United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint):

Recourse to Article 21.5 of the DSU by the European Union

(DS353)

SECOND WRITTEN SUBMISSION OF THE UNITED STATES

(Bracketing revised on October 11, 2013)

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page i

TABLE OF CONTENTS

Int	rodı	actio	on	1
I.		Th	e U.S. Requests for Preliminary Rulings	4
	A.	Le	gal Standard for Evaluating the Terms of Reference	5
		1.	A matter must be properly within the Panel's terms of reference.	5
		2.	Under DSU Article 21.5, the only measures within the terms of reference of a compliance panel are measures taken to comply (declared or undeclared)	6
			 a. Claims, whether or not raised in the original proceeding, that the measures considered by the original panel are inconsistent with one of the covered agreements are not properly before a compliance panel. b. Measures that existed at the time of the original panel request are not measures taken to comply, and are accordingly not properly within the terms of reference of a compliance panel. 	
		3.	The responding Member's obligation under Article 7.8 of the SCM Agreement extends only to a subsidy that has been determined to cause adverse effects	8
		4.	The EU's effort to re-open the DSB recommendations and rulings is in conflict with DSU Article 21.5.	9
		5.	A complaining party cannot resuscitate an issue that it failed to establish in the original proceeding as a result of its own request that the Appellate Body not complete the analysis and make an ultimate finding.	12
	B.	Th	e EU Errs in its Opposition to the U.S. Preliminary Ruling Requests	13
		1.	EU claims that certain measures are prohibited export subsidies	13
			a. Washington State B&O tax rateb. The three distinct measures enacted under HB 2294	
			c. The EU's claims that "the remaining measures" are prohibited export subsidies	17
		2.	EU claims that certain measures are prohibited import substitution subsidies	17
		3.	EU claims under Article III:4 of GATT 1994	18
		4.	U.S. claims with respect to DSU Article 6.2	18
		5.	EU request with regard to Article 4.7 of the SCM Agreement	19
		6.	DoD measures	20

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page ii

			a.	The EU's claims against the "new" program elements existed at the time of the original panel request and, therefore, cannot be measures taken to	•
			b.	comply with the recommendations and rulings of the DSB	
			c.	The EU cross-reference to generalized arguments does not suffice to explain why this Panel's terms of reference include DoD procurement contracts that were addressed by the original Panel and found not to be subsidies	
		7.	FA	A CLEEN measure	23
		8.		te of Washington measures	
			a.	The EU's claims against measures that were not found to cause adverse effects are not properly within the terms of reference of this compliance proceeding	24
				The Joint Center for Aerospace Technology Innovation ("JCATI")	25
			c.	Washington State B&O Tax Credit for Leasehold Excise Taxes	26
		9.	Sta	te of South Carolina measures	27
		10.	. Ad	verse effects-related arguments	30
II.		EU	J Al	legations of Actionable Subsidies	33
	A.			has Withdrawn the Subsidies to Boeing by Modifying Past Measures and ing Its Practices	33
		1.	rel equ	e information submitted by the United States in this proceeding is the only iable evidence as to the value of payments or provision of facilities, aipment, and employees to Boeing under the programs challenged by the	
			EU	J.	35
			a.	The NASA payment data submitted to the Panel followed the methodology endorsed by the original panel, filtered in accordance with this Panel's request for information under DSU Article 13, and the only	2.5
			b.	reliable evidence of payments to Boeing under the challenged programs The contracts and SAAs submitted by NASA offer the only reliable information as to the value of any facilities and equipment provided to	
			c.	Boeing under the challenged programs. NASA's information on the number of employees who assist contractors in carrying out work under NASA contracts is the only reliable information as to the value of employees provided to Boeing under the	30
				challenged programs.	39

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page iii

	d.	The EU's valuation methodology grossly overstates the value of any financial contribution to Boeing. 40
2.		ASA's research contracting practices today differ markedly from those cussed in the reports of the original panel and the Appellate Body41
	b.	NASA's "refocus" of its aeronautics research programs in 2006 marked a break with past practice
		including Airbus, access comparable to the access granted to Boeing
3.		e EU's assertions regarding Boeing patents and the characterization of ASA programs do not support the EU's claims
	a.	The EU discussion of patents Boeing received is irrelevant to an evaluation of any financial contribution, benefit, or specificity associated with any related NASA contracts. 49
		 i. Using the patents resulting from research under a NASA contract or agreement to evaluate whether it was a financial contribution or conferred a benefit would be an ex post analysis contrary to the terms of the SCM Agreement. 49 ii. There is no basis for the EU's continued reference to patents unrelated to the programs the EU is challenging. 51 iii. The EU cannot blame the small number of Boeing patents connected with NASA aeronautics research contracts on NASA recordkeeping or on the use of NASA funds to create trade secrets.
	b.	The United States has accurately described the research NASA paid Boeing to conduct under the challenged NASA programs
		 i. The EU fails in its efforts to show that NASA research has no use to the U.S. government. 55 ii. The United States has accurately characterized the NASA programs. 57
4.		e licensing agreements have withdrawn the subsidy conferred by pre-2007 ASA contracts and DoD assistance instruments
	a.	The benchmarks proposed by the EU are not comparable to the financial contributions found to exist by the Appellate Body

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page iv

	b.	Appe	censing agreements have eliminated the subsidy identified by the late Body with respect to pre-2007 NASA contracts and DoD ance instruments	64
		i.	The intellectual property allocation terms of the pre-2007 NASA contracts and DoD assistance instruments as amended are at least as favorable to the commissioning party as those of Contract D. 64	
		ii.	The intellectual property allocation terms of the pre-2007 NASA contracts and DoD assistance instruments as amended are at least as favorable to the commissioning party as those of Contracts A through C. 66	
		iii.	The pre-2007 NASA contracts and DoD assistance instruments as amended are consistent with NIAR's standard contract terms. 67	
		iv.	The pre-2007 NASA contracts and DoD assistance instruments as amended are consistent with prevailing market practices for collaborative R&D arrangements. 68	
5.			as not made a prima facie case that NASA's post-2006 contracts ng confer a subsidy	70
	a.		ost-2006 NASA contracts with Boeing are purchases of services, do not confer a subsidy.	71
		i.	The Appellate Body called for a two-step analysis of potential financial contributions, first identifying the "relevant characteristics" of the measures, and then determining the Article	
		ii.	1.1(a)(1) category or categories applicable to them. 71 The scrutiny of the characteristics of the measure called for in the first step in the Appellate Body's approach demonstrates that the post-2006 NASA contracts with Boeing are purchases of services. 73	
		iii.	The EU has failed to meet its burden of proof with regard to the existence of a financial contribution. 77	
	b.	contri	chases of services do fall within the definition of a financial bution under Article 1.1(a)(1)(i), the EU has failed to establish that ost-2006 NASA contracts confer a benefit.	80
6.			ails to establish a prima facie case of WTO-inconsistency with SAAs	83
7.			us measures challenged by the EU, if found to be subsidies, are not	85

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page v

		a. The EU's argument that NASA and DoD programs are specific to the aerospace and defense sectors is irrelevant to an evaluation of the specificity of the benefit conferred by the allocation of intellectual property rights through the relevant contracts and agreements	86
		b. The EU is incorrectly characterizing its claims as to the existence of a	
		benefit with regard to NASA and DoD contracts and agreements	
B.		O Assistance Instruments, as Modified by the DoD Licensing Agreement, do Confer Subsidies.	88
	1.	The 23 original program elements funded far fewer assistance instruments with Boeing after 2006 than before, and total amount spent under these instruments also decreased.	89
	2.	The assistance instruments, as modified by the DoD Licensing Agreement, do not confer a benefit.	91
		 a. The DoD Licensing Agreement covers all of the contracts subject to the recommendations and rulings of the DSB. b. The benchmarks proposed by the EU are not comparable to the financial contributions found to exist by the Appellate Body. c. The licensing agreements have eliminated the subsidy identified by the Appellate Body with respect to pre-2007 NASA contracts and DoD assistance instruments. 	92
	3.	The EU's generic specificity argument with regard to NASA, DoD, and FAA measures applies the specificity analysis incorrectly	
C.		O Contracts Funded through Challenged "General Research" Program ments Do Not Confer Subsidies	93
	1.	The contracts submitted by the United States and the EU are the only relevant evidence of the research DoD paid Boeing to conduct, and they demonstrate the exclusively military objective of the work	95
		 a. The military purpose of the research is highly relevant, as the original panel found. b. The original panel found that "the declared purposes of the DoD RDT&E programmes at issue do not generally demonstrate that DoD aimed to transfer technology to Boeing and the wider U.S. aircraft industry," and the contracts show that this remains true in the post-2006 period. c. The EU observation that these contracts do not describe everything that was funded under the challenged program elements is both irrelevant to 	95 97

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page vi

			gal analysis, and revealing as to the flaws with the EU's odology.	100		
2.	The evidence cited by the EU has no probative value for the analysis of the EU's claims of financial contribution, benefit, and specificity related to the challenged program elements.					
	a.	DoD	nly thing shown by the patents cited by the EU is how rare it is for a contract or agreement to result in a patent that is relevant to large ircraft.	102		
		i.	Using the patents resulting from research under a DoD contract or agreement to evaluate whether it was a financial contribution or conferred a benefit would be an ex post analysis contrary to the terms of the SCM Agreement. 102			
		ii.	The EU does not dispute that the number of Boeing patents for inventions invented under DoD contracts is tiny in relation to the number of contracts Boeing has with DoD, and that many of the patents bear no relation to the EU's claims in this proceeding. 103			
		iii.	The EU fails in its efforts to explain away the rarity of patents resulting from research under DoD contracts funded through the challenged program elements. 104			
	b.		RA-Rumpf review of broad summaries of work conducted under the nged program elements has no probative value	108		
	c.		de of DUS&T, ManTech, and the assistance instruments, there is no nee that DoD intended its research to produce any technology useful			
	d.	The M the as or tha	ManTech project summaries cited by the EU provide no support for sertion that Boeing was "deeply involved" in the ManTech program, t DoD provided it payments, facilities, equipment, or employees			
	e.	The E	that program	112		
	f.	betray The E	ys a lack of understanding of DoD contracts U misunderstands the significance of evidence that technology d under a program is export controlled or classified			
3.	pay und	e contr yments der the	acts submitted by the United States provide the only evidence of any or provision of facilities, equipment, and employees to Boeing "general research" program elements, and they show that their e is much less than alleged by the EU.			

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page vii

	a.	The research contracts funded by the "general research" program elements demonstrate that the value of any financial contribution is far lower than the EU asserts.	16			
		The EU provides no valid reason to disregard the evidence of DoD's actual payments to Boeing under the challenged program elements	18			
4.		EU has not made a prima facie case that DoD contracts funded under the neral research" program elements confer a subsidy	21			
	a.	The DoD contracts funded under the "general research" program elements are purchases of services, which do not confer a subsidy	22			
		 i. The Appellate Body called for a two-step analysis of potential financial contributions, first identifying the "relevant characteristics" of the measures, and then determining the Article 1.1(a)(1) category or categories applicable to them. 122 ii. The scrutiny of the characteristics of the measures called for in the first step in the Appellate Body's approach demonstrates that the DoD contracts with Boeing funded through the "general research" program elements are purchases of services. 122 				
		iii. The EU arguments that these transactions are "akin to a joint venture" get the facts wrong and rely on an incorrect interpretation of the Appellate Body's findings. 123				
	b.	Purchases of services are not a financial contribution under Article 1.1(a)(1)(iii) of the SCM Agreement	27			
5.	coı	nese purchases of services do fall within the definition of a financial tribution under Article 1.1(a)(1)(iii), the EU has failed to establish the stence of a benefit	27			
6.	me	e EU's generic specificity argument regarding NASA, DoD, and FAA asures does not establish specificity with regard to the benefit alleged correctly) to exist	28			
		ontracts Funded through the "Military Aircraft" Program Elements Do Not Actionable Subsidies	29			
1.		e objective of these programs was either to buy weapon systems or upgrade stems already in existence				
2.		e evidence cited by the EU does not support its contention that the "military traft" program elements have massive civil applicability				

D.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page viii

	a.	DoD contract or agreemen	he patents cited by the EU is how rare it is for a t to result in a patent that is relevant to large	
		civil aircraft		131
	b.		s of military applicability are highly	
		•		131
	c.		oupment policy in 1992 does not demonstrate	
			o derive commercial benefits from contracts	100
	1		ry aircraft" program elements.	133
	a.		trolled or classified information apply with	122
		particular rigor to technologic	gies actually used on military aircraft	133
3.	Co	ontracts funded through the '	'military aircraft" program elements were either	
٠.			es of services	133
	•	0 1		100
	a.		ne relevant characteristics demonstrates that the	
			ed through the P-8 and KC-46 program elements	
			nile the contracts funded through the C-17,	
			e Strike Bomber program elements are	124
		purchases of services		134
		i. The Appellate Bod	y called for a two-step analysis of potential	
		11	ons, first identifying the "relevant	
			the measures, and then determining the Article	
			or categories applicable to them. 134	
			characteristics of the measures called for in the	
			pellate Body's approach demonstrates that the	
			Boeing funded through the "general research"	
			are purchases of services. 135	
		<u> </u>	that these transactions are "akin to a joint	
		•	acts wrong and rely on an incorrect	
			e Appellate Body's findings. 139	
		•		
	b.		not a financial contribution under Article	
		1.1(a)(1)(iii) of the SCM A	Agreement	143
4.			at contracts funded through the "military	
	air	rcraft" program elements con	nferred a benefit	143
5.	Th	ne EU's generic specificity a	rgument regarding NASA, DoD, and FAA	
	me	easures does not establish sp	ecificity with regard to the benefit alleged	
	(in	ncorrectly) to exist		144
FA	Α (Continuous Lower Energy, F	Emissions, and Noise ("CLEEN") Program	144
			FAA Are Limited To the Contribution of	
1.			t, and Employees Under the CLEEN OTA	145

E.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page ix

	2.	The EU fails to establish that FAA provided any facilities, equipment, or employees to Boeing pursuant to the CLEEN OTA	. 146			
	3.	The CLEEN program does not confer a benefit to Boeing	. 148			
	4.	The subsidy alleged by the EU is not specific.	. 149			
F.	inv FA	The EU has failed to demonstrate that the Boeing's rights to patents for inventions invented under the NASA and DoD contracts, DoD assistance instruments, or the FAA CLEEN OTA at issue are a separate financial contribution, confer a benefit, or are specific.				
	1.	The EU has failed to demonstrate that the patent rights at issue are a financial contribution.	. 151			
	2.	The EU has not alleged that the "conceptualization" of a patent as a provision of goods confers a benefit.	. 152			
	3.	The Appellate Body has already found that intellectual property rights arising from U.S. government contracts, if a subsidy, are not specific.	. 152			
G.	FS	C/ETI	. 153			
Н.	Wa	Washington Measures				
	1. Washington State B&O tax rate					
	2.	Measures that were not found to cause adverse effects				
		a. Washington State B&O tax credit for preproduction developmentb. Washington State B&O tax credit for property taxesc. Washington State sales and use tax exemptions for computer hardware,				
		software and peripherals d. City of Everett B&O tax rate				
	3.	Other measures not within the terms of reference	. 161			
		a. Washington State B&O tax credit for leasehold excise taxes	. 161			
		b. Washington State Joint Center for Aerospace Technology Innovation				
I.	Ka	nnsas IRBs	. 162			
J.	So	uth Carolina Measures	. 164			
	Site Lease and Bond-Funded Facilities and Infrastructure					
		a. Key Facts	. 166			
		i. Project Emerald 166ii. Project Gemini 168				

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page x

	provision of facilities and infrastructure assoc		U fails to establish that the lease of the Project Site and the alleged sion of facilities and infrastructure associated with Projects Emerald emini confer a specific subsidy to Boeing
		i.	Project Site Lease 170
			(A) The EU claim related to the Project Site Lease
		ii.	South Carolina's provision of bond-funded facilities and infrastructure in connection with Project Gemini and Project Emerald does not confer a specific subsidy to Boeing. 173 (A) The EU claim related to the provision of bond-funded facilities and infrastructure at the Project Site
			Emerald-related bond-funded facilities and infrastructure to Boeing. 175 (C) The EU fails to establish that the provision of Project Emerald- and Project Gemini-related bond-funded facilities and infrastructure confers a benefit to Boeing. 176 (D) The EU fails to demonstrate that the alleged provision of facilities and infrastructure to Boeing in connection with Project Emerald and Project Gemini is specific under Article 2.1 SCM. 178
2.	Otl	her Mea	asures
	a.	Boein	g FILOT
		i.	The EU has failed to demonstrate that the Boeing FILOT Agreement is a subsidy under Article 1.1 of the SCM Agreement 182
			(A) Factual background

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xi

	ii.	The EU has failed to demonstrate that the Boeing FILOT Agreement is specific under Article 2.1 of the SCM Agreement 188
		(A) South Carolina's FILOT program establishes objective criteria governing eligibility within the meaning of Article 2.1(a) of the SCM Agreement
		 (B) South Carolina's FILOT program establishes objective criteria governing eligibility within the meaning of Article 2.1(b)
b.	Incom	e Tax Allocation and Apportionment Agreement
	i.	The EU has failed to demonstrate that the Boeing apportionment agreement constitutes a financial contribution and confers a benefit. 193
	ii.	The EU has failed to demonstrate that the Boeing apportionment agreement is specific. 194
c.	Large	Cargo Freighter Property Tax Exemption
	i.	The EU has failed to demonstrate that the LCF property tax exemption constitutes a financial contribution or confers a benefit. 197
	ii.	The EU's valuation of the alleged financial contribution and benefit remains flawed. 198
	iii.	The EU has failed to demonstrate that the LCF property tax exemption is specific. 199
d.	Sales	and Use Tax exemptions
	i.	The EU has failed to demonstrate that sales and use tax exemptions constitute a financial contribution or confer a benefit.
	ii.	The EU's valuation of the sale and use tax exemptions remains flawed.201
	iii.	The EU has failed to demonstrate that the sales and use tax exemptions are specific. 203
e.	readyS	SC workforce training
	i.	The EU has failed to demonstrate that the readySC workforce training constitutes a financial contribution or confers a benefit.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xii

		ii.	The EU has failed to demonstrate that readySC is specific. 205	
	f	. MCI	P jobs tax credits for Project Gemini	207
		i. ii.	The EU has failed to demonstrate that the MCIP jobs tax credit constitutes a financial contribution or confers benefit. 207 The EU has failed to demonstrate that the MCIP jobs tax credit is specific. 208	
	g	g. "Pha	se II"	209
		i. ii. iii. iv.	Factual background 210 The EU fails to demonstrate that the measures are properly within this compliance Panel's terms of reference. 211 The EU has not established a prima facie case with respect to the alleged acquisition and preparation of land. 212 The EU has not established a prima facie case with respect to the alleged Phase II FILOT agreement. 212	
	V		EU has not established a prima facie case with respect to the alleged bunted land sale.	212
III.	EU A	Alleged	Prohibited Subsidies and Claims Under Article III of GATT 1994	213
A			Not Met Its Burden of Proof Regarding Prohibited Subsidy Claims es 3.1 and 3.2 of the SCM Agreement	213
	1. T	The EU'	s prohibited export-contingent subsidy claims fail.	213
	2. T	The EU'	s contingent-in-fact import substitution claims fail.	214
	3. T	The EU'	s claim regarding the Boeing apportionment agreement fails	215
	4. T	he EU'	s claim regarding FSC/ETI fails	216
В			Not Met Its Burden of Proof Regarding Derivative Claims under of GATT 1994	216
IV.	Adve	erse Eff	ects	218
A	. Intro	duction		218
В			ed to the Legal Framework Governing Adverse Effects Assessment in the Proceeding	218
			ted States has not misapplied the causation standard in assessing the on-attribution factors.	218

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xiii

	2.	The EU bears the burden of proving the validity of the market delineation on which it bases its claims	219	
	3.	The United States has indicated that the EU must prove the case it has alleged, but has not endorsed its standard as a requirement under Article 7.8 of the SCM Agreement.	221	
C.	Fai	The EU's Obfuscation with Respect to Its R&D Subsidy Claims Constitutes a Failure to Make a <i>Prima Facie</i> Case and Deprives the United States of a Fair Opportunity to Defend Against the Claims of Non-Compliance		
D.		e EU Has Failed to Rebut the U.S. Demonstration that Many of its Claims and guments Cannot Properly Be Considered in this Compliance Proceeding	226	
E.		e EU Misapplies the Appellate Body's Guidance Regarding Aggregation and mulation	229	
	1.	The EU has failed to establish that aggregation is proper in many of the contexts in which the EU requests it	233	
		a. R&D subsidies	233	
		b. Tied tax subsidies		
		c. Miscellaneous subsidies	235	
	2.	The EU has not followed the Appellate Body's cumulation guidance	237	
	3.	The EU mischaracterizes the U.S. argument and the original panel and Appellate Body findings, and errs in contending that a party can resuscitate a claim it abandoned in the original proceeding.	239	
F.	Te	chnology Causal Mechanism	241	
	1.	Introduction		
	2.	The EU mischaracterizes the U.S. technology effects rebuttal as challenging the underlying findings.		
		a. It is the EU that departs from the findings in the original proceeding		
		regarding the disincentives for early-stage, long-term, and risky research	245	
		b. The United States does not, as the EU suggests, dispute the findings from		
		the original proceeding regarding the magnitude of U.S. R&D subsidies		
		c. Acceleration of NASA R&D researchd. Non-attribution factors		
		d. Non-autibution factors	231	
	3.	Criticisms of the Boeing Engineers Statement by the EU and Airbus engineers are baseless	254	
		a. The EU's reliance on isolated public comments does nothing to undermine		
		the credibility of the Boeing Engineers Statement.	256	

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xiv

			i.	NASA Technology Readiness Levels256	
			ii.	737 MAX engine integration and nacelle/chevron technology 257	
			iii.	737 MAX fly-by-wire spoilers 258	
			iv.	737 MAX tail cone 258	
			V.	737 MAX flight deck displays 259	
			vi.	777X folding wing tip 259	
				U's criticism with respect to 787 delays is deeply flawed	260
		c.		re-launch development timeline of the A350 XWB corroborates the	261
		d.		g engineers' counterfactual analysis with respect to the 787 U, not the Boeing engineers, misunderstands the economics of R&D	201
		u.		a launch decision.	265
		e.		U attempts to turn an issue of semantics into a substantive criticism	
			of the	counterfactual used by the Boeing engineers.	268
			i.	The proper counterfactual question 269	
			ii.	Sources of knowledge and technology development 272	
		f.	The B	oeing engineers' estimate of the 787 launch delay is based on the	
		1.		priate set of NASA and DoD programs	274
	1	TPI.	- TII		
	4.			rrs in criticizing the U.S. position with respect to the finite duration ogy effects.	275
	5			threat of future technology effects argument is not permitted under	270
	٥.			Agreement and is contradicted by the facts	276
	6.			n	
G				Mechanism	
.				price effects claims still suffer from a lack of clarity	
				ill refuses to address the magnitude of the subsidies for each market	219
	3.			as failed to demonstrate that each of the miscellaneous subsidies is f and does cause price effects.	280
	4.	-		as not and cannot demonstrate that certain R&D subsidies are	
				f and do cause price effects.	282
H.	Th	e El	J Still I	Has Failed to Demonstrate that Alleged Subsidies to the 787 and/or	
				se Adverse Effects In the Form of Significant Price Suppression,	
	_	-		ost Sales, Displacement, Impedance, or Threat Thereof With Respect	201
				XWB.	
	1.	All	leged te	echnology effects	284

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xv

	a. Alleged technology effects regarding the 787			
		 i. Composite fuselage 284 ii. Composite wing 286 iii. More electric systems architecture 286 iv. Health management systems. 286 v. Noise reduction. 287 vi. Aerodynamics and structural design; open systems architecture 287 		
	b.	Alleged technology effects regarding the 777X	. 288	
		i. Folding Wing Tip 288ii. Hybrid Laminar Flow Control ("HLFC") 289iii. Conclusion 290		
2.	Al	leged price effects	. 290	
	a.	The EU has failed to demonstrate that the nature and magnitude of the alleged subsidies are capable of and are causing 787 price effects.	. 290	
	b.	The EU's price effects argument is based on the improper inclusion of subsidies and improper aggregation and cumulation analyses	293	
	c.	The EU's objection to the methodology underlying the U.S. magnitude calculations is erroneous.		
3.	Al	leged significant price suppression and threat thereof	. 296	
	a. b.	Alleged significant price suppression – A330		
		 i. Causation 297 ii. Original A350 order conversions 298 iii. Pricing data and trends 300 iv. Campaign-specific arguments 302 v. "Significant" price suppression 302 		
	c.	Alleged threat of significant price suppression – A350 XWB	. 303	
4.	Sig	gnificant lost sales	. 306	
	a.	The EU fails to demonstrate that subsidies are genuinely and materially causing significant lost sales.	. 306	
	b. c.	The EU fails to rebut non-attribution factors raised by the United States The EU fails to make a prima facie case with respect to alleged threat of		
	С.	significant lost sales	. 311	

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xvi

	d.		U continues to grant itself the right to amend the findings of the al proceeding.	212
	e.	The E	U continues to improperly pursue lost sales allegations that it y lost in the original proceeding.	
		i. ii. iii.	All Nippon Airways 315 Japan Airlines 315 Air Canada 316	
		111. iv.	Continental Airlines 317	
		V.	Northwest Airlines 318	
	f.		ed significant lost sales concluded subsequent to the end of the al reference period.	319
		i. ii.	United Airlines – 787-10 319 Singapore Airlines 320	
		iii. iv.	British Airways – 787-10 320 Qatar Airways 321	
		v.	British Airways 322	
		vi.	Air Berlin 323	
		vii. viii.	LAN Airlines 324	
		V111. ix.	ILFC 325 Virgin Atlantic Airways 326	
		IX. X.	Etihad Airways 328	
		xi.	United Airlines 329	
		xii.		
		xiii.	Aeromexico 332	
		xiv.	Lion Air 334	
5.	Al	leged di	isplacement, impedance and threat of impedance	334
	a.		U Has Failed to Demonstrate Impedance or Threat thereof in the	
		U.S. n	narket under Article 6.3(a) of the SCM Agreement.	337
	b.		U Has Failed to Demonstrate Impedance or Threat thereof in Third-	227
		Count	ry Markets under Article 6.3(b) of the SCM Agreement	331
		i.	Canada (alleged threat of impedance)337	
		ii.	Chile (alleged impedance and threat thereof) 338	
		iii.	China (alleged threat of impedance) 338	
		iv.	Ethiopia (alleged impedance and threat thereof) 338	
		V.	Iceland (alleged threat of impedance) 339	
		vi.	India (alleged impedance and threat thereof) 340	
		vii.	Japan (alleged impedance and threat thereof)340	
		viii.	Kenya (alleged threat of impedance) 341	

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xvii

		ix. x. xi.	Mexico (alleged threat of impedance) 341 Qatar (alleged impedance and threat thereof) 342 UAE (alleged threat of impedance) 343	
		xii. xiii.	Indonesia (alleged threat of impedance) Australia 344	
		c. Conclu	usion	345
I.	Cau	se Advers	Has Failed to Demonstrate that Alleged Subsidies to the 737 MAX be Effects in the Form of Significant Price Suppression, Significant	245
		· · ·	pedance, or Threat of Impedance with Respect to the A320neo	
	1.		echnology effects	
			e Integration/Coupling	
			ons	
		_	deck displaysone	
			y-Wire Spoilers	
			ologies allegedly linked to the CLEEN program: Multi-spar	5 17
			ets, VFAN, Adaptive Trailing Wing Edge, and RFID devices	349
	2.	Alleged pi	rice effects	351
		a. The E	U has failed to demonstrate that the nature and magnitude of the	
			d subsidies are capable of and are causing 737 MAX price effects	352
			U's price effects argument is based on the improper inclusion of	a = 1
			lies and improper aggregation and cumulation analyses.	354
			U's objection to the methodology underlying the U.S. magnitude ations is erroneous	356
	3.	Sionifican	t price suppression	357
	٥.	•		
			tiong Data	
			ubsidy factors	
			ficant" price suppression	
	4.	Significan	it lost sales	361
		a. Ameri	ican Airlines	364
		b. South	west Airlines	365
			d Airlines	
			ir	368
		e. GOL		270
			egian Air Shuttle	
		s. LIUII /	111	🗦 / 1

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xviii

		h.	Avolon	
		i.	Air Lease Corp.	. 372
		j.	GECAS	. 373
		k.	Aviation Capital Group	. 374
		1.	Icelandair	. 374
		m.	AeroMexico	. 376
		n.	TUI Travel	. 376
	5.	Th	reat of impedance	. 377
		a.	The EU has failed to demonstrate threat of impedance under Article 6.3(a)	
		b.	of the SCM Agreement The EU has failed to demonstrate threat of impedance in third-country	. 380
		υ.	markets	. 380
			i. Brazil 380	
			ii. Iceland381	
			iii. Indonesia 381	
			iv. Mexico 382	
			v. Norway 382	
			vi. Singapore 383	
J.	The EU Has Still Failed to Demonstrate that Alleged Subsidies to the 737NG Cause Adverse Effects Through Significant Price Suppression, Significant Lost Sales, Displacement, Impedance, or Threat Thereof With Respect to the A320ceo			
	1.	All	leged price effects causal mechanism	. 384
		a.	The EU has failed to demonstrate that the nature and magnitude of the	
			alleged subsidies are capable of and are causing 737NG price effects	. 384
		b.	The EU's price effects argument is based on the improper inclusion of	
			subsidies and improper aggregation and cumulation analyses.	. 387
		c.	The EU's objection to the methodology underlying the U.S. magnitude	
			calculations is erroneous.	. 388
	2.	Sig	gnificant price suppression	. 390
		a.	Causation	. 390
		b.	Pricing Data	
			Non-subsidy factors	
		d.	"Significant" price suppression	
	3.	Th	a EII has failed to demonstrate that the alleged subsidies to Peaing	
	3.		e EU has failed to demonstrate that the alleged subsidies to Boeing	
			nefitting the 737NG family present cause adverse effects in the form of	302
		_	nificant lost sales of A320ceo family LCA	. 393
		a.	Delta 394	

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xix

	b. Fly Dubai	395
4.	The EU has failed to demonstrate displacement, impedance or threat thereof under Article 6.3(a) or Article 6.3(b) of the SCM Agreement with respect to the 320neo.	205
	the 320ffeo	393
	a. Brazilian, Canadian, Malaysian, Norwegian, Russian, and UAE "existing technology single-aisle markets"	395
	b. U.S., Indonesian, and Singaporean "existing technology single-aisle markets"	
	c. Australia (alleged displacement and threat thereof)	

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xx

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Short Title	Full Case Title and Citation
Canada – Aircraft (AB)	Appellate Body Report, <i>Canada – Measures Affecting the Export of Civilian Aircraft</i> , WT/DS70/AB/R, adopted 20 August 1999, DSR 1999:III, 1377
Canada – Aircraft (21.5) (AB)	Appellate Body Report, Canada – Measures Affecting the Export of Civilian Aircraft – Recourse by Brazil to Article 21.5 of the DSU, WT/DS70/AB/RW, adopted 4 August 2000, DSR 2000:IX, 4299
Canada – Renewable Energy (AB)	Appellate Body Report, Canada – Certain Measures Affecting the Renewable Energy Generation Sector, WT/DS426/AB/R.
Chile – Price Band System (21.5) (AB)	Appellate Body Report, <i>Chile – Price Band System and Safeguard Measures Relating to Certain Agricultural Products – Recourse to Article 21.5 of the DSU by Argentina</i> , WT/DS207/AB/RW, adopted 22 May 2007, DSR 2007:II, 513
China – Auto (AB)	Appellate Body Report, <i>China – Measures Affecting Imports of Automobile Parts</i> , WT/DS340/AB/R.
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EC – Bed Linen (21.5) (AB)	Appellate Body Report, European Communities – Anti-Dumping Duties on Imports of Cotton-Type Bed Linen from India – Recourse to Article 21.5 of the DSU by India, WT/DS141/AB/RW, adopted 24 April 2003, DSR 2003:III, 965
EC – Fasteners (AB)	Appellate Body Report, European Communities – Definitive Anti- Dumping Measures on Certain Iron or Steel Fasteners from China, WT/DS397/AB/R, adopted 28 July 2011
EC –Hormones (AB)	Appellate Body Report, European Communities – Measures Concerning Meat and Meat Products (Hormones), WT/DS26/AB/R, WT/DS48/AB/R, adopted 13 February 1998
EC – Large Civil Aircraft (Panel)	Panel Report, European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft, WT/DS316/R, adopted 1 June 2011, as modified by Appellate Body Report, WT/DS316/AB/R
EC – Large Civil Aircraft (AB)	Appellate Body Report, European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft, WT/DS316/AB/R, adopted 1 June 2011

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xxi

Short Title	Full Case Title and Citation
India – Patents (AB)	Appellate Body Report, <i>India – Patent Protection for Pharmaceutical and Agricultural Chemical Products</i> , WT/DS50/AB/R, adopted 16 January 1998.
Japan – Agricultural Products (AB)	Appellate Body Report, <i>Japan – Measures Affecting Agricultural Products</i> , WT/DS76/AB/R, adopted 19 March 1999
Korea – Commercial Vessels	Panel Report, <i>Korea – Measures Affecting Trade in Commercial Vessels</i> , WT/DS273/R, adopted 11 April 2005, DSR 2005:VII, 2749
Mexico – Corn Syrup (21.5) (AB)	Appellate Body Report, Mexico – Anti-Dumping Investigation of High Fructose Corn Syrup (HFCS) from the United States – Recourse to Article 21.5 of the DSU by the United States, WT/DS132/AB/RW, adopted 21 November 2001, DSR 2001:XIII, 6675
US – AD/CVD (Panel)	Panel Report, <i>United States</i> — <i>Definitive Anti-Dumping and Countervailing Duties on Certain Products from China</i> , WT/DS379/R, 2010, adopted 25 March 2011, as modified by Appellate Body Report WT/DS379/AB/R.
US – Countervailing Measures on Certain EC Products (AB)	Appellate Body Report, <i>United States – Countervailing Measures Concerning Certain Products from the European Communities</i> , WT/DS212/AB/R, adopted 8 January 2003, DSR 2003:I, 5
US – Gambling (AB)	Appellate Body Report, <i>United States – Measures Affecting the Cross Border Supply of Gambling and Betting Services, WT/DS285/AB/R</i> , adopted 20 April 2005, DSR 2005:XII, 5663
US – Lamb Safeguards (AB)	Appellate Body Report, <i>United States – Safeguard Measure on Imports of Fresh, Chilled or Frozen Lamb from New Zealand</i> , WT/DS177/AB/R, adopted 16 May 2001.
US – Large Civil Aircraft (Panel)	Panel Report, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)</i> , WT/DS353/R, circulated on 31 March 2011
US – Large Civil Aircraft (AB)	Appellate Body Report, <i>United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)</i> , WT/DS353/AB/R, adopted 23 March 2012
US – Lumber CVDs (AB)	Appellate Body Report, <i>United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada</i> , WT/DS257/AB/R, adopted 17 February 2004, DSR 2004:II, 571

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xxii

Short Title	Full Case Title and Citation
US –Lumber CVDs (21.5) (AB)	Appellate Body Report, <i>United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada – Recourse by Canada to Article 21.5 of the DSU</i> , WT/DS257/AB/RW, adopted 20 December 2005, DSR 2005:XXIII, 11357
US –Shirts and Blouses (AB)	Appellate Body Report, <i>United States – Measures Affecting Imports of Woven Wool Shirts and Blouses from India</i> , WT/DS33/AB/R.
US – Softwood Lumber IV (AB)	Appellate Body Report, <i>United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada</i> , WT/DS257/AB/R, adopted 17 February 2004.
US – Softwood Lumber VI (21.5)	Appellate Body Report, <i>United States – Investigation of the International Trade Commission in Softwood Lumber from Canada – Recourse to Article 21.5 of the DSU by Canada</i> , WT/DS277/AB/RW, adopted 9 May 2006, and Corr.1, DSR 2006:XI, 4865
US – Upland Cotton (AB)	Appellate Body Report, <i>United States – Subsidies on Upland Cotton</i> , WT/DS267/AB/R, adopted 21 March 2005
US – Upland Cotton (21.5) (AB)	Appellate Body Report, <i>United States – Subsidies on Upland Cotton – Recourse to Article 21.5 of the DSU by Brazil</i> , WT/DS267/AB/RW, adopted 20 June 2008, DSR 2008:III, 809
US – Zeroing (EC) (21.5) (AB)	Appellate Body Report, <i>United States – Laws, Regulations and Methodology for Calculating Dumping Margins</i> ("Zeroing") – Recourse to Article 21.5 of the DSU by the European Communities, WT/DS294/AB/RW and Corr.1, adopted 11 June 2009

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xxiii

Short form	Full phrase
ARMD	Aeronautics Research Mission Directorate
AWACS	Airborne Warning and Control System
B&O	Business and Occupation
CASP	Cross Agency Support Programs
CCAA	Charleston County Aviation Authority
CFD	computational fluid dynamics
CFDA	Catalog of Federal Domestic Assistance
CFR	U.S. Code of Federal Regulations
CLEEN	Continuous Lower Energy, Emissions, and Noise
DARPA	Defense Advanced Research Projects Agency
DFARS	Defense Federal Acquisition Regulations Supplement
DLA	Defense Logistics Agency
DoD	U.S. Department of Defense
DRAGON	Diminishing Manufacturing Sources Replacement of Avionics for
	Global Operations and Navigation
DSB	Dispute Settlement Body
DSU	Understanding on Rules and Procedures Governing the Settlement of
	Disputes
DUS&T	Dual Use Science and Technology Program
ETI	Extraterritorial Income
EU Panel Request	Request for the Establishment of a Panel by the European
	Communities, WT/DS317/5, p. 13 (23 Jan. 2006).
EU PR Response	European Union Response to the United States Requests for Preliminary Rulings (Nov. 23, 2012)
EU PRR	European Union Request for a Preliminary Ruling; Request for the
	Panel to Exercise its Authority Pursuant to Article 13 of the DSU
	(Oct. 31, 2012)
EU Supplemental	Supplementary Submission of the European Union on the United
Submission	States Requests for Preliminary Rulings (May 13, 2013)
FAA	U.S. Federal Aviation Administration
FAP	Fundamental Aeronautics Program
FAR	Federal Acquisition Regulations
FILOT	fee-in-lieu-of-taxes
FPDS-NG	Federal Procurement Data System – Next Generation
FSC	Foreign Sales Corporation
FWS	First Written Submission
FY	Fiscal Year
GAO	U.S. Government Accountability Office
GATT 1994	General Agreement on Tariffs and Trade 1994

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page xxiv

Short form	Full phrase
HB 2294	Washington State House Bill 2294
HSR Program	High Speed Research Program
IRB	Industrial Revenue Bond
ITAR	International Traffic in Arms Regulations
JCATI	Joint Center for Aerospace Technology and Innovation
JSF	Joint Strike Fighter
LCA	Large civil aircraft
LCF	Large cargo freighter
LERD	Limited Exclusive Rights Data
ManTech	DoD Manufacturing Technology Program
MCIP	Multi-County Industrial Park
NASA	National Aeronautics and Space Administration
NAPMO	NATO AEW&C Programme Management Agency
NATO	North Atlantic Treaty Organization
NESC	NASA Engineering and Safety Center
NEO	New Engine Option
NIAR	National Institute for Aviation Research
NRA	NASA Research Announcement
OSD	Office of the Secretary of Defense
OTA	Other Transaction Agreement
PE	Program Element
PRSEUS	Pultruded Rod Stitched Efficient Unitized Structure
PTO	U.S. Patent and Trademark Office
R&D	Research and development
RDT&E	Research, Development, Testing and Evaluation
SAA	Space Act Agreement
SCM Agreement	Agreement on Subsidies and Countervailing Measures
TIA	Technology Investment Agreement
TRL	Technology Readiness Level
US Comments on EU	Comments by the United States on Questions Proposed by the
Questions	European Union for the Panel to Use to Seek Information Pursuant
	to Article 13 of the DSU, pp. 3-4 (Nov. 20, 2012).
US Compliance	Notification of the Withdrawal of Subsidies and Removal of Adverse
Notification	Effects in United States Measures Affecting Trade in Large Civil
770 70 11 11 - 11	Aircraft (Second Complaint)
US Preliminary Ruling	Reply of the United States of America to the EU Response to the U.S.
Response	Requests for Preliminary Rulings (Dec. 3, 2012)
VSP	Vehicle Systems Program

INTRODUCTION

- 1. The EU asks the Panel to believe that Boeing's "current success in the LCA markets is the result of lavish support from the US federal government as well as state and local governments," that this support "must continue in order to maintain Boeing's position of strength in the market," and that the support "is continuing." The reality is different, in every respect. The subsidies found to exist in the 1989-2006 period covered by the original proceeding were not by any measure "lavish," and their value has declined sharply since that time so much so that the EU has sought to re-raise failed subsidy allegations from the original proceedings and add a host of new subsidy allegations to boost the magnitude of its overall claims. Even when they were extant, the original measures were not found to be critical to Boeing's position in the market the 777 and 747 families received no WTO-inconsistent subsidies whatsoever, and the only subsidies found for the 737 family were relatively minor, with effects in a small number of transactions. And the support is *not* "continuing."
- 2. To begin with, the EU errs in its portrayal of key measures at issue in this dispute as "business as usual." In fact, significant changes have occurred with respect to the measures that were critical to the findings in the original proceedings:
- With respect to WTO-inconsistent NASA and DoD programs, the United States and Boeing have concluded a licensing agreement giving the U.S. government the one right that the Appellate Body found distinguished the NASA and DoD contracts and agreements from commercial benchmarks: the right to commercialize foreground technology.³
- NASA terminated most of the programs subject to the recommendations and rulings of the DSB, and changed many of the practices with regard to aeronautics research that led to the original panel's subsidy findings.
- DoD awarded many fewer assistance instruments to Boeing.
- The FSC program and its successor programs remain terminated, and no matter how often the EU suggests otherwise, Boeing has <u>not</u> received FSC benefits since 2006.

There is no "business as usual" here. The United States has taken meaningful action to come into compliance. The EU effectively asks the Panel to ignore this.

3. As in the original proceedings, the EU continues to substantially overestimate the value or amounts of any funding or financing arrangements at issue in this compliance dispute. In reality, the value of any NASA, DoD and other measures that continue to be in existence – whether or not they are still considered to be actionable subsidies – has fallen massively. As a

¹ EU SWS, para. 1 (emphasis in original).

² E.g., EU SWS, paras. 150, 168, 242.

³ An expert report that the United States submits with this Second Written Submission concludes that "the NASA contracts and DoD assistance instruments as amended are consistent with those of many arm's length, market-based collaborative R&D arrangements." Berneman Report (Exhibit USA-322).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 2

result, any plausible amount of unwithdrawn subsidies is now too small to have caused the alleged adverse effects.

- The value of NASA contract funding, facilities, equipment, and employees provided to Boeing has fallen by <u>82 percent</u> (on an annual basis, based on a comparison between the 1989-2006 and 2007-2012 time periods).
- The number of DoD assistance instruments fell by <u>85 percent</u> (based on a comparison between the number of assistance instruments concluded in the 1992-2006 and 2007-2012 time periods).⁴
- No Kansas IRBs have been issued to Boeing since 2007.
- Boeing, as already indicated above, received <u>no FSC</u> or successor program benefits since 2006.
- Instead of properly accounting for the factual changes that have occurred and the compliance actions the United States has taken, the EU attempts to brush them aside with unsupported assertions and invective. In response to funding agreements and agency records showing that NASA/DoD funding to Boeing has fallen drastically, the EU asserts – with no evidence whatsoever – that the agencies are providing payments, facilities, equipment, and employees outside the contracts. In reaction to the alteration in the allocation of intellectual property under the NASA and DoD contracts and agreements, which was in line with the Appellate Body's findings, the EU charges that the effort is a "sham transaction" relevant only in case the United States "abandons capitalism." Faced with its own evidence showing that the NASA and DoD contracts and agreements seldom lead to Boeing patents, the EU conjures up inaccurate and legally unfounded images of a "potentially vast category of legally protected" trade secrets, whose very secrecy prevents the EU from providing any evidence of their existence or relevance. And when the United States points out that the EU never really explains its arguments under Article III:4 of the GATT, or its prohibited subsidy claims under Articles 3.1(a) and (b) of the SCM Agreement in any coherent way, the EU argues that it is the United States that has failed to rebut the EU argument, even though it remains entirely unclear what that argument actually is.
- 5. To offset the withdrawal or substantial quantitative reduction of old subsidies and their actual or potential effects, the EU seeks to expand the frontiers of this compliance dispute. It challenges a range of new measures that were not part of the original dispute; (re-)challenges

⁴ US FWS, para. 271.

⁵ Section II.A.4.b.i discusses this point in greater detail.

⁶ EU SWS, para. 228. As sections II.A.3.a.iii and II.C.2.a.iii explain, the EU's allegations regarding trade secrets contradict NASA regulations making it impossible to develop trade secrets with NASA funding, and DoD regulations of comparable effect.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 3

measures on which its claims failed in the original proceedings; and even seeks to pull in measures that predate its request for establishment of the original panel. For example, the EU argues that the Panel's terms of reference properly include DoD procurement contracts – military contracts that the original panel already found to be purchases of services *not* covered by the SCM Agreement, which the EU itself asked the Appellate Body not to consider on appeal. The EU opted *not* to challenge any South Carolina measures in its original panel request – but now it does – despite the fact that these measures have no nexus in terms of nature or effects with the DSB's recommendations and rulings or the U.S. measures taken to comply.

- 6. As its opening quotation shows, the EU has sought to vastly magnify the facts of this dispute. The original panel, the Appellate Body, and ultimately the DSB found in March 2012 that the United States had conferred certain subsidies to the U.S. manufacturer of large civil aircraft, Boeing, resulting in specific adverse effects to the EU. These adverse effects were limited to:
- For the NASA contracts and DoD assistance instruments, threat of displacement and impedance of exports from Australia, significant lost sales, and price suppression in the 200-300 seat large civil aircraft market; and
- For the Washington B&O tax rate reduction, the City of Wichita IRBs, and the (pre-2006) FSC/ETI measures, significant lost sales in the 100-200 seat large civil aircraft market in the form of 50 firm orders and 30 options that Boeing sold to Japan Airlines and Singapore Aircraft Leasing Enterprise.

The DSB recommended that the United States either withdraw the subsidies that were found to have caused these adverse effects, or remove the adverse effects themselves. That, despite the EU's protestations, is precisely what the United States has done.

⁷ Section II.B.6 discusses this issue in greater detail.

 $^{^{\}rm 8}$ Section II.B.9 discusses this issue in greater detail.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 4

I. THE U.S. REQUESTS FOR PRELIMINARY RULINGS

7. In its second written submission, the EU expresses a vision of Article 21.5 proceedings in which a complaining party may challenge virtually every aspect of the recommendations and rulings of the DSB, in addition to raising claims that it could have raised in the original proceeding but did not. In other words, in the EU's view, an Article 21.5 proceeding is *broader* than the original proceeding to which it relates, in that a compliance panel can re-visit everything the complaining party did raise during the original proceeding as well as for the first time address everything the complaining party could have raised in the original proceeding (but did not). This approach, however, runs directly counter to the Appellate Body's observation in *US – Softwood Lumber IV* that Article 21.5 "strikes a balance between competing considerations":

On the one hand, it seeks to promote the prompt resolution of disputes, to avoid a complaining Member having to initiate dispute settlement proceedings afresh when an original measure found to be inconsistent has not been brought into conformity with the recommendations and rulings of the DSB, and to make efficient use of the original panel and its relevant experience. On the other hand, the applicable time-limits are shorter than those in original proceedings, and there are limitations on the types of claims that may be raised in Article 21.5 proceedings. This confirms that the scope of Article 21.5 proceedings logically must be *narrower* than the scope of original dispute settlement proceedings.

The EU panel request ignored that balance, seeking to inject matters unrelated to whether the United States complied with the recommendations and rulings of the DSB. The U.S. preliminary ruling requests sought to restore that balance by removing from this proceeding claims that the EU improperly sought, and still seeks, to include in the Panel's terms of reference. The EU's second written submission has done nothing to address those concerns and, indeed, posits a legal framework that would nullify the normal parameters that previous panels and the Appellate Body have recognized govern compliance proceedings.

8. This section first addresses the basic principles underlying the terms of reference of a panel established under DSU Article 21.5 and demonstrates the numerous errors in the arguments in the EU's second written submission. To summarize, a matter may be reviewed by a panel only if it is properly within the terms of reference. In the case of a compliance panel, the only matters properly within the terms of reference are the consistency of measures taken to comply, whether declared or undeclared, or the existence of such measures. Measures that are the subject of the DSB recommendations and rulings cannot be considered measures taken to comply and, therefore, contrary to the EU's view, claims against them are not properly within a compliance panel's terms of reference. Similarly, measures that existed at the time of the original panel request, but were not challenged, cannot be measures taken to comply, and are accordingly outside a compliance panel's terms of reference. The Appellate Body has recognized these limitations on the scope of a proceeding under DSU Article 21.5. The EU

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⁹ US – Softwood Lumber IV (AB), para. 72 (emphasis added).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 5

second written submission contends that these limitations do not apply any time there are new facts to analyze or new panel or Appellate Body reports to consider. However, such common occurrences do not, as the EU argues, justify reopening matters settled by the recommendations and rulings of the DSB.

9. The United States then addresses each of the EU objections to the U.S. preliminary rulings requests and demonstrates why, in light of a proper understanding of the DSU, the EU's sprawling case includes numerous measures and claims that are not properly within this Panel's terms of reference. The United States accordingly respectfully reiterates its requests for preliminary rulings and requests that the Panel issue its findings so that the Panel's substantive meeting with the parties can focus on the issues that are properly part of this proceeding.

A. Legal Standard for Evaluating the Terms of Reference

1. A matter must be properly within the Panel's terms of reference.

- 10. Under DSU Article 7.1, the standard terms of reference for a panel are in relevant part "{t}o examine . . . the matter referred to the DSB by (name of the party) in document . . .", where the "party" is the complaining party, and the document is typically the request for establishment of a panel. Article 6.2 specifies further that the panel request must be in writing, indicate whether consultations were held, and "identify the specific measures at issue and provide a brief summary of the legal basis of the complaint sufficient to state the matter clearly." In general, these are the formal requirements for bringing a matter within the terms of reference of a panel. However, they do not signify that a complaining party may seize a panel of a matter simply by writing it into the panel request with sufficient detail to state the matter clearly. Other provisions of the covered agreements inform what matters are *properly* within the panel's terms of reference.
- 11. For example, DSU Article 4.3 requires a Member to consult on a matter before seeking establishment of a panel. As a general matter, if consultations are not held with respect to a measure, it is outside a panel's terms of reference even if it is listed in the panel request. Article 17 of the Antidumping Agreement and DSU Article 21.5 similarly constrain the matter before a panel such that even a measure listed in the panel request, if outside the bounds set by those articles, would not be properly within the panel's terms of reference. The proper action in this situation is for the panel to exclude that matter in question from its deliberations.

¹⁰ US – CVDs on Certain EC Products, paras. 69-70 ("The panel request by the European Communities does refer to the 19 April action. . . . {T}he European Communities acknowledge that the 19 April action, as such, was not formally the subject of the consultations held on 21 April 1999. We, therefore consider that the 19 April action is also, for that reason, not a measure at issue in this dispute and does not fall within the Panel's terms of reference.").

¹¹ E.g., US – Zeroing (EC) (21.5) (AB), para. 232.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 6

- 12. The EU appears to suggest at one point, with reference to DSU Article 3.7, that the only limit on a panel's terms of reference is whatever the complaining Member considers "fruitful" to include in its panel request. However, the Appellate Body has been clear that DSU Article 21.5 restricts a compliance panel to consideration of the existence of measures taken to comply and their consistency with the covered agreements. Thus, contrary to the EU's suggestion, a panel is not compelled to address every matter that the complaining party seeks to put before it.
- 13. At another point, the EU asserts that "when a matter is properly within the jurisdiction and terms of reference of a WTO adjudicator, that adjudicator is required to assess and rule upon it." The United States would agree that WTO panels, including compliance panels, may *only* make findings with respect to matters *properly* within their terms of reference. The United States does not agree that a panel is *required* in all instances to make a finding. The EU recognizes an exception for judicial economy. The United States also notes that the original panel considered that there was no need to make a recommendation with regard to its finding that FSC/ETI was a prohibited subsidy. The United States does not consider it useful to rule out the possibility that there may be other situations in which a panel could appropriately decline to make findings.
 - 2. Under DSU Article 21.5, the only measures within the terms of reference of a compliance panel are measures taken to comply (declared or undeclared).
- 14. DSU Article 21.5 provides for panel proceedings "{w}here there is disagreement as to the existence or consistency with a covered agreement of measures taken to comply with the recommendations and rulings." The negative implication of this charging is that Article 21.5 does not provide relief for disagreements about other types of measures. As the Appellate Body explained in *Canada Aircraft (21.5)*,

Proceedings under Article 21.5 do not concern just *any* measure of a Member of the WTO; rather, Article 21.5 proceedings are limited to those "measures *taken to comply* with the recommendations and rulings" of the DSB. In our view, the phrase "measures taken to comply" refers to measures which have been, or which should be, adopted by a Member to bring about compliance with the recommendations and rulings of the DSB. ¹⁶

¹² EU SWS, para. 18. As the portion of DSU Article 3.7 cited by the EU consists of an admonishment to potential complaining Members, the United States fails to see its relevance to an inquiry into a *panel's* terms of reference.

¹³ Canada – Aircraft (21.5) (AB), para. 36.

¹⁴ EU SWS, para. 26. In this regard, the EU asserts that "there is no general doctrine of *non liquet* in WTO dispute settlement." As the United States is not seeking to invoke such a doctrine, this observation does not seem relevant to consideration of the Panel's terms of reference.

¹⁵ US – Large Civil Aircraft (Panel), para. 8.7.

¹⁶ Canada – Aircraft (21.5) (AB), para. 36, quoted in US – Zeroing (EU) (21.5) (AB), para. 199.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 7

This principle has several important consequences that the EU ignores.

- a. Claims, whether or not raised in the original proceeding, that the measures considered by the original panel are inconsistent with one of the covered agreements are not properly before a compliance panel.
- 15. The measures that are the subject of the DSB rulings cannot, by their very nature be "measures taken to comply with the recommendations and rulings" of the DSB. As the Appellate Body has explained, its findings regarding compliance proceedings:

exclude{}, in principle, ("ordinarily") from Article 21.5 proceedings new claims that could have been pursued in the original proceedings, but not new claims against a measure taken to comply – that is, in principle, a new and different measure. This is so even where such a measure taken to comply incorporates components of the original measure that are unchanged, but are not separable from other aspects of the measures taken to comply. ¹⁷

Thus, measures before the original panel cannot be "measures taken to comply" because they are not "new" or "changed." Accordingly, claims that those measures are inconsistent with the covered agreements are not properly within the terms of reference of a compliance panel.

- 16. The EU observes that, as a general matter, nothing in the DSU precludes a Member that has failed to prevail on a claim seeking reconsideration of that claim in a new proceeding. This is true only with respect to new proceedings before a regular panel, but not true with respect to an Article 21.5 proceeding, which addresses only whether the responding Member has complied with the recommendations and rulings of the DSB, and not whether there should have been additional or different findings. As this Panel is a compliance panel, a Member's freedom to challenge past DSB recommendations and rulings before another regular panel is not relevant to an evaluation of the terms of reference in this proceeding.
 - b. Measures that existed at the time of the original panel request are not measures taken to comply, and are accordingly not properly within the terms of reference of a compliance panel.
- 17. Another implication of the definition of a measure taken to comply is that it does not encompass measures that existed at the time of the original panel request. A measure that predates the panel request can scarcely have been taken to comply with the subsequent DSB recommendations and rulings. The Appellate Body's finding in US Zeroing (EC) (21.5) that its reports have concluded that the DSU "excludes, in principle, ('ordinarily') from Article 21.5 proceedings new claims that could have been pursued in the original proceedings" applies with

¹⁷ US – Zeroing (EC) (21.5) (AB), para. 432.

¹⁸ EU SWS, para. 19.

¹⁹ US – Zeroing (EC) (21.5) (AB), para. 432.v

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 8

particular force to measures that a complaining party could have challenged, but did not. The responding party would have no reason to consider those measures inconsistent with its WTO obligations, or any basis on which to modify those measures since there were no DSB recommendations and rulings with respect to them. If a Member could use compliance proceedings to challenge measures pre-dating the original panel request, it would not only subject the responding Member to special expedited proceedings, it would also deprive the responding Member of a reasonable period of time to comply with any resulting recommendations and rulings of the DSB. This is not part of the "balance" the Appellate Body has discerned in the text of Article 21.5.

18. The United States notes that the Appellate Body found in US - Zeroing(EU)(21.5) that:

Since compliance with the recommendations and rulings of DSB can be achieved *before* the recommendations and rulings of the DSB are adopted, a compliance panel may have to review events pre-dating the adoption of those recommendations and rulings in order to resolve a disagreement as to the "existence" or "consistency with a covered agreement" of such measures.²⁰

However, the Appellate Body in that dispute was addressing measures adopted after the establishment of the original panel, but before adoption of the recommendations and rulings of the DSB. Thus, it provides no basis for a complaining party to use Article 21.5 to pull into a compliance proceeding measures it could have challenged, but did not, in the original proceedings.

- 3. The responding Member's obligation under Article 7.8 of the SCM Agreement extends only to a subsidy that has been determined to cause adverse effects.
- 19. As the United States has observed before, ²¹ the Appellate Body has found that

Article 7.8 specifies the actions that the respondent Member must take when a subsidy granted or maintained by that Member is found to have resulted in adverse effects to the interests of another Member. This means that, in order to determine whether there is compliance with the DSB's recommendations and rulings in a case involving such actionable subsidies, a panel would have to assess whether the Member concerned has taken one of the actions foreseen in Article 7.8 of the SCM Agreement. ²²

²⁰ US – Zeroing (EC) (21.5) (AB), para. 224.

²¹ US FWS, para. 31.

²² US – Upland Cotton (21.5) (AB), para. 235.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 9

Although the EU has taken exception to many of the principles regarding terms of reference for compliance panels, it has never disputed this observation.

20. Article 7.8 of the SCM Agreement provides that:

Where a panel report or an Appellate Body report is adopted in which it is determined that any subsidy has resulted in adverse effects to the interests of another Member within the meaning of Article 5, the Member granting or maintaining such subsidy shall take appropriate steps to remove the adverse effects or shall withdraw the subsidy.

Thus, the obligation under Article 7.8 applies only to "such subsidy" that a panel or the Appellate Body has "determined . . . has resulted in adverse effects to the interests of another Member within the meaning of Article 5." Conversely, the obligation under Article 7.8 does *not* apply to measures that a panel or the Appellate Body has *not* "determined" to be a "subsidy" that "has resulted in adverse effects."

- 21. Given the established, and uncontested, relationship between DSU Article 21.5 and Article 7.8 of the SCM Agreement, a panel would need to take particular caution in finding that a Member had failed to comply with the recommendations and rulings of the DSB with regard to a measure that was not found in the original proceedings to be a subsidy resulting in adverse effects.
 - 4. The EU's effort to re-open the DSB recommendations and rulings is in conflict with DSU Article 21.5.
- 22. In its first written submission, the United States cited several Appellate Body reports indicating that a compliance proceeding is not the proper forum for a complaining party to relitigate the original dispute by repeating unsuccessful claims or raising new claims that it could have raised but did not. For example, in $US Upland\ Cotton\ (21.5)$:

Because adopted panel and Appellate Body reports must be accepted by the parties to a dispute, allowing a party in an Article 21.5 proceeding to re-argue a claim that has been decided in adopted reports would indeed give an unfair "second chance" to that party. ²³

In *EC* – *Bed Linen* (21.5):

It would be incompatible with the function and purpose of the WTO dispute settlement system if a claim could be reasserted in Article 21.5 proceedings after the original panel or the Appellate Body has made a finding that the challenged

²³ US – Upland Cotton (21.5) (AB), para. 210.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 10

aspect of the original measure is not inconsistent with WTO obligations, and that report has been adopted by the DSB.²⁴

And, in US – Zeroing (21.5):

Thus, if we read the Appellate Body's statement in US-Cotton (Article 21.5 – Brazil) together with its statement in Canada – Aircraft (21.5 – Brazil), it excludes, in principle, ("ordinarily") from Article 21.5 proceedings new claims that could have been pursued in the original proceedings, but not new claims against a measure taken to comply – that is in principle, a new and different measure. ²⁵

- 23. In its second written submission, the EU seeks to portray the U.S. understanding of the terms of reference of a compliance panel as being based "in large measure" on *EC Bed Linens*. It then posits a series of exceptions to the rule supposedly enunciated only in *EC Bed Linens* that would, if adopted, virtually eliminate the recognized limitations on the scope of a compliance proceeding. There is no legal support for the EU's efforts to turn Article 21.5 into an appeal of the adopted panel and Appellate Body reports.
- 24. Before addressing the EU's arguments, it is useful to consider the status of adopted panel and Appellate Body reports. The Appellate Body has explained:

Adopted panel reports are an important part of the GATT acquis. They are often considered by subsequent panels. They create legitimate expectations among WTO Members, and, therefore, should be taken into account where they are relevant to any dispute. However, they are not binding, except with respect to resolving the particular dispute between the parties to that dispute. ²⁶

In other words, the adopted DSB recommendations and rulings <u>are</u> binding with respect to that particular dispute. This is crucial for a WTO Member seeking to comply with the recommendations and rulings of the DSB. The adopted panel and Appellate Body reports form the basis of whatever modifications it makes to existing measures, and to change the recommendations and rulings they embody after the fact would undermine the integrity of the entire process.²⁷

²⁴ EC – Bed Linen (21.5) (AB), para. 98

 $^{^{25}}$ US – Zeroing (21.5 – EC) (AB), para. 432.

²⁶ Japan – Alcoholic Beverages II (AB), pg. 14.

²⁷ At one point in its submission, the EU observes that the DSU provides "no rule of *res judicata*." EU SWS, para. 19. The United States agrees that the term "*res judicata*" is not a useful term in the context of WTO dispute settlement, particularly because that term has varied meanings in different legal systems. However, adopted panel and Appellate Body reports do represent the final resolution of the dispute between the parties, and must be applied as such.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 11

- 25. Nonetheless, the EU seeks to do just that. It first asserts that a change in "the clarification of WTO law" between the original proceedings and the compliance proceedings would entitle a party to challenge the adopted findings of the DSB. ²⁸ Interestingly, this is directly contrary to the position the EU has taken in other disputes when apparently that position better suited its purpose. For example, the EU has said that a party in an Article 21.5 proceeding "cannot reopen now an issue that was already settled by the Panel (and the Appellate Body) in the original dispute." ²⁹ In fact, the EU makes a similar point in its second written submission in this compliance proceeding. ³⁰
- 26. Nevertheless, the United States understands the EU to be arguing elsewhere in its second written submission that if, after a panel or the Appellate Body has issued its report, another panel or the Appellate Body makes a finding that would lead to a different, more favorable result from that in the DSB recommendations and rulings, a complaining party may cite the later report in a compliance proceeding to reverse the adopted findings from the original proceeding. This is incorrect.
- 27. The Appellate Body's finding in *EC Bed Linens* (21.5) that the adopted findings of a panel or the Appellate Body "must be treated as a *final resolution* to a dispute between the parties in respect of the *particular* claim and the *specific* component of a measure that is subject to that claim" remains compelling.³¹ Indeed, the EU has cited no panel or Appellate Body report that reopened the recommendations and rulings of the DSB. Were the complaining party able to seek to reverse the resolution by the DSB of its claim against a measure on which it had failed in the original proceeding, it would be relitigating its original case in a compliance proceeding, despite the fact that the responding party had no compliance obligation in that dispute. There is accordingly no basis to adopt the exception proposed by the EU.
- 28. The EU's second proposed exception is that a party may re-argue an issue if it relates to an aspect of the challenged measure that has changed. Here, the EU is imprecise. If the original measure has changed, then it may well be "a new and different measure," that is a measure taken to comply and squarely within a compliance panel's terms of reference. If the party's allegation is that the measure has *not* changed, then it would not be a measure taken to comply, and would not be within the terms of reference.

²⁸ EU SWS, para. 34.

²⁹ US – Zeroing (21.5 – EC) (AB), para. 5.50.

³⁰ See, e.g., EU SWS, para. 997 (stating that the United States "is not entitled to re-litigate the above issues {that were alleged to have been litigated in the original proceeding}, but must unconditionally accept the relevant findings").

³¹ *EC* – *Bed Linens* (21.5 (AB), paras. 92 and 93.

³² EU SWS, para. 35.

³³ *US – Upland Cotton (21.5) (AB)*, para. 210.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 12

- 29. The EU's third proposed exception is that a party may re-argue an issue if the facts have changed.³⁴ However, the findings in *US Softwood Lumber VI (21.5) (AB)*, on which the EU relies, did not announce a broad principle that a change in facts effectively opened the recommendations and rulings of the DSB to challenge. Rather, it addressed a measure taken to comply in the form of the investigating authority's new determination that relied on new facts gathered as part of the compliance effort. That situation does not exist in this proceeding. Thus, the proper question is not whether there are new facts which will always be the case in a compliance proceeding that necessarily takes place later in time but whether there is a measure taken to comply. If there is, then that new measure is within the terms of reference of a compliance panel. In any event, there is no basis to challenge the original measure in a compliance proceeding.
- 30. Finally, the EU argues that the reasoning in EC Bed Linens (21.5) applies only if the challenged aspect of the measure is "separable" from the measure taken to comply. The Appellate Body did not actually make such a finding. Rather, it rejected India's argument that the European Commission's determination of injury was "inseparable" from the finding of dumping, which was the declared measure taken to comply. The Appellate Body was not called upon to evaluate the situation in which two components of a measure were inseparable.
- 31. Therefore, the EU's arguments regarding supposed exceptions to the Appellate Body findings in $EC Bed\ Linens$ do not justify rolling back the established limitations on the terms of reference in a compliance proceeding.
 - 5. A complaining party cannot resuscitate an issue that it failed to establish in the original proceeding as a result of its own request that the Appellate Body not complete the analysis and make an ultimate finding.
- 32. In its first written submission, the United States noted that to allow a complaining party to request the Appellate Body not to complete the original panel's analysis on an issue, and then to raise that same issue as a compliance matter would give the complaining party the type of unfair "second chance" criticized by the Appellate Body. The EU responds that completion of the analysis is impossible in some situations, and that a complaining party cannot be expected to request completion where it is impossible.
- 33. The United States considers that these are all factors a panel may consider in evaluating whether a complaining party's decision to first ask the Appellate Body not to complete the analysis, and then raise the issue in a compliance proceeding would result in an "unfair second

³⁴ EU FWS, para. 36.

³⁵ EU SWS, para. 37.

 $^{^{36}}$ EC – Bed Linens (21.5) (AB), para. 86. Likewise, the EU's allegations of inseparability in this proceeding are erroneous.

³⁷ *US – Upland Cotton (21.5) (AB)*, para. 210.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 13

chance." In the original proceeding, the EU affirmatively asked the Appellate Body not to complete the analysis regarding several measures if it overturned the original panel's legal conclusions, ostensibly because there were insufficient undisputed facts. The EU's position in this proceeding is that under the Appellate Body's reasoning in *US – Large Civil Aircraft*, the evidence before the original panel *and nothing more* necessitate a finding in its favor. There is an obvious inconsistency between these two positions. The United States will address these matters further in response to the EU's objections to the individual U.S. requests for preliminary rulings.

B. The EU Errs in its Opposition to the U.S. Preliminary Ruling Requests.

34. This section addresses the EU's arguments in opposition to the U.S. requests for findings that particular EU claims and arguments are outside the Panel's terms of reference. As an overall observation, the United States notes that, for the most part, the EU second written submission raises new arguments with respect to points the United States made in its initial preliminary rulings requests in November of last year. These are all arguments that the EU could have raised in its first written submission, or in the supplemental submission on terms of reference issues that the Panel requested on May 6, 2013. The United States recalls that at that time, the Panel stated:

if the European Union did not make any submission on this matter until after the first written submission of the United States, the Panel would have received first submissions which did not fully address the logically prior questions of scope admissibility and jurisdiction. Such a sequence would be contrary to the purpose of the first written submissions. Scope and admissibility are hardly matters to be resolved after issues of substance are dealt with. They are hardly matters to be first seriously engaged in by the Parties at the point of rebuttal. It is, therefore, difficult for us to conclude other than that this would be a highly inefficient manner of proceeding.

The United States notes that, by raising these arguments with respect to the original U.S. preliminary rulings requests only in the EU second written submission, the EU has brought about exactly the situation that the Panel sought to avoid – that the main reasons for the EU opposition to the EU requests are "first seriously engaged in by the Parties at the point of rebuttal."

1. EU claims that certain measures are prohibited export subsidies.

35. The EU's claims that individual measures considered by the original panel constitute prohibited export subsidies are not properly within the Panel's terms of reference. As discussed in section I.A.2, claims that measures considered by the original panel are inconsistent with one of the covered agreements are not properly within the terms of reference of a compliance Panel. Therefore the United States reiterates its request that the Panel find the EU's prohibited subsidy

³⁸Almost all of the EU's citations to U.S. arguments are to that document.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 14

claims regarding these measures to be outside its terms of reference. The following discussion is structured to parallel the claims in the EU second written submission: (a) Washington State B&O tax rate; (b) three separate Washington measures enacted under HB 2294; and (c) "the remaining measures." However, the United States notes the lack of any meaningful distinction among these measures – each was considered by the original panel and therefore the EU's claims against each are outside the compliance Panel's terms of reference.

a. Washington State B&O tax rate

36. The EU's claim that the Washington B&O tax rate reduction constitutes a prohibited export subsidy is not properly within this compliance panel's terms of reference. The EU challenged this same measure, which was enacted under Washington State House Bill (HB) 2294 in the original proceeding and has not been modified, as a prohibited export-contingent subsidy under Article 3.1(a) and 3.2 of the SCM Agreement, but the original panel rejected the EU claims:

{T}he European Communities has not demonstrated that the taxation measures enacted under HB2294 are inconsistent with Articles 3.1(a) and 3.2 of the SCM Agreement.³⁹

The EU did not appeal this finding and it cannot now have an unfair second chance to make its case. The Appellate Body has indicated that a compliance proceeding is not the proper forum for a complaining party to re-litigate the original dispute by repeating unsuccessful claims. ⁴⁰ Given that the EU's claim that the B&O tax rate constitutes a prohibited export subsidy concerns a measure that was considered by the original panel, it is not a measure taken to comply, and therefore the EU's claim is not properly within this compliance Panel's terms of reference.

37. The EU presents a muddled attempt to circumvent the restriction imposed by DSU Article 21.5 through the assertion of artificial distinctions between a measure and the "subsequent incidences" of applying that measure. The EU asserts that it is not challenging the same measure that was before the original panel, but rather the "subsequent incidences of application" of that measure. According to the EU, these subsequent incidences of application are "new measures." The EU then asserts that these "new measures" are properly before this Panel as measures taken to comply because they are the "quintessential" example of a close nexus. 42

³⁹ US – Large Civil Aircraft (Panel), para. 7.1590.

⁴⁰ See, e.g., US – Upland Cotton (21.5) (AB), para. 210 ("{A} complainant may not reassert the same claim against an unchanged aspect of the measure that has been found to be WTO-consistent in the original proceedings."); EC – Bed Linen (21.5) (AB), para. 98.

⁴¹ EU SWS, para. 58. The EU cites to a paragraph of its first written submission where the EU estimates the value of the B&O tax rate to Boeing from 2007 through 2024.

⁴² EU SWS, para. 61.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 15

38. The EU's approach is nonsensical. There is no basis for treating "subsequent incidences of application" of a measure as a separate measure. The "measure" that was before the original panel was the Washington State B&O tax rate reduction. That is the same measure that provides the subsidy alleged by the EU. Indeed, the EU's argument in this proceeding is very similar to one raised unsuccessfully by the United States in *US – Upland Cotton (21.5)* – that payments under an alleged subsidy program could, in a compliance proceeding, be analyzed separately from the program at issue in the original proceedings. The Appellate Body found:

The verb "maintain" suggests, to us, that the obligation set forth in Article 7.8 is of a continuous nature, extending beyond subsidies granted in the past. This means that, in the case of recurring annual payments, the obligation in Article 7.8 would extend to payments "maintained" by the respondent Member beyond the time period examined by the panel for purposes of determining the existence of serious prejudice, as long as those payments continue to have adverse effects. Otherwise, the adverse effects of subsequent payments would simply replace the adverse effects that the implementing Member was under an obligation to remove. Such a reading of Article 7.8 would not give meaning and effect to the term "maintain", which is distinct from the term "grant", and has also been included in that Article. 44

- 39. Conversely, "maintaining" a measure found not to be an actionable subsidy whether through continued payments or simply keeping the measure in force cannot give rise to any obligation under Article 7.8. Given that the EU makes no claim that the Washington State B&O tax rate itself is new or has changed, and it was a measure considered by the original panel, the EU's claims are not properly within this compliance Panel's terms of reference.
- 40. The EU's remaining arguments regarding the Washington B&O tax rate concern issues that are irrelevant to whether a claim is properly within a compliance panel's terms of reference, as already discussed above. First, the European Union's assertion that it has excised its judgment as to the fruitfulness of this claim 45 does not expand a compliance panel's consideration beyond the limits imposed by Article 21.5. Second, also irrelevant is the EU's assertion that the relevant WTO rules to be applied by the compliance Panel will be different from that applied by the original panel due to subsequent clarifications relating to export subsidies. As discussed in section I.A.4 of this submission, such clarifications, even if they were relevant or would change the analysis, do not allow a complaining party to challenge the adopted findings of the DSB. Third, the EU's assertion that its claims rely on new facts and

⁴³ See, e.g., US – Large Civil Aircraft (Panel), para. 7.301 ("{t}he foregoing analysis and conclusions addressed the question of whether the following measures constitute specific subsidies to Boeing within the terms of the SCM Agreement: (a) the Washington B&O tax reduction…").

⁴⁴ *US – Upland Cotton (21.5) (AB)*, para. 237.

⁴⁵ EU SWS, para. 59.

⁴⁶ EU SWS, para. 68.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 16

evidence does not answer the question of whether there is a measure taken to comply. As discussed above, the subsequent incidences of application of a measure do not themselves constitute measures taken to comply. And fourth, as explained in section I.A.4 of this submission, the EU's assertions regarding the "non-separability" of a measure do not render it a measure taken to comply and therefore within the compliance panel's terms of reference..

b. The three distinct measures enacted under HB 2294

- 41. The EU separately addresses the three distinct measures enacted under HB 2294: (1) Washington State B&O tax rate; (2) Washington State B&O tax credits for preproduction development; and (3) Washington State Sales and Use tax exemptions for computers. As noted above, in the original proceeding, the EU asserted that each of these three measures was a prohibited export-contingent subsidy under Article 3.1(a) and 3.2 of the SCM Agreement, but the original panel rejected the EU claims: "the European Communities has not demonstrated that the taxation measures enacted under HB2294 are inconsistent with Articles 3.1(a) and 3.2 of the SCM Agreement." Given that each of these measures was considered by the original panel, they are not measures taken to comply, and therefore the EU's claims are not properly within this compliance Panel's terms of reference.
- 42. The EU attempts to rely on a modification to the Washington B&O tax credit to claim that the EU can re-litigate its prohibited subsidy claims for all three measures. In regard to the Washington State B&O tax credit, the EU's first written submission asserted that "the United States and Washington State continue to maintain this subsidy measure, *i.e.*, the B&O tax credits for preproduction/aerospace product development." However, the EU's second written submission asserts, for the first time, that the Washington B&O tax credit for preproduction development is "clearly a new measure." This is based on the EU's assertion that the availability of the credit has been modified to substantially expand its application. Even if the preproduction tax credit had been modified, the EU would still need to demonstrate that it was a "new measure" and, moreover, that it was in fact a measure taken to comply. It has done neither.
- 43. But the EU's flawed assertion is more ambitious. The EU claims that because the preproduction tax credit is a new measure (according to the EU), "the compliance Panel must now assess HB 2294 and the associated tax provisions, as revised, in its totality and in an integrated manner." Although the EU now attempts to conflate the three separate measures with the legislation they were enacted under, the original panel was clear that the measures were

⁴⁷ EU SWS, paras. 81-86.

⁴⁸ US – Large Civil Aircraft (Panel), para. 7.1590.

⁴⁹ EU FWS, para. 461.

⁵⁰ EU SWS, para. 85.

⁵¹ EU SWS, para. 85.

⁵² EU SWS, para. 85.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 17

the exemptions themselves, not HB 2294.⁵³ Modification of an individual measure does not authorize a complaining party to re-litigate any claim it wants with respect to distinct measures that may have been enacted under the same legislation.

- c. The EU's claims that "the remaining measures" are prohibited export subsidies
- 44. The United States understands the EU's reference to the "remaining measures" to refer to measures considered by the original Panel other than the Washington State tax measures discussed above. The U.S. preliminary ruling request noted that the EU did not assert in the original proceeding prohibited export-contingent subsidy claims under Articles 3.1(a) and 3.2 of the SCM Agreement with respect to any of the NASA original measures, the DoD original measures, the State of Kansas and City of Wichita original measures, or two of the Washington original measures (the City of Everett B&O tax rate and the Washington State B&O leasehold excise tax credits). The EU could have asserted claims against these measures, but did not. As discussed above in section I.A.2.a, claims that measures considered by the original panel are inconsistent with one of the covered agreements are not properly before a compliance Panel. Therefore the EU's claims that these measures are prohibited export subsidies are not properly within this compliance Panel's terms of reference.
- 45. The EU's only response is to cross reference its arguments regarding the Washington B&O tax rate and to repeat the same generic assertions that the United States demonstrated in section I.A to be irrelevant to whether a claim is properly within a compliance panel's terms of reference.

2. EU claims that certain measures are prohibited import substitution subsidies.

- 46. As noted in the U.S. preliminary ruling request, the EU did not argue any prohibited import substitution claims under Articles 3.1(b) and 3.2 of the SCM Agreement in the original proceeding. The EU could have asserted such claims against these measures, but did not. As discussed in section I.A.2.a, claims that measures considered by the original panel are inconsistent with one of the covered agreements are not properly before a compliance Panel. Therefore the EU's claims that these measures are prohibited import substitution subsidies are not properly within this compliance Panel's terms of reference.
- 47. The EU again responds by referencing its earlier arguments and repeating the same generic assertions that the United States demonstrated above to be irrelevant to whether a claim is properly within a compliance panel's terms of reference.

⁵³ US – Large Civil Aircraft (Panel), para. 7.1467 ("HB 2294 includes five tax measures which the European Communities challenges as subsidies to Boeing's LCA division.").

⁵⁴ U.S. Preliminary Ruling Request, para. 17.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 18

3. EU claims under Article III:4 of GATT 1994

- 48. The U.S. preliminary ruling request noted that the EU could have raised Article III:4 claims with respect to the pre-2006 measures in the original proceeding and, therefore, could not assert them in this proceeding. The U.S. first written submission observed that the EU had included such a claim in the original panel request.⁵⁵ In fact, the EU so thoroughly failed to advance that claim through evidence or argumentation that it does not appear in the original panel's report. In short, the EU is seeking exactly the sort of "unfair second chance" that the Appellate Body has found not to be appropriate in an Article 21.5 proceeding.
- 49. The EU's only response to these arguments by the United States is to cross-reference generic arguments that deal primarily with the U.S. preliminary ruling request with respect to the EU's prohibited and import substitution subsidy claims. The EU never relates those generic arguments to either the legal or factual arguments, such as they are, that it has raised with regard to Article III of GATT 1994. The United States will not attempt here to guess why the EU considered these cross-references relevant, and then rebut hypothesized arguments. Rather, we refer the Panel to our rebuttals of the EU's generalized arguments.
- 50. A few points do warrant notice. The EU asserts that it is "simply false" to assert that the EU could have raised its Article III claims in 2006 because "they are based on facts and evidence that only came into existence after the date on which the original panel was established (17 February 2006)." In fact, it is the EU's assertion that is demonstrably false. Its Article III claims rest at base on a series of quotations reproduced in Exhibit EU-583. Many of these predate February 17, 2006. The EU also asserts that "the measures placed before the compliance Panel are not the measures that were before the original panel." This, again, is false. Most of the NASA, DoD, Washington state, and Kansas measures covered by the EU Article III claims were in fact before the original panel.
- 51. Therefore, the United States reiterates its request that the Panel find these claims to be outside its terms of reference.

4. U.S. claims with respect to DSU Article 6.2

52. The United States explained in its Preliminary Rulings Requests that the EU panel request fails to meet the requirements of Article 6.2 of the DSU because it does not allow the United States or the Panel to discern which measures it alleges are prohibited export-contingent subsidies under Article 3.1(a) of the SCM Agreement, which measures it alleges are prohibited import-substitution subsidies under Article 3.1(b) of the SCM Agreement, and which measures it alleges breach the national treatment obligations found in Articles III:1, III:4, and III:5 of the

⁵⁵ US FWS, para. 85.

⁵⁶ EU SWS, para. 100.

⁵⁷ EU SWS, para. 102.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 19

GATT 1994.⁵⁸ The EU's panel request fails to connect the challenged measures with the provisions of the covered agreements the EU claims to have been breached in a way that presents the problem clearly.

- 53. Given the lack of clarity in the EU's panel request, the United States could only speculate as to the nature of the EU's claims. The United States noted that one possibility that the EU was asserting each claim for each measure was not evident from its panel request and would in any event be implausible. The EU now asserts that because it has in fact followed through with such an (implausible) argument, the US Preliminary Rulings Request is rendered "moot." However, the deficiencies in the EU's *panel request* cannot be remedied by the EU's subsequent clarifications (and re-clarifications) in its written submission. The EU's approach would render Article 6.2 of the DSU inutile.
- 54. Moreover, the nature of the claim the EU now advances with respect to Articles 3.1(a) and 3.1(b) of the SCM Agreement, and Article III of the GATT 19994, is not apparent from the EU's panel request. The EU claims that the United States has used the measures identified in the EU panel request to condition Boeing's behavior through some sort of vague Pavlovian conditioning exercise, in a manner inconsistent with these treaty provisions. The EU panel request failed to present this problem clearly.
- 55. Accordingly, the EU has failed to justify the vagueness in its compliance panel request, and the United States respectfully requests that the panel make a preliminary ruling that the EU request fails to satisfy the requirements of Article 6.2 DSU with respect to the EU claims under Articles 3.1(a) and (b) and Article III GATT.

5. EU request with regard to Article 4.7 of the SCM Agreement

- 56. The EU Panel Request states that "{t}he actions and events listed by the United States in its 23 September 2012 notification do not withdraw the subsidies or remove their adverse effects, as required by Article 4.7 and 7.8 of the SCM Agreement." The United States preliminary ruling request observed that Article 4.7 applies only in the event there is a recommendation regarding a prohibited subsidy, which was not the case in the original proceeding. The United States accordingly requested a preliminary ruling that any claims related to an existing obligation under Article 4.7 were not within the Panel's terms of reference.
- 57. In its second written submission, the EU states that its reference to Article 4.7 does not reflect an attempt to seek findings with regard to previous recommendations and rulings of the

⁵⁸ US PRR, para. 45.

⁵⁹ US PRR, para. 47; US Reply to the EU Response to the US PRR, para. 72.

⁶⁰ EU SWS, para, 104.

⁶¹ US Preliminary Ruling Request, para. 58 (quoting EU Panel Request, para. 6.).

⁶² US Preliminary Ruling Request, paras. 58-59.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 20

DSB regarding prohibited subsidization, but rather refers to its claims of prohibited subsidies in this compliance proceeding. ⁶³ In that event, the reference to Article 4.7 appears to be superfluous. The Panel has not yet made findings with respect to the EU's prohibited subsidies claims in this proceeding, so Article 4.7 is not at issue. Even if the Panel were to find prohibited subsidies, that would establish an inconsistently with Article 3, rather than with an obligation the United States did not have under Article 4.7. In any event, as the EU appears to have dropped any claims the United States respectfully requests the Panel to find these claims outside its terms of reference.

6. DoD measures

- 58. The United States demonstrated in its preliminary ruling request that many of the EU's claims regarding DoD were outside the Panel's terms of reference. With respect to the "new" program elements, the United States showed that most of them existed at the time of the EU's original panel request, but that the EU did not challenge them at that time. 64 The EU explicitly excluded alleged provisions of DoD equipment and employees from its original panel request, and the original panel rejected efforts to bring them into the proceeding belatedly. And, finally, the EU failed to prevail on its claims with regard to DoD procurement contracts under the "old" program elements. For the most, the EU second written response advances a single overarching response: see above. The EU contends that, but never explains why, arguments previously made with respect to other measures also establish that all of the DoD measures are properly within the Panel's terms of reference. 65 Such recitations do not suffice to broaden the Panel's terms of reference in the ways sought by the EU. The EU does attempt a bit more with respect to its challenges to its claims against "new" program elements, but these do nothing to address the critical problem with its claims – that as the program elements existed in 2006, they cannot be treated as measures taken to comply with the recommendations and rulings of the DSB.
 - a. The EU's claims against the "new" program elements existed at the time of the original panel request and, therefore, cannot be measures taken to comply with the recommendations and rulings of the DSB.
- 59. The EU's sole response to the U.S. observation that these program elements existed in 2006 is to assert that the EU could not have challenged them then "because on the basis of the information available, they did not appear to be supporting LCA-related R&D prior to that time." The EU also clarifies that it is challenging the new program elements only from 2007 forward, and not for anything that occurred prior to 2007. Neither of these observations goes

⁶³ EU SWS, paras. 107-110.

⁶⁴ US Preliminary Ruling Request, paras. 13-14.

⁶⁵ EU SWS, paras. 117-118.

⁶⁶ EU SWS, para. 115.

⁶⁷ EU SWS, para. 114.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 21

to the critical point – that as measures existing at the time of the original panel request, the new program elements cannot also be measures taken to comply with the recommendations and rulings of the DSB.

- 60. To begin, there is no dispute that an Article 21.5 proceeding covers only measures taken to comply with the recommendations and rulings of the DSB, or the non-existence of such measures. A measure that existed at the time of the panel request cannot, by the fact of its existence before the commencement of the proceeding, also be a measure taken to comply with recommendations and rulings of the DSB regarding the measures subject to the proceeding. The EU's assertion that it did not study the new DoD program elements thoroughly enough to support a claim against them in 2006 does not change this fact.
- 61. It is also not relevant that the EU is challenging the new program elements only *after* 2006. Article 21.5 does not accord the complaining party the latitude to manipulate a compliance panel's terms of reference by sculpting the temporal scope of its claims. To take an example, if the EU were correct, a complaining party could relitigate *any* issue in a compliance proceeding including claims rejected by the panel or Appellate Body on substantive grounds simply by restating the earlier claim with respect to application of the measure in question after the period covered by the panel's deliberations. Thus, the legal principle advanced by the EU would make a mockery of the limitations that Article 21.5 places on the terms of reference of a compliance panel.⁶⁸
- 62. As a factual matter, the EU's assertion that the program elements changed after establishment of the original panel in ways that led the EU to consider that they subsequently involved technology applicable to large civil aircraft does not withstand scrutiny. For the new "military aircraft" program elements, it was obvious in the beginning of 2006 that P-8, the aerial refueling tanker, and AWACS were or would be military aircraft produced by militarizing civil airframes. As this fact lies at the heart of all of the EU's arguments with regard to these programs, it is hard to see how the EU discovered something in 2007 that changed its views. Moreover, while the EU touts the limited nature of its claims with regard to the new program elements in arguing that it is not inappropriately expanding the terms of reference, it appears to disavow those limitations elsewhere in its argument. 69

⁶⁸ The EU argues in a footnote that the United States view with regard to any program elements not challenged in the original proceedings is that the EU "is forever precluded from challenging that PE, even under changed facts." EU SWS, para. 114, note 121. This is not the U.S. view. The EU is precluded from challenging those program elements *in this compliance proceeding*. It remains free to commence a new dispute with regard to those program elements.

⁶⁹ The EU Supplemental Scope Submission states with respect to AWACS: "{t}he EU claims with respect to this PE are limited to the DMS Replacement of Avionics for Global Operations and Navigation (DRAGON) effort, which began in 2010." EU Supplemental Scope Submission, para. 20, first bullet. However, it nevertheless seeks to challenge a patent derived from a different part of the AWACS budget as an effect of the challenged subsidy, and suggests that this is appropriate because the EU "did not previously have public information to show that it was supporting research dual use to LCA." EU SWS, para. 380, second bullet.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 22

- 63. The EU also argues that its claims against the P-8A and KC-46 are appropriate because "design and testing of the P-8A continued well after the date of the EU panel request" and the contract of the KC-46 was awarded in 2011. These arguments show the muddled nature of the EU's claims. If it is challenging payments, facilities, equipment, and employees under these program elements without regard to the contract that made them available, it should not matter when the KC-46 contract was signed. Similarly, if the EU is challenging design and testing without regard to the contract, and those activities took place both before 2006 and continued afterward, that "measure" was in place at the time of the panel request, and cannot be treated as a measure taken to comply. If, the EU is recognizing that DoD only makes payments or provides facilities, equipment, and employees is pursuant to a contract or agreement, and that those are the relevant measures, then the analysis might be different. However, the EU has not sought to justify its expansion of the terms of reference based on contract dates. If it did, by far the largest contract funded through the "new" program elements, the P-8A contract, would be outside of the Panel's terms of reference, as it was awarded in 2004.
- 64. Therefore, the United States reiterates its request that the Panel find these claims to be outside its terms of reference.
 - b. The EU cross-reference to generalized arguments does not suffice to explain why this Panel's terms of reference include DoD procurement contracts that were addressed by the original Panel and found not to be subsidies.
- 65. The EU's response to the analysis in the U.S. first written submission boils down to two words: "see above." Rather than engage with the points raised by the United States, it simply cross references a number of arguments raised earlier in its submission, without explaining how or why they relate to the points raised by the United States. The United States will not attempt here to guess why the EU considered these cross-references relevant, and then rebut hypothesized arguments. Rather, we refer the Panel to our rebuttals of the EU's generalized arguments. Therefore, the United States reiterates its request that the Panel find these claims to be outside its terms of reference.
 - c. The EU cross-reference to generalized arguments does not suffice to explain why this Panel's terms of reference include DoD procurement contracts that were addressed by the original Panel and found not to be subsidies.
- 66. The EU's response to the analysis in the U.S. first written submission boils down to two words: "see above." Rather than engage with the points raised by the United States, it simply

⁷⁰ EU SWS, paras. 114, note 120, and 115, note 124.

⁷¹ US FWS, para. 458.

⁷² EU SWS, para. 117.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 23

cross references a number of arguments raised earlier in its submission, without explaining how or why they relate to the points raised by the United States. The United States will not attempt here to guess why the EU considered these cross-references relevant, and then rebut hypothesized arguments. Rather, we refer the Panel to our rebuttals of the EU's generalized arguments.

- 67. However, one observation is particularly relevant with respect to these claims. The alleged provision of equipment and employees cannot be a measure taken to comply because these are not separate measures. If before 2007, they are simply aspects of existing measures that were subject to challenge, or in the case of the new program elements, did not challenge, for different reasons. With respect to the DoD procurement contractors, they are not even unchanged aspects of a measure taken to comply they are unchanged aspects of a measure before the original panel.
- 68. Therefore, the United States reiterates its request that the Panel find these claims to be outside its terms of reference.

7. FAA CLEEN measure

- 69. The United States has demonstrated that the EU's claims regarding the Federal Aviation Administration ("FAA") CLEEN program are not properly within this compliance Panel's terms of reference. The CLEEN program is not a "declared" measure taken to comply, nor does it satisfy the close nexus test set out by the Appellate Body, which involves an examination of the nature, effects, and timing of an alleged undeclared measure taken to comply. The EU claims the CLEEN program shares a close nexus to the NASA R&D programs subject to the DSB's recommendations and rulings. In its previous communications to the Panel and in the U.S. first written submission, and briefly below, the United States has demonstrated that is not the case.
- 70. The EU has failed to establish that the CLEEN program shares a close nexus in terms of nature with the NASA measures covered by the DSB's recommendations and rulings. At most, the EU has established that the CLEEN program shares common environmental goals with NASA. The EU now claims that there is "both a technological and organizational continuity between NASA and the CLEEN programme." But what the EU cites as technological continuity making LCA "more fuel efficient, quieter, and less polluting" simply repeats the EU's unremarkable assertion regarding common environmental goals. Sharing common

⁷³ EU SWS, para. 118.

 $^{^{74}}$ US – Zeroing (21.5 – EC) (AB), para. 204.

⁷⁵ EU SWS, para. 119.

⁷⁶ U.S. PRR, paras. 36-44; U.S. Reply to EU Response to Preliminary Rulings Request, paras. 65-71; and US FWS, paras. 475-480.

⁷⁷ EU SWS, para. 120.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 24

environmental goals is not a sufficient basis for finding the existence of a close nexus, as most U.S. Government agencies seek to lower energy consumption and reduce pollution.

- 71. The EU asserts there is organizational continuity between CLEEN and NASA because, according to the EU, NASA supports the CLEEN program with NASA personnel. The United States has already explained that FAA consulted selected NASA experts as it developed the CLEEN solicitation, but just as it consulted various other experts inside and outside of the government. The EU also makes the broad assertion that, "under the CLEEN program", Boeing's research involves NASA technologies and makes use of NASA facilities, but the EU fails to provide any explain of how its "evidence" supports such an assertion. To be clear, it does not.
- 72. The United States has also explained that the CLEEN program authorizes cost-sharing arrangements only, where the program participant must provide funding on a 1:1 basis, at a minimum.⁸¹ The United States noted that the EU has failed to identify any NASA contracts that are similarly structured. The EU's response -i.e., that the U.S. position is illogical -is an obvious attempt to sidestep the issue in light of the EU's inability to identify any such contract.
- 73. The EU similarly tries to sidestep entirely the second prong of the close nexus test. The EU has failed to articulate any theory about how the potential "effects" of the CLEEN program would undermine the compliance achieved through the U.S. declared measures to comply. The EU's proffered excuse for this failure is its statement that it does not believe compliance has been achieved, and then declares that if the declared measures did, in fact, bring the measures into compliance, the EU would nevertheless consider CLEEN to undermine such compliance. ⁸² This single, conclusory statement falls well short of establishing a close nexus in terms of effects.

8. State of Washington measures

- a. The EU's claims against measures that were not found to cause adverse effects are not properly within the terms of reference of this compliance proceeding.
- 74. The EU's claims against four State of Washington measures that were considered by the original panel are not properly within the terms of reference of this compliance proceeding because they are not "measures taken to comply" but rather are part of the original set of

⁷⁸ EU SWS, para, 120.

⁷⁹ US FWS, para. 477; Response of the United States to the Panel's Request for Information Pursuant to Article 13 of the DSU (Feb. 28, 2013), para. 93 (Exhibit USA-198).

⁸⁰ EU SWS, para. 120.

⁸¹ US FWS, para. 478.

⁸² EU SWS, para. 121.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 25

measures challenged by the EU. These measures include (i) the Washington State B&O tax credit for preproduction development; (ii) Washington State B&O tax credit for property taxes; (iii) the sales and use tax exemptions for computer hardware, software and peripherals; and (iv) the City of Everett B&O tax rate reduction. Each of these measures was considered by the original panel, but none was ultimately found to cause adverse effects and therefore the panel did not find that any of these measures was inconsistent with U.S. obligations under the SCM Agreement.

- 75. As discussed in section I.A.2.a, claims against measures considered by the original panel are not properly before the compliance panel because they do not concern "measures taken to comply." The original measure is not a "new" or "changed" measure. Each of the four Washington State measures was considered by the original panel, and none of them are "new" or "changed." The EU does not dispute this fact. Therefore, those measures cannot be considered measures taken to comply, and the EU's claims against those measures are not properly within this compliance panel's terms of reference.
- 76. An additional reason these measures cannot be measures taken to comply is the fact that all four existed at the time of the EU's original panel request. As discussed in section I.A.2.b, measures that existed at the time of the original panel request are not measures taken to comply, and are accordingly not properly within the terms of reference of a compliance panel. Given that these Washington measures preexisted the EU's original request, it is unreasonable to consider that they were taken to comply with the DSB's subsequent recommendations and rulings especially when those measures themselves were subject to those recommendations and rulings.
 - b. The Joint Center for Aerospace Technology Innovation ("JCATI")
- 77. The JCATI is not a measure taken to comply and the EU's claims concerning this measure are therefore not properly within this compliance Panel's terms of reference. The JCATI is neither a declared measure taken to comply, nor does it share a close nexus to a declared measure taken to comply or the DSB's recommendations and rulings. The EU's close nexus argument appears to be limited to its assertion that the JCATI shares a close nexus with the Washington B&O tax rate reduction and the NASA and DoD measures subject to the DSB's recommendations and rulings. ⁸³ However, as discussed below, the EU fails to demonstrate a close nexus with any of these measures.
- 78. The JCATI does not share a close nexus with the Washington B&O tax rate reduction. In terms of nature, it is difficult to conceive of how a program developed to foster the education of engineering students is akin to the reduction of a B&O tax rate. The EU's unsupported assertion that the "purpose" of both measures is to convince Boeing to expand production in Washington says nothing about the "nature" of these two very different types of measures. Nor

⁸³ EU SWS, para. 134. Although the EU refers to the "Washington State subsidies", the United States understands this reference to be to the Washington State B&O tax rate reduction, the only measure subject to the DSB's recommendations and rulings.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 26

does the EU show that these measures share a close nexus in terms of "effects." Although unclear, the EU appears to suggest that the "effects" of both measures will be to reduce Boeing's costs of doing business in Washington State, but the EU fails to articulate any coherent theory as to how such effects would occur. 84

- 79. Similarly, the JCATI does not share a close nexus with the NASA and DoD measures subject to the DSB's recommendations and rulings. Unlike the NASA and DoD measures, the JCATI coordinates the development of higher-education aerospace programs at the University of Washington and Washington State University. Moreover, the JCATI's activities with industry are structured quite differently than under the NASA and DoD measures. For example, JCATI funding is allocated to projects by educational institutions, not to a participating party. In terms of effects, the EU asserts that Boeing will be able to use technology developed through the JCATI to further its own LCA-related research without paying anything in return. In this respect, too, JCATI differs from NASA, which awards contracts to outside entities to obtain research into new scientific principles.
 - c. Washington State B&O Tax Credit for Leasehold Excise Taxes
- 80. The Washington State B&O Tax Credit for Leasehold Excise Taxes is not a measure taken to comply and the EU's claims concerning this measure are therefore not properly within this compliance Panel's terms of reference. The measure is not a declared measure taken to comply, nor does it share a close nexus with any of the measures subject to the DSB's recommendations and rulings.
- 81. The EU second written submission asserts, for the first time, that the leasehold excise tax credit is an undeclared measure taken to comply, but the EU's effort to demonstrate a close nexus is misguided and flawed from the start. The Appellate Body described undeclared measures taken to comply as "{s}ome measures with a particularly close relationship to the declared 'measure taken to comply', and to the recommendations and rulings of the DSB". But the EU fails to even attempt to link the excise tax credit to a declared measure taken to comply or the DSB's recommendations and rulings. Instead, the EU attempts to demonstrate a close nexus between the excise tax credit and House Bill 2294 and the Project Olympus Master Site Agreement, neither of which are measures taken to comply or measures subject to the recommendations and rulings of the DSB. Therefore, even if the EU was able to demonstrate a close nexus between the leasehold excise tax credit and these instruments which it does not the EU would nevertheless have failed to demonstrate that the excise tax credit is an undeclared measure taken to comply.

⁸⁴ EU SWS, para. 140.

⁸⁵ US – Softwood Lumber CVDs (21.5) (AB), para. 77.

⁸⁶ EU SWS, para. 144.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 27

- 82. In terms of nature, the EU claims the excise tax credit "is simply a logical extension of the Washington State property tax exemptions that had previously been enacted as part of the overarching measures providing incentives for Boeing to expand its Washington State production, namely, House Bill 2294 and the Project Olympus Master Site Agreement." The only Washington measure subject to the DSB's recommendations and rulings is the Washington B&O tax rate reduction. The tax rate reduction is not a "tax exemption." The only commonality in the nature of these measures is that they concern taxes. The EU's assertion that the leasehold excise tax credit is simply another tax reduction that reduces Boeing's overall tax liability in Washington is incorrect. Boeing does not claim the leasehold excise tax exemption (and the EU has produced no evidence to the contrary) and therefore it cannot reduce Boeing's tax liability.
- 83. In terms of effects, the EU's unsupported assertion that the excise tax exemption "worsens the existing situation of non-compliance" is unproven and inconsistent with the fact that Boeing does not claim the leasehold excise tax credit.
- 84. Lastly, the EU's claim that a close nexus exists between the leasehold excise tax exemption and the Washington State measures is also misguided. The EU asserts that although the measure went into effect in January 2007 i.e., well before the DSB's recommendations and rulings it only began to provide Boeing with tax exemptions in 2012 after those recommendations and rulings were issued. ⁸⁹ The EU's assertion is based on the unsubstantiated assumption that Boeing began claiming the excise tax credit at that time. As the EU does not allege that the measure was somehow changed in 2012, the timing of when Boeing allegedly began to receive benefits under the measure is irrelevant. The fact that the measure was enacted well before the DSB's recommendations and rulings, although not dispositive, indicates the absence of a close nexus in terms of timing.

9. State of South Carolina measures

- 85. The United States has demonstrated in its prior communications to the Panel and in the U.S. first written submission that the EU's claims regarding Project Emerald and Project Gemini are not properly within this compliance Panel's terms of reference. These are not declared measures taken to comply, nor do they share a close nexus with the DSB's recommendations and rulings such that they can be considered undeclared measures taken to comply.
- 86. The EU argues that in the absence of Project Gemini-related subsidies, Boeing would have manufactured more large civil aircraft in Washington State and would have received more

⁸⁷ EU SWS, para. 144.

⁸⁸ EU SWS, para. 144.

⁸⁹ EU SWS, para. 146.

⁹¹ EU SWS, para. 148.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 28

subsidies from the State B&O tax rate reduction as a result. Therefore, according to the EU, Project Gemini-related subsidies – and any other "packages" that are allegedly "inter-connected" with it, such as Project Emerald and Phase II – are all automatically within the scope of this compliance proceeding. This argument fails for several reasons.

- 87. First, in order for a measure to have a "close nexus" with a declared or undeclared measure taken to comply, it must, among other criteria, exhibit a close connection to such other measures in terms of its "nature." However, the EU terms of reference argument ignores the fact that the Washington State B&O tax rate reduction has nothing in common with Project Gemini in terms of nature. The former is a reduction in tax rate; the latter is a complex package consisting of a ground lease for a project site; a partial defrayment of the costs associated with infrastructure investment at the project site; an agreement on the method of taxation of property at the project site; tax credits for jobs created at the project site; an agreement related to the apportionment of sales tax; and several additional measures that do not resemble the B&O tax rate reduction. The fact that the South Carolina package includes some tax-related measures, or it was conferred by a U.S. state (other than the state whose measures the EU claims it relates to), provides no basis to consider the South Carolina measures and the Washington State B&O tax rate reduction to be of the same "nature."
- 88. Indeed, the Washington B&O tax rate reduction was enacted in 2003 through HB2294, specifically for the benefit of the aeronautical industry; ⁹³ by contrast Project Gemini was enacted in 2009 and forms part of a pattern of similar incentive packages provided by South Carolina since the 1990s, which have involved companies across industries (whether it be airplanes, tires, or tissue paper) and from any country (whether it be France, Germany, the UK, or Japan). ⁹⁴ The former was granted by Washington State, on the West Coast of the United States; the latter was granted by South Carolina, approximately 5,000 km away. ⁹⁵
- 89. Yet despite the absence of any "close connection" between the two sets of measures in terms of nature, the EU nonetheless claims that the South Carolina measures are within the scope of this compliance proceeding because of their allegedly related effects -i.e., according to the EU, Boeing receives fewer benefits under one if it receives more benefits under the other. ⁹⁶ As discussed below, this assertion is incorrect. Moreover, the EU's proposed analytical approach would dilute the "nature" component of the Appellate Body's close nexus test into a simple "but-

⁹¹ EU SWS, para. 148.

⁹² EU SWS, para. 151 & note 190.

⁹³ See, e.g., US – Large Civil Aircraft (Panel), para. 7.194 ("section 1 of HB 2294.

⁹⁴ See US FWS, paras. 530, 534.

⁹⁵ The EU denies that the common alleged subsidy recipient establishes a close nexus. *See* EU FWS, para. 735 ("Contrary to the US' assertion, the European Union is *clearly not suggesting* that the identity of the recipient turns all Boeing subsidies into measures taken to comply") (emphasis in original).

⁹⁶ EU SWS, para. 148.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 29

for" counterfactual test. ⁹⁷ Thus, under the EU's maximalist view of the terms of reference in a compliance proceeding, *any* alleged South Carolina subsidy to Boeing – regardless of its form or nature – would be part of this proceeding. In other words, under the EU's view, any alleged subsidy granted by any federal, regional or local government would be potentially subject to a finding of "close nexus," irrespective of its nature, whether it was provided before or after the measure to which it has an alleged close nexus, and other key factors.

- 90. Second, the EU's terms of reference argument implies the scope of Article 21.5 proceedings is potentially limitless. For example, by virtue of being "inter-connected" with Project Gemini, the EU alleges that Project Emerald and Phase II are within the scope of the compliance dispute, despite the fact that they date from six years before and three years after Project Gemini, respectively and despite the fact that the EU does not even allege that they reduced the amount of subsidy benefit that Boeing receives under the Washington State B&O tax rate reduction. Thus, the EU's proposed legal conclusions would contradict the Appellate Body's guidance that "{p}roceedings under Article 21.5 do not concern just *any* measure of a Member of the WTO; rather, Article 21.5 proceedings are limited." Indeed, they would require compliance panels to review "just any" measure involving the same subsidy recipient.
- 91. Third, even under the EU's own approach which is inconsistent with the approach of the Appellate Body and prior panels, and suggests that "effects" alone can be sufficient for a finding of a close nexus the EU fails to establish that there is a close nexus in terms of effects. The EU appears to rely almost entirely on the notion that in the absence of Project Gemini, Boeing would have established its second 787 assembly line in Washington, but it then fails to prove that this was actually the case. In fact, many factors influenced Boeing's decision to establish a second 787 assembly line in South Carolina, including:
- It "{e}stablishe{d} a differentiated center of excellence for a large, composite commercial aircraft";
- It enabled Boeing to "{c}apture{} logistical efficiency" as a result of its "{p}roximity to Boeing Charleston, Global Aeronautica, and Dreamlifter {i.e., Vought};
- It enabled Boeing to "{d}evelop{} capability to transfer final assembly & delivery operations," which would be useful for both "{c}urrent and future programs";
- It "{a}dd{ed} geographical diversity to {Boeing's} operations," and

⁹⁷ U.S. Preliminary Ruling Request, para. 37.

⁹⁸ See EU SWS, para. 151 & note 152.

⁹⁹ US – Softwood Lumber IV (21.5) (AB), para. 65 (quoting Canada – Aircraft (21.5) (AB)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 30

- It "{a}dd{ed} important political support from a key state." 100
- 92. The EU fails to address these factors, and it fails to address why it believes that the Project Gemini incentives were the deciding factor in Boeing's decision not to locate its facility in Washington State. Therefore, the EU does not make a *prima facie* showing that a close nexus exists even under its own flawed analytic framework.

10. Adverse effects-related arguments

- 93. The EU notes that it responds in the adverse effects portion of its second written submission to adverse effects-related objections by the United States to EU claims and arguments not properly raised in this compliance proceeding. In addition, the EU provides a "short summary of its rebuttals." The United States responds in kind by responding to the full EU rebuttals in the adverse effects portion of this submission, and by responding to the EU's "summary" here.
- 94. The EU opposes the purported U.S. objection that the Panel may not assess collectively the present effects of U.S. subsidies that operate through technology and price-based causal mechanisms. The EU requests the Panel to recall that, in the original proceedings, the Appellate Body reversed the original panel's failure to undertake a collective assessment. According to the EU, the United States argues that the Panel is required to make the same legal error in these compliance proceedings. All three assertions are inaccurate.
- 95. First, the United States has not argued that a Panel is precluded from collectively assessing the effects of subsidies with different causal mechanisms. Rather, the United States has argued that subsidies with different causal mechanisms cannot be *aggregated*. The EU itself acknowledges that "{a}ggregating subsidies requires that the subsidies…affect markets through the same causal mechanism." ¹⁰⁶
- 96. Second, the Appellate Body did *not* reverse the original panel's failure to undertake a collective assessment of all subsidies. Instead, it found that different causal mechanisms did not preclude the original panel from assessing *whether* aggregated groups of subsidies *should be*

¹⁰⁰ Gemini Update, Boeing Board of Directors (Oct. 19, 2009) (Exhibit USA-323), p. 6.

¹⁰¹ The EU itself admits that a mere overlap in the identity of the alleged subsidy recipient is not sufficient to satisfy the close nexus test. EU FWS, para. 735 ("Contrary to the US' assertion, the European Union is clearly not suggesting that the identity of the recipient turns all Boeing subsidies into measures taken to comply") (emphasis in original).

¹⁰² EU SWS, para. 153.

¹⁰³ EU SWS, paras. 153-160.

¹⁰⁴ EU SWS, para. 154.

¹⁰⁵ EU SWS, para. 154.

¹⁰⁶ EU SWS, para. 931.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 31

cumulated. The Appellate Body ultimately cumulated the effects of one subsidy (Wichita IRBs) with an aggregated group of subsidies (tied tax subsidies) in one market (100-200 seat market), and those subsidies shared the same causal mechanism (price effects). It did not cumulate the effects of any other aggregated groups of subsidies in the 100-200 seat market, or in any of the other markets – meaning it also did not cumulate the effects of any subsidies with different causal mechanisms.

- 97. Third, the United States has not requested that the Panel refrain from assessing whether subsidies should be cumulated solely because of different causal mechanisms. The United States has simply argued that, consistent with the principles listed by the EU, subsidies with different causal mechanisms cannot be aggregated, and that based on the facts before this Panel, application of the cumulation assessment described by the Appellate Body does not support cumulation of the aggregated groups of subsidies identified by the EU. Accordingly, the U.S. arguments are consistent with the Appellate Body's guidance and do not ask the Panel to repeat an error from the original proceeding.
- 98. The EU also summarizes some of the claims and arguments that it has improperly raised in this compliance proceeding. These include claims against measures that were challenged unsuccessfully in the original proceeding as well as other issues that were resolved in the original panel and Appellate Body reports. With respect to these issues and the EU's list is not exhaustive the EU raises the same three objections.
- 99. First, the EU asserts that these are "arguments" and not "claims." To the extent that this is true, it is not a substantive point. The relevant question is whether they relate to claims properly within the terms of reference of this Panel. To the extent those claims are listed above, arguments related to those claims are not relevant to this Panel.
- 100. Second, the EU argues that it is re-litigating these issues under different factual conditions. One example the EU gives is its argument that "the City of Everett B&O tax rate reduction causes adverse effects." This is a measure that the EU challenged in the original proceeding, but was not found to breach the SCM Agreement and was not subject to the DSB's recommendations and rulings. If the EU believes that "new facts" make this measure WTO-inconsistent it can bring a new dispute, but it cannot use the compliance proceeding as a second chance. Moreover, in many instances, the EU relies on either the same facts as in the original proceeding or additional facts from the original reference period that it could have but did not introduce. In other circumstances, the EU does not even indicate what the "change in facts" is.
- 101. Third, the EU argues that it is addressing a new basket of measures. ¹⁰⁸ The EU's position appears to be that, if there are new measures, it can treat the old measures and the new measures

¹⁰⁷ EU SWS, paras. 156-159.

¹⁰⁸ EU SWS, paras. 156-159.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 32

as a new "basket of measures" and challenge the old measures as well, even if unchanged. There is no support for this proposition.

- 102. For example, the EU re-raises lost sales allegations that were rejected in the original proceeding. If it failed to prove that, for example, a 2005 sale was a lost sale in the original proceeding, no new measure could make that sale a lost sale now. The EU's new basket of measures argument is a thinly veiled attempt at a second chance the Appellate Body has rejected as unfair.
- 103. For these reasons, and as explained more fully in the adverse effects portion of this submission, the EU's rebuttals fail, and it may not pursue these claims and arguments that are not properly before this compliance Panel.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 33

II. EU ALLEGATIONS OF ACTIONABLE SUBSIDIES

A. NASA has Withdrawn the Subsidies to Boeing by Modifying Past Measures and Changing Its Practices.

NASA's Aeronautics Research Mission Directorate ("ARMD") took a number of steps in 2006 that significantly changed its research practices. The United States described these in its first written submission – revised contracting practices that lessened contractors' role in shaping objectives, peer review of research proposals, elimination of industry competitiveness as an objective, and the addition of dissemination of results as a source selection criterion, among others. NASA's budget for aeronautics research also continued to fall during the FY2007-FY2012 period, coming to a rest at its lowest levels in 20 years. These changes resulted in a dramatic reduction in research contracting, including with Boeing. Where the original panel found that payments to Boeing under the programs challenged by the EU averaged \$58 million per year, 110 the evidence shows that average payments fell to [***] per year in the FY2007-FY2012 period. The declining aeronautics budget also constricted NASA's ability to provide facilities, equipment and employees to its contractors. Where the original panel estimated a value of \$1.55 billion from 1989 to 2006, the evidence shows a total of [***] for FY2007-FY2012. All told, the value of all financial contributions alleged by the EU, taken together, was [***] in FY2007-FY2012, [***] percent less on an annualized basis than the original panel found for the 1989-2006 period.

105. In addition, NASA modified the terms of its research contracts¹¹¹ with Boeing for the conduct of research relevant to large civil aircraft to bring them in line with the potential benchmarks discussed by the Appellate Body. It took this change not only with respect to the pre-2007 contracts explicitly covered by the recommendations and rulings of the DSB, but also with respect to contracts awarded under the modified post-2006 aeronautics research contracting practices.

106. The EU does not dispute that funding under the challenged programs was drastically lower in the 2007-2013 period. Nonetheless, it asks the Panel to find that the value of NASA payments and provision of facilities, equipment, and employees to Boeing more than *doubled*. 112

¹⁰⁹ US SWS, para. 94.

¹¹⁰ US – Large Civil Aircraft (Panel), para. 7.1099 (\$1.05 billion for the 18-year period from 1989 to 2006).

As in the original proceeding, the term "NASA contracts" includes a small number of cooperative agreements. As the United States explains in its discussion of DoD research funding, cooperative agreements and other assistance instruments raise a distinct set of legal issues. However, in the case of NASA, their value is so small in relation to contracts that these differences do not affect the overall outcome.

¹¹² The original panel's findings indicate an average annual value for payments, facilities, equipment, and employees of \$144 million (\$2.6 billion over 18 years) in the 1989-2006 period. *US – Large Civil Aircraft (Panel)*, para. 7.1099. The EU alleges a total NASA subsidy of \$1.8 billion for the 2007-2012 period, for an annual average of \$300 million. EU FWS, para. 56, figure 1.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 34

The EU provides no valid support for this assertion. Instead, it seeks to discredit the information submitted by the United States, arguing that data on payments, facilities, equipment, and employees is "the same flawed type of data rejected by the original panel." In fact, the United States used the methodology endorsed by the original panel to identify contracts funded by NASA's four aeronautics research centers and then, in line with *the Panel's* request, provided those funded by the programs challenged by the EU. Thus, the United States has responded to the Panel's concerns, while the EU still champions its discredited methodology, which the original panel rejected.

- 107. The EU does dispute the changes to NASA's research contracting practices, belittling the overhaul in NASA's contracting practices in 2006 as "a disparate set of actions brought together only for the purposes of this dispute." However, the United States did not invent these changes for purposes of this proceeding. NASA's 2007 budget request (drafted in 2006) described a "reshaped vision" ushering in a "{s}haft in focus from technology demonstration to fundamental research" and called for the elimination of existing research programs and replacement with new ones. These changes manifested themselves in the subject matter of the research NASA paid Boeing to conduct. As the U.S. first written submission showed, NASA has shifted away from technology demonstration like the High Speed Research Program and toward more foundational research.
- 108. In light of these changes, NASA has withdrawn the subsidies determined to exist, both with regard to the pre-2007 contracts covered by the recommendations and rulings of the DSB and with regard to subsequent contracts and agreements. Specifically, the Appellate Body findings in $US-Large\ Civil\ Aircraft$ identified a small gap between government terms and the market terms for comparable transactions, consisting mainly of the government's failure to obtain certain intellectual property rights for commercialization outside its established government sphere of activities. The NASA Licensing Agreement eliminated that gap, withdrawing the benefit that led to the finding of subsidization.
- 109. The United States has shown that post-2006 contracts are purchases of services because they involve primarily monetary contributions from the government, and the performance of research services by Boeing. These are not a form of financial contribution. In any event, assuming *arguendo* that they were a financial contribution, these transactions do not confer a benefit, as their terms are consistent with comparable commercial transactions. Furthermore, those terms are consistent with those offered by all U.S. government agencies on research and development contracting, so if there were some element of benefit, any resulting subsidy would not be specific. The same holds true for NASA's SAAs with Boeing.

¹¹³ EU SWS, para. 261.

¹¹⁴ EU SWS, para. 178.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 35

- 110. Therefore, with respect to both pre-2007 and post-2006 contracts, the EU has not satisfied its burden of proof for establishing that the United States has failed to comply with the recommendations and rulings of the DSB.
 - 1. The information submitted by the United States in this proceeding is the only reliable evidence as to the value of payments or provision of facilities, equipment, and employees to Boeing under the programs challenged by the EU.
 - a. The NASA payment data submitted to the Panel followed the methodology endorsed by the original panel, filtered in accordance with this Panel's request for information under DSU Article 13, and the only reliable evidence of payments to Boeing under the challenged programs.
- 111. NASA compiled the contract list submitted to the Panel by first generating a list of all payments made by the four aeronautics research centers as reported in FPDS-NG, ¹¹⁵ the database for all U.S. government contracts. NASA then identified which payments were funded through the aeronautics research programs challenged by the EU. This methodology carefully followed the findings of the original panel and the information requests from this Panel. It resulted in the contract list and financial data submitted to the Panel, which showed that NASA paid only [***] to Boeing under the challenged programs from 2007 to 2012. ¹¹⁶
- 112. The EU asserts that this list consists of "the same flawed type of data rejected by the original panel." This is untrue. The first step in the process is one the original panel endorsed. Specifically, the original panel found that "a list of contracts generated by FPDS/FPDS-NG inquiries would be the starting point for compiling any list of contracts between NASA and Boeing." That is just where NASA started in this proceeding, with the list of all payments from the four aeronautics centers to Boeing. As the Panel's Article 13 request for information asked for only those contracts "involving Boeing under the programs listed below that were entered into or that have provided funding and support from FY 2006 present," NASA identified the funding source for each payment on the FPDS-NG list. If one of the challenged programs funded even one payment to Boeing under a contract, the United States reported that contract in response to the Panel's request. Where a contract was funded entirely by a program that the EU has not challenged, such as CASP, the Exploration Technology

¹¹⁵ The original panel found that "{w}e are inclined to agree with the United States that a list of contracts generated by FPDs/FPDs-NG inquiries would be the starting point for compiling any list of contracts between NASA and Boeing." *US – Large Civil Aircraft (Panel)*, para. 7.1073.

¹¹⁶ Obligations under NASA contracts with Boeing, FY2007-FY2012, by program (Exhibit USA-37(BCI)).

¹¹⁷ EU SWS para. 261.

¹¹⁸ EU SWS, para. 7.1073.

¹¹⁹ Article 13 Request for Information, question 5. This part of the question tracks an EU suggested question word for word. EU Annex V Questions, question 5 (Oct. 25, 2012).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 36

Development Program, the Multi-Purpose Crew Vehicle, or the NASA Engineering Safety Center, the United States did not provide the contract.

- 113. The United States did not, as the EU suggests, conduct a substantive evaluation of the type of research conducted under the contract, as was the case with the contract lists submitted to the original panel. (Although the original panel did not explicitly reject that procedure, the Appellate Body suggested that the manual review by NASA personnel of descriptions of research under each contract may have raised verifiability concerns. The methodology adopted in this proceeding, which inquires only into the source of the funds for each contract, avoids such subjectivity.
- 114. Therefore, the payments data are not, as the EU asserts "inconsistent with the findings of the original panel and Appellate Body." The United States carefully considered those findings and the Panel's request for information, and structured its methodology accordingly.
 - b. The contracts and SAAs submitted by NASA offer the only reliable information as to the value of any facilities and equipment provided to Boeing under the challenged programs.
- 115. NASA does not have authority to simply provide facilities and equipment to its contractors on an "as asked" basis. During the FY2007-FY2012 period, the NASA acquisition regulations provided that "{t}he contracting officer shall insert the clause at 1852.245-76, List of Government-Furnished Property, in solicitations and contracts if the contractor is to be accountable under the contract for Government property." That clause, in turn, required a listing of the item provided and its acquisition cost. ¹²⁵ If the contractor sought to use property placed in its possession in this manner for non-governmental work, the general Federal Acquisition Regulations require the payment of rent to be agreed with the contracting officer. ¹²⁶

¹²⁰ US – Large Civil Aircraft (Panel), para. 7.1063 (The second part of the elimination process involved elimination of contracts that, although awarded by one of the four NASA research centers that perform aeronautics research, nevertheless pertained to non-aeronautics research (e.g., contracts whose subject matter pertained to space, atmospheric science, airspace hypersonics, vertical take-off and landing and short takeoff and landing, and aircraft support related to the maintenance and upkeep of NASA's aircraft).)

¹²¹ US – Large Civil Aircraft (AB), para. 695.

¹²² As the United States noted in its comments on the EU suggested questions, "NASA does not maintain data directly linking program funding to particular contractual vehicles." US Comments on EU Proposed Questions, general comment 3. NASA's contract management database, Business Warehouse, does indicate the center that provided funding, and in some instances provides program and project affiliations for individual payments. Where Business Warehouse did not provide such affiliations, it did indicate purchase requisition or order numbers. NASA consulted those documents and contract language to determine program affiliation.

¹²³ EU SWS, para. 260.

¹²⁴ 48 CFR § 1845-106.-70(g) (Exhibit USA-300).

¹²⁵ 48 CFR § 1852.245-76 (Exhibit USA-301).

¹²⁶ 48 CFR § 45.301(b) and (f) (Exhibit USA-302).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 37

Any property made available under an SAA would be reflected in the calculation of the costs waived under the SAA. Therefore, under NASA's regulations, any property provided to a contractor, including such as Boeing, would be recorded in the relevant contract or SAA. These documents accordingly provide the best evidence of any such provisions. The documents provided to the Panel testify to the rigor of NASA practices in this regard, with contracts recording equipment worth as little as \$1000, and separate SAAs with values as low as \$10,000. These instruments provide the *only* evidence as to the facilities and equipment actually provided to Boeing, and establish a total value of [***] for facilities and equipment provided under the challenged programs.

- 116. The EU does not dispute the individual components of this calculation. Rather, it asserts that Boeing "receives significant value" from NASA's own in-house research "in the form of the access it is provided to the NASA researchers, facilities and equipment under a subsequent contract." The next section of this analysis addresses this assertion with respect to access to employees. It should, however, be obvious that the value of access to a facility or piece of equipment consists solely of the value of use of that facility or equipment, which has nothing to do with NASA's in-house research.
- 117. The EU also complains that the SAA list submitted by the United States does not indicate how particular SAAs were selected or allow verification of completeness. However, the United States compiled this list in accordance with the Panel's request for:

a list of all non-reimbursable or partially reimbursable Space Act Agreements ("SAAs"), that were entered into or that have provided funding and support from FY 2006 – present, involving Boeing under the programs listed in question 5 or relating to NASA assets provided (*i.e.* managed) or funded under those programs.¹³¹

That request did not seek an explanation of how NASA compiled the list, or require a separate verification procedure. However, to put the EU's spurious concerns to rest, the SAA List resulted from a five-step process. First, NASA generated a list of SAAs between each of the four aeronautics research centers and Boeing, using NASA's Space Act Agreement Maker system. (NASA Policy Directive 1050 1H requires that every SAA be entered into this

¹²⁷ E.g., NASA SAAs with Boeing (Exhibit USA-60) (revised July 22, 2013); Equipment provided under NASA contracts and agreements (Exhibit USA-271, frame 3/7); NASA SAAs with Boeing (Exhibit USA-161(BCI), frame 1/3 (revised July 22, 2013)).

¹²⁸ Equipment provided under NASA contracts and agreements (Exhibit USA-271(BCI) (revised Aug. 22, 2013)); Boeing use of NASA computers, 2007-2012 (Exhibit USA-270); Estimate of NASA employee time in support of contracts with Boeing (Exhibit USA-321).

¹²⁹ EU SWS, para. 264 (emphasis in original).

¹³⁰ EU SWS, para. 267.

¹³¹ Article 13 Request for Information, question 6.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 38

system. ¹³²) Second, ARMD then routed the list to all Center Agreement Managers to validate data and add any missing information. Third, these officials also provided copies of any instruments not already in the possession of ARMD and verified dollar values with Center CFOs. In some cases, it was necessary to change negotiated amounts reflected in the text of the agreements with actual expenditures. Fourth, ARMD determined the program responsible for funding, and identified the agreement as fully, partially, or non-reimbursable. Fifth, in accordance with the Panel's instructions, the 41 fully reimbursable SAAs, along with SAAs funded through programs that the EU had not challenged, ¹³³ were removed from the list. This is the best information available with regard to the value of facilities and equipment provided under SAAs, and complete to the best of the knowledge of the United States.

118. The EU notes that there are entries in the list of SAAs that do not contain values for the waived amounts. The United States rectified that problem with the revised SAA list that it submitted on July 22, 2013. SAAs without reimbursement or waived amount values are, for the most part, umbrella SAAs that set out the overarching terms for work memorialized under the listed annexes or SAAs that were signed, but did not incur costs. There were two SAAs in the period for which NASA could not find cost data. However, as the data do cover most of the SAAs in the period, and given that there is no obligation to quantify precisely the magnitude of the subsidy in a proceeding under Part III of the agreement, the EU has provided no basis for

In sum, reading Article 6.3(c) in the context of Article 6.8 and Annex V suggests that a panel should have regard to the magnitude of the challenged subsidy and its relationship to prices of the product in the relevant market when analyzing whether the effect of a subsidy is significant price suppression. In many cases, it may be difficult to decide this question in the absence of such an assessment. Nevertheless, this does not mean that Article 6.3(c) imposes an obligation on panels to quantify precisely the amount of a subsidy benefiting the product at issue in every case. A precise, definitive quantification of the subsidy is not required.

¹³² NASA Policy Directive 1050 1H (Exhibit USA-303).

¹³³ SAA DFRC-276 and SAA1-757, Annex 2 are listed as partially reimbursable, but have no waived amount. This is because the Boeing cash contribution ended up covering all costs incurred. SAA2-401097, Annex 15; SAA1-754, Annex 13; and SAA3-1255, Annex 1, were signed, but no costs were incurred, so the waived amount is zero. NASA's records do not indicate waived amounts for SAAs 2-402214 and 2-402268.

¹³⁴ NASA SAAs with Boeing (Exhibit USA-60) (revised July 22, 2013). A sixth SAA with no waived amount, DFRC-276 provided for testing of [***]. The testing described in this SAA was related to the work under Air Force Cooperative Agreement FA8650-05-2-3503. Cooperative Agreement FA8650-05-2-3503, Modification 12, Attachment 3, pp. 4-6 (Exhibit USA-352, frames 52-54/61). AFRL reimbursed NASA for the cost of the waived portion of this SAA, which is captured in the government contribution under the Air Force cooperative agreement. To list that figure as the waived amount of the SAA would result in double counting.

The EU also notes a discrepancy between the data on SAA1-588, Annex 24, in the SAA List and the figures in the copy of the agreement itself. The reimbursement amount on the list contains a typographical error, and should read \$985,108. The figure for the waived amount reflects NASA's actual expenditures.

¹³⁵ The Appellate Body has found:

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 39

the Panel to reject the data from the SAAs showing that they involved [***] in facilities, equipment, and employees.

- 119. The EU also raised concerns with regard to the data on the list of equipment provided under NASA contracts, noting that there were 15 entries without valuation data. NASA has provided estimates for the values of equipment that previously had none, indicating a total value of [***] for equipment provided to Boeing under the relevant contracts. The EU makes similar assertions with respect to the completeness of the separate list showing Boeing's use of NASA computer facilities for aeronautics research activities. However, it is wrong to consider that there is something missing the data on the list represent totals of the separate sessions listed for each period. The United States emphasizes that both of these are maximum values. The values for equipment for the most part indicate the acquisition cost. If the contractor returns the equipment, which is often the case for non-consumable items, actual value to the contractor is the value of temporary use of the item, rather than the full acquisition cost. Computer time reflects all of Boeing's use of the NASA supercomputers, even though 90 percent of ARMD's use of the supercomputers is for hypersonic research, which the EU has previously recognized as having no application to large civil aircraft.
- 120. In short, the data submitted by the United States is the only evidence of facilities and equipment actually provided to Boeing by NASA. This evidence supports the conclusion that, after 2006, the provision of facilities and equipment was vastly smaller than the amount alleged by the EU.
 - c. NASA's information on the number of employees who assist contractors in carrying out work under NASA contracts is the only reliable information as to the value of employees provided to Boeing under the challenged programs.
- 121. The United States explained in the first written submission that, faced with declining budgets, NASA has had to curtail employee involvement with contractors such as Boeing. The work of those employees was limited to financial administration and management, technical monitoring to ensure that the contractor complied with the terms of the contract and satisfied all

¹³⁶ EU SWS, para. 26.

¹³⁷ The United States is submitting a revised version of *Equipment provided under NASA contracts and agreements* (Exhibit USA-271(BCI) (revised Aug. 22, 2013) that reflects this additional information.

¹³⁸ EU SWS, para. 269.

¹³⁹ The EU asserts that there is no way to verify the reported values. EU SWS, para. 268. With regard to most of the facilities and equipment listed in contracts, the text of the contract confirms the value. With regard to NASA computer usage records, the United States has submitted data from the systems NASA uses to track usage of its computers. The EU has provided no basis to consider that NASA's computer usage records are inaccurate.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 40

deliverables, and managing logistics. 140 NASA estimates that these activities occupied the following amounts of employee time at the four aeronautics research centers:

							2007-12
Center	2007	2008	2009	2010	2011	2012	Total
Ames	[***]
Dryden	Ī		***]
Glenn	[***]
Langley	[***]
Total	24.4	25.6	18.7	18.8	17.6	10.7	115.8

Source: Estimate of NASA employee time in support of contracts with Boeing (Exhibit USA-321)

For budget purposes, NASA values its professional personnel time at \$150,000 per full time equivalent, which translates to the work performed by one person over the course of a year. Thus, these figures indicate a total maximum value of employee time of \$17.4 million. The United States emphasizes that this is not the value of NASA employees "provided" to Boeing, as the EU uses that term. It is the U.S. view that these employees engage exclusively in work *for* NASA, to ensure that contractors are doing the work they are paid to do.

- 122. The EU does not dispute that NASA employees spend relatively little time working with contractors to advance the work under the contract. Rather, it argues that NASA personnel perform their own research, and that "Boeing still receives significant value *in the form of the access it is provided to the NASA researchers*... under a subsequent contract or agreement." However, there is a critical fallacy behind this assertion. The contractor has access to that researcher for a limited amount of time, which is reflected in the table in the preceding paragraph. That is the only "access" that NASA provides. A contractor could get a similar type of "access" by engaging a university to perform research. (As demonstrated by the NIAR contract, discussed below, the terms of such arrangements are essentially the same as under a NASA contract.) Thus, the reported figures indicate the only access that NASA gives its contractors to NASA employees. In this regard, the United States emphasizes again that this time consists primarily of technical oversight and review, to ensure that the contractor is doing what it was hired to do, and not doing work for the contractor.
 - d. The EU's valuation methodology grossly overstates the value of any financial contribution to Boeing.
- 123. The United States explained in its first written submission that the EU valuation methodology is identical to the "top down" approach it advocated in the original dispute, which the original panel found overstated the "maximum value" of any financial contribution by nearly

¹⁴⁰ US FWS, paras. 201-202.

¹⁴¹ EU SWS, para, 264.

¹⁴² As the United States has indicated, if NASA could do the work itself, it would. It hires contractors to perform research because they have areas of expertise that NASA does not have.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 41

four times. 143 The EU does not dispute any of this. It merely reiterates its call for the same, rejected "top down" approach in this dispute because of the concerns noted, and disproven, in the preceding paragraphs. 144 As the EU has no defense for its already rejected methodology, there is no basis to accept it in this proceeding.

- 2. NASA's research contracting practices today differ markedly from those discussed in the reports of the original panel and the Appellate Body.
- 124. The U.S. first written submission detailed several ways in which NASA modified its aeronautics research practices in 2006, which the United States described as an "overhaul" of NASA's practices. NASA terminated its largest aeronautics research program, VSP, and "refocused" all of its programs on longer term fundamental research. NASA introduced a new approach to contracting as exemplified by the NRA process and significant use of NRAs as a critical procurement tool, and placed increased emphasis on the importance of dissemination of results. It changed facilities usage policies to allow foreign entities greater access, which has resulted in Airbus use of NASA facilities under fully reimbursable SAAs. These changes together moved NASA research away from the collaborative, industry-centric model that led to the Appellate Body's findings, and they constituted important affirmative steps taken by the United States to bring itself into compliance.
 - a. NASA's "refocus" of its aeronautics research programs in 2006 marked a break with past practice.
- 125. The EU belittles the changes to NASA's aeronautics research programs as "a disparate set of actions brought together only for purposes of this dispute." However, the evidence indicates a significant change to an approach different from the collaborative, industry-centered system described by the original panel and the Appellate Body. For example, the EU cites a 2006 presentation by Dr. Lisa Porter, then the associate administrator of ARMD, for the proposition that the changes she implemented were primarily industry-driven, and that "it is unclear exactly how much reshaping actually occurred." In fact, Dr. Porter laid out a plan for extensive changes. Entitled "Reshaping NASA's Aeronautics Program," the presentation set out "Three Principles":
 - We will dedicate ourselves to the mastery and intellectual stewardship of the core competencies of Aeronautics for the Nation in all flight regimes.
 - We will focus our research in areas that are appropriate to NASA's unique capabilities.

¹⁴³ US SWS, para. 203; US – Large Civil Aircraft (Panel), para. 7.1104.

¹⁴⁴ EU SWS, para. 258.

¹⁴⁵ EU SWS, para. 178.

¹⁴⁶ EU SWS, para. 182.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 42

• We will directly address the R&D needs of the Next Generation Air Transportation System (NGATS) in partnership with the member agencies of the Joint Planning and Development Office (JPDO). 147

It is noteworthy that contrary to the many examples cited in the original panel report, ¹⁴⁸ these principles do *not* include improving the competitiveness of U.S. industry.

- 126. The EU notes correctly that Dr. Porter sought to develop "revolutionary capabilities," but disregards that the direction of that revolution, as evidenced by her three principles, was toward a greater focus on governmental uses and reliance on government capabilities to advance the state of the art for the benefit of the overall aeronautics community. The EU asserts that she wanted to do this while "enabling short-term 'products'," but here it takes her words out of context. Her real message was that "{1} ong-term research can and should have milestones," and that this "{e} nables continual assessment of research portfolio" and "{e} nables short-term 'products' while sticking to long-term goals." Thus, the "products" she sought to "enable" are "assessments" of the progress being made in the conduct of research, in terms of its quality and whether it addresses the stated objectives. They are not commercial products, as the EU implies. Dr. Porter did envisage that as Step 4 of a process in which the NRA effort was "Step 1" NASA might "Use Space Act Agreements to collaborate with industry." However, the list of SAAs with Boeing during the FY2007-FY2012 period shows that, in the end, NASA is using these instruments less frequently than before 2007
- 127. As Dr. Porter's presentation relates, the NRA process was the cornerstone of her "reshaping" of NASA's research. And, indeed, the NRA solicitation pulls together all of the threads of the effort a new focus on fundamental research, moving away from collaborative identification of research topics, and encouraging even greater dissemination of results. Thus, the critical elements of NASA's modified approach to aeronautics research were not cobbled together in 2013 as part of this proceeding, as the EU would have the Panel believe, but were part of an integrated effort initiated in 2006.
- 128. The EU also seeks to portray Dr. Porter's "reshaping" of NASA aeronautics research as driven by the Aerospace Industry Commission's concern that "U.S. industry might fall behind foreign competitors." However, the EU distorts the facts. Its primary source is a 2006 GAO

¹⁴⁷ Lisa Porter, Reshaping NASA's Aeronautics Program, slide 3 (Exhibit EU-89).

¹⁴⁸ E.g., US – Large Civil Aircraft (Panel), paras. 7.986-7.1023.

¹⁴⁹ Lisa Porter, *Reshaping NASA's Aeronautics Program*, slide 5 (Exhibit EU-89).

¹⁵⁰ Lisa Porter, Reshaping NASA's Aeronautics Program, slide 10 (Exhibit EU-89).

¹⁵¹ Lisa Porter, Reshaping NASA's Aeronautics Program, slide 11 (Exhibit EU-89).

¹⁵² US FWS, para. 105

¹⁵³ US FWS, paras. 106, 120, 154, and 179.

¹⁵⁴ EU SWS, para. 180.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 43

study designed to evaluate "the extent to which federal agencies have addressed selected Commission recommendations." GAO listed three recommendations as relevant to NASA aeronautics:

"Transformation of the U.S. air transportation system should be a national priority."

"The nation should immediately reverse the decline in, and promote the growth of, a scientifically and technologically trained U.S. aerospace workforce."

"The federal government should significantly increase its investment in basic aerospace research, which enhances U.S. national security; enables breakthrough capabilities; and fosters an efficient, secure, and safe aerospace transportation system." ¹⁵⁶

Thus, the Aerospace Industry Commission's main concern was with respect to transportation and educational infrastructure and national security, and it advocated basic research primarily for national security and transportation safety and efficiency reasons. It was not, as the EU suggests, focused on serving the needs of producers of aerospace products, but at the needs of the broader community.

129. The GAO report directly contradicts EU efforts to depict NASA as simply doing the Aerospace Industry Commission's bidding. The GAO explicitly notes that NASA refused to adopt the recommendation for "specific technology demonstration goals," and was in fact "moving away from demonstration projects that showcase such goals." NASA officials explained that pursuing such goals "can lead to scientifically unjustified research projects." GAO noted that NASA was "facilitating the transfer of R&D to industry as a whole," but the only example was a robust response by universities to NASA's research solicitations. (This reflects that, in NASA's parlance, "industry" goes far beyond "Boeing.") GAO also highlights the critical mismatch between the Aerospace Industry Commission's recommendation to increase funding for aeronautics research, and the reality that Congress decreased that funding. It noted the views of experts that "NASA will not be able to develop new technologies to the

¹⁵⁵ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, Highlights (Sept. 2006) (Exhibit EU-1031, frame 2/85).

¹⁵⁶ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 10 (Sept. 2006) (Exhibit EU-1031). GAO identifies the federal entities relevant to each Commission recommendation on page 11.

¹⁵⁷ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 22 (Sept. 2006) (Exhibit EU-1031).

¹⁵⁸ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 23 (Sept. 2006) (Exhibit EU-1031).

¹⁵⁹ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 23 (Sept. 2006) (Exhibit EU-1031).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 44

same level of maturity as in the past" and "industry would be less likely to further develop these new technologies for commercial and government use." ¹⁶⁰ In short, GAO considered that the changes occurring in 2006 would lessen the types of technology effects identified by the original panel and the Appellate Body.

- 130. In light of this evidence, it is difficult to see how the EU can cite the GAO Report for the proposition that the changes to NASA aeronautics research were designed to "improve the competitiveness of U.S. industry." It attempts to justify this view by quoting at length from NASA's response to a draft of the GAO report, which emphasizes that NASA engages not just in basic research, but also integrates the knowledge gained in different core areas to achieve "system-level objectives." However, the concern with system-level objectives is not inconsistent with the fact that NASA has changed its approach. The remainder of the NASA's comment, which the EU omits, emphasizes that it is industry's responsibility to seek to leverage research for commercial applications.
- 131. The EU also makes much of the fact that NASA's NRA process used RFIs to "solicit information on key areas of interest for private industry and determine opportunities for collaboration with NASA's planning and research efforts." In the first place, the United States made clear, and the EU has not disputed, NASA supplemented the results of the RFIs with input from other government agencies, had repeatedly emphasized the importance of universities to its efforts. In any event, seeking and accepting input from interested persons is a standard way for governments to ensure good decisionmaking. That NASA sought suggestions from industry in no way indicates that industry dictated the results. Indeed, one official of the National Academies, in reviewing NASA's efforts in mid-July 2006, criticized the agency specifically for failing to consult with customers and users, and opined that "the behind-closed-doors development of the FY 2006 VSP revision, whatever its technical merits, neglected this

¹⁶⁰ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 24 (Sept. 2006) (Exhibit EU-1031).

¹⁶¹ EU SWS, para. 180.

¹⁶² EU SWS, para. 181, quoting US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 77 (Sept. 2006) (Exhibit EU-1031).

¹⁶³ EU SWS, para. 185, quoting US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 69 (Sept. 2006) (Exhibit EU-1031).

¹⁶⁴ US FWS, para. 105.

¹⁶⁵ US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 78 (Sept. 2006) (Exhibit EU-1031) ("the restructured Aeronautics program will have a positive effect on university research"); Lisa Porter, Reshaping NASA's Aeronautics Program, slide 8 (Exhibit EU-89) ("University partnerships: - We will integrate students and faculty as true partners in our research projects.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 45

lesson." ¹⁶⁶ Thus, NASA's *consideration* of industry views in framing its objectives does not, as the EU argues, amount to a collaborative drafting of objectives.

132. The EU also tries to cite NASA's 2013 budget for the proposition that the agency has continued "business as usual." However, this is not the case. After noting that NASA's transfers of technologies have formed "the DNA of modern aircraft," the budget lays out three areas in which ARMD "continues to work: air traffic congestion, safety, and environmental impacts." All of these are public goods, rather than competitive advantages. The EU particularly emphasizes the Advanced Composites Project, noting that "accelerating the development, verification, and regulatory acceptance of new composite materials, structural design methods, test, inspection, and manufacturing processes will enhance the competitiveness of U.S. industry." However, the EU neglects to note the description of exactly what NASA intends to do:

During FY 2014, the project will pursue partnerships with industry, academia and other government agencies to expedite validation of advanced production, test, and analysis methods. A collaborative FAA and NASA research effort will be established to ensure the Advanced Concepts project will addresses FAA needs. The project will also initiate small-scale material and structures tests to acquire data to validate new analysis methods and determine new test protocols that will be shared with our partners in industry, academia, FAA and other government agencies. ¹⁷⁰

Thus, an important element of this project is to develop testing procedures that, among other things, will allow FAA to conduct its certification of all aircraft more efficiently. While an efficient regulatory process is certainly a competitive advantage for the United States, it does not constitute a subsidy.

133. In closing, the United States notes the EU assertion that the United States discussed some of these aspects of NASA's research programs in the original proceeding. However, the original panel concluded, based primarily on evidence regarding earlier programs, that NASA programs did not operate that way in the 1989-2006 period. As the EU claims regarding post-

¹⁶⁶ Statement of Stephen A. Merrill, Ph.D., before the Subcommittee on Space and Aeronautics, Committee on Science, U.S. House of Representatives, p. 3 (July 18, 2006) (Exhibit USA-304).

¹⁶⁷ EU SWS, para. 168.

¹⁶⁸ NASA 2013 Budget, p. AERO-3 (Exhibit EU-1015).

¹⁶⁹ EU SWS, para. 169, *quoting* NASA 2013 Budget, p. AERO-33 (Exhibit EU-1015).

¹⁷⁰ NASA 2013 Budget, p. AERO-35 (Exhibit EU-1015).

¹⁷¹ EU SWS, para, 182.

¹⁷² US – Large Civil Aircraft (Panel), paras. 7.999-7.1023. In fact, the Panel did not address any of the post-2006 programs in its discussion.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 46

2006 NASA programs are new claims that the original panel did not address, the analysis of them must take into account how NASA operated after 2006, and not before. The EU's insistence that nothing has changed shows that it has not put forward such an analysis. A proper consideration of these programs, as they actually operate, demonstrates that NASA's "refocus" of its aeronautic research programs in 2006 marked a significant change from past practices, and moved away from the agency's collaborative relationship with industry.

- b. Changes to NASA's dissemination policies have removed restrictions that limited dissemination in the past.
- 134. The U.S. first written submission observed that NASA has ceased providing LERD treatment to data under its contracts, and adopted a policy of greater disclosure. The NRAs for Fundamental Aeronautics, Aviation Safety, Airspace, and ISRP made agreement in advance to disclosure an evaluation criterion. They clearly indicated NASA's intent "that all deliverables under the contract be provided to NASA with unrestricted/unlimited rights," that restrictions would be allowed only if there were a "significant net benefit to NASA," and that even restrictions justified in that way "may lead to a lower score." ¹⁷³
- 135. The EU seeks to minimize the significance of this change in several ways, but none of them detracts from the significance of this change. Ironically, after insisting throughout the original proceedings that LERD protections remained available, the EU now argues that the U.S. statement that NASA abandoned LERD clauses prior to 2001 means that this change is irrelevant to the compliance proceeding. However, the original panel and the Appellate Body both referenced the LERD clauses as factors preventing the dissemination of technology the release of which "could seriously impact the competitiveness of the U.S. aeronautics industry." The continued absence of LERD clauses after 2006 accordingly represents a positive change from the measures found to be WTO-inconsistent subsidies.
- 136. The EU also argues that LERD-type protections continue in the form of "special license rights" under one contract. ¹⁷⁶ In response to the U.S. explanation that the use of this clause was an exceptional deviation from NASA's data disclosure policies and that ARMD has instructed centers not to use it in the future, the EU argues that the United States did not identify the policies or how NASA implemented them. ¹⁷⁷ As the United States has already explained, the policy is reflected in the NRA data disclosure requirement, and also in the fact, which the EU does not dispute, that no other NASA contracts used a "special license rights" or LERD clauses

¹⁷³ See, e.g., NRA NNH08ZEA001, pp. A-46, A-78, B-25, C-12, C-56, and D-53 (Exhibit US-93).

¹⁷⁴ EU SWS, para. 190.

¹⁷⁵ US – Large Civil Aircraft (Panel), para. 7.1007 (emphasis omitted).

¹⁷⁶ EU SWS, para. 193.

¹⁷⁷ EU SWS, para. 193, note, 279.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 47

in the 2007-2012 period. From this evidence, the Panel can conclude that the EU assertion that NASA may establish a "regime" of special license rights is unsupported by evidence.

- 137. The EU also seeks to marginalize the changes to policies regarding disclosure of research results by arguing that they were not part of the overhaul of NASA aeronautics programs. This comment is curious because, in the very next paragraph, the EU notes the U.S. observation that the NRAs announced NASA's intention to fully disclose all research results. The EU tries to dismiss these as "a couple of statements" about disclosure. However, as noted above, these "couple of statements" set out the evaluation criteria applicable to almost every single NRA proposal. The United States is aware of no similar instructions in pre-2006 reports. Therefore, the NRA criteria represent a significant break with the past.
- 138. The EU also notes that NASA routinely protects data developed at private expense from disclosure if it is confidential, privileged, or would reveal trade secrets. The EU is correct that such protections limit disclosure of some data in some circumstances. However, protection of this type of information, as the Panel is aware from its own working procedures, is standard. Indeed, it is difficult to imagine a commercial entity accepting one of NASA's contracts if doing so would result in the disclosure of its confidential data or trade secrets. The same holds true in transactions between private entities protection of each other's proprietary information is a foundational principle. Therefore, NASA's protection of privately funded commercially sensitive information is yet another way in which its contracts conform with commercial terms. ¹⁸²
- 139. Finally, the EU notes that it had difficulty obtaining many of the reports cited by NASA from the NASA Technical Reports Server. As the United States explained in its first written submission, this is not a formal limitation on data dissemination, but the temporary consequence of efforts to rectify gaps in NASA's data security procedures. The NASA server is back on line, and NASA is working to make sure that all data properly subject to dissemination is available.

¹⁷⁸ EU SWS, para. 191.

¹⁷⁹ EU SWS, para. 192, *citing* US FWS, para. 120.

¹⁸⁰ EU SWS, para. 192.

¹⁸¹ EU SWS, para. 192.

¹⁸² The EU also notes that the grant to Boeing of patents for inventions invented under government contracts permits it to enjoin the use of those inventions during the period of the patent. EU SWS, para. 197. However, this is not a matter of data dissemination, but of intellectual property, an issue that the United States addresses below.

¹⁸³ EU SWS, para. 195.

¹⁸⁴ US FWS, para. 208, note 394.

- 140. Thus, despite the EU's efforts to argue otherwise, the end of NASA's LERD clauses and the adoption of policies encouraging greater access to data represent a significant change in NASA's practices.
 - c. Changes to NASA's facilities usage policies have given foreign producers, including Airbus, access comparable to the access granted to Boeing.
- The U.S. first written submission identified changes to NASA's facilities usage policies 141. as one area in which it has modified its practices in line with the recommendations and rulings of the DSB. The United States further observed that Airbus has used NASA facilities under a reimbursable SAA, and is in the process of negotiating a nonreimbursable SAA. The EU, however, argues that subparagraphs 1(e) and 1(k) of NASA Policy Directive 1370.1 authorize foreign usage only if consistent with NASA's mission, and provide that NASA's mission does not include "enhancing the performance of foreign competitors of the U.S. industrial base." 185 This conclusion is obviously untrue, as Airbus, a self-acknowledged competitor with the U.S. large civil aircraft industry, has already used NASA facilities. In fact, the EU's summary of NASA's procedures combines two unrelated passages. Subparagraph 1(e) provides simply that "{t}he use of NASA facilities or capabilities shall be consistent with the Agency's mission, as described in the Space Act." This restriction holds true for domestic users, and the subparagraph makes clear that the rule applies equally to foreign users. Subparagraph 1(k) addresses a different topic – "Unwarranted International Technology Transfer and Consistency with U.S. Nonproliferation and Export control Laws, Regulations, and Practices." It also makes clear that any "higher levels of scrutiny" relating to these activities applies to "advanced research and development activities, in contrast to fundamental research or basic testing programs or projects."186
- 142. Thus, the evidence does not support the EU argument that, as a practical matter, foreign entities are never eligible to use NASA facilities.
 - 3. The EU's assertions regarding Boeing patents and the characterization of NASA programs do not support the EU's claims.
- 143. In addition to its unsustainable efforts to inflate the value of financial contributions under NASA programs involving Boeing and diminish the significance of the changes to NASA's research practices, the EU seeks to bolster its claims by reference to Boeing patents resulting from work under NASA contracts and mischaracterizing the NASA programs it is challenging. However, the issuance of patents as a result of research under a contract is irrelevant to an evaluation of whether the contract is a financial contribution or conferred a benefit. Moreover, the small number of patents identified as applicable to civil aircraft contradicts the EU's view that research under NASA contracts had massive civil applications. The EU's characterizations

¹⁸⁵ EU SWS, para. 198, *citing* NASA Policy Directive 1370.1. The EU notes that NASA policy also precludes use by "U.S. adversaries." To be clear, the United States does not consider Airbus to be an "adversary."

¹⁸⁶ NASA Policy Directive 1370.1, para. 1(k) (Exhibit USA-256).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 49

of the programs it is challenging are simply wrong and, accordingly, do not support the conclusions the EU seeks to have the Panel draw.

- a. The EU discussion of patents Boeing received is irrelevant to an evaluation of any financial contribution, benefit, or specificity associated with any related NASA contracts.
 - i. Using the patents resulting from research under a NASA contract or agreement to evaluate whether it was a financial contribution or conferred a benefit would be an ex post analysis contrary to the terms of the SCM Agreement.
- 144. The EU first and second written submission both contain extended sections describing patents for inventions that the EU considers, in some cases incorrectly, were invented during work by Boeing employees under contracts and agreements with NASA or DoD. ¹⁸⁷ The EU states repeatedly its view that the patents it cites show that NASA and DoD research results in inventions useful on large civil aircraft. However, outside of its allegation that the patents themselves are a financial contribution, which the United States addresses below in section II.F, the EU never explains how this assertion relates to the Panel's analysis of the contracts or SAAs. In fact, the patents have no role in that analysis. At the time that Boeing enters into a contract or agreement with NASA or DoD, neither party knows whether the research will result in a patentable invention. ¹⁸⁸ Thus, to consider the patents that resulted from a contract in an evaluation of whether there was a financial contribution, benefit, or specificity would involve the kind of *ex post* analysis the Appellate Body has rejected.
- 145. The Appellate Body explained in *EC Large Civil Aircraft* that Articles 14(b) and 14(c) of the SCM Agreement

support the view that a panel's assessment of benefit should focus on the relevant market benchmark at the time the financial contribution is granted to the recipient. That benchmark entails a consideration of what a market participant would have been able to secure on the market at that time. The market benchmark is predicated upon a projection as to the anticipated flow of returns that are expected to accrue as a result of the financial contribution. Consequently, the determination of benefit under Article 1.1(b) of the *SCM Agreement* is an *ex ante*

¹⁸⁷ EU FWS, paras. 141-168 and 316-362; EU SWS, paras. 171-173 and 371-377. The EU raises many of the same arguments with respect to patents resulting from work under NASA and DoD contracts and agreements. The United States addresses the cross-cutting issues in this section, and will address DoD-specific points in the section on DoD contracts funded through the "general research" program elements.

¹⁸⁸ Indeed, if Boeing knew that a particular research project was going to result in a valuable patent, it would have every incentive to fund that project itself, so that it would not have to share patent rights with the government.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 50

analysis that does not depend on how the particular financial contribution actually performed after it was granted. 189

In a subsequent part of that report, the Appellate Body drew upon this reasoning in finding that "the Panel's reference to *ex post* events was not permissible. ¹⁹⁰

- 146. The same logic applies to the evaluation of a financial contribution. Article 1.1(a)(1) frames all of the categories of financial contribution in the present tense: "a government practice involves . . ."; "government revenue . . . is foregone;" "a government provides . . ."; a government makes payments . . . or entrusts a private body." Thus, the evaluation of what the government conferred and what the recipient received depends on the facts known at the time of the transaction, and not what happened later.
- 147. The sole reason the EU gives for its extended discussion of patents is that they demonstrate the "valuable LCA-related technologies that Boeing develops" under NASA and DoD contracts and "the extended length of time during which Boeing benefits from the fruits of these programs." Here, too, the EU is mistaken. Most of the patents arise from research conducted under pre-2007 contracts. However, NASA refocused its research programs in 2006 in ways that, to quote a document the EU cites repeatedly, "industry would be less likely to further develop these new technologies for commercial and government use." With that knowledge, examples of patents under older contracts would indicate nothing about the usefulness of research under post-2006 agreements. Moreover, as the United States explains further in this section with regard to NASA and in section II.C.2.a.ii with regard to DoD, the number of patents that the EU considers related to large civil aircraft that resulted from work under government contracts is too small in relation to Boeing's total number of contracts ¹⁹³ to support a conclusion that NASA or DoD contracts and agreements routinely result in intellectual property useful for large civil aircraft.
- 148. The EU's comment about "length of time during which Boeing benefits" is a *non sequitur*. The benefit conferred by a financial contribution is defined by the difference between its terms and a comparable commercial transaction. Information related to the cited patents provides no indication about the length of time Boeing benefits from research. In the quickly changing world of aeronautics technology, inventions are often superseded by more advanced technologies.

¹⁸⁹ EU – Large Civil Aircraft (AB), para. 706.

¹⁹⁰ EU – Large Civil Aircraft (AB), para. 1330.

¹⁹¹ EU SWS, paras. 171 and 372.

¹⁹² US. Aerospace Industry: Progress in Implementing Aerospace Commission Recommendations, and Remaining Challenges, GAO Report GAO-06-920, p. 24 (Sept. 2006) (Exhibit EU-1031).

¹⁹³ US FWS, para. 372.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 51

ii. There is no basis for the EU's continued reference to patents unrelated to the programs the EU is challenging.

149. The EU is also wrong about all of these patents relating to research under the challenged programs. The United States observed in its first written submission that three of the patents cited by the EU resulted from research sponsored by Marshall Space Flight Center and Kennedy Space Center, which do not receive funding from aeronautics research programs. ¹⁹⁴ The EU asserts that this fact does not disprove a relationship to the challenged aeronautics research programs because the panel found that "the *majority* but not the *entirety* of ARMD funding is provided by NASA's Ames, Dryden, Glenn, and Langley Research Centers." ¹⁹⁵ In the first place, the EU distorts the original panel's finding, based on data for 1991-2000, that the four aeronautics centers accounted for "more than 99 per cent" of ARMD's spending on aeronautics research. ¹⁹⁶ The United States can confirm that, as ARMD's funding has shrunk, so has its ability to fund work outside of the four aeronautics research centers. Since 2006, the only ARMD funds sent to non-aeronautics research centers went to NASA Goddard Space Flight Center to pay for hypersonic flight experiments that did not involve Boeing. With regard to pre-2007 funding, there is no evidence that the less than one percent of ARMD funds that went to non-aeronautics centers funded work by Boeing, or the particular contracts cited by the EU.

150. The EU also argues that if NASA space programs resulted in inventions related to large civil aircraft, the U.S. large civil aircraft industry must derive even greater technology benefits from aeronautics programs. The conclusion does not follow. As the United States has explained, Boeing draws technology for its large civil aircraft from a huge variety of nongovernmental sources, including the manufacture of composite hulls for racing yachts, electric motors for hybrid cars, and production of business jets. If Boeing's unsubsidized work with NASA's space program produces technology useful to the company's other businesses, that merely confirms that this type of "spin-off" is not the result of the alleged subsidies, but the normal result of unsubsidized transactions. Indeed, the small number of government-related patents cited by the EU, when compared with the huge number of Boeing patents granted during the 2007-2012 period, belies the EU's theory that NASA aeronautics research contributes greatly to Boeing's civil aeronautics technology.

¹⁹⁴ US FWS, para. 205.

¹⁹⁵ EU SWS, para. 222, note 337, citing US – Large Civil Aircraft (Panel), para. 7.1079.

¹⁹⁶ US – Large Civil Aircraft (Panel), para. 7.1079.

¹⁹⁷ EU SWS, para. 222.

¹⁹⁸ Statement of Michael Bair, para. 41 (Exhibit USA-305).

¹⁹⁹ The United States notes that NASA's space program is a major consumer, and perhaps the world's largest, of launch vehicles and spacecraft and, as such, is in a different position with respect to contracts related to those activities than ARMD is with respect to aeronautics research.

²⁰⁰ US FWS, para. 377. Boeing was granted 3,736 U.S. patents from January 1, 2007, to March 15, 2013.

- iii. The EU cannot blame the small number of Boeing patents connected with NASA aeronautics research contracts on NASA recordkeeping or on the use of NASA funds to create trade secrets.
- 151. Recognizing that NASA aeronautics research programs account for an insignificant portion of Boeing's patent portfolio, the EU tries to dismiss the number of patents as the result of "shortcomings in US recordkeeping." There is no merit to this assertion.
- 152. The EU first argues that NASA provided 25 new technology reports related to inventions by Boeing while working under NASA aeronautics contracts, but did not provide corresponding waiver petitions. Any absence of waiver records cannot have hindered the EU in any way, as the new technology reports would provide the information necessary to identify any invention. It is also important to note that these reports indicate only that the contractor considers that it has discovered an invention. They do not signify that the invention is patentable, or that Boeing would necessarily seek a patent.
- 153. Second, the EU complains that [***] "patents or patent applications" appear in the U.S. list of patents and patent applications provided in response to the Panel's Question 18, but they were not listed in the NASA licensing agreement. The EU neglects to mention, however, that [***] were patent *applications*, rather than patents. Thus, there was no need to include them in the licensing agreement, but the United States correctly included them in response to the Panel's Question 18, which sought information regarding all outstanding patent applications. Thus, the EU fails to establish that the lists are "inconsistent" on the contrary, they provided consistent information in response to different questions, posed at different times.
- 154. The EU also complains that some patents list the inventors without referencing their employer. According to the EU, this makes it "difficult{}" to "identify{} all of Boeing's patents developed with funding or support from NASA." The EU is wrong. Although the patent it cites does not list "Boeing" as the subsequent transferee of the patent, it does state plainly that "{t}he invention was made under contract no. NAS1-18862 awarded by NASA." The United States identified that as a NASA contract to Boeing in the original proceeding, and in the U.S. Compliance Notification. Thus, while identifying this patent as related to the contracts covered by the EU challenge might require some diligence, it is not terribly "difficult."

²⁰¹ EU SWS, paras. 223 and 383.

²⁰² EU SWS, para. 225.

²⁰³ EU SWS, para. 226 (complaining about one particular patent that "identifies the patent as having been issued to certain individuals, rather than to Boeing or McDonnell Douglas," but which appears in the list of patents in the NASA licensing agreement).

²⁰⁴ EU SWS, para, 226.

²⁰⁵ U.S. Patent No. 5,915,317, col. 1 (Exhibit EU-1044, frame 11/16).

²⁰⁶ U.S. Compliance Notification, Annex A (Exhibit USA-107).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 53

155. Third, the EU argues that a 1999 GAO report and a 2012 study of biomedical patents indicated "endemic" underreporting of the U.S. government interest in patents for inventions invented under government contracts. However, these reports are generalized in nature, and do not purport to have addressed *Boeing's* reporting of the government interest in such patents. In fact, [***]. ***[***]**[***]***[***]**[***]***[***]**[***]***[***]**[**]**

[***]. Under U.S. law, a contractor that files for a patent for an invention invented during work on a government contract without reporting the government interest does not have valid title to the resulting patent. Thus, whatever the studies cited by the EU found generally with respect to reporting of the government interest in patents, Boeing [***] to ensure that its patents are fully in compliance with the law.

156. Moreover, the EU seriously exaggerates the results and relevance of these studies. The GAO study covered 2,094 patents, and found that for 90 percent of them, the government interest was recorded in the patent. The GAO referenced another study by the Inspector General of the U.S. Department of Health and Human Services of medically related patents finding that contractors correctly reported the government interests in their patents 86 percent of the time. The other study cited by the EU, from 2012, explicitly restricted its analysis to reporting by universities of patents in the biomedical field, so it has limited relevance to determining levels of reporting by private companies. In any event, the findings indicated that from 1995 to 2007 patents granted to universities correctly indicated government rights between 75 and 90 percent of the time, and that reporting rates were increasing over that period. Thus, the EU provides

²⁰⁷ EU SWS, para. 227.

²⁰⁸ [***] (March 25, 2013) (Exhibit USA-312(BCI)).

²⁰⁹ [***], p. 1 (March 25, 2013) (Exhibit USA-312(BCI)).

²¹⁰ Technology Transfer: Reporting Requirements for Federally Sponsored Inventions Need Revision, GAO Report GAO/RCED-99-242, pp. 6 and 10 (Aug. 1999) (U.S. PTO records indicated 2,083 patents with some government interest, while GAO interviews with contractors revealed 11 that had not been reported at all.).

²¹¹ Technology Transfer: Reporting Requirements for Federally Sponsored Inventions Need Revision, GAO Report GAO/RCED-99-242, p. 13 (Aug. 1999). The study addressed all 633 patents issued to 12 grantees of the National Institutes of Health ("NIH"), and found that 490 were properly reported in EDISON, a database that NIH and several other agencies maintain to track patents for inventions they have funded, while 79 patents were not.

²¹² Rai and Sampat, "Accountability in patenting of federally funded research," *Nature Biotechnology*, vol. 30, p. 954 (Oct. 2012).

²¹³ Rai and Sampat, "Accountability in patenting of federally funded research," *Nature Biotechnology*, vol. 30, p. 955, figure 3 (Oct. 2012).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 54

no basis to conclude that the number of "additional Boeing patents for LCA technologies" that it cannot identify from the PTO database is in any way significant. 215

- 157. The EU makes one last effort to inflate the amount of intellectual property Boeing derives from its NASA contracts, by arguing that in addition to patents, Boeing develops trade secrets through work funded by the challenged NASA programs. The EU again has the facts wrong. Under the U.S. Federal Acquisition Regulations, the government has "unlimited rights" to
 - (a) Data first produced in the performance of a contract (except to the extent the data constitute minor modifications to data that are limited rights data or restricted computer software) . . . and
 - (d) All other data delivered under the contract other than limited rights data or restricted computer software (see 27.404-2). ²¹⁷

These "unlimited rights" allow the government "to use the technical data 'as it sees fit, both inside and outside of the government', *i.e.* to 'use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or to permit others to do so.'." These are the default rights to the government with regard to any data developed under a contract.

158. Limited rights data represent an exception, and are defined as "data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications."²¹⁹ If a contractor develops data using government funds that would have been a trade secret if developed with private funds, the government has unlimited rights in the data, and the contractor cannot protect the data as a trade secret. Thus, Boeing cannot have developed trade secrets through work funded by NASA.²²⁰

²¹⁴ EU SWS, para. 223.

²¹⁵ Based on the GAO data showing reporting of the government interest in 90 percent of cases, which were not restricted to the medical sector, the existence of ten patents reporting the government interest would, on average, suggest the existence of one additional patent that had not been reported.

²¹⁶ EU SWS, para. 228.

²¹⁷ 48 CFR § 207.401-1 (Exhibit USA-306).

²¹⁸ US – Large Civil Aircraft (Panel), para. 7.1300

²¹⁹ 48 CFR § 27.401 (Exhibit USA-313).

If government and a private entity jointly fund the development of data, NASA procedures call for protection of the data as a trade secret. *US – Large Civil Aircraft (Panel)*, para. 7.1303. However, cooperative agreements are the only instruments used by NASA that provide for "joint funding," and they did not represent a significant share of NASA's payments to Boeing at any point from 1989 to the present. In addition, "under certain limited circumstances," information produced by a NASA employee under an SAA may be treated as a trade secret for up to five years. However, NASA notes that "{t}his provision is generally applicable to agreements that have

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 55

- 159. In sum, the EU's discussion of patents is irrelevant to the Panel's evaluation of whether NASA contracts or SAAs confer a subsidy. To the extent those observations have any value, it is to confirm that Boeing does not develop a significant number of patents for large civil aircraft technology from its work under NASA contracts, and the EU does not dispute that Boeing has a number of alternative sources of technology.
 - b. The United States has accurately described the research NASA paid Boeing to conduct under the challenged NASA programs.
- 160. In its first written submission, the United States reviewed the actual research that Boeing agreed to conduct under contracts and SAAs funded through the challenged programs, demonstrating usefulness to the government, and limitations on its relevance to Boeing's commercial operations. The EU attempts to rebut this explanation with a number of incorrect and, at times self-contradictory, assertions. They only serve to demonstrate the EU's failure to engage with the full suite of facts, and confirm that the EU has overstated the usefulness of NASA research to Boeing.
 - i. The EU fails in its efforts to show that NASA research has no use to the U.S. government.
- 161. The EU's first point confirms the self-contradictory nature of its arguments with respect to NASA. The EU begins by noting its adherence to the "central" Appellate Body finding that "NASA and Boeing each obtain something from this R&D," and ends the same paragraph by asserting that the notion that NASA is paying Boeing to provide public goods is "simply incompatible" with the evidence. This is precisely the reason why the United States highlighted the evidence that NASA research benefits the broader public, and has far less use to Boeing than the EU asserts. It was necessary to counteract the EU's one-sided presentation about putative applications of the research to large civil aircraft. The point is not that NASA research is useless to Boeing's large commercial aircraft, a position the United States has never advanced, but rather that a conclusion as to the existence of a financial contribution and benefit must take account of what both sides contribute and both sides get. The EU's one-sided view ignores this point entirely.
- 162. In its second point, the EU agrees that NASA research has uses beyond large civil aircraft, and then argues that such uses allow Boeing to profit by "monetiz{ing} a technology and licensing it to other firms." However, the only way to "monetize" such knowledge would be through licensing of patents, and evidence that NASA contracts do not produce a significant number of patents indicates that this theoretical business line (for which the EU presents no

the objective of developing commercial products or processes," which was not true of most of the Boeing SAAs at issue in this proceeding. NPR 2200.2C, section 4.5.15 (Exhibit USA-307).

²²¹ EU SWS, para. 201.

²²² EU SWS, para. 202.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 56

evidence) would not be lucrative. The point the United States made, and which the EU has not rebutted, is that because the knowledge was broadly applicable, and the U.S. government had full rights to use it for any government purpose, the results of the research would tend to assist others far more than Boeing. To take an example, information on siting of electric vision systems is not something Boeing could "monetize," but it is information that, when applied by the U.S. government, would have broad public good.

- In its third point, the EU accuses the United States of seeking to draw "reverse adverse 163. inferences" from evidence indicating that some of the topics NASA researched were subject to export controls or classified. In fact, the United States has identified reasonable inferences with regard to such information. For export-controlled information, the reasonable inferences are that Boeing could not reveal the information to foreign nationals without first obtaining a license, which it has not done with respect to technology used on civil aircraft. Classified information has vastly stricter restrictions, in that Boeing employees cannot even share the information (or information derived from that information) with persons inside the company lacking the requisite security clearance and a need to use that information for government purposes. (The United States discusses these points further in the discussion of DoD measures.) The only inference the United States advocates is that these restrictions have the effects provided under U.S. law. In the case of ITAR, the Panel found that "the ITAR restrict Boeing's ability to use certain R&D performed for DoD towards its civil aircraft," and that Boeing took steps to ensure that the 787 was ITAR-free. 223 However, the restrictions on classified information are much more significant than those on ITAR-controlled information, and would have correspondingly greater effect.
- 164. In its fourth point, the EU concedes that some of the research NASA conducted was highly speculative and unrelated to actual aircraft, but then notes the Appellate Body finding that early stage research is useful to Boeing. The EU misses the fact that the NASA's new focus on fundamental research has led to research more remote from potential commercialization than was the case in the original proceedings, and far less technically relevant. For example, N+3 research under the Fundamental Aeronautics Program²²⁴ called for hypothesizing about aircraft still 30 years from market entry. Studies of market, environmental, and regulatory concerns posed by supersonic aircraft with fewer than 100 seats are both outside of the large civil aircraft sector challenged by the EU, and do not call for any technology development. The EU argues that the Appellate Body's findings regarding pre-2007 early stage research effectively decided this issue, but this argument only spotlights the EU's refusal to address all the facts of NASA research as it existed after 2006. The Appellate Body decided only the issues before it, which did not include post-2006 contracts or the post-2006 organization of NASA's aeronautics research programs.

²²³ US – Large Civil Aircraft (Panel), para. 7.1160.

²²⁴ EU SWS, para. 76.

²²⁵ E.g., US FWS, para. 135.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 57

- 165. The EU ends by asserting that "{w}hat *does* matter about the research supported by these NASA programmes is whether this research produces results that are useful or relevant to Boeing's LCA business." The EU's approach ignores that the transactions had two parties, each of which took away something of use. It accordingly "matters" equally that the research in question is relevant for the use of the U.S. government, and the EU failure to engage on this issue means that it has failed to satisfy its burden of proof.
 - ii. The United States has accurately characterized the NASA programs.
- 166. The United States demonstrated that the NASA programs had broad public utility. The EU seeks to characterize the descriptions of the programs as "mischaracterizations," but they in fact comport fully with the evidence.

Fundamental Aeronautics Program, Aviation Safety, and Integrated Systems Research Programs

- 167. The EU identifies three supposed "inaccurate representations" with regard to the U.S. descriptions of these programs. In fact, the descriptions are fully accurate. The EU's arguments to the contrary reveal important errors in the EU's approach to NASA research.
- 168. The EU begins by recognizing that NASA actively invited non-U.S. entities to participate in these programs, which represent the majority of NASA's aeronautics research spending from 2007 to 2012. The supposed "inaccuracy" is that non-U.S. entities would participate on a cost share basis, rather than receiving any funding from NASA. However, the EU fails to recognize that this active invitation represents a change from the past, and belies the EU's assertion that NASA only seeks to work with U.S. companies. Moreover, given the EU's insistence that non-reimbursable SAAs, which also lack a cash payment component, allow Boeing to acquire useful knowledge, the offer of a similar arrangement to non-U.S. entities would provide similar advantages to them.
- 169. The EU attempts to downplay the significance of NASA's full data disclosure policy under the NRAs by asserting that it was merely "one of 7 evaluative factors" in a category "that was assigned a 25% weight." This criticism misfires on two levels. First, NASA did not simply state its intent to disclose all data it stated that data restrictions "must demonstrate a significant net benefit *to NASA*," and that even such justified restrictions "may cause a lower score." This is the only one of the seven criteria for which NASA made such a warning.

²²⁶ EU SWS, para. 205 (emphasis in orignial).

²²⁷ EU SWS, para. 208.

²²⁸ EU SWS.

²²⁹ E.g., NRA, p. A-46 (Exhibit USA-93).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 58

Second, NASA expected and received a voluminous response to the NRAs, and awarded relatively few contracts. ²³⁰ In that environment, every criterion would matter.

170. Finally, the EU states that it could not find many of the reports cited by NASA on the NASA Technical Reports Server. NASA has independently searched for the reports on the list, and found that, with the exception of two, all of the non-controlled formal reports (designated with a "CR" number or "AIAA" number) are on the NASA server. The two exceptions are available from other public Internet sources. Two new articles related to research under Task NNL10AA71T have now been published, and six additional reports are in the process of review for public release. The list indicated several reports that were not on the server, but are available on request from the relevant NASA research center.

Aeronautics Strategy and Management

171. The U.S. first written submission explained that this program did not fund payments or provide facilities, equipment, or employees to Boeing. The only "inaccuracy" identified by the EU is note that the United States addresses such provisions under contracts and agreements, but does not address the EU's claims with regard to other (unspecified) ways that NASA allegedly conveys payments, facilities, equipment or employees. The United States is, however, fully aware of the breadth of the EU's claims. As explained above in section II.A.1.b, the only means by which NASA provided facilities, equipment, or employees was through contracts and

²³⁰ NASA's records indicate that in most years, fewer than one qurter awards a contract for only one quarter of the NRA proposals it receives:

NRA	Proposals	Awards
2006	1014	244
2007	390	128
2008	117	37
2009	194	49
2010	526	93
2011	304	43
Source: NAS	A	

²³¹ One of the report numbers had a typographical error. Report "2013-462" should read "2013-0462." One of the reports under NASA Contract NNA06BC41C contained limited rights data and distribution was limited accordingly, but the underlying wind tunnel test data was published, and is available at http://rotorcraft.arc.nasa.gov/Publications/2010.html.

²³² CR2003-212309 is available at http://archive.org/details/nasa_techdoc_20030061085; CR-2003-212331 is available at http://archive.org/details/nasa_techdoc_20030064046.

²³³ NTRS document identification numbers are 20130013993 and 20130012906.

²³⁴ In addition to those indicated on the list, the following reports are available on request or at the relevant center's library: L9K6-FR-020901; ;L9K6-FR-05001; L9K6-FR-03301; L9S7-07-FTR-07001; D500-13671-1; PWDM08-0010 Rev A; and reports relating to contracts NND11AQ73C, NAS1-NNL04AA11B, NNL07AA03A, NNL09AD50T.

²³⁵ EU SWS, para. 211.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 59

SAAs.²³⁶ Therefore, the U.S. statement that the Aeronautics Strategy and Management Program provided no such things to Boeing fully addresses the EU claim.

Aeronautics Test Program

172. As with the Aeronautics Strategy and Management Program, the "central flaw" highlighted by the EU is that its claims go beyond direct funding of Boeing and include use of facilities funded under the program. ²³⁷ The United States understands this point, which is why it has reported both contracts and SAAs funded by the Aeronautics Test Program. Those instruments represent the only means by which NASA provided payments, facilities, equipment, or employees to Boeing that are subject to the EU claims. ²³⁸ If contracts or SAAs sponsored by other programs provided access to facilities funded by the Aeronautics Test Program, they will appear in those documents, and to report them as also being "provided" by the Aeronautics Test Program would result in double counting.

Strategic Capabilities Assets Program

173. The United States explained that this program did not provide facilities, equipment, and employees to Boeing, and that the only payment was a purchase *from* Boeing of a commercial simulator. The EU responds by asserting that its claims "address the aeronautics test and simulation capabilities funded by this program." This is not correct. The EU's claims are that NASA made payments to Boeing *to conduct research* and provided facilities, equipment, and employees. It did not challenge NASA's generalized maintenance of or investment in those facilities. The single contract with Boeing under this program was not a payment for research, but a payment for a commercial good sold by Boeing, which NASA purchased as an investment in its own infrastructure. It is accordingly not subject to the EU claims. (If Boeing made any subsequent use of this software – which seems unlikely, as the company already owned it – that would appear as an SAA or government-furnished property or government-furnished information under a contract.)

High-End Computing Program

174. The EU contends that there is a disconnect between the U.S. statements that the High-End Computing Program does not provide facilities to Boeing and the fact that Boeing made use of NASA computer facilities. There is none. The 2013 NASA budget explains the Science

 $^{^{236}}$ The United States recalls that the EU has never challenged provision of facilities, equipment, or employees under fully reimbursable SAAs.

²³⁷ EU SWS, para. 216.

 $^{^{238}}$ The United States recalls that the EU has never challenged provision of facilities, equipment, or employees under fully reimbursable SAAs.

²³⁹ US FWS, para. 193.

²⁴⁰ EU SWS, para. 211

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 60

Mission Directorate funds the operation, maintenance, and upgrade of NASA's supercomputing capacity as an agency asset. The individual mission directorates are responsible for regulating access to the supercomputers, and any provision of access under the challenged programs would be *through* ARMD. The High-End Computing Program maintains records of supercomputer use identified by the sponsoring mission directorate and the group ID of the Principal Investigator ("PI") for the particular use. The data on supercomputer usage reflects all of the usage by Boeing that ARMD sponsored.

175. The EU does not dispute the accuracy of the U.S. description of restrictions on usage of the NASA supercomputers, but asserts that the description is "misleading" because the PIs who are authorized to request access to the computers may be employees of contractors, including Boeing. The EU's concern is baseless. All PI requests for allocation of computer time must be approved by the NASA project manager to ensure that the mission directorate is supporting the requested allocation. Each approved allocation of time receives a distinct group ID. It is a criminal offense for a government employee or contractor to use the supercomputers for any purpose that NASA has not specifically authorized.

Cross-Agency Support Program ("CASP")

176. The United States referred to CASP only because it funded some payments to Boeing by the four aeronautics research centers. As the EU agrees that its claims do not cover CASP, ²⁴³ there is no dispute that these payments are not within the scope of the EU claims.

4. The licensing agreements have withdrawn the subsidy conferred by pre-2007 NASA contracts and DoD assistance instruments.

177. For pre-2007 NASA contracts and DoD assistance instruments, ²⁴⁴ the United States has taken affirmative action to withdraw the subsidy by obtaining from Boeing a royalty-free license to exploit patents resulting from research under those contracts and instruments for any commercial purpose. ²⁴⁵ These licensing agreements were tailored to eliminate the gap identified by the Appellate Body between the intellectual property allocation terms of U.S. government

²⁴¹ NASA 2013 Budget, p. ES-6 (Exhibit EU-46).

²⁴² EU SWS, para. 219.

²⁴³ EU SWS, para. 220.

²⁴⁴ The EU raises essentially identical arguments with respect to the benefit allegedly associated with NASA and DoD contracts and DoD assistance instruments. The United States addresses those arguments here.

²⁴⁵ NASA License Agreement (Exhibit EU-251(BCI)) and DoD License Agreement (Exhibit EU-0401(BCI)). Out of an abundance of caution, the United States designed the agreements to cover not only DoD assistance instruments and pre-2007 NASA contracts and DoD assistance instruments, but also post-2006 NASA contracts, even though it was unnecessary to do so for WTO compliance purposes, because post-2006 NASA contracts are purchases of services.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 61

contracts and certain agreements identified as potential benchmarks. ²⁴⁶ Consequently, the licensing agreements withdrew the subsidy previously conferred by pre-2007 NASA contracts and DoD assistance instruments. ²⁴⁷

178. Against this backdrop, the EU claims that the United States has not achieved full compliance with the DSB's original recommendations and rulings. Therefore, the EU has the burden to establish that the U.S. measures taken to comply are insufficient – and in particular, it must show that the pre-2007 NASA contracts and DoD assistance instruments as amended are more favorable to Boeing than comparable commercial joint venture agreements are to the party being commissioned to perform research. The EU must take account of all of the potential benchmarks, identify which ones are relevant, and demonstrate that the pre-2007 NASA contracts and DoD assistance instruments, as amended, are more favorable to the nongovernment party than all of the valid benchmarks. This is the approach the Appellate Body took when it based its benefit analysis not on the benchmarks advocated by the EU but on those proposed by the United States, which resembled the challenged measures more closely. It is not enough merely to put forward two isolated examples of private R&D transactions, as the EU does with the Dieu statement and the 2002 NIAR contract. 248 This is especially true as the two benchmarks are critically deficient – Dieu addresses only research fully funded by one of the parties, which is not the case with these collaborative arrangements, while the 2002 NIAR contract was superseded by a new model that closely tracks the terms of U.S. government research contracts. 249

179. Since the EU has not provided the requisite market benchmark analysis, it fails to meet its burden of proof. To facilitate an objective assessment of the matter in this compliance proceeding, this submission will provide additional evidence and argumentation demonstrating the United States has in fact withdrawn any subsidy. First, the United States shows that the licensing agreements have eliminated the gap between Contract D and the pre-2007 NASA contracts and DoD assistance instruments, notwithstanding the EU's arguments to the contrary. Second, the United States shows that Contracts A, B, and C and the current NIAR model contract confirm this conclusion, as the terms of U.S. government contracts and agreements are

The Appellate Body noted that:

the United States did not contest that this evidence indicates that there were market transactions in which the entity commissioning the R&D obtained ownership of all intellectual property rights. The United States, however, argued that the "market does not dictate a single outcome in the negotiation of intellectual property rights", and introduced evidence of alleged market transactions showing more "diversity in the disposition of rights". *US – Large Civil Aircraft (AB)*, para. 653. ²⁵⁰ EU SWS, paras. 297 and 504.

²⁴⁶ In the case of Contract D, the Appellate Body defined this gap as [***]. *US – Large Civil Aircraft (AB)*, para. 657 ("[***]."). As explained below, the United States has eliminated the gap with respect to Contract D and the other contracts discussed by the Appellate Body.

²⁴⁷ Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

²⁴⁸ See EU SWS, paras. 273, 308, 478, 515.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 62

no more favorable than these commercial transactions. Third, in response to the EU's argument that Contract D is an outlier, the United States provides a report by Louis P. Berneman, an industry expert on private, arm's length collaborative R&D arrangements, who explains that the terms of U.S. government contracts are consistent with market outcomes. Improvides additional evidence of prevailing market practices with respect to collaborative R&D arrangements, confirming – contrary to the EU's claims – that Contract D exemplifies one type of private, market-based transaction for collaborative research efforts. In sum, the U.S. measures taken to comply have satisfied the U.S. compliance obligations with respect to pre-2007 NASA contracts and DoD assistance instruments.

- a. The benchmarks proposed by the EU are not comparable to the financial contributions found to exist by the Appellate Body.
- 180. The Appellate Body was clear as to the principle characteristics of the intellectual property allocation under NASA contracts and DoD assistance instruments: they "involve the commitment of resources from both parties" and "{t}he fruits of the research are shared between Boeing and NASA or Boeing and the USDOD." The benchmarks that the EU proposes are not valid comparators because they involve a commitment of resources by only one party in exchange for that party enjoying all of the fruits of the research for itself. Therefore, any comparison between their terms and those of the NASA contracts and DoD assistance instruments provides no valid indication as to the existence of a benefit.
- 181. The centerpiece of the EU benchmarking exercise is a statement from Regina Dieu, the former Airbus in-house counsel responsible for negotiating the purchase of R&D services. She stated that "{w}hen Airbus *fully funds* R&D or *purchases* engineering product design work from a supplier, Airbus exclusively and solely owns all foreground intellectual property." Thus, Dieu describes a transaction where one party walks away with all of the "fruits." By contrast, the Appellate Body indicated that the proper benchmark for pre-2007 NSA and DoD assistance instruments is a transaction involving joint research, useful to both parties, where "{t}he fruits of the research are shared." ²⁵⁴
- 182. The EU second written submission attempts to salvage Dieu's statement by arguing that the transactions she described as "fully fund{ed}" encompass situations where the suppliers bring "their own talents, skills, and intellectual property" to the transaction, which make them

²⁵⁰ EU SWS, paras. 297 and 504.

²⁵¹ Declaration of Louis P. Berneman, Ed.D., DLP (Aug. 22, 2013) ("Berneman Report") (Exhibit USA-322(BCI)).

²⁵² US – Large Civil Aircraft (AB), para. 611.

²⁵³ EU SWS (quoting Declaration of Regina Dieu (Exhibit EU-31) (emphasis added). Airbus employee Alistair Scott attested that the conditions described by Dieu remain true of Airbus's research transactions today.

²⁵⁴ US FWS, para. 239.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 63

"analogous to joint ventures." As a matter of fact, it is likely that a situation in which one party pays and the other provides services does involve the supplier's use of its own talents, skills, and intellectual property. However, that does not mean that the purchaser and supplier are engaged in a "collaborative" exercise or "sharing" the results in a way that is "akin to a joint venture." (If that were the case, every transaction would be "akin to a joint venture," which would deprive the concept of any meaning.) As Dieu plainly does not address the split of intellectual property rights in a collaborative or shared situation, her statements are worthless as a benchmark for the kind of *joint* ventures described by the Appellate Body and alleged to exist by the EU.

The EU also cites the 2002 NIAR contract. 256 In a statement submitted with the U.S. first 183. written submission, Dr. John Tomblin, the current executive director of NIAR, explained that the terms of the 2002 contract are contrary to NIAR's policy during his tenure, and he described NIAR's current standard intellectual property terms. ²⁵⁷ These terms track closely with those of pre-2006 NASA contracts and DoD assistance instruments. The EU attempts to rehabilitate the 2002 contract by observing that Dr. Tomblin was not in charge of NIAR at that time. However, the EU ignores the fact that NIAR's current standard intellectual property terms are unquestionably a better benchmark for evaluating the EU's claims that the NASA contracts and DoD assistance instruments, as amended, presently confer a subsidy to Boeing. Moreover, even with respect to commercial practices as they existed prior to 2006, the 2002 NIAR contract has less probative value than Dr. Tomblin's explanation that they were contrary to NIAR policy. He assumed his current post in January, 2003, two months after the 2002 contract was signed, ²⁵⁸ so his statements provide a good indication of the state of affairs at that time. Therefore, the 2002 NIAR contract is not a valid benchmark for the NASA contracts and DoD assistance instruments, as amended by the licensing agreements.

184. Finally, the EU seeks to bolster its position by referring to articles advising those who engage in intellectual property transactions to gain exclusive rights to the results. The United States does not doubt that many of the participants in these transactions would like exclusivity. But in a transaction in which "{t}he fruits of the research are shared," exclusive rights are an oxymoron. The articles cited by the EU are accordingly worthless as a benchmark for the kind of *joint* ventures described by the Appellate Body and alleged to exist by the EU.

²⁵⁵ EU SWS, para. 273.

²⁵⁶ EU SWS, para. 274.

²⁵⁷ US FWS, 240.

²⁵⁸ Contract between Boeing Commercial Airplane Group Wichita Division and Wichita State University, Contract No. 000051728 (Nov. 4, 2002) (Exhibit EU-243).

²⁵⁹ EU SWS, para. 274.

- 185. Thus, the benchmarks cited by the EU do not provide a valid comparison to determine whether the pre-2006 NASA contracts and DoD assistance instruments. The EU has accordingly failed to meet its burden of proof.
 - b. The licensing agreements have eliminated the subsidy identified by the Appellate Body with respect to pre-2007 NASA contracts and DoD assistance instruments.
- 186. In the original dispute, the Appellate Body's benefit finding was based on its assessment that the pre-2007 NASA contracts and DoD assistance instruments were more favorable to the commissioned party (*i.e.*, Boeing), in terms of intellectual property allocation, than any of the six benchmark contracts (*i.e.*, Contracts A through F) that were before it. ²⁶⁰ Now, through the licensing agreements, the United States has eliminated the gap between Contracts A through D on the one hand, and the pre-2007 NASA contracts and DoD assistance instruments on the other hand. Thus, under the Appellate Body's approach, there is no benefit.
 - i. The intellectual property allocation terms of the pre-2007 NASA contracts and DoD assistance instruments as amended are at least as favorable to the commissioning party as those of Contract D.
- 187. The Appellate Body identified only one difference between the pre-2007 NASA contracts and DoD assistance instruments and Contract D: [***]."²⁶¹ The licensing agreements eliminate this difference and, therefore, have withdrawn the subsidy.
- 188. The EU attempts to draw three additional distinctions between Contract D and the pre-2007 NASA contracts and DoD assistance instruments, despite the fact that the Appellate Body did not discuss any of these factors in its own subsidy analysis. In effect, the EU seeks to retroactively expand the Appellate Body's original findings, and by extension, the U.S. compliance obligations.
- 189. Moreover, the aspects of Contract D discussed by the EU actually confirm that the pre-2007 NASA contracts and DoD assistance instruments as amended are even more favorable to the commissioning party than Contract D, and therefore do not confer a subsidy to Boeing. First, the EU argues that the [***]. In fact, however, the opposite is true: [***]²⁶³

²⁶⁰ US – Large Civil Aircraft (AB), paras. 655-660.

²⁶¹ US – Large Civil Aircraft (AB), para. 657.

²⁶² EU SWS, paras. 303-304.

²⁶³ See US – Large Civil Aircraft (AB), para. 657.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 65

- 190. [***]²⁶⁴ [***], Contract D is *less* favorable to the commissioning party than pre-2007 NASA contracts and DoD assistance instruments as amended.
- 191. Second, the EU argues that the commissioning party's [***]²⁶⁵ [***]²⁶⁶ [***]²⁶⁷ [***], Contract D is at least as favorable to the commissioning party as pre-2007 NASA contracts and DoD assistance instruments as amended.
- 192. Third, the EU argues that the commissioning party's right to $[***]^{268}$ $[***]^{269}$ $[***]^{270}$ $[***]^{271}$
- 193. Thus, with respect to the [***], Contract D is actually *less* favorable to the commissioning party than the pre-2007 NASA contracts and DoD assistance instruments as amended. Accordingly, the EU fails to establish that the U.S. measures taken to comply are insufficient to withdraw the subsidy identified by the Appellate Body.²⁷²

The EU argument on the second point is incorrect. The attribution of patent rights was the only form of intellectual property right in the government transactions that the Appellate Body found to be more favorable to the commissioned party than in a commercial transaction. This finding cannot be transposed to government data rights clauses because they work differently. In particular, NASA receives unlimited rights in most data. The Appellate Body did not address trade secrets, either. As section II.A.3.a.iii of this submission explains, data created with government funds cannot be treated as a trade secret, which rules out the creation of trade secrets under NASA contracts and DoD assistance instruments. Moreover, NASA no longer uses LERD clauses. *See* US FWS, para. 224.

²⁶⁴ See Contract D (Exhibit USA-234(BCI)), para. 1.1 (defining "Fields of Use" to include [***]; *ibid.*, para. 6.3.1 (providing the commissioning party with "[***]. [***]." *Ibid.*

²⁶⁵ EU SWS, para. 305.

²⁶⁶ As the original panel explained and the Appellate Body acknowledged, NASA's government use rights include "the use of the patent by any government contractor engaged in 'government business.'" *US – Aircraft* (*AB*), para. 657 (quoting *US – Large Civil Aircraft (Panel)*, para. 7.1286).

²⁶⁷ In particular, Contract D states: [***]." Contract D, para. 6.3.1 (Exhibit USA-234(BCI)) (emphasis added). Thus, under Contract D, the commissioning party may [***]

²⁶⁸ EU SWS, para. 306.

²⁶⁹ *US – Aircraft (AB)*, para. 657

²⁷⁰ Contract D, para. 6.3.1.1 (Exhibit USA-234(BCI)).

²⁷¹ Contract D, para. 6.3.1.1 (Exhibit USA-234(BCI)).

The EU also argues that the NASA licensing agreement is insufficient to withdraw the subsidy because it does not address (i) contracts concluded on or after September 24, 2012, or (ii) "trade secrets and data protection." EU SWS, paras. 285, 288. With respect to the EU's first point, the parties could not know what patents would result in the future from research under assistance instruments funded through the original 23 program elements and, accordingly could not write them into the agreement. They retain the ability to amend the agreement, although the drop-off in the number of assistance instruments suggests a similar decline in the already small number of patents that result from those instruments.

- 194. Moreover, the EU's rhetorical attacks on the U.S. compliance steps are both misplaced and significantly overstated. As explained above, the U.S. compliance steps were tailored to close the narrow gap between commercial practice and government contracts identified by the Appellate Body in this dispute. The scope of the licensing agreements is commensurate with this gap, and this does not somehow imply that the licensing agreements are a "sham transaction," or that they would only be commercially relevant if the United States "abandons capitalism." In fact, just as the EU's Airbus governments decided to enter the commercial arena at one point in time, it is possible that the United States will do so, either with respect to civil aircraft or another product. Through the licensing agreements, Boeing has committed to forego royalty income in the event that the United States decides to exploit the intellectual property for any purpose. This commitment represents a real liability for Boeing that the EU glosses over.
 - ii. The intellectual property allocation terms of the pre-2007 NASA contracts and DoD assistance instruments as amended are at least as favorable to the commissioning party as those of Contracts A through C.
- 195. In its second written submission, the EU argues that Contracts A, B, and C demonstrate that the pre-2007 NASA contracts and DoD assistance instruments as amended continue to confer a benefit to Boeing. According to the EU, this is because Contracts A, B, and C [***]. However, this EU analysis is based on an incorrect understanding of the relevant U.S. law, which in fact allocates patent rights for joint inventions in the same way as the pre-2007 NASA contracts and DoD assistance instruments. Therefore, contrary to the EU's mistaken assertions, [***] the licensing agreements closed the gap between pre-2007 NASA contracts and DoD assistance instruments that the Appellate Body identified.
- 196. The regulations codifying Executive Order 10096, "Providing for a uniform patent policy for the Government with respect to inventions made by Government employees and for the administration of such policy," state:
 - (1) The Government shall obtain, except as herein otherwise provided, the entire right, title and interest in and to any invention made by any Government employee:

²⁷³ EU FWS, paras. 3, 190, 384; SWS, para. 4.

²⁷⁴ EU SWS, paras. 277, 283, 483, 489.

²⁷⁵ This would not entail "abandoning capitalism," as the EU asserts, any more than the Airbus member States abandoned capitalism when they joined together to launch Airbus.

²⁷⁶ EU SWS, paras. 293, 500.

²⁷⁷ EU SWS, paras, 293, 500.

 $^{^{278}}$ Executive Order 10096, sec. 4, as amended by Executive Order 10930, and by Executive Order (Exhibit USA-309).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 67

- (i) During working hours, or
- (ii) With a contribution by the Government of facilities, equipment, materials, funds or information, or of time or services of other Government employees on official duty, or
- (iii) Which bears a direct relation to or is made in consequence of the official duties of the inventor. ²⁷⁹

Thus, under U.S. law, the United States government takes title and interest in inventions jointly made by NASA and DoD employees and contractors. ²⁸⁰ Accordingly, the EU is incorrect to claim that [***]. Since the EU [***] that it considers relevant to the benefit analysis, the EU fails to establish that the Contracts A through C indicate the continued existence of a benefit.

- iii. The pre-2007 NASA contracts and DoD assistance instruments as amended are consistent with NIAR's standard contract terms.
- 197. In response to the U.S. demonstration that the licensing agreements withdrew the subsidy, the EU attempts to dismiss the benchmark contracts used by the United States and the Appellate Body as "outlier{s}." However, the EU fails to substantiate this assertion with new evidence regarding the relevant benchmark. By contrast, the United States submitted additional evidence, in the form of NIAR's current standard contract terms, confirming that Contract D is in fact a typical example of market-based transactions.
- 198. NIAR's standard contract terms allocate intellectual property in a manner that is consistent with the pre-2007 NASA contracts and DoD assistance instruments as amended. This confirms that Contract D is not an "outlier," as the EU claims, ²⁸³ and that pre-2007 NASA contracts and DoD assistance instruments no longer confer any benefit to Boeing.
- 199. Dr. John Tomblin, NIAR's Executive Director, explained: "NIAR is the largest university aviation R&D institution in the United States," which "provides research, design, testing, and certification services to the aviation manufacturing agencies, government agencies, educational entities, and other entities." NIAR's private-sector research partners include "Airbus, Boeing,

²⁷⁹ 37 CFR § 501.6 (Exhibit USA-310).

²⁸⁰ The EU cites the Appellate Body as its source for the statement that NASA and DoD did not take title to inventions developed by their own personnel. EU SWS, paras. 293 and 500. As the Panel made no finding that patents for jointly discovered inventions would be owned by the contractor (which is, in fact, incorrect) the EU is in essence asserting that the Appellate Body made a finding of fact. As the DSU explicitly precludes findings of fact by the Appellate Body, the EU must be misunderstanding the import of the Appellate Body's statement.

²⁸¹ See EU SWS, paras. 293, 500.

²⁸² EU SWS, paras. 297, 504.

²⁸³ EU SWS, paras. 297, 504.

²⁸⁴ Statement of John Tomblin, para. 1 (Exhibit USA-263).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 68

Bombardier Learjet, Cessna, Hawker Beechcraft, and Spirit Aerosystems."²⁸⁵ Dr. Tomblin stated that NIAR's collaboration with these companies is not charitable.²⁸⁶

- 200. Dr. Tomblin's statement includes NIAR's standard intellectual property allocation terms as an attachment. With regard to these standard terms, Dr. Tomblin stated: "If outside sponsors cannot accept our standard terms, then NIAR is unable to engage with them in collaborative research projects." Thus, NIAR's intellectual property allocation terms reflect the prevailing intellectual property allocation terms of collaborative R&D contracts with the largest aviation R&D institution in the United States.
- 201. NIAR's standard intellectual property allocation terms mirror those of the pre-2007 NASA contracts, as amended. The EU attempts to draw a distinction based on their treatment of patents related to joint inventions: NIAR's standard terms give the parties joint ownership over joint inventions, whereas the pre-2007 NASA contracts supposedly give Boeing sole ownership over joint inventions. However, as explained above, the United States government takes title and interest in inventions jointly discovered by NASA employees and contractors. Therefore, the EU fails to identify any relevant difference between prevailing market practices as instantiated by NIAR's standard contract terms and the pre-2007 NASA contracts as amended.
- 202. The EU also emphasizes supposed differences between NIAR's current standard contract terms and a previous 2002 NIAR contract with Boeing that the EU submitted in the context of the original dispute. However, even if it were correct, this EU argument would only confirm that prevailing market conditions have changed since the time examined by the original panel. Therefore, the EU has a burden to demonstrate that pre-2007 NASA contracts as amended do not fall within the range of possible market outcomes today. The EU fails to discharge this burden, and its arguments regarding NIAR's supposed practices in 2002 are beside the point.
 - iv. The pre-2007 NASA contracts and DoD assistance instruments as amended are consistent with prevailing market practices for collaborative R&D arrangements.
- 203. In light of the EU's continued insistence that the U.S. proposed benchmarks are "outliers," ²⁹⁰ the United States has obtained a broader analysis of how commercial entities

²⁸⁵ Statement of John Tomblin, para, 4 (Exhibit USA-263).

²⁸⁶ Statement of John Tomblin, para. 5 (Exhibit USA-263).

²⁸⁷ Statement of John Tomblin, para. 4 (Exhibit USA-263).

²⁸⁸ EU SWS, para. 309 ("When NASA and DOD enter into R&D contracts and agreements however, and an invention is made jointly or in collaboration with the commissioned party, the invention is owned solely by the commissioned party.").

²⁸⁹ EU SWS, paras. 309, 516 (admitting that NIAR's "current standard contract provides fewer rights to the commissioning party than does the older NIAR contract considered by the Appellate Body{}").

²⁹⁰ EU SWS, paras. 297 and 504.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 69

engage in collaborative research structure their transactions. The United States is submitting a report by Louis P. Berneman, an industry expert on intellectual property licensing and R&D collaboration with more than 30 years of intellectual property-related experience in all technology sectors and in both private and public sectors. Mr. Berneman reviews sample contracts drawn from the pharmaceutical and biomedical research sectors, and finds that the pre-2007 NASA contracts or DoD assistance instruments do not deviate from commercial practices in any relevant way.

- 204. The United States asked Mr. Berneman to provide his expert opinion as to whether the pre-2007 NASA contracts and DoD assistance instruments at issue in this case, as amended, are consistent with prevailing market practices for collaborative R&D arrangements. Mr. Berneman concludes that: "the terms of the NASA contracts and DoD assistance instruments as amended are consistent with those of many arm's length, market-based collaborative R&D arrangements."²⁹¹
- 205. Mr. Berneman bases this conclusion on three categories of information. First, he reviews sample contracts of collaborative R&D arrangements from the pharmaceutical and biomedical research sectors, as well as Contract D and the NIAR sample contract terms. In light of the intellectual property allocation terms of these contracts, Mr. Berneman finds that the NASA Contracts and DoD Assistance Instruments are consistent with arm's length R&D collaborations between market participants. ²⁹²
- 206. Mr. Berneman also reviews the fact that the pre-2007 NASA contracts and DoD assistance instruments were open to bidding by multiple contractors. ²⁹³ In his view, this fact confirms that the contracts were priced consistently with commercial price, notwithstanding the legal constraints that bind NASA and DoD in their negotiations with contractors such as Boeing. ²⁹⁴ He points out that although there may be certain constraints on the outcome of the negotiation as a result of U.S. law, such constraints would be factored into the price of the contract. ²⁹⁵
- 207. Mr. Berneman explains that the absence of compensation for commercialization of technologies under NASA contracts and DoD assistance instruments is consistent with market outcomes.²⁹⁶ This is because early-stage technologies are, by definition, highly speculative, and it is difficult or impossible to estimate the potential returns from commercializing them. Consequently, the absence of any apparent compensation to the U.S. government for potential

²⁹¹ Berneman Report, para. 75 (Exhibit USA-322(BCI)).

²⁹² Berneman Report, paras. 61-63 (Exhibit USA-322(BCI)).

²⁹³ Berneman Report, paras. 66-70 (Exhibit USA-322(BCI)).

²⁹⁴ Berneman Report, paras. 66-70 (Exhibit USA-322(BCI)).

²⁹⁵ Berneman Report, para. 70 (Exhibit USA-322(BCI)).

²⁹⁶ Berneman Report, header before para. 71 (Exhibit USA-322(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 70

commercial rewards from foreground intellectual property under contracts with Boeing is consistent with prevailing market conditions. ²⁹⁷

208. Thus, from Mr. Berneman's point of view, the pre-2007 NASA contracts and DoD assistance instruments are consistent with prevailing market conditions, both in terms of the structure of their intellectual property allocation, and in terms of the risks and rewards shouldered by each partner to the joint venture. Furthermore, Contract D is not an "outlier" or an example of Boeing's philanthropic activities, as the EU baselessly speculates, but rather it falls within the range of commercial market outcomes. To be sure, this range also includes commercial market outcomes that are different from pre-2007 NASA contracts, such as those cited by the EU. However, as Mr. Berneman explains, "There is no 'market for codevelopment' that allows for a precise and immovable structure or valuation for a given transaction, and there is no single 'competitive' or 'market' outcome. . . . As a result, different R&D alliance structures between commercial parties can be observed and a range of terms can be fair and reasonable." Consequently, the EU fails to establish a *prima facie* case of noncompliance with respect to pre-2007 NASA contracts and DoD assistance instruments.

5. The EU has not made a prima facie case that NASA's post-2006 contracts with Boeing confer a subsidy.

209. The United States demonstrated in its first written submission that the post-2006 contracts differed in significant ways from the characteristics that the Appellate Body identified as relevant in its discussion of the pre-2007 contracts. We showed further that their principal characteristics supported the conclusion that they were purchases of services, and that the original panel report provided compelling reasoning for treating such transactions as not conferring a financial contribution. The EU never disputes that these contracts can be treated as purchases of services. Instead, it argues that the Appellate Body essentially established a two-factor test for identification of a transaction as "akin to a joint venture," precluded consideration of any other factors, and that this conclusion ends the analysis of the existence of financial contribution. None of this reasoning is correct. The Appellate Body has found that a proper analysis of the applicability of Article 1.1(a)(1) of the SCM Agreement calls on a panel first to "examine{} the measures to determine the relevant characteristics," and then whether it falls within the scope of that provision. The Appellate Body has also cautioned that panels must

²⁹⁷ Berneman Report, paras. 71-74 (Exhibit USA-322(BCI)).

²⁹⁸ EU SWS, paras. 297, 504.

²⁹⁹ EU SWS, paras. 298, 505.

³⁰⁰ Berneman Report, para. 60 (Exhibit USA-322(BCI)) ("as a comparison with the other contracts discussed in this report indicates, it is structured similarly to collaborative R&D agreements between other types of for-profit entities, including in the biopharmaceutical sector.").

³⁰¹ See EU SWS, paras. 273, 478 (referring to the Dieu and Scott statements).

³⁰² Berneman Report, para. 10 (Exhibit USA-322(BCI)).

³⁰³ US – Large Civil Aircraft (AB), para. 589.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 71

remain open to the possibility that a subsidy falls into multiple categories. ³⁰⁴ The analysis advocated by the EU is contrary to all of this guidance and, therefore, provides no support for its assertion that the post-2006 NASA contracts are "akin to a joint venture" or "analogous to an equity infusion."

- 210. The EU does not attempt to rebut the legal arguments that purchases of services are not a financial contribution. Instead, it simply cites the Appellate Body's declaration of the original panel's findings as moot as if that resolved the matter. The EU fails to understand that a declaration of mootness is not equivalent to a reversal. It merely reflects that a panel did not need to reach a particular issue and that, like *obiter dictum*, its findings have no legal effect. However, like an unadopted panel report or a law review article, such statements may still be considered for the persuasiveness of their reasoning.
 - a. The post-2006 NASA contracts with Boeing are purchases of services, which do not confer a subsidy.
 - i. The Appellate Body called for a two-step analysis of potential financial contributions, first identifying the "relevant characteristics" of the measures, and then determining the Article 1.1(a)(1) category or categories applicable to them.
- 211. In *US Large Civil Aircraft*, the Appellate Body found that "the Panel should first have examined the measures to determine their relevant characteristics, and then considered whether, in the light of a proper interpretation of Article 1.1(a)(1), these measures, properly characterized, fall with the scope of that provision."³⁰⁵ The Appellate Body then undertook such an examination, considered the "terms and scope" of Article 1.1(a)(1), and then evaluated whether the NASA contracts and DoD assistance instruments before it fell within one of the four categories of financial contribution. ³⁰⁶ This amounted to a two-step analysis of first carefully considering all characteristics of the transaction, and then moving on to the application of the treaty text.
- 212. The Appellate Body elaborated upon these concepts in *Canada Renewable Energy*, explaining that:

When determining the proper legal characterization of a measure under Article 1.1(a)(1) of the SCM Agreement, a panel must assess whether the measure may fall within any of the types of financial contributions set out in that provision. In doing so, a panel should scrutinize the measure both as to its design and operation and identify its principal characteristics. Having done so, the

³⁰⁴ Canada – Renewable Energy (AB), para. 5.120.

³⁰⁵ US – Large Civil Aircraft (AB), para. 589.

³⁰⁶ US – Large Civil Aircraft (AB), para. 589.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States *Recourse to Article 21.5 of the DSU by the United States* (DS353)

August 22, 2013 – Page 72

transaction may naturally fit into one of the types of financial contributions listed in Article 1.1(a)(1). However, transactions may be complex and multifaceted. This may mean that different aspects of the same transaction may fall under different types of financial contribution. It may also be the case that the characterization exercise does not permit the identification of a single category of financial contribution and, in that situation, as described in the *US – Large Civil Aircraft (2nd complaint)* Appellate Body report, a transaction may fall under more than one type of financial contribution. We note, however, that *the fact that a transaction may fall under more than one type of financial contribution does not mean that the types of financial contributions set out in Article 1.1(a)(1) are the same* or that the distinct legal concepts set out in this provision would become redundant, as the Panel suggests.³⁰⁷

Although the Appellate Body issued this report on May 6, 2013, and it addresses many of the provisions of the SCM Agreement at issue in this dispute, the EU did not cite the report once in its second written submission.

213. In fact, the EU ignores the Appellate Body's analysis entirely. Rather than scrutinizing the measures, it criticizes the United States for addressing all of the considerations noted by the Appellate Body in its lengthy discussion of "Proper Characterization of the NASA/USDOD Measures at Issue." It then insists that the only relevant characteristics are those listed in the Appellate Body's one-paragraph "Summary of the main characteristics of the measures." This is not a credible view. The Appellate Body would scarcely have engaged in a 17-paragraph review of all of the characteristics of NASA contracts and DoD assistance instruments if it considered that the three factors that the EU pulls from the "summary" paragraph were sufficient. Even if the Appellate Body's analysis in *US – Large Civil Aircraft* standing alone could be interpreted in this way, a position that the United States considers unsustainable, the findings in *Canada – Renewable Energy* make clear that a panel applying Article 1.1(a)(1) needs to "scrutinize the measure both as to its design and operation and identify its principal characteristics." The simplistic approach adopted by the EU does not pass this test.

³⁰⁷ Canada – Renewable Energy (AB), para. 5.120 (emphasis added).

³⁰⁸ EU SWS, para. 243.

³⁰⁹ EU SWS, para. 244.

³¹⁰ US – Large Civil Aircraft (AB), paras. 593-609.

³¹¹ EU SWS, para. 244.

³¹² Canada – Renewable Energy (AB), para. 5.120 (emphasis added).

- ii. The scrutiny of the characteristics of the measure called for in the first step in the Appellate Body's approach demonstrates that the post-2006 NASA contracts with Boeing are purchases of services.
- 214. In its first written submission, the United States demonstrated that post-2006 NASA contracts differed in critical respects from the characteristics the Appellate Body described for pre-2007 contracts. The research topics were not chosen collaboratively, but through a question and comment process. The evidence shows that the value of facilities, equipment, and employees is much lower in relation to payments than the original panel found for the 1989-2006 period, indicating that these transactions no longer involve the "pooling of resources" that the Appellate Body found. Data rights clauses are more open. Regulations make clear that where a NASA employee invents an invention, it belongs entirely to NASA, which would then be authorized to charge royalties for its usage. As a general matter, these developments shifted the balance of the transactions to a point where for most contracts, NASA's contribution consisted almost exclusively of funds, and Boeing's contribution almost exclusively of services. This balance is characteristic of a purchase of services.
- 215. The EU does not dispute that, as a substantive matter, these transactions can be viewed as purchases of services. Rather, it argues that because they meet what the EU considers to be the Appellate Body's definition of a joint venture, they cannot be a purchase of services. The EU errs both as a matter of fact and as a matter of law.
- 216. The EU's purely legal errors are straightforward. First, its analysis only addresses whether the measures can possibly be characterized as joint ventures, without bothering to examine whether they would be more appropriately characterized as purchases of services. This is precisely the type of narrow approach that the Appellate Body rejected. Rather a panel's analysis must begin with an objective assessment of the measure, taking into account *all* relevant characteristics of the measure" and the "features which are most central to the measure itself." In addition, as the Appellate Body found in *Canada Renewable Energy*, one transaction may have multiple aspects, a panel's analysis must take those complexities into account. Thus, even if the EU were correct that these transactions had characteristics that were "akin to a joint venture" and it is not that would not end the Panel's inquiry. It would still need to weigh the relative merits of each possible characterization, and the EU fails to provide any arguments whatsoever on this score. Second, the EU's attempts to limit the analysis to the three factors it draws from the Appellate Body's "summary" of characteristics fall afoul of the Appellate Body's instruction to "scrutinize" the measures.

³¹³ US FWS, para. 224.

³¹⁴ Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

³¹⁵ US – Large Civil Aircraft (AB), para. 585.

³¹⁶ US – Large Civil Aircraft (AB), para. 586 (emphasis in original).

- 217. The EU also makes errors of fact in its argument that the characteristics of the post-2006 contracts are identical to the ones the Appellate Body found for earlier contracts. In other words, even for the limited number of characteristics that the EU considers relevant, the facts do not support the legal conclusion it seeks to draw.
- Whether "both parties commit resources." This is one of the factors from the Appellate Body's summary paragraph that the EU highlights. The EU asserts that there is "no dispute" that "NASA commits to provide financial resources and contributes the use of its facilities, equipment, and employees."317 The EU has not been paying attention. The U.S. responses to the Panel's Article 13 requests for information and its first written submission made clear that access to NASA facilities under contracts was "quite limited," the value and incidence of provision of equipment was quite low, and involvement of NASA employees was minimal. 318 The United States provided a list of government property furnished under the NASA contracts, which showed that three quarters of the contracts and tasks (72 out of 96) provided no government equipment for Boeing to use. 319 Use of facilities was even less, and the provision of employees averaged far less than one FTE per year for each contract or task. Thus, the evidence - as opposed to the bare assertions advanced by the EU - shows that for most contracts, NASA contributed neither facilities nor equipment, and any provision of employees was so small as to be meaningless. The EU also asserts that Boeing provides financial resources to some of the research projects, but this is not true of NASA contracts. Indeed, under U.S. procurement law, a contract would not be the appropriate vehicle if the private party was contributing unreimbursed resources.
- 219. Whether "the parties share the fruits of the research." The United States does not dispute that Boeing obtains title to patents for inventions its employees invent while working under these contracts, and that the U.S. government obtains a royalty-free license for government purpose use. The EU however, does not dispute the U.S. observation that if a NASA employee working alone invents an invention, the agency obtains sole ownership of any patent. Of course, given the minimal involvement of NASA employees in the post-2006 contracts, it is highly unlikely that a NASA employee would be the inventor or co-inventor (with a Boeing employee) of an invention under the contract. However, if such a co-invention situation arose, NASA and Boeing would be co-owners of the patent, because each would derive a right to title from the activities of its employees

³¹⁷ EU SWS, para. 246, first bullet. The EU raises a similar point in paragraph 247 of its submission.

³¹⁸ US SWS, paras. 113 and 199-202.

³¹⁹ Equipment provided under NASA contracts and agreements (Exhibit USA-271(BCI) (revised Aug. 22, 2013).

³²⁰ EU FWS, para. 246, second bullet.

- Whether "the subjects to be researched are often determined collaboratively between 220. NASA and Boeing." The EU attempts to show that research subjects were "often determined collaboratively" based on two examples. The first is a contention, without any citation to evidence, that the ERA project was "conceived with input from external sources, including industry."³²² "Collaboration" would require the parties working *together* to "determine" subjects, which is not what happens when one party provides "input" and the other determines.³²³ The EU also points out that in the NRA process, NASA identifies the goal and proposers offer ways to achieve the goal. (The EU leaves unsaid that NASA then decides by itself which mix of proposals to accept and, because of limited funds, must reject the large majority.) Again, this process is not "collaborative" because the parties do not work together. The EU does not dispute that NASA identifies the research topics through an internal decisionmaking process, that proposers decide through their own internal processes what to propose, and that NASA conducts a separate internal process to decide which proposals to accept. Thus, the evidence show that after 2006, it is no longer true that research topics are "often determined collaboratively."
- 221. Whether "funding {is} provided in expectation of some kind of return." The Appellate Body did not identify this as a factor supporting the characterization of NASA contracts as "akin to a joint venture." Rather, it made this inquiry as part of its evaluation of whether the contracts, correctly characterized as "akin to a joint venture," were "analogous to an equity infusions." Thus, the EU seems to be mixing two steps of the analysis that the Appellate Body considered as separate. In any event, under the EU's simplistic understanding, this cannot be a defining characteristic of the NASA contracts because *all* transactions that provide funding involve expectation of some kind of return. 326
- 222. Whether there is "no certainty that the research will be successful." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts as "akin to a joint venture." In any event, the EU errs in arguing that an analogy between the uncertain

³²¹ The EU attempts to re-write the Appellate Body's finding to insert that often is "certainly not always," and contends (without support) that this was "not a necessary feature." As neither of these comments was part of the Appellate Body finding, there is no reason to add them now.

³²² EU FWS, para. 246, third bullet.

³²³ Indeed, if this description of NASA decisionmaking was sufficient to establish "collaborative determination," then almost any process that involved a presentation of views by a party to a decisionmaker would be "collaborative." Such a broad reading would reduce the concept to a nullity.

³²⁴ US – Large Civil Aircraft (AB), paras. 593-600.

³²⁵ US – Large Civil Aircraft (AB), para. 624.

³²⁶ The one exception is a grant, but the original panel found that NASA contracts were not grants, and the EU does not dispute this finding. *US – Large Civil Aircraft (Panel)*, para. 7.1100.

³²⁷ US – Large Civil Aircraft (AB), paras. 593-600.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 76

return on an equity investment and the uncertainty that research will produce the desired results led the Appellate Body to find research joint ventures analogous to an equity investment. This cannot be the case, as the Appellate Body upheld the original panel's finding that NASA and Boeing learned valuable lessons from research that failed. This is even more true with respect to basic research, which aims to prove or disprove basic scientific principles, rather than achieve a particular goal. Thus, as described by the panel and the Appellate Body, the "return" on NASA research, unlike an equity investment, is always a "sure thing." Either NASA and Boeing learn something valuable, or they learn that a particular avenue of inquiry is unfruitful. Thus, the EU has misunderstood the Appellate Body's analysis, and misapplied its reasoning, and its arguments do not support treatment of NASA contracts as "akin to a joint venture" or "analogous to an equity infusion."

- 223. Whether the "funder's risks are limited to the amount of money they commit and the opportunity cost of other support they provide." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts as "akin to a joint venture." In any event, this characteristic pertains equally to a purchase of goods or of services, so it cannot be a defining characteristic of a joint venture.
- 224. Finally, the EU takes issue with U.S. references to the Appellate Body observations that the NASA contracts before it had the following characteristics: 329
 - "the value of such access {to facilities, equipment, and employees} was significantly higher than the value of the payments;"
 - "the transactions involve NASA and Boeing pooling non-monetary resources and employees;" and
 - "LERD clauses grant Boeing exclusive rights to exploit critical technologies developed under certain NASA contracts for at least five years from the date the data is reported."³³⁰

The EU asserts that these references are either "unsupported by the Appellate Body" or "not an essential aspect of a joint venture."³³¹ However, these are direct quotes from the Appellate Body report describing the relevant characteristics of the transactions at issue. The fact that they are not true of post-2006 NASA contracts provides yet further evidence that the EU is mistaken in arguing that the post-2006 NASA contracts are essentially the same as the earlier contracts addressed by the original panel and the Appellate Body.

³²⁸ US – Large Civil Aircraft (AB), paras. 593-600.

³²⁹ EU SWS, paras. 247-249.

³³⁰ US – Large Civil Aircraft (AB), paras. 595-596.

³³¹ EU SWS paras. 247 and 249.

- 225. In sum, the primary characteristics of these transactions are that in most of them, NASA paid Boeing money and provided a small amount of employee time in exchange for Boeing providing designated research services. Even where NASA contributed facilities and employees, the value was for the most part minor relative to the monetary contribution. Both parties expected to use the results of this work, and if any intellectual property rights resulted, to split them in a way that each party could use them in its sphere of activity. They also recognized that, whatever the results, the knowledge gained would be useful in their further activities. These characteristics support the conclusion that the transactions are purchases of services, and are not joint ventures.
 - iii. The EU has failed to meet its burden of proof with regard to the existence of a financial contribution.
- 226. The second step of the Appellate Body's analysis calls for a consideration, in light of the proper interpretation of Article 1.1(a)(1), of whether a particular transaction comes within the four defined forms of financial contribution. The EU failure to consider all of the relevant characteristics of the post-2006 NASA contracts and its misinterpretation of the Appellate Body's findings means that it has failed to do this and, therefore, failed to meet its burden of proof. The Panel could end its analysis there. However, should the Panel choose to continue, the United States has explained that the original panel's analysis in *US Large Civil Aircraft* provides compelling reasons to conclude that purchases of services are not a financial contribution for purposes of Article 1.1(a)(1).
- 227. The United States recalls the key elements of that analysis, which it incorporates by reference ³³²:
 - The panel found that the reference to a "direct transfer of funds in Article 1.1(a)(1)(i) could be read as referring to a situation in which a government purchases something, and that previous panels and the Appellate Body had not given a restrictive interpretation to those terms.³³³
 - The panel found that Article 1.1(a)(1)(iii) and Article 14 of the SCM Agreement provided context for Article 1.1(a)(1)(i), and that while both of them treated purchases of goods and provisions of goods and services as financial contributions, they did not include purchases of services. 334
 - The panel considered that to read "direct transfers of funds" as including purchases of services would necessitate the conclusion that it also covered

³³² US – Large Civil Aircraft (Panel), paras. 7.953-7.970.

³³³ US – Large Civil Aircraft (Panel), para. 7.954.

³³⁴ US – Large Civil Aircraft (Panel), para. 7.955.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 78

purchases of goods as also included, which would render the reference to "purchases goods" in Article 1.1(a)(1)(iii) redundant and inutile. ³³⁵

- The panel noted the Appellate Body's finding that "the object and purpose of the SCM Agreement . . . reflects a delicate balance between the Members that sought to impose more disciplines on the use of subsidies and those that sought to impose more disciplines on the application of countervailing measures." It noted the finding of the panel in *US Export Restraints* that the definitions of financial contribution, benefit, and specificity were "drafted with the express purpose of ensuring that not every government intervention in the market would fall within the coverage of the Agreement." 337
- The panel noted concerns that a general exclusion of purchases of services might create a "loophole" in the SCM Agreement, but concluded that a finding that transactions properly characterized as purchases of services were excluded would not lead to such a result. 338
- The panel confirmed its conclusion by reference to supplementary means of interpretation provided under Article 32 of the Vienna Convention. It noted from the preparatory work for the SCM Agreement that the original version of the text that became Article 1.1(a)(1)(iii) contained a reference to purchases of services, but that a later version omitted that reference. Second, it considered circumstances of the conclusion of the SCM Agreement, noting that at the time of the negotiation of the SCM Agreement, panel proceedings under the Tokyo Round Procurement Code and the renegotiation of the Code itself were addressing the coverage of government purchases of services. GATS negotiators also addressed procurement of services. The panel considered that, in this environment, the removal of purchases of services from the definition of financial contribution in Article 1.1(a)(1)(iii) cannot have reflected the understanding that the reference was superfluous.

The Panel accordingly concluded that "transactions *properly characterized* as purchases of services are excluded from the scope of Article 1.1(a)(1)(i) of the SCM Agreement.³⁴¹

³³⁵ US – Large Civil Aircraft (Panel), para. 7.956.

³³⁶ US – Large Civil Aircraft (Panel), para. 7.959, quoting US – CVD Investigation on DRAMS, para. 115.

³³⁷ US – Large Civil Aircraft (Panel), para. 7.959, quoting US – Export Restraints, para. 8.63.

³³⁸ US – Large Civil Aircraft (Panel), para. 7.960.

³³⁹ US – Large Civil Aircraft (Panel), para. 7.962.

³⁴⁰ US – Large Civil Aircraft (Panel), paras. 7.964-7.969

³⁴¹ US – Large Civil Aircraft (Panel), para. 7.970.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 79

228. The United States finds this reasoning compelling. We note that the Appellate Body in *Canada – Renewable Energy* disagreed with the proposition that "the coverage of subparagraphs (i) and (iii) of Article 1.1(a)(1) is mutually exclusive." However, it also found that the particular transactions at issue, based upon the evidence and argument before it, were properly characterized as purchases of goods, but not also as a direct transfer of funds. 343 It explained that:

We do not see in Japan's arguments any aspects different from, or in addition to, those characteristics that led us to agree with the Panel that the transactions at issue constitute government "purchases {of} goods". We are not persuaded that, on the basis of these arguments and features of the challenged measures, Japan has established that these measures should in addition be characterized as "direct transfer{s} of funds or "potential direct transfers of funds." 344

Thus, the Appellate Body accepts the basic understanding of the original panel that there are transactions that do not properly fall within both subparagraphs (i) and (iii) of Article 1.1(a)(1). In particular, under the Appellate Body's reasoning, if the characteristics of a transaction qualify it as a purchase, it is not also a "direct transfer of fund" unless there is some additional factor justifying that treatment.

- 229. The EU has two responses to the original panel's analysis. First, it incorporates its arguments before the Appellate Body.³⁴⁵ The United States accordingly incorporates by reference its arguments, as summarized in the Appellate Body report.³⁴⁶
- 230. The EU's second response is that the Panel should address only the EU view that these transactions are "akin to a joint venture" and, therefore, "similar to an equity infusion," and inquire no further. However, this suggestion runs counter to the Appellate Body's finding that panels must "scrutinize" transactions and consider their complexities. Thus, even if the Panel does adopt the EU's view that the post-2006 NASA contracts are "akin to a joint venture," it would still need to consider whether it was also a purchase of services, in particular because "different characterizations of a measure may lead to different *methods* for determining whether a benefit has been conferred." However, and the Panel should be addressed to the EU's view that the post-2006 NASA contracts are "akin to a joint venture," it would still need to consider whether it was also a purchase of services, in particular because "different characterizations of a measure may lead to different *methods* for determining whether a benefit has been conferred."

³⁴² Canada – Renewable Energy (AB), para. 5.119.

³⁴³ Canada – Renewable Energy (AB), paras. 5.129 and 5.131.

³⁴⁴ Canada – Renewable Energy (AB), para. 5.131.

³⁴⁵ EU SWS, para. 251, note 386.

³⁴⁶ US – Large Civil Aircraft (AB), paras. 98-107.

³⁴⁷ EU SWS, para. 251.

³⁴⁸ Canada – Renewable Energy (AB), para 5.130 (emphasis in original).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 80

231. The EU also accuses the United States as treating the original panel's reasoning regarding the exclusion of purchases of services from the scope of Article 1.1(a)(1) as if the Appellate Body had upheld it.³⁴⁹ This is not the case. The United States clearly stated that the Appellate Body had found the interpretation moot, and cited the panel's reasoning solely for its persuasive value.³⁵⁰ In this regard, the United States notes the Appellate Body's finding that:

we agree with the Panel's conclusion . . . that *unadopted* panel reports "have no legal status in the GATT or WTO system since they have not been endorsed through decisions by the CONTRACTING PARTIES to GATT or WTO Members". Likewise, we agree that "a panel could nevertheless find useful guidance in the reasoning of an unadopted panel report that it considered to be relevant". ³⁵¹

The same logic holds true for findings that the Appellate Body does not address because it finds them moot and of no legal effect. In this situation, the panel finding in question is not adopted by the DSB, giving it a status similar to that of a panel report that is unadopted in its entirety.

- b. If purchases of services do fall within the definition of a financial contribution under Article 1.1(a)(1)(i), the EU has failed to establish that the post-2006 NASA contracts confer a benefit.
- 232. As the Appellate Body made clear in *Canada Renewable Energy*, the legal analysis of a potential subsidy must take into account all of its characteristics and potential characterizations, and take into account how they would affect the analysis of benefit. As the United States has demonstrated, the post-2006 NASA contracts were purchases of services. Even if the Panel were to conclude that these NASA transactions are nonetheless financial contributions within the meaning of Article 1.1(a)(1)(i), it would still need to take into account that the transactions were, in substance, purchases of services. Under Article 14 of the SCM Agreement, which provides context for Article 1.1, a government purchase of goods confers a benefit if "the purchase is made for more than adequate remuneration." Thus, the proper measure for whether these transactions confer a benefit is whether the government paid more than adequate remuneration for what it received. The EU has failed entirely to address this standard.
- 233. This is a critical point because governments often seek to buy things that a commercial actor would not want or does not need. Thus, the "adequate remuneration" standard focuses on what the government purchased, and not what a private entity would have purchased in similar circumstances. In concrete terms, the EU position is that these contracts confer a benefit because a private funder would have insisted on broader intellectual property rights than the U.S.

³⁴⁹ EU SWS, para. 252.

³⁵⁰ US FWS, para. 230.

³⁵¹ *Japan – Alcohol (AB)*, pp. 14-15.

³⁵² Canada – Renewable Energy (AB), paras. 5.120 and 5.130.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 81

government received. The EU does not dispute, however, that the United States purchased all of the rights that it wanted and needed, namely, rights for government use, or that the United States does not at this time plan or need commercial use of those rights. Nonetheless, under the EU's theory, in this situation, the United States can only avoid a subsidy finding if it (1) insists on obtaining intellectual property rights it does not want, (2) enters into a commercial intellectual property licensing business that it does not seek to enter, and (3) sells the rights back to the suppliers that produced them in the first place. This is not good government. It is also not good economics as it interposes numerous transaction costs that the parties avoid when the government does not obtain unwanted intellectual property rights in the first place. Thus, the proper question in this situation is not whether a private entity would have purchased what the government purchased. Under the "adequate remuneration" standard, the proper question is whether the government paid too much (*i.e.*, more than adequate remuneration) for what it sought to buy.

- 234. The EU has failed entirely to address the adequacy of remuneration. The United States, however, explained in its first written submission that NASA met this standard by opening all of its contracts to competitive processes. It further noted the Appellate Body's finding in *Canada Renewable Energy* that where a transaction presents valuation difficulties, "such benchmark may also be found in price-discovery mechanisms such as competitive bidding or negotiated prices, which ensure that the price paid by the government is the lowest possible price offered by a willing supply contractor." 353
- 235. The EU ignores both the argument that adequate remuneration is the proper standard and the Appellate Body's recent findings, relying instead on the conclusion in *US Large Civil Aircraft* that competitive bidding with regard to DoD assistance instruments did not remove the benefit associated with intellectual property provisions of those agreements. There are numerous problems with this argument. First, in light of the findings on bidding in *Canada Renewable Energy*, it is clear that the relevance of competitive bidding to the analysis of benefit depends on the facts. The Appellate Body's finding on bidding in *US Large Civil Aircraft* addressed only DoD assistance instruments, which the Appellate Body differentiated from DoD contracts, noting that assistance instruments provide for "{t}he transfer of a thing of value to a recipient to carry out a public purpose of support or stimulation," while contracts provided for acquisition "of property or services for the direct benefit or use of the United States Government." There is accordingly no basis to treat the *US Large Civil Aircraft* finding as applicable to post-2006 NASA contracts or DoD procurement contracts.
- 236. Second, the Appellate Body's reasoning can only be understood in this context. It stated that in the case of DoD assistance instruments:

³⁵³ US FWS, para. 255, quoting Canada – Renewable Energy (AB), para. 5.228.

³⁵⁴ EU SWS, paras. 311-312,

³⁵⁵ US – Large Civil Aircraft (AB), para. 603.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 82

intellectual property is not open to bidding: it is determined by US law. Because each bidder knows in advance that this particular aspect of the transaction will not be altered with respect to the competitors, ownership of any resulting intellectual property will not be a determinative element in how each bidder structures its proposals. 356

The EU argues that this reasoning applies as a general rule, but as *Canada – Renewable Energy* establishes, this is not the case. If a seller seeks bids for an asset that has a fixed value and cannot be divided, bidders will still factor that value into their bids. To use a concrete example, in a U.S. government contract, the offerors bid their cost of providing the service plus a fee. Assuming that the cost of services required under a contract is \$90, and that contractors need a fee of \$10 to justify participating, \$100 would be the economically rational bid. However, if the offerors knew that the contract would result in obtaining intellectual property rights worth \$5, 357 the calculus changes. In that situation, the economically rational bid would be \$95, as \$95 in payments plus \$5 worth of intellectual property would produce the requisite net value of \$100. The EU insistence that a bidder in that situation would ignore the value of the intellectual property is plainly wrong. Such a bidder would bid \$100 for the package, and would lose both the \$95 payment for services and the \$5 in intellectual property every time. That is not the approach a rational market actor would take.

- 237. The EU tries to justify its position by contending that the economically rational result of a bid reflecting the value of expected intellectual property would not occur if the contract in question was with an entity that had stated its intent to support the industry and transfer technology. However, if the bidders are economically rational, the intent of the entity offering the project will not matter all will bid the economic value of the package, knowing that they will otherwise lose to the offeror that bids the correct value.
- 238. Thus, the EU has failed to address the correct standard for evaluating whether NASA's post-2006 contracts conferred a benefit, and failed to take account of the Appellate Body's most recent findings with regard to bidding. Accordingly, it has failed to establish that these contracts confer a subsidy.

³⁵⁶ US – Large Civil Aircraft (AB), para. 665.

³⁵⁷ The United States uses a known value of intellectual property solely for purposes of example. The parties appear to agree that bidders for a NASA contract do not know at the time of the contract whether it will result in valuable intellectual property.

³⁵⁸ This is a highly simplified example of how bidding for U.S. government contracts operates. It underscores the critical point that a rational economic actor will bid on the entire value of the package, and not ignore one element because it is a standardized term.

³⁵⁹ EU SWS, para. 312.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 83

6. The EU fails to establish a prima facie case of WTO-inconsistency with respect to SAAs.

- 239. The SAAs funded through the challenged NASA programs involve no money flowing from NASA to Boeing. Rather, under these SAAs, NASA and Boeing jointly make in-kind contributions for research projects and in the case of partially and fully reimbursable SAAs, money flows *from Boeing* to NASA. Accordingly, SAAs do not confer subsidies to Boeing, but rather reflect an arrangement similar to commercial joint ventures, with the parties making in-kind and (in the case of Boeing only) financial contributions on the input side, and reaping rewards on the output side. The EU does not even attempt to explain how any particular SAA achieves an equilibrium that is more favorable to Boeing than comparable commercial transactions. Therefore, the EU fails to establish a *prima facie* case of WTO-inconsistency with respect to SAAs.
- 240. To recall, there are three varieties of SAAs at issue: non-reimbursable SAAs, partially reimbursable SAAs, and fully reimbursable SAAs. The "reimbursement" referred to in the title of each type of agreement is *from the contractor* to NASA ARMD does not contribute funds to a contractor under an SAA. As the EU and the United States agree, non-reimbursable and partially reimbursable SAAs are similar in nature to commercial joint venture agreements. In particular, the parties pool non-monetary resources, including facilities, equipment, and employees, in furtherance of the research project. With respect to intellectual property rights, NASA generally owns patents in inventions made by its employees, and the same is true of Boeing. Patents for joint inventions are jointly owned. And as mentioned above, in the case of partially reimbursable SAAs, Boeing provides NASA with funding. By contrast, fully reimbursable SAAs are essentially purchases of services by Boeing, since Boeing fully reimburses NASA for all costs incurred in its performance of the SAA.
- 241. The EU appears to consider that fully reimbursable SAAs are outside the scope of this compliance dispute.³⁶⁶ In the original proceeding, there was no DSB-adopted finding that SAAs confer a benefit to Boeing. The original panel did not assess SAAs through the lens of joint

³⁶⁰ Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

³⁶¹ See US – Large Civil Aircraft (Panel), fn. 2410. This is the general rule. There are a very limited number of funded SAAs, used exclusively by NASA's space program to foster the development of commercial space transportation vehicles.

³⁶² The United States explained that "SAAs are best understood as a joint venture comprising a government provision of goods and services," and the EU does not contest this characterization. US FWS, para. 221.

³⁶³ See US FWS, paras. 215-217.

³⁶⁴ See US FWS, para. 218.

³⁶⁵ The EU admits this fact. See EU SWS, para. 316.

³⁶⁶ See, e.g., EU FWS, paras. 91, 133 (mentioning non-reimbursable and partially reimbursable SAAs); *ibid.*, *passim* (not mentioning fully reimbursable SAAs).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 84

venture agreements, instead considering them to be vehicles for conveying access to facilities, equipment, and employees from NASA to Boeing.³⁶⁷ The United States appealed the original panel's finding that SAAs conferred a benefit, but the Appellate Body declined to address the United States' appeal.³⁶⁸ Consequently, the original panel and Appellate Body reports do not analyze SAAs under the commercial joint venture benchmark articulated by the Appellate Body.³⁶⁹

- 242. The EU now argues that "SAAs provide a 'benefit' for the same reason as NASA contracts and agreements." However, this argument is logically indefensible. Pre-2007 NASA procurement contracts (prior to amendment by the licensing agreement) previously conferred a benefit to Boeing because the allocation of intellectual property rights, in light of the funding provided to Boeing, was deemed more favorable to the commissioned party than the equilibrium that the Appellate Body observed in the market, based on the evidence before it. However, as mentioned above, the SAAs at issue in this compliance dispute do not provide any funding to Boeing whatsoever, and they do not have the same intellectual property allocation terms as NASA procurement contracts. Indeed, as discussed above, they involve funds flowing from Boeing to NASA. Consequently, the findings regarding pre-2007 NASA contracts cannot simply be transposed to SAAs, as the EU asks the Panel to do.
- 243. In addition, the EU fails to provide any evidence regarding the appropriate market benchmark for SAAs, and it also fails to compare any particular SAA with this benchmark. In fact, the EU first written submission does not mention a single SAA in its "Legal Analysis" of NASA contracts, ³⁷² and the EU's second written submission discusses only one SAA in its section on "Benefit": SAA1-757. Moreover, even here, the EU fails to identify the relevant market benchmark and address the fact that no funding is exchanged under SAA1-757. Therefore, the EU fails to establish a *prima facie* case of benefit with respect to any SAAs.

³⁶⁷ See US – Large Civil Aircraft (Panel), paras. 7.1093-7.1099.

³⁶⁸ US – Large Civil Aircraft (AB), fn. 1300.

³⁶⁹ The EU acknowledges that the Appellate Body did not address the U.S. appeal of the original panel's benefit finding with regard to SAAs. EU SWS, para. 314. However, inexplicably, the EU then accuses the United States of "challenging the DSB rulings and recommendations" by arguing that none of the SAAs – pre-2007 or post-2006 – confer a benefit. *Ibid.* Since the United States appealed the panel's finding of benefit with regard to SAAs and the Appellate Body declined to make such a finding, the United States is not "challenging the DSB rulings and recommendations" by arguing now that NASA does not confer a benefit to Boeing under any SAAs, whether pre-2007 or post-2006.

³⁷⁰ EU SWS, heading before para. 313.

³⁷¹ US – Large Civil Aircraft (AB), para. 662.

³⁷² EU FWS, paras. 169-198.

³⁷³ *See* EU SWS, para. 316.

³⁷⁴ See SAA1-757 (Exhibit USA-82).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 85

244. Indeed, regarding SAA1-757, the EU's only argument is that the contract does not permit the United States to exploit subject inventions "for commercial purposes."³⁷⁵ In other words, the EU's sole point of criticism regarding SAA1-757 is that it was not covered by the NASA licensing agreement. Thus, the EU's argument in fact confirms the legal significance of the licensing agreements that the United States implemented for pre-2007 NASA contracts and DoD assistance instruments.

7. The various measures challenged by the EU, if found to be subsidies, are not specific.

245. The U.S. first written submission demonstrated that the subsidy alleged to exist by the EU – that NASA and DoD entered into relationships "akin to joint ventures" on terms more favorable than market suppliers – was not specific because the terms in question were not specific to those agencies. The only non-market term that the EU has identified in these transactions was that the allocation of intellectual property was more favorable than under certain benchmark transactions proposed by the EU. ³⁷⁶ The United States explained that the EU's specificity analysis is mistaken because the Appellate Body has already found that this treatment, if it were a benefit, is available under all U.S. government contracts in all sectors of the economy. ³⁷⁷

246. The EU now reiterates its assertion that NASA and DoD programs taken separately are specific, but the Appellate Body has already found that this argument is not sufficient to demonstrate specificity when multiple authorities are implementing the same measure. The EU then contends that the U.S. specificity analysis addresses a "patent rights subsidy" that the EU is not alleging. Here the EU misperceives the point we are making. The United States understands that the EU's benefit arguments address the patent rights terms of the transaction, rather than treating those terms a separate financial contribution. Our point is that, whether as analyzed as a separate financial contribution or as one term in a broader transaction, that particular benefit is available through government contracts in all sectors, and is accordingly not specific. Finally, the EU accuses the United States of disregarding the Appellate Body statement that its finding of non-specificity regarding allocation of intellectual property under U.S. government contracts "did not traverse the Panel's findings of specificity relating to payments and other support provided under the NASA/USDOD contracts and agreements." The EU is again incorrect. The original panel's specificity finding was based on a concept of financial contribution and benefit that the Appellate Body reversed. Thus, the original panel's conclusions

³⁷⁵ EU SWS, para. 317.

³⁷⁶ EU FWS, paras. 182-190 and 373-384.

³⁷⁷ US FWS, paras. 259-262, 291-294, 394-397, 428, and 473.

³⁷⁸ US – Large Civil Aircraft (AB), paras. 757-759.

³⁷⁹ EU FWS, para. 329, quoting US – Large Civil Aircraft (AB), para. 730.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 86

as to the specificity of that benefit are not germane to the specificity of the different financial contribution and benefit now alleged by the EU.

- a. The EU's argument that NASA and DoD programs are specific to the aerospace and defense sectors is irrelevant to an evaluation of the specificity of the benefit conferred by the allocation of intellectual property rights through the relevant contracts and agreements.
- 247. The EU argues that the subsidies at issue in this proceeding are specific because the challenged NASA aeronautics programs and DoD RDT&E programs are specific to the aeronautics and defense industries. It contends that the original panel found specificity on this basis, and that that finding should "continue to hold true." ³⁸⁰ Both arguments are mistaken.
- 248. The EU is not challenging the NASA and DoD research programs as a whole. In fact, it emphasizes that it is not challenging certain aspects of those programs, such as NASA in-house research funded through these programs³⁸¹ or reimbursable SAAs. Rather, it is challenging alleged payments and provision of facilities, equipment, and employees under those programs. And its sole basis for considering these to be a subsidy is that NASA and DoD made the alleged financial contributions through contracts that provided an allocation of intellectual property rights more favorable than a commercial entity would have allowed.
- 249. Article 2 of the SCM Agreement bases the evaluation of specificity not on the "program" that provided the alleged subsidy, but on "the granting authority, or the legislation pursuant to which the granting authority operates." In the case of the benefit alleged by the EU, the legislation under which NASA and DoD were operating in providing the allocation of intellectual property rights were the measures listed in paragraph 765 of Appellate Body's *US Large Civil Aircraft* report. As the Appellate Body has already found that the treatment accorded under these measures is not specific, ³⁸² the EU's arguments regarding the NASA and DoD programs are beside the point.
- 250. The EU also argues that the original panel's finding of specificity with regard to the pre-2007 measures, which neither party appealed, should continue to hold true with respect to the post-2006 measures. The EU forgets that the benefit found by the original panel was that NASA and DoD paid Boeing to perform aeronautics R&D work that was principally for Boeing's own benefit and use, and that no private entity acting pursuant to commercials considerations would do that. This formulation of the benefit was grounded in each instance on the nature of the research commissioned by each agency, as derived from the particular facts of that agency's contracts or agreements. However, the Appellate Body reversed the panel's findings of financial

³⁸⁰ EU SWS, paras. 319-322 and 523-524.

³⁸¹ EU SWS, para. 264, note 413.

³⁸² US – Large Civil Aircraft (AB), para. 789.

³⁸³ US – Large Civil Aircraft (Panel), paras.. 7-1038-7.1039 and 7.1183-7.1184.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 87

contribution, along with the related benefit findings. The EU now presents a different allegation as to the benefit, based on aspects of the relevant instruments that are common to U.S. government contracting by all agencies, in all sectors. The original panel's findings of specificity, based on different findings of financial contribution and benefit, do not "continue to hold" to the EU's new arguments.

- b. The EU is incorrectly characterizing its claims as to the existence of a benefit with regard to NASA and DoD contracts and agreements.
- 251. The United States has demonstrated that the benefit alleged by the EU is that NASA and DoD contracts and agreements provide for an allocation of patent rights more favorable than a commercial actor would accept. As this particular treatment is available through all U.S. government research contracts with entities in all sectors, it is not specific.
- 252. The EU second written submission, however, accuses the United States of "having grossly mischaracterized" the benefit alleged by the EU. 384 The EU asserts that although it raised a separate claim with regard to the patent rights subsidy in the first proceeding, it has now dropped that claim. 385 The EU argues:

it is clear that the "benefit" is not only the provision of intellectual property. To the contrary, the "benefit" consists of the provision of payments, access to government facilities, equipment, and employees by NASA in return for less than what a market-based actor would demand."³⁸⁶

It is the EU that mischaracterizes its own claim. The EU does not assert that NASA paid Boeing too much for the work Boeing conducted and the intellectual property rights that resulted. Nor does it assert that no market-based actor would make payments, or provide facilities, equipment, and employees to obtain research results that the market-based actor sought. The EU's sole argument is that no market-based actor would *ever* accept the allocation of intellectual property rights that NASA and DoD did with respect to such work. Thus, the benefit it has alleged is the allocation of intellectual property rights, and nothing more.

253. The EU also asserts that its claim in this proceeding is different from the appeal addressed by the Appellate Body, which challenged patent rights independently from the challenge to the underlying contracts and agreements.³⁸⁷ The United States does not dispute that

³⁸⁴ EU SWS, paras. 329 and 531.

³⁸⁵ EU SWS, para. 326. This is, in fact, untrue, as the EU has raised a claim "in the alternative" or "additional" that patents rights Boeing derived through the contractual intellectual rights clauses are a provision of goods. Section II.A.F discusses this claim in more detail.

³⁸⁶ EU SWS, para. 328. The EU makes the same point (substituting "DOD" for "NASA") with regard to DoD contracts and agreements. EU SWS, para. 530.

³⁸⁷ EU SWS, paras. 237 and 529.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 88

the EU has packaged its claim differently. However, it is *in substance* the same argument – that the allocation of intellectual property rights under U.S. government contracts (as conferred by NASA and DoD) is specific because NASA and DoD research programs are specific to the aerospace and defense sectors, respectively. This is precisely the argument that the Appellate Body rejected in *US – Large Civil Aircraft*. The United States requests that this Panel reject the same basic argument as raised by the EU in this proceeding.

- c. The Appellate Body's statement regarding the original panel's specificity finding is not germane to this proceeding because the EU is alleging a different financial contribution and benefit that requires a different analysis of specificity.
- 254. The EU argues that the United States, and by extension the Panel, cannot rely on the Appellate Body's specificity findings in *US Large Civil Aircraft* because the Appellate Body stated that these findings "do not traverse the Panel's findings of specificity relating to the payments and other support provided under the NASA/USDOD contracts and agreements." However, as explained above, the original panel's findings of specificity related to a different characterization of the financial contribution and benefit than the EU makes in its second written submission. Applying the Appellate Body's finding to the EU's current characterization would not traverse the original panel's conclusions with regard to the EU's former characterization.
- 255. The EU also asserts that the Appellate Body's reasoning does not apply because the subsidy it alleges is not only the patent rights, but also "includes the continuing provision of funds, facilities, equipment, and employees through several NASA R&D programs." Here, the EU is confusing the financial contribution the alleged funds, facilities, equipment, and employees with the benefit, which addresses the terms under which the government made the contribution. The EU does not allege that the provision of funds, facilities, equipment, and employees in exchange for research services and resulting intellectual property is in and of itself a subsidy. The EU alleges instead that no private party would ever make those provisions in exchange for intellectual property rights that NASA and DoD received. If the Panel concludes that this treatment confers a benefit, this treatment must form the basis for the specificity analysis. And, as the provision of funds, facilities, equipment, and employees in exchange for the intellectual property rights NASA and DoD obtained is present in U.S. government research contracts awarded by all agencies in all sectors, it is not specific.

B. DoD Assistance Instruments, as Modified by the DoD Licensing Agreement, do Not Confer Subsidies.

256. The U.S. first written submission demonstrated that the EU had failed to establish any failure on the part of the United States to comply with the DSB's recommendations and rulings

³⁸⁸ EU SWS, paras. 330 and 531.

³⁸⁹ EU SWS, para. 331.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 89

regarding DoD. For assistance instruments funded through the original 23 program elements the difference between DoD's terms and market benchmarks was limited to DoD's right to use any resulting technologies outside of its established sphere of operation. The DoD Licensing Agreement eliminated that difference.

- 257. For these instruments, the primary disagreements between the parties are over the value of the post-2006 assistance instruments, the existence of a benefit, and specificity. The parties do not otherwise dispute the basic facts: the assistance instruments awarded to Boeing are "akin to a joint venture," they are financial contributions, and the pre-2006 agreements provide for defense technologies (which is the basis for DoD's funding) with potential civil applications. The parties also agree that DoD assistance instruments operate basically the same today as they did in the period covered by the original panel and Appellate Body findings.
 - 1. The 23 original program elements funded far fewer assistance instruments with Boeing after 2006 than before, and total amount spent under these instruments also decreased.
- 258. The United States demonstrated in its first written submission that the 23 original program elements funded only three assistance instruments with Boeing in the 2007-2012 period, much fewer on average than before 2007. The United States showed further that total funding of all outstanding assistance instruments under the 23 program elements amounted to [***]. Two of the new program elements, 0602715E and 0604015F, funded an additional five assistance instruments, with obligations of [***] in the 2007-2012 period. 392
- 259. The EU has not addressed these data, but has made generalized arguments against the valuation data submitted to the United States. It first criticizes the United States for "excluding the value of other forms of support that DOD provides." The United States takes this to refer obliquely to the EU's allegations regarding alleged provision of facilities, equipment, and employees. The EU, however, has provided no evidence that any of the assistance instruments funded through the challenged program elements provided facilities, equipment, or employees to Boeing after 2006, so it has failed to meet its burden of proof in this regard. Moreover, the

³⁹⁰ The United States emphasizes that it accepts this categorization for purposes of application of the SCM Agreement. The instruments themselves specify that they are not joint ventures for purposes of U.S. law.

³⁹¹ .Funds obligated to Air Force agreements with Boeing, FY2007-FY2012, by program element (Exhibit USA-108(BCI); Funds obligated to Navy contracts and agreements with Boeing, FY2007-FY2012 (Exhibit USA-273(BCI)).

³⁹² Funds obligated to Air Force agreements with Boeing, FY2007-FY2012, by program element (Exhibit USA-108(BCI); Funds obligated to other DoD entities' contracts and agreements with Boeing, FY2007-FY2012 (Exhibit USA-274(BCI)).

³⁹³ EU SWS, para. 471.

United States - Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353) August 22, 2013 – Page 90

United States has demonstrated that alleged provision of equipment and employees by DoD is not within the Panel's terms of reference. 394

- The EU also asserts, based on two reports by the U.S. Government Accountability Office, 260. that DoD financial management systems are neither accurate nor reliable. 395 What the EU fails to recognize is that the data it prefers, the budget data for each program element, are also the product of DoD's financial management systems. Thus, supposed weaknesses in DoD's financial systems do not provide a reason to reject either party's data. 396 The proper question is, recognizing the limitations of the available information, which party cites the more probative information on the value of any financial contributions. The EU's "top-down" approach relies on a number of untrue assumptions, in particular that all funds in each program element are paid to defense contractors, and that payments are in proportion to each contractor's share of the military aircraft market. The results of that methodology are accordingly entitled to no evidentiary weight.
- 261. In contrast, the United States has provided actual data derived from DoD's agreements with Boeing, reported by personnel in the DoD agencies responsible for overseeing the expenditure of funds under the challenged program elements. Completeness is not an issue, as the United States started with a list of all assistance instruments between DoD and Boeing in the FY2006-FY2012 period, and removed only those that were not funded through the challenged program elements. This is beyond question the most accurate source of information for what DoD paid to Boeing through assistance instruments funded under the challenged program elements, and what services Boeing supplied in return.

³⁹⁴ This analysis appears in section II.B.6.b.

³⁹⁵ EU SWS, para. 472.

³⁹⁶ The EU also purports to have found "inconsistencies" in record keeping in the form of two different agencies' different definitions of the term "Defense Research Sciences" and Boeing's role in a ManTech project related to aerospace foundries PCC and Howmet. EU FWS, para. 472. Sections II.C.2.d and II.C.2.e explain that these are not "inconsistencies," but instead represent a failure by the EU to understand the evidence available to it. To summarize, the Office and Management and Budget uses the title "Defense Research Sciences" to accumulate data on spending from a number of different DoD spending categories. At DoD, "Defense Research Sciences" is the title of a single program element. The use of the same generic term as the title for two different data sets is accordingly not an "inconsistency" that casts doubt on the accuracy of either agency's data. The EU's assertions regarding ManTech represent another effort to improperly treat DoD payments to other contractors as a financial contribution to Boeing. This Panel should follow the original panel's lead and reject these efforts. US – Large Civil Aircraft (Panel), para. 7.1070.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 91

2. The assistance instruments, as modified by the DoD Licensing Agreement, do not confer a benefit.

- a. The DoD Licensing Agreement covers all of the contracts subject to the recommendations and rulings of the DSB.
- 262. As explained in the preceding section, to identify the assistance instruments that needed modification to comply with the recommendations and rulings of the DSB, the United States first generated a list of all assistance instruments between DoD and Boeing up through September 23, 2012. It then removed from the list all of the agreements that received no funding through the 23 program elements challenged by the EU. For remaining agreements, the United States used the U.S. PTO database to determine what patents, if any, Boeing had received for inventions invented during work on the contract. The United States also identified outstanding patent applications for subject inventions resulting from work under assistance instruments funded through the 23 original program elements. The United States listed these patents in the DoD Licensing Agreement. This list is, to the best of the knowledge of the United States, complete and accurate with respect to the contracts listed in the DoD Licensing Agreement.
- 263. The EU asserts four reasons for considering the list incomplete, but none are valid. First, the EU notes that all of the agreements were entered into prior to September 23, 2012. That was the end of the compliance period in this proceeding, and the time that DoD and Boeing signed the DoD License Agreement. At that point, they obviously could not list future agreements that might or might not be signed and, accordingly, did not seek to do so. 399
- 264. Second, the EU notes that the list does not include procurement contracts. 400 However, this is not evidence of incompleteness. No DoD procurement contract has *ever* been found inconsistent with U.S. WTO obligations. There is accordingly no basis to consider that the United States had an obligation to take compliance action with regard to procurement contracts.
- 265. Third, the EU repeats its assertion that the United States cannot accurately or comprehensively track patents associated with U.S. government contracts. However, as the

³⁹⁷ The United States notes that there were several agreements listed in the DoD Patent Licensing Agreement for which it could find no funding information. In an abundance of caution, the United States applied the agreement to those contracts. DoD continued to seek funding data after signature of the DoD Patent Licensing Agreement, and discovered that some of the agreements on the list received no funding through the challenged program elements. The United States deleted those agreements and patents from subsequent lists of the patents awarded to Boeing for inventions invented during work on DoD contracts.

³⁹⁸ EU SWS, para. 491.

³⁹⁹ Given that there were eight assistance agreements funded through the challenged program elements in the FY 2007-FY2012 period, significant additions to the list are unlikely. *DoD Cooperative Agreements, TIAs, and OTAs, FY2007-FY2012* (Exhibit USA-159(BCI)).

⁴⁰⁰ EU SWS, para. 492.

⁴⁰¹ EU SWS, para. 493.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 92

United States explained in section II.A.3.a.iii, whatever the conclusions that the studies indicated with respect to other companies, Boeing has in place rigorous procedures to ensure proper reporting of the government interest in patents resulting from work under government contracts. In any event, the documents cited by the EU indicate that approximately 90 percent of patents associated with U.S. government contracts are notated as such in the U.S. PTO database. Therefore, if there is any underreporting, it is not significant.

- 266. Finally, the EU asserts that the DoD License Agreement is insufficient because it covers only patent rights, and does not affect other intellectual property rights. The EU fails to recognize that patent rights are the only area in which the Appellate Body found the terms of DoD assistance instruments to be more favorable than commercial benchmarks. Compliance with those findings did not require changes to any other intellectual property rights.
 - b. The benchmarks proposed by the EU are not comparable to the financial contributions found to exist by the Appellate Body.
- 267. The EU raises identical arguments with respect to its proposed benchmarks for the NASA contracts and for the DoD assistance instruments. Section II.A.4.a addresses these arguments, and demonstrates that the benchmarks proposed by the EU do not provide a valid indication of benefit for DoD assistance instruments and, therefore, do not satisfy the EU's burden of proof on this issue.
 - c. The licensing agreements have eliminated the subsidy identified by the Appellate Body with respect to pre-2007 NASA contracts and DoD assistance instruments.
- 268. The EU raises identical arguments with respect to the U.S. benchmarks for the NASA contracts and for the DoD assistance instruments. Section II.A.4.b addresses these arguments, and demonstrates that the benchmarks proposed by the United States offer an appropriate comparison with the transactions challenged by the EU, and establish that they do not confer a benefit.
 - 3. The EU's generic specificity argument with regard to NASA, DoD, and FAA measures applies the specificity analysis incorrectly.
- 269. The U.S. observations in section II.A.7 apply to the arguments the EU advances generically with specificity for all of the NASA, DoD, and FAA financial contributions it challenges. To summarize, the only non-market term that the EU identified in these transactions was that the allocation of intellectual property was more favorable than under certain benchmark transactions proposed by the EU. 404 The United States has explained that this element of the EU

⁴⁰³ US – Large Civil Aircraft (AB), para. 661.

⁴⁰² EU SWS, para. 495.

⁴⁰⁴ EU FWS, paras. 182-190 and 373-384.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 93

claim is wrong because the Appellate Body has already found that this treatment of intellectual property rights, if it were a subsidy, is available under all U.S. government contracts in all sectors of the economy. The EU reiterates its assertion that NASA and DoD programs taken separately are specific, but the Appellate Body found that this argument is not sufficient to demonstrate specificity when multiple authorities are implementing the same measure. The EU contends that its subsidy allegation goes beyond the patent terms, and applies to the entire financial contribution. However, the EU argument misses the point. Even if looked at from the point of view of the entire transaction, the fact is that *all* U.S. government agencies that enter into research transactions, in all sectors, do so on the basis the terms that the EU is challenging here. Thus, the subsidy alleged by the EU, assuming *arguendo* that it is a subsidy, is not specific.

C. DoD Contracts Funded through Challenged "General Research" Program Elements Do Not Confer Subsidies

270. The original panel found that DoD procurement contracts and assistance instruments are fundamentally different, and that only the latter conferred a subsidy. Nevertheless, the EU attempts to resuscitate its challenge to DoD procurement contracts by arguing that DoD procurement contracts and assistance instruments work the same way. This is another example of the EU's effort to turn this proceeding into a referendum on the recommendations and rulings of the DSB, rather than whether the United States complied with those recommendations and rulings.

271. There were no DSB recommendations and rulings regarding contracts funded through the so-called "general research" program elements, 409 and the EU has failed to present any

⁴⁰⁵ US FWS, paras. 259-262, 291-294, 394-397, 428, and 473.

⁴⁰⁶ US – Large Civil Aircraft (AB), paras. 757-759.

⁴⁰⁷ US – :arge Civil Aircraft (Panel), paras. 7.1149-7.1150 and 7.1153.

⁴⁰⁸ The EU lists the "general research" program elements as Defense Research Sciences (PE 0601102F); Materials (PE 0602102F); Aerospace Flight Dynamics/Aerospace Vehicle Technologies (PE 0602201F); Aerospace Propulsion (PE 0602203F); Aerospace Avionics/Aerospace Sensors (PE 0602204); Dual Use Science & Technology (PE 0602805F); Advanced Materials for Weapons Systems (PE 0603112F); Flight Vehicle Technology (PE 0603205F); Aerospace Structures/Aerospace Technology Dev/Demo (PE 0603211F); Aerospace Propulsion and Power Technology (PE 0603216F); Flight Vehicle Technology Integration (PE 0603245F); RDT&E for Aging Aircraft (PE 0605011F); Manufacturing Technology.Industrial Preparedness (Air Force (PE 0603680F/0708011F), Navy (PE 0708011N), Defense Logistics Agency (PE 0708011S), and Defense Wide Manufacturing Science & Technology (PE 0603860D8Z)). EU FWS, para. 246.

⁴⁰⁹ Because the EU's claims with regard to the original "general research" program elements (namely, those among the 23 program elements challenged in the original proceedings) and the new "general research" program elements (namely, those challenged in this proceeding but not in the original proceeding) raise similar legal issues, the United States addresses them collectively here. As indicated in section II.B, the United States retains its request for a preliminary ruling that claims related to the new program elements are outside of this Panel's terms of reference.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 94

basis to reach such a finding at this stage. The U.S. first written submission demonstrated that DoD entered into these contracts solely to achieve military objectives, selected through DoD's internal processes. With the exception of two explicitly dual use programs, DoD did not seek the development of technologies applicable to civil products. Thus, these contracts were not "akin to joint ventures," but purchases by the government of research services and the relevant knowledge and technology that resulted. As purchases of services, they are not financial contributions for purposes of Article 1.1(a)(1) of the SCM Agreement. And, even if these transactions were financial contributions, they did not meet the other criteria under Articles 1 and 2 of the SCM Agreement. As government purchases they would confer a benefit only to the extent that DoD paid more than adequate remuneration, but the EU has never even attempted to show that the agency paid too much for the research services, research results, and intellectual property it received. Nor is there any specificity in the treatment of Boeing, as the terms of the contracts that the EU alleges as conferring a benefit are available under all U.S. government research contracts, awarded by all agencies, in all sectors of the economy. Therefore, the EU has provided no basis for the Panel to conclude that these contracts were measures taken to comply, or that there are inconsistent with the covered agreements.

- 272. The EU's second written submission indicates many important areas of agreement between the United States and the EU with respect to contracts funded through the "general research" program elements. The EU does not dispute that all of these transactions had military objectives. It also does not dispute that, outside of the DUS&T and ManTech programs, DoD sets its research objectives based exclusively on the potential for providing future technology options for military needs, and evaluates for-profit firms' proposals to perform research exclusively on the extent to which they meet those military objectives. These facts confirm that the resulting transactions were not joint ventures, designed to produce technology useful for both DoD's military objectives and Boeing's civil use. Rather, the contracts under the "general research" program elements put Boeing's aeronautics research expertise at DoD's disposal to attain DoD's ends. The EU second written submission, in an effort to create the impression that military research had massive civil uses, highlights every reference to civil application under these contracts. However, the rarity and marginality of these references only serves to demonstrate further the insignificance of potential civil uses to these transactions.
- 273. The EU asks the Panel to ignore these critical aspects of the transaction and assume that operation of DoD contracts is indistinguishable from the operation of assistance instruments the Appellate Body found to be actionable subsidies. In fact, the original panel made factual findings, which the EU did not appeal, that "there are significant, substantive differences between DOD's R&D procurement contracts and DOD's R&D assistance instruments with

⁴¹⁰ As the Panel is aware, the United States has asked for a preliminary ruling that any payments, facilities, equipment, or employees funded through the program elements not challenged in the original proceedings are not properly within the Panel's terms of reference. Any arguments it presents in this section with regard to those program elements are presented on a contingent basis only, in the event the Panel does not grant the U.S. preliminary ruling request.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 95

Boeing."⁴¹¹ The EU explicitly asked the Appellate Body *not* to make any finding with regard to the legal consequences of these substantive differences. Therefore, the question of how to characterize these transactions has not been decided already. In fact, the evidence, as supplemented by the EU second written submission, establishes that, unlike the pre-2007 NASA contracts and DoD assistance instruments, these transactions were purchases of services. The EU has provided no convincing rebuttal to this conclusion, so it has failed to establish that DoD contracts funded through the "general research" program elements were subsidies.

- 1. The contracts submitted by the United States and the EU are the only relevant evidence of the research DoD paid Boeing to conduct, and they demonstrate the exclusively military objective of the work.
- 274. The EU's principal claim against DoD is for "providing Boeing with funding and access to government facilities, equipment, and employees for R&D applicable to the development, design, and production of LCA on terms more favourable than would be available on the commercial market." The only mechanisms through which DoD is legally authorized to provide payments, facilities, or equipment to private entities like Boeing are procurement contracts or assistance instruments. Therefore, DoD's contracts and agreements with Boeing are the *only* evidence of whether and to what extent DoD provides any of these things to Boeing. They confirm that DoD sought only to develop technologies for military applications, and that any civil applications were incidental and unimportant. The EU's efforts to characterize these transactions as equally military and civil are accordingly unfounded.
- 275. The EU advances a number of arguments to evade the implications of this evidence. All of them fail.
 - a. The military purpose of the research is highly relevant, as the original panel found.
- 276. The original panel's report quoted extensively from descriptions of the 23 DoD program elements challenged by the EU in support of its finding that "{g}enerally, the purpose of these programmes was to conduct R&D aimed at designing more advanced weapons or other defense systems or to reduce the cost of such systems." This finding then factored into the Panel's conclusion that "it appears that only two of the 23 R&D programmes at issue in this dispute the

⁴¹¹ US – Large Civil Aircraft (Panel), para. 7.1169.

⁴¹² US – Large Civil Aircraft (AB), para. 54.

⁴¹³ EU Panel Request, para. 11. The EU panel request asserts that DoD also "provid{ed} Boeing with royalty-free use of the technologies developed with such funding and support or use of such technologies on preferential terms." *Ibid.* This claim receives little attention in the EU submissions. The United States addresses it in section II.F of this submission.

⁴¹⁴ US – Large Civil Aircraft (Panel), para. 1147.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 96

DUS&T and ManTech programmes – had a declared purpose of funding 'dual use' R&D." The U.S. review of the contracts funded through the "general research" program elements challenged in this proceeding demonstrated that, as in the original proceedings, with the exception of ManTech and DUS&T, the declared purpose was to obtain technologies for military purposes. DUS&T is now defunct, and Boeing received little funding under ManTech. None of the remaining program elements had the declared purpose of funding "dual use" research and development. This information is critical for an understanding of whether the transactions were a "joint venture" to produce knowledge useful for both DoD's military operations and Boeing's civil aircraft business, or an essentially military transaction to which any civil uses were incidental. The original panel held that the latter is the case, the United States has shown through evidence that it is still the case. The EU has failed entirely to prove otherwise.

277. The EU instead tries to rebut the U.S. evidence that technology developed by Boeing had military uses with a confused presentation that (1) concedes that there is a military use for the work DoD paid Boeing to perform, but argues that this is irrelevant;⁴¹⁷ (2) concedes that there are only "rare instances when the contract *does* mention civil application explicitly, but argues that the infrequency of such uses is also irrelevant;⁴¹⁸ and (3) points to a few isolated examples of actual civil application or potential applicability in the contracts as support for the EU position that *all* of the work Boeing conducted for DoD had civil applications.⁴¹⁹ This is an approach to the evidence that presumes the result and then twists the evidence in support of that outcome. It may satisfy the EU, but it does not support the inferences the EU asks the Panel to make.

278. With regard to the military uses evidenced in DoD's contracts with Boeing, the EU forgets that the United States has cited a confluence of evidence that, outside of the DUS&T and ManTech programs, research Boeing conducted for DoD and funded under the "general research" program elements had relatively little utility to large civil aircraft. The summaries of the "general research" program elements show that the stated purpose of the challenged "general research" program elements is to develop technology for military purposes, not for civil applications. The United States has shown, and the EU has not disputed, that DoD sets its research objectives based solely on military utility and evaluates proposals based solely on military utility. The contracts verify that observation, calling for work with military purposes that are either explicit or readily discernible. The United States has also shown that Boeing's contracts with DoD produce, on a relative basis, a minuscule number of patents, and an even smaller number that the EU identifies as having any relevance to large civil aircraft. These facts together provide compelling evidence that the sole objective of these contracts is military, and that any civil application is incidental.

⁴¹⁵ US – Large Civil Aircraft (Panel), para. 7.1165.

⁴¹⁶ US FWS, paras. 328-369 and 438-443.

⁴¹⁷ EU SWS, para, 398.

⁴¹⁸ EU SWS, para. 403-404.

⁴¹⁹ EU SWS, para. 400-401.

United States - Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353) August 22, 2013 – Page 97

- The following section deals with the limited examples of civil application for the research 279. Boeing conducted for DoD that the EU asserts as evidence that all of the transactions involved "dual use" technology.
 - b. The original panel found that "the declared purposes of the DoD RDT&E programmes at issue do not generally demonstrate that DoD aimed to transfer technology to Boeing and the wider U.S. aircraft industry," and the contracts show that this remains true in the post-2006 period.
- 280. In addition to finding that, outside of the ManTech and DUS&T programs, the challenged programs had military objectives, the original panel also found that "the declared purposes of the DoD RDT&E programmes at issue do not generally demonstrate that DoD aimed to transfer technology to Boeing and the wider U.S. aircraft industry."⁴²⁰ The review of the contracts funded through the general research program elements showed that only rarely do they mention civil applications, and even then in tangential roles. In short, it is still the case that DoD does not aim to develop technology for civil aeronautics, or to transfer such technologies to Boeing or the broader civil aeronautics industry.
- With regard to the absence of evidence of civil applicability, the EU tries to justify a 281. "damned if you do, damned if you don't" evidentiary standard. Under this approach, the EU treats any reference to civil application, no matter how fleeting, as evidence of "dual use." (And, under the EU's approach to "dual use," that fleeting reference leads to a presumption that 50 percent of the value of the work supports large civil aircraft.) If there are no references, the EU takes that as evidence that, due to this dispute, DoD is attempting to hide the dual uses of its research. 421 There is no justification for such an assumption. As the original panel found, outside of DUS&T and ManTech, DoD did not have an objective of developing civil applications before the dispute. Thus, the absence of stated civil objectives in post-2006 DoD contracts supports the same conclusion today – that DoD is not seeking to develop civil technologies or transition military technologies to the civil sector, and it is correspondingly rare for military research to result in technologies with civil application. 422
- For the most part, the EU strives successfully to ignore the evidence that the contracts provide as to the nature of the research Boeing actually conducted for DoD, choosing instead to make generalizations based on broad summaries of all of the research conducted under each program element. However, the EU does attempt to show that of the 56 contracts for which the U.S. first written submission demonstrated military objectives, seven also had potential civil applications. Its efforts only drive home the point that a contracting process in which civil

⁴²⁰ EC – Large Civil Aircraft (Panel), para. 7.1147.

⁴²¹ EU SWS, paas.403-404.

⁴²² The fact that DoD still references civil applications in the "rare instances" where they relate to a Boeing research project, and still enters into assistance instruments when the conditions warrant, demonstrates further that the concerted effort the EU imagines to hide such information is in fact nonexistent.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 98

applications are irrelevant results in research that has little real world applicability to large civil aircraft.

- 283. The EU's first example is a contract for advanced nondestructive sensor modeling for multi-site inspection for "complex aging aircraft. In the EU's view, the research applies "without restriction to aircraft type, military or civil." There are at least two problems with this assertion. First, in the DoD context, "aging aircraft" refers to aircraft operating well beyond their design services lives, such as the B-52 bomber (which ceased production in 1963) and the KC-135 tanker (which is on average 50 years old). As civil aircraft do not remain in service anywhere near as long, this research addresses problems unique to the military. Second, military and civil aircraft each have specific, and entirely disparate usage and inspection criteria. For civil aircraft flightworthiness criteria maintained by FAA and other air traffic authorities determine what technologies to use. For military aircraft, risk-based assessment (including live fire requirements for combat conditions) and life-management and sustainment costs are the criteria that determine the viability of a technology. To maintain that everything associated with military needs is applicable to civil needs is to misunderstand how civil aircraft fleets operate. Given that DoD has solely military objectives for its contracts under the "general research" program elements, the only logical inference is that this contract would address military inspection needs, and not civil needs.
- 284. Another example advanced by the EU is FA8650-06-C-3623, which the EU describes as containing a single line indicating military usage. The contract in fact states repeatedly that the testing relates to [[**HSBI**]], including to specify that [[**HSBI**]]. The focus on [[**HSBI**]] makes imagining a civil application for this effort extremely speculative.
- 285. The EU's attempt to assert a civil application for the evaluation of Fischer-Tropsch alternative fuels under Contract F33615-03-D-2358, D.O. 6, runs into another problem. Fischer-Tropsch fuels are a commercial product, readily available to commercial users who have already evaluated civil applications and, in the aviation industry, concluded that the cost of operation is too high. Thus, this contract did not, as the EU claims, [[**HSBI**]]. Instead, it provided for testing of an existing fuel to see if it could meet military requirements, motivated primarily by secure sourcing concerns rather than commercial objectives. Thus, the contract exemplifies the way the military tries to take advantage of commercial products, rather than the reverse. The sole reference to [[**HSBI**]] referenced by the EU does not [[**HSBI**]].

⁴²³ EU SWS, para. 411, citing Air Force Contract FA8650-06-C-5210.

⁴²⁴ EU SWS, para. 415, *citing* Air Force Contract FA8650-06-C-3623, p. 21.

⁴²⁵ Air Force Contract FA8650-06-C-3623, SOW, pp. 1-2.

⁴²⁶ EU SWS, para. 417.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 99

286. The EU also errs in its discussion of Contract FA8650-08-C-5213. The EU asserts that "the United States claims this system would be customised for use on the F-22 fighter. This is not, however, what the contract says." In fact, "what the contract says" is:

Boeing proposes to demonstrate a prototype portable NDE system that can inspect remote areas within an aircraft structure. This system will also address remote access inspection needs of the F-22 program, which will provide specific inspection requirements and technical guidance. . . . Boeing will manage the project, demonstrate novel probe-structure attachments, and *ensure the system design supports F-22 needs*. ⁴²⁸

It is hard to square the EU's statement with the evidence it purports to discuss. The contract clearly calls for a device that supports the needs of the F-22, a single-seat fighter with special military characteristics that make access for inspection much more difficult than on a large civil aircraft. The EU also tries to defend its claim of potential civil uses by noting that the contract provides that [[**HSBI**]]. Given that there is no dispute that military objectives are the sole motive for the Air Force to engage in these contracts, [[**HSBI**]]. Finally, even if this technology had the broad applicability the EU asserts, it is a portable testing and inspection device, and not a technology for incorporation in a large civil aircraft or production of a large civil aircraft.

287. The EU also errs in its efforts to characterize research into "Revolutionary Hunter-Killer Design Development" as having a civil application. This effort considered configurations and technologies for unmanned aircraft to perform surveillance (hunter) and engagement (killer) missions. These vehicles ranged from [[HSBI]] kilograms, and made no provision for passengers or crew. (By contrast, a 737 weighs 28,000 kilograms empty.) The cruise and loiter speed were [[HSBI]], whereas large civil aircraft typically cruise near Mach 0.8, and certainly not above Mach 0.85. While this may seem [[HSBI]], aerodynamic properties [[HSBI]]. Thus, this research aimed at aircraft configurations that are not relevant to large civil aircraft operating in flight conditions that large civil aircraft seek to avoid. 431

288. As these examples show, the EU's assertions of extensive civil applicability for the technologies Boeing studied for DoD under these programs are not supported even by the contracts the EU highlights. Moreover, with regard to these and other hypothetical civil applications the EU may imagine in the future for technology developed by DoD, the United

⁴²⁷ EU SWS, para. 419.

⁴²⁸ Air Force Contract FA8650-08-C-5213, SOW, p. 1 (emphasis added) (Exhibit USA-143(HSBI)).

⁴²⁹ EU SWS, *quoting* Air Force Contract FA8650-08-C-5213, SOW, p. 1.

⁴³⁰ In fact, if the program is to meet the objective of supporting F-22 needs, [[**HSBI**]].

⁴³¹ The United States notes that, for this reason, supersonic passenger aircraft try to transit the high transonic speed zone as quickly as possible and cruise at supersonic speeds, unlike the hunter/killer UCAV configurations considered under this aircraft, which are designed to remain at this speed over long periods.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 100

States has never disputed that some DoD research *could* lead to technologies with civil applications, or that actual civil applications sometimes do arise. The critical question, however, is how to account for that fact in the analysis of financial contribution and benefit. The United States has shown that both known civil applications and potential civil applications are incidental to the exclusive purpose of these transactions – to obtain technology for military purposes identified by DoD. Such tangential possibilities and rare real-world applications do not interfere with the conclusion that these transactions are purchases of services.

- c. The EU observation that these contracts do not describe everything that was funded under the challenged program elements is both irrelevant to the legal analysis, and revealing as to the flaws with the EU's methodology.
- 289. One of the "inaccuracies" alleged by the EU is that the U.S. demonstration of military application for the research Boeing conducted for DoD addresses only "a *subset* of the R&D supported by a given PE" and provides "no basis to generalise from this conclusion that *none* of the R&D under that PE is applicable to LCA." This is an odd criticism from the EU, which has for the most part ignored the contracts. In any event, the United States has addressed vastly more of the contracts than the EU has, which makes the U.S. discussion of the contracts vastly more representative of the work that Boeing performed.
- 290. It is also worth noting that this criticism is also irrelevant. The EU's claims are not against the program elements as a whole, but against alleged payments, facilities, equipment, and employees provided *to Boeing* through those program elements. Thus, the United States does not bear the burden to show that none of the research under each program element is applicable to large civil aircraft. Rather, the EU bears the burden of proof as to its claim that *all* of the research DoD paid *Boeing* to perform is applicable to large civil aircraft, and that for that research, half of the total value of research is attributable to large civil aircraft. The EU's "top down" approach utterly fails to satisfy this burden.

⁴³² The EU seeks to create the impression of civil application by arguing that, while particular technologies may have clear military purposes "it is entirely consistent with the EU's explanation that the same technology is also useful for composite civil aircraft, which also undergo stresses and need to maintain a high level of reliability." EU SWS, para. 400. Statements like these demonstrate the lack of sophistication in the EU's approach to aircraft technology. The two examples the EU cites for this particular iteration of its civil applicability mantra are part of an on-going effort to research [[HSBI]]. Contract F33615-00-D-3052, D.O. 79, p. 2 and FA8650-08-D-3857, D.O. 10. As the EU itself recognizes, criteria such as speed regime, planform (the basic shape of the aircraft), size, and typical stresses are critical for the applicability of research to a particular aircraft. These particular projects were based on the load distribution of an unmanned combat air vehicle ("UCAV"). In addition to having to meet live fire design criteria, which do not apply to civil aircraft, a UCAV is much smaller than a large civil aircraft and, because it need not carry human payloads, subject to far greater stresses. There is no basis to consider that research geared to this particular type of aircraft is also applicable to large civil aircraft, and the EU has provided none.

⁴³³ EU SWS, para. 410 (emphasis in original).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 101

- 291. The EU's assertion is also telling because it indicates how backward the EU has the analysis. The issue is not whether contracts with Boeing are representative of the program elements. The issue is whether the broad summaries of research funded under the program elements are probative of what DoD paid Boeing to do. Any mismatch between the scope of the contracts and the scope of the summary descriptions of the program elements only emphasizes that the program element descriptions are not good evidence of what DoD paid Boeing to do.
 - 2. The evidence cited by the EU has no probative value for the analysis of the EU's claims of financial contribution, benefit, and specificity related to the challenged program elements.
- 292. In its second written submission, the EU accuses the United States of seeking to "restrict" the EU "to only one form of evidence, the DOD contracts provided by the United States." This is not the case. The U.S. has no objection to multiple sources of evidence that are *probative* and *relevant* as to the matter before the Panel. The problem with the EU's submission is that it does not cite such evidence in support of its central assertions: that *all* of the research that DoD pays Boeing to perform through the "general research" program elements has applications for civil aircraft, and that half of the value of the research is attributable to those applications.
- 293. The EU contends that it has cited "DOD budget exhibits and other {unidentified} official materials, news articles, DOD contracts, expert reports, and DOD-funded Boeing patents," and that the United States "did not engage with the extensive evidence." This is both incorrect and self-contradictory, as the EU then moves immediately to attempt (unsuccessfully) to rebut the arguments it has just accused the United States of not making. 436
- 294. To summarize, the United States has in fact "engaged with" the patents cited by the EU. The U.S. first written submission showed that many of the patents were not related to the program elements challenged by the EU, and that the small number of remaining patents only serves to underscore how rare it is for research under the "general research" program elements to result in technology with civil applications. The EU does not dispute these facts, but argues instead that the patent data are incomplete, and that DoD paid for the development of other intellectual property rights that Boeing does not disclose to the public. However, the evidence shows that any gaps in patent records are not significant.
- 295. The DoD budget exhibits and the EU's expert report are in fact one and the same, as the EU expert's sole function was to review and comment upon budget exhibits. The U.S. first written submission identified a number of glaring flaws in the approach that the EU and its expert took in their analysis, 437 which rendered the conclusions worthless for addressing the

⁴³⁴ EU SWS, para. 378, note 605.

⁴³⁵ EU SWS, para. 378.

⁴³⁶ E.g., paras. 380-393, 398-426.

⁴³⁷ US FWS, paras. 295-302.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 102

point before the Panel. The EU tries a number of arguments to rehabilitate this effort, but none of them are successful. Its expert does not have the expertise in the civil sector that would allow him to opine credibly on civil applications of technology, and the budget summaries provide no basis for identifying and valuing research performed by Boeing, as opposed to DoD itself, other contractors, or universities. Therefore, the budget exhibits and expert report cited by the EU are entitled to no evidentiary weight.

- 296. The EU's assertion that the United States failed to "engage with" the DoD contracts is a perverse criticism. The U.S. first written submission both noted and disproved the erroneous propositions the EU sought to derive from its citation to a small number of contracts, and demonstrated, based on a huge number of contracts, the military objectives for the research DoD paid Boeing to perform for it. The EU has for the most part ignored this evidence, and is not in a position to criticize the United States for its vastly more thorough review.
- 297. With regard to the unidentified other "official materials" and news articles, the United States considers that the contracts and financial data provided in response to the Panel's request for information offer more probative evidence of any payments, facilities, equipment, or employees provided to Boeing.
- 298. Therefore, the United States has engaged with the evidence cited by the EU and shown that it is not probative of the issues before the Panel, and does not support the arguments made by the EU.
 - a. The only thing shown by the patents cited by the EU is how rare it is for a DoD contract or agreement to result in a patent that is relevant to large civil aircraft.
- 299. The EU makes a common set of arguments regarding patents that it considers related to the "general research" and "military aircraft" program elements. This section deals with the arguments as they apply to contracts funded through both sets of programs.
 - i. Using the patents resulting from research under a DoD contract or agreement to evaluate whether it was a financial contribution or conferred a benefit would be an ex post analysis contrary to the terms of the SCM Agreement.
- 300. The EU second written submission makes many of the same points about patents resulting from research under DoD contracts and agreements funded through the challenged program elements that it did with regard to patents funded through NASA aeronautics research programs. The U.S. response to those arguments in section II.A.3.a.i applies equally to the EU's claims regarding the challenged DoD program elements.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 103

- ii. The EU does not dispute that the number of Boeing patents for inventions invented under DoD contracts is tiny in relation to the number of contracts Boeing has with DoD, and that many of the patents bear no relation to the EU's claims in this proceeding.
- The United States explained in its first written submission that Boeing had [***] contracts, task orders with DoD in the 2007-2012 period, and that the EU identifies only 32 patents arising from those contracts as having any utility to large civil aircraft – fewer than one for every hundred instruments. 438 The United States showed further that it is even less likely than that statistic indicates for DoD research to yield applications relevant to large civil aircraft. Of the 32 patents cited by the EU, only two resulted from research funded by the "general research" program elements. In contrast, eleven patents derived from contracts or agreements funded through ManTech and/or DUS&T, demonstrating that, to the extent DoD conducts dual use research, it is primarily through a dual-use research program. Contracts funded through the "military aircraft" program elements resulted in 11 patents that the EU identifies as applicable to large civil aircraft, but the United States showed that, as these program elements provide billions of dollars of funding, the number of patents highlighted by the EU is proportionately minuscule. 439 Another comparison is also instructive: during the 2007-2013 period in which the EU cited 169 Boeing patents as resulting from research under DoD contracts, Boeing was granted 3,736 U.S. patents. This indicates that DoD is not a significant source for technology that Boeing considers important enough to protect with patents.
- 302. The United States also observed that eight of the patents cited by the EU were not the result of research funded through the 34 program elements challenged in this proceeding. For the most part, the EU does not dispute these observations. The United States noted that one patent resulted from research funded by an element of the AWACS project that the EU's own expert, Richard Rumpf, identified as having no civil applicability. The EU now asserts that it did not originally have access to the information necessary to identify the civil applications. However, the United States submitted data identifying that particular AWACS contract in response to the Panel's DSU Article 13 requests for information. The EU's failure to make use of it is entirely its own fault. The EU also asserts that it is irrelevant that two of the patents

⁴³⁸ US FWS, para. 372

the C-17 program element provides a good example. In the original proceeding, CRA (the EU's consultants) stated that "{t}he C-17 aircraft much more closely resembles an LCA than the other military aircraft programs examined above," and estimated that DoD funded \$2.5 billion in research related to the C-17 from 1991 to 2006. 2006 CRA Report, p. 23 and Appendix J, p. 1 (Exhibit EU-29). Under the EU's reckoning, this research resulted in the issuance of one patent relevant to large civil aircraft. US FWS, para. 371. Thus, for the military aircraft that the EU considers most like large civil aircraft, civil applications for resulting technologies are actually quite rare.

⁴⁴⁰ US FWS, para. 371.

⁴⁴¹ EU SWS, para. 380, second bullet.

 $^{^{442}}$ The United States notes the haste with which the EU jettisons the views of its "expert" when they conflict with the EU's preconceived notions.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 104

resulted from research contracts originally awarded to independent companies that Boeing later bought, since Boeing now owns the patents. The EU misses the point. Its claim is against DoD payments, facilities, equipment, and employees provided *to Boeing*. Boeing's ability to access knowledge by purchasing companies that with independent expertise demonstrates that it has many sources of technology outside of its own work for DoD. Moreover, Airbus's own parent corporation, EADS, regularly seeks to buy U.S. defense contractors with similar objectives in mind.

- 303. Thus, the patent evidence cited by the EU does not support its assertion that the research DoD funded through the "general research" program elements had significant civil applicability. Its sole reply to this observation is to challenge the reliability of its own evidence. The following section shows that these efforts fail. The only conclusion supported by reference to patents that the EU considers as having civil uses is that they rarely result from research funded by the "general research" or "military research" program elements.
 - iii. The EU fails in its efforts to explain away the rarity of patents resulting from research under DoD contracts funded through the challenged program elements.
- 304. Recognizing that its evidence demonstrates only the insignificance of the contribution of aeronautics research programs to Boeing's patent portfolio, the EU argues that there are Boeing patents the EU cannot identify because of "shortcomings in US recordkeeping." 443
- 305. First, the EU asserts that DoD is "unable to track the inventions that Boeing makes" as a result of work conducted under military contracts because DoD does not keep centralized files of contractor invention disclosures. ⁴⁴⁴ The EU misunderstands the role of these disclosures. In DoD's system, they serve merely to alert contracting officers that the contractor may have invented an invention. DoD relies on the data in the U.S. PTO patent database to track the patents to which it has government purpose licenses arising from any contract with the inventor's employer. Thus, once the written disclosures have served their purpose of providing notice to the contracting officer, there is no need to reference them and, therefore, DoD does not provide centralized access.
- 306. Second, the EU notes differences between the lists of patents compiled for the DoD License Agreement and in response to the Panel's Article 13 request for information. These differences in fact show the precision with which the United States approached this effort. At the time of the DoD Licensing Agreement, the United States could not identify the program elements that funded several assistance instruments and, in an abundance of caution, included those instruments and any resulting patents in the licensing agreement. DoD subsequently identified the funding sources for more agreements, which demonstrated that several agreements

⁴⁴³ EU SWS, para. 383.

⁴⁴⁴ EU SWS, para. 384.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 105

(and associated patents) were not related to the EU claims, and the United States adjusted its response to the Article 13 question accordingly. The United States also expanded the Article 13 Response to reflect the broader reach of the Panel's inquiry, which the United States understood to include patents after September 23, 2012, foreign patents, and patent applications that were subsequently dropped. The Panel also inquired after agreements funded under the new program elements, which were not a factor at the time that NASA and DoD signed the respective licensing agreements. Thus, the lists were different because they addressed different questions, posed at different times.

307. Third, the EU makes certain factual assertions that, it claims, "illustrate the difficulty in identifying accurately Boeing's patents" related to DoD agreements." In fact, they illustrate that any "difficulty" is due to the EU's own lack of diligence rather than any problems with the evidence itself. The relevant patents generally list Boeing as the assignee or otherwise mention it by name, and they also indicate the contract identifier for the relevant DoD contract or agreement. The United States has provided the EU multiple lists of the relevant DoD contracts, including as an attachment to the U.S. compliance notification, during the Article 13 process, and with the first written submission. Thus, the EU has multiple methods at its disposal to identify the relevant patents, and the EU fails to note any instance in which employing these methods would result in the omission of a relevant patent.

308. Fourth, the EU argues that a 1999 GAO report and a 2012 study of biomedical patents indicated "endemic" underreporting of the U.S. government interest in patents for inventions invented under government contracts. However, as the United States explained in section II.A.3.a.iii, whatever the studies indicated with respect to other companies, Boeing has in place rigorous procedures to ensure proper reporting of the government interest in patents resulting from work under government contracts. In any event, the documents cited by the EU indicate that approximately 90 percent of patents associated with U.S. government contracts are notated as such in the U.S. PTO database. Therefore, if there is any underreporting, it is not significant. The EU also seriously exaggerates the results and relevance of these studies. The GAO study covered 2,094 patents, and found that for 90 percent of them, the government interest was recorded in the patent. The GAO referenced another study by the Inspector General of the U.S. Department of Health and Human Services of medically related patents finding that

⁴⁴⁵ EU SWS, para. 386.

⁴⁴⁶ In addition, the EU complains that certain patents do not list Boeing as the assignee. EU SWS, para. 386, third bullet and note 625. However, the text of the patent mentions Boeing by name, providing the EU yet another way to identify the relevant patents. *E.g.*, U.S. Patent No. 6,195,768 (Exhibit EU-1082); U.S. Patent No. 7,024,309 (Exhibit EU-1089).

⁴⁴⁷ EU SWS, para. 387.

⁴⁴⁸ Technology Transfer: Reporting Requirements for Federally Sponsored Inventions Need Revision, GAO Report GAO/RCED-99-242, pp. 6 and 10 (Aug. 1999) (U.S. PTO records indicated 2,083 patents with some government interest, while GAO interviews with contractors revealed 11 that had not been reported at all.).

United States - Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 - Page 106

contractors correctly reported the government interests in their patents 86 percent of the time. 449 The other study cited by the EU, from 2012, explicitly restricted its analysis to reporting by universities of patents in the biomedical field, so it has limited relevance to determining levels of reporting by private companies in the aerospace sector. 450 In any event, the findings indicated that from 1995 to 2007 patents granted to universities correctly indicated government rights between 75 and 90 percent of the time, and that reporting rates were increasing over that period. 451 Thus, the EU provides no basis to conclude that the number of "additional Boeing patents for LCA technologies" 452 that it cannot identify from the U.S. PTO database is in any way significant. 453

- 309. The EU makes one last effort to inflate the amount of intellectual property Boeing derives from its DoD contracts and agreements by arguing that, in addition to patents, Boeing develops trade secrets through work funded by the challenged program elements. 454 The EU again has the facts wrong. Under the U.S. Defense Federal Acquisition Regulation Supplement ("DFARS"), which govern DoD contracts, any technology developed with DoD funding results in DoD having broad license rights that prevent the contractor-developer from treating the development as a trade secret. More specifically, DoD gets an "unlimited rights" license with respect to any "{d}ata pertaining to an item, component, or process which has been or will be developed exclusively with Government funds". This license is genuinely unlimited, authorizing any U.S. government use, for any purpose or reason whatsoever, including the unrestricted release or disclosure to third parties for any uses or purposes without restriction.
- 310. The only circumstances in which a contractor is allowed to treat technology as a form of trade secret is when the contractor has funded the development of the technology, most typically prior to or outside the contracted effort. More specifically, DoD is granted only a "limited rights" license to data related to items, components, or processes developed completely with private funds, which prohibits use of data outside of government without permission of the party

⁴⁴⁹ Technology Transfer: Reporting Requirements for Federally Sponsored Inventions Need Revision, GAO Report GAO/RCED-99-242, p. 13 (Aug. 1999). The study addressed all 633 patents issued to 12 grantees of the National Institutes of Health ("NIH"), and found that 490 were properly reported in EDISON, a database that NIH and several other agencies maintain to track patents for inventions they have funded, while 79 patents were not.

⁴⁵⁰ Rai and Sampat, "Accountability in patenting of federally funded research," *Nature Biotechnology*, vol. 30, p. 954 (Oct. 2012).

⁴⁵¹ Rai and Sampat, "Accountability in patenting of federally funded research," *Nature Biotechnology*, vol. 30, p. 955, figure 3 (Oct. 2012).

⁴⁵² EU SWS, para. 223.

⁴⁵³ Based on the GAO data showing reporting of the government interest in 90 percent of cases, which were not restricted to the medical sector, the existence of ten patents reporting the government interest would, on average, suggest the existence of one additional patent that had not been reported.

⁴⁵⁴ EU SWS, para. 382.

⁴⁵⁵ 48 CFR § 227.7103-5(a) (Exhibit USA-311). The same result occurs for computer software developed at DoD expense under the contract, pursuant to 48 CFR § 227.7203-5(a) (Exhibit USA-311).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 107

that developed it. 456 If an item, component, or process is developed with "mixed" funding (*i.e.*, public and private funding), the government still gets "government purpose rights," which includes completely unrestricted use within the government, and also authorizes release or disclosure to, and use by, third parties for any U.S. government purpose for five years after the contract. 457 After five years, or another period resulting from negotiation by the parties, the government's license automatically converts to unlimited rights, thereby eliminating any sort of restriction on the use, release, or disclosure of the data.

- 311. The temporary commercial-use restrictions on use and disclosure during the five-year period are based on the recognition that a portion of the data was developed entirely at private expense (*e.g.*, a pre-existing trade secret developed and owned by the contractor), not as a mechanism to allow government funded technology to be treated as a private party's trade secret. Moreover, whenever there is technology developed with mixed funding, the regulations allow and encourage the further division of that technology into its component parts so that the privately funded elements can be segregated from the government funded elements, which allows the contractor-developer to retain trade secret status only for those elements for which it paid for the development, while allowing the government to have unlimited rights in the government funded elements. Contractors make every effort to achieve such segregations because otherwise they risk having their secrets shared with competitors who contract with the government, and eventual conversion of their protected data into unlimited rights data that the government may share with anyone.
- 312. For DoD assistance instruments, the allocation of data rights is less regulated than under a DFARS contract, but the general scheme is similar and does not result in a private party being authorized to assert exclusive trade secret rights for technology developed solely with government funding. Thus, the only situation in which a private party retains legal rights in any way resembling a form of trade secret for technology that involves using government funding is where there is joint funding. This occurs most typically in the context of assistance instruments, of which Boeing received very few during the FY2007-FY2012 period.

⁴⁵⁶ 48 CFR § 227.7103-5(c) (Exhibit USA-311). The same result occurs for computer software that was developed entirely at private expense, pursuant to 48 CFR § 227.7203-5(c).

⁴⁵⁷ 48 CFR § 227.7103-5(b) (Exhibit USA-311). The same result occurs for computer software that was developed with mixed funding, pursuant to 48 CFR § 227.7203-5(b). Note that, even during the initial five-year period, the government's ability to release to third-party competitors of the private party contractor for any government purpose is inconsistent with the argument that the private party contractor-developer has exclusive trade secret rights.

 $^{^{458}}$ 48 CFR $\$ 227.7103-4(b) (Exhibit USA-311). The same rule governs computer software developed with mixed funding, pursuant to 48 CFR $\$ 227.7203-4(b)

⁴⁵⁹ 32 CFR § 34.25(b) (allowing the government to publish and release data to third parties for any federal purpose), and 32 CFR § 37.845 (recognizing the private party's cost-sharing contributions and recommending the typical allocation of rights analogous to government purpose rights under the DFARS) (Exhibit USA-357).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 108

- 313. In sum, the EU's discussion of patents is irrelevant to the Panel's evaluation of whether DoD contracts or agreements confer a subsidy. To the extent those observations have any value, it is to confirm that Boeing does not develop a significant number of patents for large civil aircraft technology from its work under NASA contracts, and has a number of alternative sources of technology.
 - b. The CRA-Rumpf review of broad summaries of work conducted under the challenged program elements has no probative value.
- 314. The U.S. first written submission identified a number of methodological flaws with the methodology the EU and its consultants, Richard Rumpf and CRA, used to argue that broad descriptions of ongoing efforts in the DoD summaries of the challenged "general research" program elements demonstrated that they involved "dual-use research." The EU second written submission fails to rehabilitate the CRA-Rumpf methodology.
- 315. Even taken in the abstract, the CRA-Rumpf methodology has serious limitations. It starts with very high level, generalized descriptions of research programs from the DoD budget summaries, which contain limited information as to the research conducted and none as to who performed it. 460 It then further abstracts the information by taking "keywords" (variously words, phrases, and sentences) out of those summaries, and attempts to reach conclusions about civil applications based on those words taken in isolation. With data hyper-generalized in this way and then further stripped of context by extraction of "key words," there is obvious potential to conclude incorrectly that a program has broader applicability than more detailed descriptions of the work indicate.
- 316. When reduced to practice, the results are less reliable than even the generic description indicates. To take one example, the CRA and Mr. Rumpf provide the following "summary" of PE 0602102F, project 4347, based on "keywords" taken from the budget summary:

Explore new material systems ... and develop and evaluate lightweight, active, adaptive, multifunctional, high temperature, and durable composite and hybrid materials ... Develop composite and hybrid life prediction tools for ... airframe applications. Develop computational materials science techniques and models to characterize high performance materials ... ⁴⁶¹

They then conclude that this research is "dual use" because "composite materials are a critical component of modern LCA, and now finding wide use in both wing and fuselage structures." However, the entire text from which they extracted these "keywords" reads (with omitted words bolded and underlined) reads:

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⁴⁶⁰ The original panel cited the budget summaries, but the Panel uses them exclusively as evidence of "the specific purpose *of these programmes*." *US – Large Civil Aircraft (Panel)*, para. 7.1147 (emphasis added). The original panel did not use budget summaries as evidence of what research DoD paid Boeing to perform.

⁴⁶¹ CRA-Rumpf Report, Annex A, p. 4.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 109

Explore new material systems <u>for expendable supersonic/hypersonic weapon</u> <u>system applications.</u> Develop and evaluate lightweight, active, adaptive, multifunctional, high temperature, and durable composite and hybrid materials <u>for extreme environments</u>. Develop composite and hybrid life prediction tools for <u>engine and</u> airframe applications. Develop computational materials <u>science</u> techniques and models to characterize high performance materials <u>for</u> <u>expendable space and hypersonic/hypersonic applications.</u>

It is difficult to see how the EU can expect the Panel to place any weight on conclusions of civil applicability to large civil aircraft justified by deletion of the reference to the military objectives.

- 317. These are not the only problems. Although Mr. Rumpf and CRA never state that their conclusions demonstrate that *all* the research in a given project or program element has civil applications, the EU simply assumes that is the case. And, although the budget estimates do not indicate who received funding, Mr. Rumpf and CRA simply assume that it was only aerospace contractors, even though it is known that DoD does extensive contracting with universities and entities outside the aerospace sector. Thus, this methodology provides little credible evidence as to what DoD paid Boeing to do.
- 318. The U.S. first written submission identified several concerns with the EU's methodology. The EU's efforts to answer them are unconvincing.
- 319. First, the United States observed that the EU had not defined what constitutes "dual-use" research. The EU responded that CRA and Mr. Rumpf defined it as funding and technologies "that is applicable to both military and large commercial aircraft development." The United States is aware that the EU has used this type of generic definition previously. The problem is that, under this definition, *everything* is dual use to large civil aircraft because any technology is *potentially* useful. Since CRA and Mr. Rumpf do not find that everything is dual use, they must have used additional, undisclosed criteria.
- 320. The United States also observed that this definition is utterly subjective. The EU responds that "it is a question of fact, not of opinion, whether technologies and other knowledge are dual-use to LCA." There are several problems with this statement. First, experience in the original proceedings demonstrates that it is untrue. Experts at Boeing and Airbus disagreed throughout as to whether identified technologies were used or usable on large civil aircraft. Therefore, the EU cannot credibly argue that this is an issue of observable fact discernible by Richard Rumpf. Another problem is that the information on which CRA and Mr. Rumpf were taking identified "technologies" or "knowledge" and seeking to identify potential civil applications. They were starting with extremely generalized descriptions of processes performed

⁴⁶² Air Force FY 2013 Budget, Exhibit R-2, p. 6 (Exhibit EU-54, frame 465/480).

⁴⁶³ EU SWS, para. 389.

⁴⁶⁴ EU SWS, para. 390.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 110

with limited indications as to results. Thus, to reach what the EU (wrongly) describes as a question of fact, CRA and Mr. Rumpf would first have to extrapolate what "technologies and other knowledge" were likely to arise, and then explain the linkage to civil applications. The cursory analysis in the CRA-Rumpf Report clearly does not do this.

- 321. Second, the United States observed that, while Richard Rumpf was employed by DoD 20 years ago, primarily with regard to Naval matters, his expertise was somewhat dated, and did not in any event extend to the civil sector, calling into question his capacity to identify civil applications of technology. The EU responded with a supplemental description of his experience indicating that he represented the Navy on joint review of weapons systems during his tenure, and has since periodically consulted for DoD on a number of matters. Nevertheless, having participated in design reviews for Air Force projects in the 1980s in periodic consulting projects afterward is thoroughly consistent with the U.S. view that his expertise is somewhat dated, especially with regard to the broad range of Air Force research covered in the CRA-Rumpf report. In any event, the supplemental statement only confirms that his expertise in the civil sector is almost nonexistent, consisting of service on the boards of directors for two composites companies and consulting for 3M on aircraft and missile technology. Therefore, he has little credibility to opine on civil applicability of technology.
- 322. Finally, the EU asserts that none of the U.S. conclusions regarding civil and military uses for technologies are "backed up by any evidence or expert opinion." This is another odd criticism, given that the only "expertise" the EU cites is with regard to the CRA-Rumpf review of budget summaries, which are not technologies. In any event, the EU's statement is also incorrect. The evaluations of technology in the U.S. first written submission and this submission were drafted in consultation with DoD scientists, program personnel, and contracting personnel in the program offices for the relevant military aircraft program elements and within AFRL and DARPA for the relevant general research program elements. Those statements were reviewed for accuracy and, where necessary, corrected prior to submission to the Panel. The individuals who participated in the project in this way have a deeper and more recent familiarity with the operations of these programs than anyone retained by the EU.
- 323. In short, the EU has done nothing to demonstrate that the CRA-Rumpf analysis establishes any fact relevant to the Panel's inquiry.

⁴⁶⁵ US FWS, para. 298.

⁴⁶⁶ EU SWS, para. 388.

⁴⁶⁷ Statement of Richard Rumpf, M.S.A.E., para. 7.

⁴⁶⁸ EU SWS, para. 392.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 111

- c. Outside of DUS&T, ManTech, and the assistance instruments, there is no evidence that DoD intended its research to produce any technology useful to large civil aircraft.
- 324. As the United States has observed, the original panel reviewed the overall purposes of the 23 original program elements from 1992 to 2006 and concluded that "the declared purpose of the DoD programmes at issue do not generally demonstrate that DOD aimed to transfer technology to Boeing and the wider U.S. aircraft industry." The EU has pointed to nothing from subsequent years, or with regard to the new program elements, that would change that conclusion. The U.S. first written submission additionally describes DoD's processes for identifying research topics and choosing suppliers and explains that outside of DUS&T and ManTech, the sole criterion is military utility.
- 325. Nonetheless, the EU starts its section on the supposed applicability of DoD research to large civil aircraft with the pronouncement that "DoD intends for contractors to extract commercial benefits from dual-use aspects of DOD R&D."⁴⁷⁰ The EU simply ignores the original panel's statement to the contrary. The only evidence it adduces in support of the opposite conclusion is that DoD terminated its "recoupment" regulations in 1992.⁴⁷¹ The original panel was aware of this fact, as DoD raised it repeatedly during the original proceedings. However, that information did not affect the original panel's evaluation of DoD's subsequent objectives, and it should not affect this Panel's analysis, either. As the United States demonstrated before the original panel, even when they were in force, DoD's recoupment rules would not have applied to the research the EU is challenging now, or to the Boeing aircraft that allegedly applied those technologies.⁴⁷² Therefore, termination of the recoupment regulations had nothing to do with making it possible for contractors to use technologies resulting from research under DoD contracts for civil applications.

Under those rules, DoD required recoupment fees only for commercial sales of a "DoD developed item or a derivative of a DoD developed item." A "DoD developed item would be a weapons system itself or other product whose development costs DoD paid, while a "derivative" of a DoD developed item was defined as one that "consists of common parts equal to, or more than 10 percent of the Defense item." DoD does not develop large civil aircraft, and Boeing's large civil aircraft do not have a commonality of more than ten percent with any DoD-developed article. Therefore, the old recoupment rules would not have applied to sales of large civil aircraft.

U.S. Comment on EU Response to Panel Question 196(ii), para. 340 (citations omitted) (Exhibit USA-359). The exhibit contains the entirety of the U.S. response. The response cited 48 CFR §§ 271.001 and 271.004(c), which are no longer in effect. (Exhibits USA-314 and USA-315).

⁴⁶⁹ US – Large Civil Aircraft (Panel), para. 7.1147.

⁴⁷⁰ EU SWS, para. 395, heading.

⁴⁷¹ EU SWS, para. 395.

 $^{^{472}}$ The fullest discussion of the recoupment rules appears in the U.S. comments on the panel question 196(ii):

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 112

- d. The ManTech project summaries cited by the EU provide no support for the assertion that Boeing was "deeply involved" in the ManTech program, or that DoD provided it payments, facilities, equipment, or employees under that program.
- 326. The U.S. first written submission explained that only five DoD contracts with Boeing received ManTech funding during the 2007-2012: two from OSD ManTech, two from Air Force ManTech, and one from DLA ManTech. The United States demonstrated that these contracts had military applications, and did not reference civil applications. 474
- 327. In its second written submission, the EU notes that it cited ManTech program materials listing Boeing as a "participant" in certain projects. It opines that these indicate that "Boeing was deeply involved in the ManTech programme," and that this is in "contradiction" to the U.S. data showing it received no funding for the work. In fact, of the ManTech projects for which the EU lists Boeing as a "participant," only three were active in the 2007-2012 period, 476 scarcely a "deep involvement" on Boeing's part. Nor does Boeing's "participation" in any way contradict the evidence that ManTech did not provide funding to Boeing with regard to these projects.
- 328. The ManTech project on solder-free electronics involved a contract with Optomec to further develop an Optomec-owned technology that was already being used by Boeing in commercial and military applications. Thus, any "participation" by Boeing was as a customer of Optomec and not as a recipient of DoD payments or access to DoD facilities, equipment, or employees. To the extent the ManTech project advanced the technology, any benefit would accrue to Optomec rather than Boeing.
- 329. The ManTech RANGER project involved a contract with the South Carolina Research Authority, and the University of Kentucky as a subcontractor to develop software supply chain predictive capability. Boeing had already provided data to the University of Kentucky for purposes of modeling and conducting simulations of several risk scenarios. Together with studies and supplier surveys, the University used this information to develop a software

 $^{^{473}}$ US FWS, paras. 366-368 and 442. One of the Air Force contracts received only part of its funding from Air Force ManTech.

⁴⁷⁴ US FWS, paras. 366-368 and 442.

⁴⁷⁵ EU SWS, paras. 425-426.

⁴⁷⁶ EU FWS, para. 276 (Digital Radiography for Final Part Acceptance of Aerospace Castings; sources indicate the remaining projects listed in this paragraph were completed in 2005 or before) and 281 (Risk Assessment for Next Generation Supply Chain Readiness and Solder Free Electronics – Direct Write Electronics). The EU asserts that the budget summaries show Boeing involvement in Fiber Place of Out of Autoclave Composites, but this is incorrect. The project description refers to Boeing only to explain that out-of-autoclave composites research is important because existing large autoclaves are "tied up with Boeing 787 and F-35 production." DoD It in no way indicates Boeing's involvement with the project. DoD FY 2012 Budget, Exhibit R-2, R-1 line item 47, p. 10 (Exhibit EU-67, frame 60/82).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 113

simulation package called "RADAR." The ManTech project aimed to develop the software further, with Boeing "participating" by conducting a pilot demonstration. ⁴⁷⁷ Again, Boeing's relationship was with the University of Kentucky. ManTech did not provide the company with payments or access to facilities, equipment, or employees for this effort. Any benefit would accrue to the University of Kentucky, which owned the software package in question.

- 330. Thus, contrary to the EU's assertions, Boeing's participation in these projects is entirely consistent with the evidence showing that it received neither payments nor access to facilities, equipment, and employees for these efforts.
 - e. The EU's continued defense of the erroneous assertions by CRA and Mr. Rumpf regarding usaspending.gov data on "Defense Research Services" betrays a lack of understanding of DoD contracts.
- 331. The CRA-Rumpf Report bases part of its valuation exercise on the assumption that data reported on the usaspending.gov website under the heading "Defense Research Sciences" was the same as spending under DoD program element 0602102F, also entitled "Defense Research Sciences." The U.S. first written submission explained that the identical titles were a coincidence, and that many of the instruments reported by usaspending.gov in the "Defense Research Sciences" category received no funding through program element 0602102F. Rather than accept that it made a mistake, the EU in its second written submission now insists that it has an unspecified "reason to believe" that any instruments funded by other program elements included in the usaspending.gov "Defense Research Sciences" category were the result of "poor recordkeeping." It observes (correctly) that the FA8650 prefix on some of the contracts indicates that AFRL administered the contract, and surmises that the U.S. observation that DARPA provided funding for them is the result of another error. This complicated effort to blame the United States for the EU's errors only serves to show that it does not understand the evidence on which it seeks to rely.
- 332. Any time DoD obligates funds for payment under a contract, it includes in the contract an accounting line providing information about the funding. The U.S. Air Force, U.S. Army, and DARPA embed the program element that funded the particular obligation in that code, allowing a direct link from the contract to the PE number. To take an example, Cooperative Agreement, FA8650-07-2-7716 (Non-Autoclave Manufacturing Technology), lists the following obligations:

Date	Amount	Line of accounting
March 23, 2007	\$[[HSBI]]	[***] <u>62715E</u> [***]
Jan. 18, 2008	\$[[HSBI]]	[***] <u>62715E</u> [***]

⁴⁷⁷ Risk Assessment for Next Generation Supply Chain Readiness (RANGER), pp. 1-2 (Exhibit EU-313).

⁴⁷⁸ CRA-Rumpf Report, p. 9 (Exhibit EU-23).

⁴⁷⁹ US FWS, para. 299, note 535.

⁴⁸⁰ EU SWS, para. 422.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 114

Apr. 29, 2009	\$[[HSBI]]	[***] <u>62715E</u> [***]
Sept. 9, 2009	\$[[HSBI]]	[***] <u>62715E</u> [***]
Mar. 10, 2010	\$[[HSBI]]	[***] <u>62715E</u> [***]
Mar. 10, 2010	\$[[HSBI]]	[***] <u>62715E</u> [***]
May 13, 2011	\$[[HSBI]]	[***] <u>62715E</u> [***]

Source: Cooperative Agreement FA8650-07-2-7716 (Exhibit USA-165(HSBI))

The underlined text in the lines of accounting indicates that each of these obligations was funded through PE number 0602715E (DoD drops the first and third digits of the full PE number, which are always "0").

- 333. The CRA-Rumpf Report indicates two expenditures for "Non-Autoclave Manufacturing Technology in the "Defense Research Sciences" category: \$7,999,877 on September 9, 2009, and \$340,697 on June 22, 2011. Thus, these expenditures under the usaspending.gov category for "Defense Research Sciences" have no connection to PE 0602102F, also entitled "Defense Research Sciences." Most of the other entries CRA and Mr. Rumpf derived from usaspending.gov related to Cooperative Agreements F33615-03-2-3300 and FA8650-05-2-3503. A review of the lines of accounting listed for obligations under those agreements indicates that they also received no funding from PE 0602102F. The same approach indicates that one topic, the Human-Assisted-Manufacturing Model Library, was under Cooperative Agreement FA8650-11-2-7127, which did not receive funding through any of the challenged program elements.
- 334. The EU notes that all of these agreements were issued by AFRL, and claims to find it implausible that they received funding from outside of the Air Force. ⁴⁸⁴ Again, the EU betrays its lack of knowledge of how DoD operates. It is not unusual for DARPA to provide funding to work by other DoD entities that relates to DARPA's mission, which is what happened with two of the agreements. The program element designation for payments under Cooperative Agreement FA8650-05-2-3503 reflects that AFRL carried out the work in cooperation with NASA. The United States does not dispute that this funding was covered by the EU's claims.
- 335. Thus, whatever the EU considers it has "reason to believe," the evidence shows that the agreements listed in the usaspending.gov "Defense Research Sciences" category were not funded through PE 0602102, in spite of its similar title. ⁴⁸⁵ The EU's continued insistence on this point,

⁴⁸¹ CRA-Rumpf Report, Annex B, p. 5 (Exhibit EU-23).

⁴⁸² DoD Cooperative Agreements, TIAs, and OTAs, FY2007-FY2012 (Exhibit USA-159(BCI) (revised July 22, 2012)).

⁴⁸³ US FWS, para. 329.

⁴⁸⁴ EU SWS, para. 423.

 $^{^{485}}$ The EU also claims to find fuel for its suspicions of "poor recordkeeping" in the fact that three of the cooperative

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 115

without any check against the evidence available to it, casts serious doubt either on the diligence or the expertise of its experts.

- f. The EU misunderstands the significance of evidence that technology studied under a program is export controlled or classified.
- 336. In documents submitted to the Panel, the United States indicated where particular information was export controlled or classified, both to explain why it could not provide that information, and to provide an indication of how that information differed from other information before the Panel. The EU second written submission accuses the United States of seeking to draw "reverse adverse inferences" from this fact. The EU misunderstands. The United States does not seek an adverse inference, "reverse" or otherwise. It has merely identified facts that certain information is subject to export controls or classified and suggested that the Panel take reasonable inferences based on those facts.
- 337. With respect to export-controlled information, the reasonable inferences are that Boeing could not reveal the information to foreign nationals without first obtaining a license, which it has not done with respect to the technologies used on civil aircraft. Classified information has vastly stricter restrictions, in that Boeing employees cannot even share the information (or information derived from the information) with persons lacking the requisite security clearance and a need to use that information for government purposes. (To be explicit, a Boeing employee could not reveal classified information to a fellow employee in order for the fellow employee to use it on a civil aircraft, even if the fellow employee had a security clearance.) The inference the United States advocates is that these restrictions have the effects provided under U.S. law. In the case of ITAR, while the original panel found that use of ITAR-controlled information was not "impossible," it nevertheless agreed that "the ITAR restrict Boeing's ability to use certain R&D performed for DOD towards its civil aircraft" and that Boeing took steps to ensure that the 787 was ITAR-free. 486 The restrictions on classified information are much more significant, and would have correspondingly greater effect. Use of classified information for non-governmental purposes would be a highly serious breach of U.S. law.
- 338. The United States is not, as the EU alleges, asserting that ITAR protections mean that "none of the R&D presumably described can have any dual-use application." Our point is that civil applications are *less likely* because, as the original panel found, "the ITAR restrict Boeing's ability to use certain R&D performed for DOD toward its civil aircraft." If the EU disagrees with this inference, its complaint is with the original panel, and not with the United States. In contrast, given the much tighter limitations on classified information, it is difficult to conceive how Boeing could turn it to commercial use.

⁴⁸⁸ US – Large Civil Aircraft, para. 7.1160.

⁴⁸⁶ US – Large Civil Aircraft (Panel), para. 7.1160.

⁴⁸⁷ EU SWS, para. 406.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 116

- 3. The contracts submitted by the United States provide the only evidence of any payments or provision of facilities, equipment, and employees to Boeing under the "general research" program elements, and they show that their magnitude is much less than alleged by the EU.
- 339. The EU provides virtually no evidence as to the magnitude of any payments, facilities, equipment, or employees provided to Boeing under the "general research" program elements. It relies instead on the valuation exercise conducted by CRA and Mr. Rumpf, which uses highly generalized data and a series of unsupported and unsustainable assumptions to arrive at a wholly fictitious number. In contrast, in line with the Panel's Article 13 requests for information, the United States looked separately at the different financial contributions alleged by the EU. It identified the contracts funded under the "general research" program elements during the FY2007-FY2012 period, and reported their value. As those contracts identified no meaningful facilities usage by Boeing, the United States considered that that element of the EU's claim did not affect the magnitude calculation. The United States did not attempt to value equipment and employees allegedly provided to Boeing, as it has asked the Panel for a preliminary ruling are outside of the terms of reference of this proceeding. In any event, the contracts establish that the EU has provided no evidence to support the assertion that employees and equipment are significant enough to affect the value of the alleged financial contribution.
- 340. The evidence referenced by the United States is the best evidence of the magnitude of the alleged subsidies, and show a value of [***], 489 far less than the \$463 million alleged by the EU. 490 The EU sought in the second written submission to challenge the credibility of the U.S. data and rehabilitate the dubious CRA-Rumpf exercise, but both efforts fail. The U.S. approach to the data represents a reasonable effort to identify the alleged contributions and their magnitude. The EU approach is not.
 - a. The research contracts funded by the "general research" program elements demonstrate that the value of any financial contribution is far lower than the EU asserts.
- 341. Contracts and assistance instruments are the exclusive vehicles for DoD to provide payments, facilities, equipment, or employees to contractors under the "general research" program elements. In response to the Panel's Article 13 request for information, the United States provided a list of all payments made to Boeing during the FY2007-FY2012 period, showing that the total amount was [***]. ⁴⁹¹ Along with the evidence, the United States submitted all copies of contracts and modifications that were available in the limited time provided by the Panel.

⁴⁸⁹ Exhibits USA-108, USA-116, USA-157, and USA-273. The United States notes that this is a total figure, covering contracts and agreements, whether funded by the 23 original program elements or the new program elements. It is presented in this section for purposes of comparison with the EU aggregate figure.

⁴⁹⁰ Exhibit EU-37.

⁴⁹¹ Exhibits USA-108, USA-116, USA-157, and USA-273.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 117

- 342. The contracts also list any facilities and equipment provided to the contractor. From the perspective of the contractor, this is a critical element of the bargain. If the proposal depends on government furnished equipment that proves to be unavailable, the contractor is likely to overrun the allowable expenses and could be unable to finish the work. Therefore, DoD contracts list any government-furnish equipment necessary to perform the specified work.
- 343. The evidence demonstrates that government facilities are not a significant element in contracts funded through the "general research" program elements. The EU has provided no evidence from any source that the government made facilities available to Boeing for work under these contracts. The relatively early stage of most of the research funded through these program elements means that specialized testing facilities are rarely required. Where they are, DoD typically specifies for the contractor to provide a deliverable that DoD's own scientists test for themselves. Thus, there is no basis to conclude that access to DoD facilities affected the value of the financial contribution in any meaningful way.
- 344. The evidence shows further that government equipment is not a significant element in contracts funded through the "general research" program elements. To begin with, under the DFARS, a contracting officer may provide government property to a contractor only if doing so: (1) is in the government's best interests; (2) the benefit to the acquisition significantly outweighs the increased costs associated with provision of government property; (3) provision of the property does not substantially increase the risk associated with the acquisition; and (4) government requirements cannot otherwise be met. These are high standards, and the contracts show that they are rarely met. Thus, there is no basis to conclude that provision of DoD equipment affected the value of the financial contribution in any meaningful way.
- 345. The EU has provided absolutely no support for its assertion that DoD provides its employees to Boeing or other contractors. In fact, the only information related to this aspect of the EU allegation is the undisputed fact that DoD contracts out for work for research that it cannot perform in-house. DoD scientists would accordingly have little to add to a contractor's efforts. Thus, there is no basis to conclude that provision of DoD employees affected the value of the financial contribution in any meaningful way.
- 346. In short, the best evidence available to the Panel establishes that the total value of any payments, facilities, equipment, and employees provided to Boeing under the "general research" program elements is [***], greatly less than the EU's alleged value of \$463 million. 493

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⁴⁹² 48 CFR § 245.103(1) (Exhibit USA-316); PGI 245.103-70 (Exhibit USA-317).

⁴⁹³ Exhibit EU-37.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 118

- b. The EU provides no valid reason to disregard the evidence of DoD's actual payments to Boeing under the challenged program elements.
- 347. With its first written submission and in response to the Panel's Article 13 requests for information, the United States supplied data on the amounts that DoD obligated under each of contracts funded through the challenged program elements. This is the only available evidence of the value of DoD's payments to Boeing under the challenged "general research" program elements.
- 348. The EU first notes that the U.S. numerical data reflect only the payments made to Boeing. However, as the original panel considered an approach that started with payments reliable for determining the value of financial contributions to NASA, this EU observation only indicates that the information provides a valid starting point.
- 349. Second, the EU asserts that GAO reports indicate that DoD's financial management systems are "unreliable." The EU fails to realize that the data it advocates come from the same system. Therefore, the question is not whether DoD's financial data as a whole are ideal, but rather, which party has made a more credible use of the available information. In this instance, an approach that looks at Boeing's contracts funded under the relevant program elements is a far more reliable means to determine what DoD conferred on Boeing than the essentially fictitious CRA-Rumpf approach.
- 350. The EU also attempts to defend its failure to engage with evidence of the value of payments because of certain "issues" regarding the data. ⁴⁹⁷ However, none of them indicate any flaw with the information provided by the United States.
- 351. The EU first notes with regard to program element designations that "the numbers listed have 5 digits, whereas actual PE numbers have 6 digits." This should not have interfered in any way. The listed PE numbers were derived from the lines of accounting associated with the actual payments. As the United States explained in section II.C.2.e, because the first and third digits of all PE numbers are "0", DoD drops them from the lines of accounting. This was not difficult to discern. To take an example, the first page of Exhibit USA-158(BCI) reports contract F1962800C0004A00009 as having PE number 27417F. A reference to the DoD contract list in Exhibit USA-161 shows that Contract F19628-00-C0004 has a PE number of 0207417F, indicating exactly how the PE numbers were shortened.

⁴⁹⁶ The EU also cites its contentions regarding data on ManTech and Defense Research Sciences. EU SWS, para. 472. The United States has addressed and disproven these arguments in Sections II.C.2.d and II.C.2.e.

⁴⁹⁴ US – Large Civil Aircraft (Panel), para. 7.1070.

⁴⁹⁵ EU SWS, para. 472.

⁴⁹⁷ EU SWS, para. 470, note 776.

⁴⁹⁸ EU FWS, para. 470, note 776, first bullet. Actually, PE numbers have seven digits.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 119

- 352. The EU then notes that some of the entries do not have dates. ⁴⁹⁹ Rather than a sign that data is unreliable, this fact shows the care taken by the United States. Where an obligation without a date appears on the list, it is because the date was unclear, but in an abundance of caution, the United States reported those obligations as coming within the period covered by the data-gathering exercise.
- 353. The EU finally complains that the contract, modification, and delivery order data were presented "in long strings of numbers and letters, exceeding the number of characters in normal contract numbers." This is, in fact, the way such information is often presented in internal DoD documents, and as the EU claimed to have retained "experts" in DoD contracting matters, the United States assumed they would understand this way of presenting the relevant information. In fact, at least one of the contract documents cited by the EU contained footers presenting the contract number, distribution order, and modification number in just this way. The EU also asserts that it is unfamiliar with "random letters (*e.g.*, P, A, or B) in different parts of the string supposedly related to the order and modification numbers." These are not "random letters," but instead distinguish between substantive modifications (commencing with a "P") and administrative modifications (commencing with an "A"). The EU's confusion is surprising, as the "A"s and "P"s appear in the modification numbers on the face of the contracts.
- 354. Thus, the U.S. presentation of the data was neither "inaccessible" nor "opaque," as the EU asserts. It was assembled in and presented in a way easily comprehensible to a reviewer that was truly expert in DoD procurement practices or that applied a small degree of diligence.
 - c. The EU presents no valid reason to disregard the manifest and serious inaccuracies in its valuation exercise.
- 355. The U.S. first written submission observed that the CRA-Rumpf valuation exercise was simply a repeat of the CRA analysis presented to the original panel, which was proven to produce estimates wildly in excess of actual values. The United States identified five serious problems that invalidate the EU methodology for valuing any financial contribution: (1) the absence of any definition of "dual use" research; (2) Richard Rumpf's lack of credibility as an "expert" on discerning "dual use" research; (3) the absence of support for the critical assumption that the "general research" program elements support only research by contractors, in proportion to their share of the military aeronautics market; (4) the lack of support for the assumption that

⁴⁹⁹ EU FWS, para. 470, note 776, second bullet..

⁵⁰⁰ EU FWS, para. 470, note 776, third bullet.

 $^{^{501}}$ E.g., Contract FA8650-08-D-3857, D.O. 28, Modification 1, p. 2 (Exhibit USA13-229(HSBI)), cited in EU FWS, para. 253.

⁵⁰² EU FWS, para, 470, note 776, third bullet.

 $^{^{503}}$ E.g. Contract FA8650-08-C-5213, Modification 1 (Exhibit USA-143(HSBI)) (listing the modification as "P00001").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 120

"dual use" research has a value to Boeing's civil activities proportionate to their share of Boeing's revenue; and (5) the failure to recognize differences among the types of instruments that DoD uses for contracting. 504

- 356. Section II.C.2.b above has already shown that the EU has no credible response to the first two criticisms. To summarize, the definition of "dual use" that it claims to have applied is so general that everything could be defined as "dual use," cementing the impression that the distinctions drawn by CRA and Mr. Rumpf are either purely subjective or rely on an as-yet undisclosed standard. The additional efforts to bolster Richard Rumpf's credentials only confirm that he has very little knowledge of civil aeronautics, and that his more recent involvement in military aeronautics is at a generalized level. These cast serious doubt on his credibility to opine on whether broadly defined military research topics are likely in practice to have civil application.
- 357. The EU has done no better with regard to the remaining three problems identified by the United States. It begins by asserting that the huge gap between CRA-Rumpf estimates of payments to Boeing and the actual values is based on figures generated by the United States. This is incorrect. During the period covered by the original panel proceedings, two of the 23 original program elements reported both total expenses, and amounts paid to individual contractors. The information submitted by the United States compared the CRA estimates for financial contributions to Boeing with the actual reported payments and showed that CRA's estimates were between three and eight times the actual amounts. Thus, the only available test of the CRA-Rumpf methodology against real-world data shows that it consistently and massively inflates the figures. The state of the CRA-Rumpf methodology against real-world data shows that it consistently and massively inflates the figures.
- 358. The EU attempts to defend its demonstrably incorrect assumption that DoD program element funding goes exclusively to contractors in the U.S. military aviation market as a "proxy" necessary because it lacked other data. The EU misses the point. The fact that its "top-down"

⁵⁰⁴ US FWS, paras. 296-301.

⁵⁰⁵ EU SWS, para. 467.

⁵⁰⁶ US SWS, para. 295, citing EC overestimate of DoD General Aviation RDT&E funding to Boeing (Exhibit USA-113).

⁵⁰⁷ The EU asserts that the original panel rejected this exercise "out of hand." EU FWS, para 467. This is incorrect. The EU paragraph cited by the EU deals with a different valuation exercise, based on a different data set. Unlike the EU, the United States took heed of the original panel's concerns, and did not apply the rejected methodology in this proceeding.

⁵⁰⁸ EU SWS, para. 469, first bullet. The United States notes that this allocation is particularly inappropriate for program elements like 0601102F, which devote a large part of funding to university research. It is equally inappropriate for the Technology Transfer program element, 0604317F, which the evidence cited by the EU describes as directed at "integration of advanced commercial-sector technologies into Department of Defense (DoD) systems, *particularly from non-traditional defense contractors*" Air Force FY 2012 Budget, Exhibit R-2, R-1 Line Item #45, p. 1 (emphasis added) (Exhibit EU-75, frame 4/15).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 121

approach requires the use of invalid assumptions does not justify the use of those assumptions. Rather, it is evidence that the whole exercise is invalid.

- 359. The EU concedes that it did not seek its experts' views as to the attribution of approximately one half of the value of "dual use" research to Boeing, but asserts that this was acceptable because the attribution is based on "a legal determination of what constitutes a subsidy." As the EU cites no basis in the SCM Agreement for this "legal determination," it is entitled to no weight.
- 360. Finally, the EU contends that it was unnecessary to take account of the differences between different types of instruments because "this distinction was rendered moot by the Appellate Body." This assertion misrepresents the Appellate Body's finding, which rendered moot the original panel's finding that "the USDOD procurement contracts are properly characterized as purchases of services and thus are not financial contributions under Article 1.1(a)(1)." The Appellate Body did not disturb the original panel's numerous *factual* findings regarding the differences between DoD assistance instruments and procurement contract *because the EU did not appeal them*.
- 361. Thus, the EU has done nothing to mitigate the numerous concerns with the CRA-Rumpf methodology that the United States identified in its first written submission. The CRA-Rumpf figures are accordingly entitled to no probative weight in this proceeding.
 - 4. The EU has not made a prima facie case that DoD contracts funded under the "general research" program elements confer a subsidy.
- 362. The EU seeks to create the impression that the Appellate Body's findings regarding NASA contracts and DoD assistance instruments disposed of all legal and factual questions regarding the "general research" program elements. However, the Appellate Body explicitly declined to make findings on these issues. Application of the analytical principles set out by the Appellate Body demonstrates that these contracts were not a financial contribution, did not confer a benefit, and were not specific. ⁵¹²
- 363. The relevant characteristics of these transactions are that DoD makes a contribution consisting completely or almost completely of money to a contractor who conducts research services specified in the contract and delivers the results to DoD. The research has a purely military objective, and DoD judges the transactions at all stages based on their responsiveness to military objectives. Although the contractor does retain rights for use of the technology, they

⁵⁰⁹ EU SWS, para. 469, second bullet.

⁵¹⁰ EU SWS, para. 469, third bullet, citing US – Large Civil Aircraft (AB), para. 620, note 1258.

⁵¹¹ US – Large Civil Aircraft (AB), para. 620, note 1258.

⁵¹² Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 122

have limited usefulness to the contractor, as DoD restricts its ability to sell military technologies to any other purchaser, and any civil applicability is incidental and relatively rare. These characteristics qualify the transactions as purchases of services. Based on the original panel's reasoning, which the United States finds compelling, such transactions are not financial contributions for purposes of Article 1.1(a)(1) of the SCM Agreement.

- 364. Even assuming, *arguendo*, that these transactions are a financial contribution, they confer a benefit only if DoD paid more than adequate remuneration for the services conducted and results received. The EU has failed entirely to address this standard, so it has failed to make a *prima facie* case.
- 365. In any event, the EU has failed to demonstrate specificity because all U.S. government agencies contract for research with all contractors, in all sectors of the economy, using these terms.
 - a. The DoD contracts funded under the "general research" program elements are purchases of services, which do not confer a subsidy.
 - i. The Appellate Body called for a two-step analysis of potential financial contributions, first identifying the "relevant characteristics" of the measures, and then determining the Article 1.1(a)(1) category or categories applicable to them.
- 366. The EU and the United States agree that the same *legal* analysis should apply to the EU's claims that NASA and DoD measures are financial contributions. We disagree about the nature of the legal analysis. Section II.A.5.a.i addresses these issues in detail. In summary, the Appellate Body in *US Large Civil Aircraft* and *Canada Renewable Energy* called for an analysis of financial contribution that first scrutinizes the relevant characteristics of the measure and, second, evaluates whether it falls into one, several, or none of the categories in Article 1.1(a)(1). By contrast, the EU seeks to reduce the analysis to the factors addressed in the Appellate Body's one-paragraph "summary" of the measures at issue it in *US Large Civil Aircraft*. Nothing in the relevant Appellate Body reports justifies such a constricted approach. Rather, a proper analysis requires consideration of all relevant characteristics of the transactions at issue and all potential categorizations for them.
 - ii. The scrutiny of the characteristics of the measures called for in the first step in the Appellate Body's approach demonstrates that the DoD contracts with Boeing funded through the "general research" program elements are purchases of services.
- 367. The U.S. first written submission demonstrated that DoD's funding of procurement contracts through the "general research" program elements differed in critical respects from the characteristics the Appellate Body described for NASA and DoD assistance instruments. The research topics are not considered collaboratively, but determined solely by DoD based on its

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 123

military needs. There is no evidence that DoD commits facilities or its own employees to the research, and provisions of equipment are highly limited. Thus, there is none of the "pooling of resources" that the Appellate Body noted with NASA contracts. Similarly, regulations make clear that when a DoD employee invents an invention, it belongs entirely to DoD, which would then be authorized to charge royalties for its usage. ⁵¹³

- 368. A comparison with the Appellate Body findings regarding DoD assistance instruments is equally telling. The Appellate Body itself noted important differences, observing the panel's distinction between the role of assistance agreements as serving "a public purpose of support," while procurement contracts acquire property or services for the direct benefit of the government. Those aspects of U.S. law have not changed. The Appellate Body also noted that assistance instruments awarded to Boeing provided for funding by both parties, which is not true of contracts, and access to facilities, which is not an important aspect of contracts funded through the "general research" program elements. Finally, the Appellate Body noted the sharing of the results of the research. While DoD contracts provides intellectual property rights and access to data similar to those under NASA contracts, that is more a formal than a substantive matter. As explained above, the military objectives of the research and the incidental nature of any civil application highly limits the utility to Boeing of any "shared" results.
- 369. To summarize, one party contributes primarily in the form of funds and the other engages in specified activities (research) that are by their nature services. The sole objective of the transaction is to produce information and intellectual property useful for the funding entity's operations. Any other applicability is incidental to that objective. These attributes of the transactions establish that they are purchases of services.
 - iii. The EU arguments that these transactions are "akin to a joint venture" get the facts wrong and rely on an incorrect interpretation of the Appellate Body's findings.
- 370. The EU does not dispute that, as a substantive matter, these transactions can be viewed as purchases of services. Its primary argument is instead that they are "akin to a joint venture" based on the Appellate Body's criteria, and that there is no need to consider alternative, potentially better, categorizations. The EU errs both as a matter of fact and as a matter of law.
- 371. The EU's purely legal errors are straightforward. First, its analysis only addresses whether the measures can possibly be characterized as joint ventures, without bothering to examine whether they would be more appropriately characterized as purchases of services. This is precisely the type of narrow approach that the Appellate Body rejected.⁵¹⁶ Rather a panel's

⁵¹³ US FWS, para. 388.

⁵¹⁴ US – Large Civil Aircraft (AB), paras. 603-604.

⁵¹⁵ US – Large Civil Aircraft (AB), paras. 606-607.

⁵¹⁶ US – Large Civil Aircraft (AB), para. 585.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 124

analysis must begin with an objective assessment of the measure, taking into account "all relevant characteristics of the measure" and the "features which are most central to the measure itself." In addition, as the Appellate Body found in Canada – Renewable Energy, one transaction may have multiple aspects, and a panel's analysis must take those complexities into account.

- 372. Thus, even if the EU were correct that these transactions had characteristics that were "akin to a joint venture" and it is not that would not end the Panel's inquiry. It would still need to weigh the relative merits of each possible characterization, and the EU fails to provide any arguments whatsoever on this score.
- 373. Second, the EU attempts to limit the analysis to the three factors it draws from the Appellate Body's "summary" of characteristics of the measures before it in *US Large Civil Aircraft*, but this approach does not provide the scrutiny the Appellate Body has found necessary in evaluation of a possible financial contribution.
- 374. The EU also makes errors of fact in its argument that the characteristics of the DoD contracts are identical to the ones the Appellate Body found for NASA contracts and DoD assistance instruments. In other words, even for the limited number of characteristics that the EU considers relevant, the facts do not support the legal conclusion it seeks to draw.
- 375. Whether "both parties commit resources." This is one of the factors from the Appellate Body's summary paragraph that the EU highlights. The EU notes that Boeing contributes the effort of its own employees, facilities, and equipment, and then asserts that "{t}here is no dispute that . . . Boeing also contributes its own resources to DOD RDT&E-related research efforts through its Independent Research and Development ("IR&D")." The EU is wrong on the latter point. DoD regulations explicitly prohibit contractors from treating expenses related to a particular contract as IR&D expenditures. Thus, IR&D costs are not resources that a contractor commits to a contract, but an investment that the contractor makes to maintain its technical competence and ability to meet DoD's future technological needs. With respect to the DoD side of the transaction, the EU asserts only that DoD "commits to provide financial resources." However, this balance of contributions one side providing exclusively funding and the other engaging in services through the application of its own facilities, equipment, and employees, is characteristic of a purchase of services, and not "akin to a joint venture."
- 376. Whether "the parties share the fruits of the research." The United States does not dispute that Boeing obtains title to patents for inventions its employees invent while working

⁵¹⁷ US – Large Civil Aircraft (AB), para. 586 (emphasis in original).

⁵¹⁸ EU SWS, para. 446, first bullet.

⁵¹⁹ US – Large Civil Aircraft (Panel), para. 7.1316 ("IR&D and B&P payments are not related to the underlying contract").

⁵²⁰ EU SWS, para. 446, first bullet, second sub-bullet.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 125

under these contracts, and that the government obtains a royalty-free license for government purpose use. The EU, however, does not dispute the U.S. observation that if a DoD employee working alone invents an invention, the department obtains sole ownership of any patent. Of course, given that the EU has provided no evidence of DoD employee involvement in these contracts, it is highly unlikely that a DoD employee would be the inventor or co-inventor (with a Boeing employee) of an invention under the contract. Furthermore, under DoD contracts, Boeing's "share" of the fruits of the research is largely formal. For any military technologies, DoD is the sole customer in the United States, and maintains strict limitations on contractors' ability to provide sensitive military technologies to non-US customers. On the civil side, the United States has demonstrated that research under the challenged program elements is rarely applicable to large civil aircraft.

- Whether "the subjects to be researched are determined collaboratively between the parties."522 The EU attempts to show "collaboration in determining the scope of the research" because DoD issues solicitations asking proposers to devise the best solution to reach a research goal set by DoD and, if a proposal is accepted, enters into negotiations to finalize the statement of work. 523 This argument fails for several reasons. One of the key characteristic of NASA contracts and DoD assistance instruments that led the Appellate Body to consider them "akin to a joint venture" was the collaboration in determining "the subjects to be researched." For contracts, DoD makes this decision through an entirely internal process before issuing a solicitation. The subsequent competition is over how to achieve the objective already set in the solicitation. The subsequent process is not "collaborative" because the parties do not work together. The rules preclude DoD personnel from helping contractors to assemble their proposals. And, as DoD accepts proposals only when they offer a satisfactory solution to the technological problem presented, subsequent negotiations are not about determining the subject of the research, but about fine-tuning the proposal to make sure it is realistic and credible. Thus, there is no support for the EU's assertion that research subjects under these contracts are determined collaboratively.
- 378. Whether "{f}unding {i}s provided in expectation of some kind of return." The Appellate Body did not identify this as a factor supporting the characterization of NASA contracts or DoD assistance instruments as "akin to a joint venture." Rather, it made this inquiry as part of its evaluation of whether the contracts, correctly characterized as "akin to a joint venture," were "analogous to an equity infusion." Thus, the EU seems to be mixing two steps of the analysis that the Appellate Body considered as separate. In any event, under the

⁵²¹ EU SWS, para 446, second bullet.

⁵²² The EU attempts to re-write the Appellate Body's finding to insert that "often" is "certainly not always," and contends (without support) that this was "not a necessary feature." As neither of these comments was part of the Appellate Body finding, there is no reason to add them now.

⁵²³ EU SWS, para, 446, third bullet.

⁵²⁴ US – Large Civil Aircraft (AB), paras. 593-609.

⁵²⁵ US – Large Civil Aircraft (AB), para. 624.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 126

EU's simplistic understanding, this cannot be a defining characteristic of the DoD contracts because *all* transactions that provide funding involve expectation of some kind of return. ⁵²⁶

- Whether there is "no certainty that the research will be successful." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts and DoD assistance instruments as "akin to a joint venture." ⁵²⁷ In any event, the EU errs in arguing that an analogy between the uncertain return on an equity investment and the uncertainty that research will produce the desired results led the Appellate Body to find research joint ventures analogous to an equity investment. This cannot be the case, as the Appellate Body upheld the original panel's finding that NASA and Boeing learned valuable lessons from research that failed. This is even more the case with contracts funded under the "general research" program elements. Under these contracts, DoD seeks to evaluate whether particular technologies warrant further investment of its resources. A project that revealed that a particular approach would not achieve the desired research objective would be a success in that it forestalled further effort in that direction, and allowed focusing on more promising avenues of inquiry. Thus, the "return" on spending under the "general research" program elements is always a "sure thing," because the "return" that DoD expects is the completion of research services. In short, the EU has misunderstood the Appellate Body's analysis and misapplied its reasoning, and the EU's arguments regarding the uncertainty of success do not support treatment of DoD contracts as "akin to a joint venture" or "analogous to an equity infusion."
- 380. Whether the "funder's risks are limited to the amount of money they commit and the opportunity cost of other support they provide." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts and DoD assistance instruments as "akin to a joint venture." In any event, this characteristic pertains equally to a purchase of goods or services, so it cannot be a defining characteristic of a joint venture.
- 381. Finally, the EU takes issue with U.S. references to the Appellate Body observations that the NASA contracts before it had the following characteristics:
 - "the value of such access {to facilities, equipment, and employees} was significantly higher than the value of the payments;"
 - "the transactions involve NASA and Boeing pooling non-monetary resources and employees;" and

⁵²⁶ The one exception is a grant, but the EU is not alleging that DoD contracts were grants.

⁵²⁷ US – Large Civil Aircraft (AB), paras. 593-609.

⁵²⁸ US – Large Civil Aircraft (AB), paras. 593-609.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 127

"LERD clauses grant Boeing exclusive rights to exploit critical technologies developed under certain NASA contracts for at least five years from the date the data is reported." 529

The EU asserts that these references are either "unsupported by the Appellate Body" or "not an essential aspect of a joint venture." However, these are direct quotes from the Appellate Body report describing the relevant characteristics of the transactions at issue. The fact that they are not true of DoD contracts funded through the "general research" program elements provides yet further evidence that the EU is mistaken in arguing that those contracts are essentially the same as the earlier contracts addressed by the original panel and the Appellate Body.

- 382. In sum, the primary characteristics of these transactions are that in most of them, DoD paid Boeing money in exchange for Boeing providing designated research services. Any involvement of DoD facilities, equipment, or employees did not have a meaningful effect on the magnitude of the financial contribution. The objective of the effort was to obtain technology useful for DoD's military objectives, and any civil applicability was incidental. These characteristics support the conclusion that the transactions are purchases of services, and are not joint ventures.
 - b. Purchases of services are not a financial contribution under Article 1.1(a)(1)(iii) of the SCM Agreement.
- 383. The U.S. analysis regarding the omission of purchases of services from Article 1.1(a)(1) of the SCM Agreement, set out in section II.A.5.b of this submission, applies to the arguments the EU advances generically with respect to post-2006 NASA contracts and all DoD procurement contracts. To summarize, the United States finds the original panel's reasoning on this point compelling. The EU's primary reason for opposing this conclusion is that the Appellate Body declared the panel's ultimate findings moot. However, that finding of mootness indicates only that the original panel should not have reached the issue. As the Appellate Body did not uphold or reverse the panel report on that issue, the Panel should accord the original panel's findings the same status as those of an unadopted panel report, and "find useful guidance in the reasoning." 531
 - 5. If these purchases of services do fall within the definition of a financial contribution under Article 1.1(a)(1)(iii), the EU has failed to establish the existence of a benefit.
- 384. The U.S. observations in section II.A.5.b of this submission also apply to the arguments the EU advances generically with respect to the evaluation of whether post-2006 NASA

⁵²⁹ US – Large Civil Aircraft (AB), paras. 595-596.

⁵³⁰ EU SWS paras. 447 and 449.

⁵³¹ *Japan – Alcohol (AB)*, pp. 14-15.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 128

contracts and all DoD procurement contracts confer a benefit. To summarize, the EU's argument as to the existence of a benefit is that DoD obtained fewer intellectual property rights than a commercial sponsor of the same research. That is not the proper standard. The context provided by Article 14(d) of the SCM Agreement indicates that government purchases confer a benefit only when the government pays more than adequate remuneration for whatever it receives. In this proceeding, the EU has failed to address this standard, so it has not made a *prima facie* case.

385. In contrast, the U.S. first written submission demonstrated that DoD ensured that it paid no more than adequate remuneration by subjecting solicitations funded through the "general research" program elements to competitive bidding. The Appellate Body has endorsed just this approach, finding in *Canada – Renewable Energy* that a "benchmark may also be found in price-discovery mechanisms, such as competitive bidding or negotiated prices, which ensure that the price paid by the government is the lowest possible price offered by a willing supply contractor." The EU ignores this finding completely in arguing that bidding cannot under any circumstances achieve such a result in these circumstances.

6. The EU's generic specificity argument regarding NASA, DoD, and FAA measures does not establish specificity with regard to the benefit alleged (incorrectly) to exist.

The U.S. observations in section II.A.7 apply to the arguments the EU advances generically with respect to specificity for all of the alleged NASA, DoD, and FAA financial contributions. To summarize, the only non-market term that the EU identified in these transactions was that the allocation of intellectual property was more favorable than under certain benchmark transactions proposed by the EU. 533 The United States explained that this element of the EU claim is wrong because the Appellate Body has already found that this treatment of intellectual property rights, if it were a benefit, is available under all U.S. government contracts in all sectors of the economy. 534 The EU reiterates its assertion that NASA and DoD programs taken separately are specific, but the Appellate Body found that this argument is not sufficient to demonstrate specificity when multiple authorities are implementing the same measure. 535 The EU contends that its subsidy allegation goes beyond the patent terms, and applies to the entire financial contribution. However, the EU argument misses the point. Even if looked at from the point of view of the entire transaction, the fact is that all U.S. government agencies that enter into research transactions, in all sectors, do so on the terms that the EU is challenging here. Thus, the subsidy alleged by the EU, assuming arguendo, that it is a subsidy, is not specific.

⁵³² Canada – Renewable Energy (AB), para. 5.239.

⁵³³ EU FWS, paras, 182-190 and 373-384.

⁵³⁴ US FWS, paras. 259-262, 291-294, 394-397, 428, and 473.

⁵³⁵ US – Large Civil Aircraft (AB), paras. 757-759.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 129

D. DoD Contracts Funded through the "Military Aircraft" Program Elements Do Not Confer Actionable Subsidies.

387. The original panel found that DoD procurement contracts and assistance instruments are fundamentally different, and that only the latter conferred a subsidy. Nevertheless, the EU attempts to resuscitate its challenge to DoD procurement contracts by arguing that DoD procurement contracts and assistance instruments work the same way. This is another example of the EU's effort to turn this proceeding into a referendum on the recommendations and rulings of the DSB, rather than whether the United States complied with those recommendations and rulings.

388. There were no DSB recommendations and rulings regarding contracts funded through the "military aircraft" program elements. These contracts fall into two categories—acquisition of new weapons systems and upgrades to existing systems. As they generally involve buying either completed systems or improved parts and components, most of them are best characterized as purchases of goods, although upgrade contracts are better characterized as purchases of services if they involve redesign and limited new equipment. The EU has not addressed the proper benefit standard for these types of financial contributions, and certainly has not shown that DoD paid more than adequate remuneration for the goods it purchased. It also has failed to address the specificity of the key terms of these contracts, which are available under all U.S. government research contracts, awarded by all agencies, in all sectors of the economy. Therefore, the EU has provided no basis for the Panel to conclude that these contracts were measures taken to comply, or that they are inconsistent with the covered agreements.

389. The Parties agree on most of the critical facts regarding these transactions. The EU does not dispute that the "military aircraft" program elements funded purchases of new weapons systems and upgrades to existing ones. The EU also does not dispute the U.S. descriptions of the relevant transactions, or that these contracts differ from the NASA contracts and contracts funded through the "general research" program elements. Indeed, the difference between "general research" and "military aircraft" program elements is the primary organizational division among its DoD-related claims. ⁵³⁷

390. The primary difference between the parties regards the correct legal implications of these facts. The United States has shown that these distinctive characteristics of contracts under the "military aircraft" program elements warrant the conclusion that contracts for the purchase of new weapons systems are a different form of financial contribution, namely, a purchase of goods, and that upgrade contracts are purchases of goods or services, depending on the nature of the upgrade. ⁵³⁸ In spite of recognizing the differences between the "general research" and

⁵³⁶ US – : arge Civil Aircraft (Panel), paras. 7.1149-7.1150 and 7.1153.

⁵³⁷ *E.g.*, EU FWS, para. 243.

 $^{^{538}}$ For example, an upgrade that results in the creation and purchase of new versions of a weapon system, as occurred with the design and purchase of the F/A-18 E/F, is best conceived as a purchase of goods.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 130

"military aircraft" program elements, the EU argues that contracts under the different types of program elements should be treated as identical to each other, and identical to assistance instruments, for purposes of the subsidy analysis. The EU provides no valid support for this one-size-fits-all approach.

1. The objective of these programs was either to buy weapon systems or upgrade systems already in existence.

391. The U.S. first written submission demonstrated that the objective of the "military aircraft" program elements was either to obtain new weapon systems for DoD or to upgrade existing systems. Specifically, for the five program elements for which the EU provides any current data:

Military aircraft	Objective
C-17	"continuing producibility and performance improvements to support full-
	rate production and increase the operational capability of the C-17
	through programmed modifications."
AWACS	"the addition of data link communications, upgrade or replacement of
	emergency locating technologies, voice and data link digital radios,
	improved visual displays and flight management system, as well as
	automatic position reporting via data link{;} {r}eplacement of
	critical avionics system that became unsustainable beginning in 2010."
KC-46	"{T}he KC-135 Stratotanker fleet is now over 50 years old on
	average and costs increasingly more to maintain and support, with
	additional concerns that age-related problems could potentially ground
	the fleet. Consequently, the Air Force plans to develop, test, and field 18
	KC-46 tankers by August 2017, and eventually have a total of 179
	aircraft by 2027."
P-8	"The Multi-mission Maritime Aircraft (MMA) program provides the
	replacement system(s) for the aging P-3 aircraft."
Long-Range	"The Long Range Strike Bomber ("LRSB") is a highly classified
Strike Bomber	programme to develop a new large stealth bomber."
Stille Dolline	programme to develop a new range steam contoer.

Sources: US FWS, paras. 408 and 449; Exhibit USA-237, p. 1; Exhibit USA-172, frame 1/11; EU FWS, para. 314

It is also important to note that as the objective of an acquisition or systems upgrade program is to integrate known technologies into a product capable of performing in the real world, the nature of the RDT&E activities changes. The "T&E" – "testing and evaluation" – aspect is prominent, and the "R" and "D" are relatively insignificant. Using a scale with which the Panel is familiar, activities funded through the "military aircraft" program elements generally correspond to NASA TRLs 7 through 9. In contrast, the S&T ("science and technology") activities funded through the "general research" program elements correspond to NASA TRLs 1

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 131

through 6.⁵³⁹ Systems acquisition contracts will typically involve one or more rounds of bidding with the objective of awarding a contract to the single "prime" contractor who provides the best combination of technical capabilities and value.⁵⁴⁰

- 392. These facts make clear, and the EU does not dispute, that the objective of contracts funded through the "military aircraft" program elements was the acquisition of new weapons systems, or to upgrade systems currently in existence.
 - 2. The evidence cited by the EU does not support its contention that the "military aircraft" program elements have massive civil applicability.
 - a. The only thing shown by the patents cited by the EU is how rare it is for a DoD contract or agreement to result in a patent that is relevant to large civil aircraft.
- 393. The U.S. observations in section II.C.2.a apply to the EU arguments regarding patents resulting from research conducted under both "general research" and "military aircraft" program elements. To summarize, using the patents resulting from research under a DoD contract or agreement to evaluate whether it was a financial contribution or conferred a benefit would be an ex post analysis contrary to the terms of the SCM Agreement. To the extent the patent data provide any probative information, it is that the number of Boeing patents for inventions invented under DoD contract is tiny in relation to the number of contracts Boeing had with DoD, and in relation to the total number of patents granted to Boeing. The EU efforts to explain the relative infrequency of patents resulting from these contracts are unconvincing. The alleged errors with record keeping do not apply to Boeing, which maintains rigorous procedures to ensure the proper reporting of patents resulting from U.S. government contracts. The generalized studies cited by the EU do not indicate a significant underreporting of government ownership of patents. Differences between the lists of patents submitted by the United States are primarily the result of the purpose for which they were compiled and the information available on the submission date. Therefore, the only conclusion to draw from the patent evidence submitted by the EU is that research funded through the challenged program elements rarely results in patents for civil technologies.
 - b. The CRA-Rumpf estimates of military applicability are highly problematic.
- 394. CRA and Mr. Rumpf used a somewhat different methodology to estimate the value of alleged financial contributions to Boeing under the "military aircraft" program elements, but some of the old problems remain, and new problems enter. Because Boeing is the prime

⁵³⁹ US FWS, para. 319.

⁵⁴⁰ The United States notes that the EU's inclusion of the long-range strike bomber in this category is artificial. Although the program element has the long-term objective of developing a new bomber, the effort is at an earlier stage than the other aircraft grouped in this category, and no prime contract has been awarded.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 132

contractor under most of these program elements, ⁵⁴¹ there is little concern that budgeted funds went to other contractors. ⁵⁴² But, once again, the CRA-Rumpf standard for determining what areas of research are "dual use" remains a secret, and Mr. Rumpf continues to lack the expertise to reach credible conclusions. Moreover, although the amounts of money at issue are much larger for the "military aircraft" program elements, the CRA-Rumpf explanations get shorter and even less substantive.

395. To take an example, CRA and Mr. Rumpf devote less than a single page to justify "dual use" conclusions with regard to \$3.7 billion in spending related to the P-8, based on a sequence of unsupported statements setting out Mr. Rumpf's conclusions. They treat \$1.7 billion in avionics research under this program as "dual use" because "{i}n Mr. Rumpf's view, R&D related to, e.g., Rapid Capability Insertion and integrated broadcast services are potentially relevant to future Boeing LCA." Testing and Evaluation" expenses of \$425 million go into the dual use category because "{i}n Mr. Rumpf's view, Boeing's experience with the design of improved testing instruments and data reduction processes during the development of the P-8A helps Boeing to improve future T&E schedules and reduce costs for new LCA development programs." These are not explanations based on citation to data, but simple assertions backed by nothing other than Richard Rumpf's supposed expertise. As such, they are entitled to no weight.

396. CRA and Mr. Rumpf also err in their valuation of DoD RDT&E funds paid to Boeing for the AWACS DRAGON project. As noted in the U.S. first written submission, the activities conducted under Air Force Contract F19628-01-D-0016, D.O. 73, were part of an effort to upgrade AWACS aircraft owned both by the United States and NATO. Accordingly, NAPMO, the entity responsible for the NATO AWACS aircraft, paid for [***] percent of the costs incurred in this effort. These were handled as payments to DoD, and treated as part of program element 0207417F when funds were obligated for Contract F19628-01-D-0016, D.O. 73. As the EU is challenging only payments and provision of facilities, equipment, and employees by the *U.S. DoD*, only [***] percent of any payments under this program element should have been treated as the value of the financial contribution challenged by the EU. In this regard, the United States notes that NAPMO members Belgium, Czech Republic, Denmark, Germany, Greece, Hungary, Italy, Luxembourg, The Netherlands, Norway, Poland, Portugal,

⁵⁴¹ There are some exceptions. Having lost the contract for the Joint Strike Fighter (now the F-35), Boeing is not the prime contractor on that project. The Long-Range Strike Bomber is still in early stages, and DoD has not chosen a prime contractor.

⁵⁴² The United States notes, however, that some of the funding is the program element will likely fund non-contract expenses, such as government management and oversight of the effort.

⁵⁴³ CRA-Rumpf Report, pp. 14-15 (Exhibit EU-23).

⁵⁴⁴ CRA-Rumpf Report, p. 14 (Exhibit EU-23).

⁵⁴⁵ CRA-Rumpf Report, p. 15 (Exhibit EU-23).

⁵⁴⁶ US FWS, para. 450.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 133

Romania, Spain, and Turkey are providing funds to Boeing, through their contributions to NAPMO, on the same terms as DoD. Unless the EU's view is that these nations are also seeking to assist Boeing's development of technology with civil utility, it is difficult to see how it can allege that this is the case when DoD paid Boeing under the same terms.

- c. The termination of the recoupment policy in 1992 does not demonstrate any intent for contractors to derive commercial benefits from contracts funded through the "military aircraft" program elements.
- 397. The U.S. observations in section II.C.2.c regarding the relevance of the recoupment policy to an evaluation of the "general research" program elements apply equally to the "military aircraft" program elements. To summarize, for all program elements except those associated with the DUS&T and ManTech programs, the original panel concluded that DoD had no objective of developing technology and transitioning it to the civil sector. The only support the EU cites in opposition to this conclusion is the termination in 1992 of DoD's procurement regulations. As these would not have applied to the development of technology as described by the EU, that event 21 years ago has no relevance to this proceeding.
 - d. Restrictions on export-controlled or classified information apply with particular rigor to technologies actually used on military aircraft.
- 398. The U.S. observations in section II.C.2.f regarding the inferences to be drawn from the identification of certain information as export-controlled or classified apply even more so to technologies developed for actual use on military aircraft. To summarize, export-controlled information cannot be shared with any foreign national. Classified information can only be shared with individuals with the appropriate classification level, and even then cannot be used for non-government purposes, like manufacturing large civil aircraft.
 - 3. Contracts funded through the "military aircraft" program elements were either purchases of goods or purchases of services.
- 399. The EU seeks to create the impression that the Appellate Body's findings regarding NASA contracts and DoD assistance instruments disposed of all legal and factual questions regarding the "military aircraft" program elements. However, the Appellate Body explicitly declined to make findings on these issues. In fact, application of the analytical principles set out by the Appellate Body demonstrates that these contracts were not a financial contribution, did not confer a benefit, and were not specific. ⁵⁴⁷
- 400. The relevant characteristics of these transactions are that DoD makes a contribution consisting almost completely of money to a contractor who commits to provide a finished weapon system or to upgrade an existing system. RDT&E activities, for the most part, focus on

⁵⁴⁷ Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 134

testing and evaluating the integration of known technologies to ensure that the finished product meets performance requirements. The objective is not for DoD to acquire knowledge or technologies for potential use, but to obtain a new or improved weapon system. Any RDT&E activities are an adjunct to this end, and highly particularized to achieve it. Thus, the military objective is even more pronounced than under the "general research" program elements. Although the contractor does retain rights for use of the technology, they have limited usefulness to the contractor, as DoD is by far the largest purchaser, and the sale of military aircraft developed with DoD funds to other entities requires the express permission of the U.S. government. These characteristics qualify acquisitions of new weapon systems as purchases of goods. Contracts for upgrades could take a number of forms, and could accordingly be either purchases of goods or purchases of services.

- 401. Based on the original panel's reasoning, which the United States finds compelling, a purchase of services is a not financial contribution for purposes of Article 1.1(a)(1) of the SCM Agreement.
- 402. Even assuming, *arguendo*, that all of the transactions funded through the "military aircraft" program elements are financial contributions, they confer a benefit only if DoD paid more than adequate remuneration for the goods in question, or for the services conducted and results received. The EU has failed entirely to address this standard, so it has failed to make a *prima facie* case.
- 403. In any event, the EU has failed to demonstrate specificity because all U.S. government agencies contract for research with all contractors, in all sectors of the economy, using these terms.
 - a. A consideration of all of the relevant characteristics demonstrates that the challenged contracts funded through the P-8 and KC-46 program elements are purchases of goods, while the contracts funded through the C-17, AWACS, and Long-Range Strike Bomber program elements are purchases of services.
 - i. The Appellate Body called for a two-step analysis of potential financial contributions, first identifying the "relevant characteristics" of the measures, and then determining the Article 1.1(a)(1) category or categories applicable to them.
- 404. The EU and the United States agree that the same *legal* analysis should apply to the EU's claims that NASA and DoD measures are financial contributions. We disagree about the nature of the legal analysis. Section II.A.5.a.i of this submission addresses these issues in detail. In summary, the Appellate Body in *US Large Civil Aircraft* and *Canada Renewable Energy* called for an analysis of financial contribution that first scrutinizes the relevant characteristics of the measure and, second, evaluates whether it falls into one, several, or none of the categories in Article 1.1(a)(1). By contrast, the EU seeks to reduce the analysis to the factors addressed in

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 135

Appellate Body's one-paragraph "summary" of the measures before it. However, nothing in the relevant Appellate Body reports justifies such a constricted approach. Rather, a proper analysis requires consideration of all relevant characteristics of the transactions at issue and all potential categorizations for them.

ii. The scrutiny of the characteristics of the measures called for in the first step in the Appellate Body's approach demonstrates that the DoD contracts with Boeing funded through the "general research" program elements are purchases of services.

405. The U.S. first written submission demonstrated that for the five program elements for which the EU alleged post-2006 value, the contracts that the EU alleged as providing "dual-use" research were either purchases of services or purchases of goods⁵⁴⁸:

- The post-2006 activities of the C-17 program that the EU has challenged involved a mix of performance improvement and upgrades, ⁵⁴⁹ indicating that it is a purchase of services.
- The AWACS program's DRAGON project acquired new communications capabilities, and upgraded or replaced various components, particularly the avionics, the meet modern air traffic control requirements, ⁵⁵⁰ indicating that it is a purchase of goods.
- The KC-46 program is purchasing of new aerial refueling tankers to replace aging existing equipment from the 1950s, 551 indicating that it is a purchase of goods.
- The P-8A program is purchasing new aircraft to engage in sub-chasing and other maritime activities, ⁵⁵² indicating that it is a purchase of goods.

⁵⁴⁸ Section II.F addresses the EU's claim that patents granted to Boeing for inventions invented by company employees during work under government contracts and agreements are a separate financial contribution.

⁵⁴⁹ See generally DoD contract list funded by program elements challenged by the EU, FY2007-FY2012 (Exhibit USA-161(BCI) (revised July 22, 2013), Air Force Contracts F33657-01-D-2000 and FA8614-08-D-2080.

⁵⁵⁰ US FWS, para. 449. The entire project was a joint effort between the United States and NATO, with NATO contributing [***] percent of the total cost. The amounts obligated under Air Force Contract F19628-01-D-0016, D.O. 73 are accordingly [***] percent funded by DoD, and [***] percent funded by NATO. The United States notes that CRA and Mr. Rumpf declare uncategorically that this is the only project funded through the AWACS program that involves dual-use research. CRA-Rumpf Report, p. 12 (Exhibit EU-23). The EU seems to disavow this conclusion in its second written submission, but does not identify any other project that it is challenging. EU SWS, para. 380, second bullet.

⁵⁵¹ US FWS, para. 451. The relevant contract is Air Force Contract FA8625-11-C-6600 (Exhibit USA13-721).

⁵⁵² US FWS, para. 458. The relevant contract is Navy Contract N00019-05-G-0026.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 136

The Long-Range Strike Bomber program element is not at the stage of acquiring a system or upgrading one. The Boeing contracts funded through this program primarily involved research into automated aerial refueling, indicating that they are purchases of services. 553

The EU first written submission also contained assertions regarding three other military aircraft programs, although it does not assert that the alleged financial contributions had any value after 2006:

- The V-22/CV-22 activities described by the EU consist mainly of designing and developing various components for a two-engine tilt-rotor aircraft, ⁵⁵⁴ indicating that any contracts under which Boeing conducted those activities were purchases of goods.
- The F/A-18 Squadrons activities described by the EU involved the increased use of composites, integrated design processes, and lean manufacturing for the E and F variants of the F/A-18,⁵⁵⁵ indicating that those activities were purchases of goods.
- The EU's discussion of the Joint Strike Fighter program addresses Boeing's development work on the X-32 Joint Strike Fighter, ⁵⁵⁶ which was produced only in prototype, and which DoD did not purchase. As the purpose of the underlying contract was to develop an operational prototype aircraft for DoD to flight test against other proposers' offerings, these transactions are best treated as a purchase of goods.

406. The EU first written submission also contained a two-paragraph section asserting that five DoD program elements had certain technological effects on Boeing. Based on the absence of any indication of what type of financial contribution the EU was alleging, the United States understood this section to be for background purposes only. The EU second written submission asserts that these programs conferred subsidies prior to 2006 that continue to provide a benefit today in the form of technologies and intellectual property rights developed on

⁵⁵³ See generally DoD contract list funded by program elements challenged by the EU, FY2007-FY2012 (Exhibit USA-161(BCI) (revised July 22, 2013), Air Force Contracts F33615-00-D-3052, D.O. 90; FA8650-08-D-3857, D.O. 1; and FA8650-09-C-3092.

⁵⁵⁴ EU FWS, para. 283.

⁵⁵⁵ EU FWS, para. 284.

⁵⁵⁶ EU FWS, para. 285.

 $^{^{557}}$ EU FWS, paras. 289-290. Those program elements were for the F-22, B-2, Comanche helicopter, A-6 and AV-8B.

⁵⁵⁸ US FWS, para. 410.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 137

preferential terms.⁵⁵⁹ These assertions do nothing to establish the existence of a subsidy. The EU has provided neither evidence nor argumentation that would support a conclusion as to what type of financial contribution, if any, these program elements funded. Moreover, the EU's one-sentence assertion regarding the alleged benefit identifies theoretical effects of the subsidy, rather than identifying the non-market terms of any financial contributions. The EU has accordingly failed to meet its burden of proof.

- 407. The United States notes that, as a general matter, DoD's funding of procurement contracts through the "military aircraft" program elements differs in critical respects from the characteristics the Appellate Body described for NASA and DoD assistance instruments. The research topics are not considered collaboratively, but determined solely by DoD based on its military needs. Use of DoD's test facilities is limited, and normally for the purpose of demonstrating to DoD that components, subsystems, and finished products are operating as promised. Thus, there is none of the "pooling of resources" that the Appellate Body noted with NASA contracts. Similarly, regulations make clear that when a DoD employee invents an invention, it belongs entirely to DoD, which would then be authorized to charge royalties for its usage. ⁵⁶⁰
- 408. A comparison with the Appellate Body findings regarding DoD assistance instruments is equally telling. The Appellate Body itself noted important differences, observing the original panel's distinction between the role of assistance agreements as serving "a public purpose of support," while procurement contracts acquire property or services for the direct benefit of the government. Those aspects of U.S. law have not changed. The Appellate Body also noted that assistance instruments provided joint funding, which is not true of acquisition contracts, and access to facilities, the Appellate Body noted the sharing of the results of the research. While DoD contracts provide intellectual property rights and access to data similar to those under NASA contracts, that is more a formal than a substantive matter. As explained above, the military usage of the equipment and the tangential nature of any civil application highly limits the utility to Boeing of any "shared" results.
- 409. The EU does not dispute any of the U.S. descriptions of the program elements or the contracts under them. It does, however, raise three nonsubstantive objections to categorizing transactions under the "military aircraft" program elements as purchases of goods.
- 410. First, the EU argues that its claim is based on the allegation that contracts funded through the "military aircraft" program elements are "akin to joint ventures," and that if the Panel accepts that argument, it need not bother itself with the possibility that purchase of goods is a better

⁵⁵⁹ EU SWS, para. 429.

⁵⁶⁰ US FWS, para. 388.

⁵⁶¹ US – Large Civil Aircraft (AB), paras. 603-604.

⁵⁶² US – Large Civil Aircraft (AB), paras. 606-607.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 138

characterization or a concurrent characterization. ⁵⁶³ As the Appellate Body pointed out in *Canada – Renewable Energy*:

the transaction may naturally fit into one of the types of financial contributions listed in Article 1.1(a)(1). However, transactions may be complex and multifaceted. This may mean that different aspects of the same transaction may fall under different types of financial contribution. ⁵⁶⁴

Thus, the Panel is not free to simply stop its analysis once it has considered the EU's allegations. In fact, the narrow analysis proposed by the EU is precisely what the Appellate Body rejected in the original proceedings. ⁵⁶⁵

- 411. Second, the EU notes that in the original proceedings, the United States advocated treating the "general research" and "military aircraft" program elements alike as purchases of services, and argued that they were "discrete transactions that cannot be equated with any goods that may result." The United States made this assertion in response to the EU's argument that all DoD research contracts were purchases of goods because they might lead to purchase of a weapons system. The U.S. response was clearly geared more to the "general research" program elements, rather than to the "military aircraft" program elements. In any event, the United States has taken careful note of the Appellate Body's more recent findings regarding the need to scrutinize each transaction and modified its position accordingly.
- 412. The EU's third argument is that it is challenging only RDT&E funds used to cover the costs incurred under those contracts, rather than budget categories directed at goods. This is an artificial distinction. In all of the transactions in question, funding from the RDT&E budget categories is part of a broader effort to obtain a new weapon system or upgrade an existing one. The funding from RDT&E budget categories cannot simply be segregated from the broader transaction and examined in isolation.
- 413. Therefore, the contracts for the acquisition of new weapon systems were purchases of goods, and contracts for upgrading weapons systems were purchases of goods or purchases of services, depending on the nature of the upgrade. With regard to the "other military aircraft" program elements, the EU has simply failed to provide sufficient information and argumentation to meet its burden of proof.

⁵⁶³ EU SWS, para. 459.

 $^{^{564}}$ Canada – Renewable Energy (AB), para. 5.120.

⁵⁶⁵ US – Large Civil Aircraft (AB), para. 585.

⁵⁶⁶ EU SWS, para, 460.

⁵⁶⁷ US – Large Civil Aircraft (Panel), para. 7.1135.

⁵⁶⁸ EU SWS, para. 461.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 139

- iii. The EU arguments that these transactions are "akin to a joint venture" have the facts wrong and rely on an incorrect interpretation of the Appellate Body's findings.
- 414. As noted above, the EU does not assert that these transactions cannot be properly characterized as purchases of goods or services. Its primary argument is instead that they are "akin to a joint venture" based on the Appellate Body's criteria, and that there is no need to consider alternative, potentially better, categorizations. The EU errs both as a matter of fact and as a matter of law.
- The EU's purely legal errors are straightforward. First, its analysis only addresses 415. whether the measures can possibly be characterized as joint ventures, without bothering to examine whether they would be more appropriately characterized as purchases of services. This is precisely the type of narrow approach that the Appellate Body rejected. ⁵⁶⁹ Rather a panel's analysis must begin with an objective assessment of the measure, taking into account "all relevant characteristics of the measure" and the "features which are most central to the measure itself." In addition, as the Appellate Body found in Canada – Renewable Energy, one transaction may have multiple aspects, and a panel's analysis must take those complexities into account. Thus, even if the EU were correct that these transactions had characteristics that were "akin to a joint venture," that would not end the Panel's inquiry. It would still need to weigh the relative merits of each possible characterization, and the EU fails to provide any arguments whatsoever on this score. Second, the EU's attempts to limit the analysis to the three factors it draws from the Appellate Body's "summary" of characteristics fall afoul of the Appellate Body's instruction to "scrutinize" the measures. Third, the EU errs in trying to address all of the "military aircraft" contracts collectively, when the systems acquisition and systems upgrade contracts involve different types of activities.
- 416. The EU also makes errors of fact in its argument that the characteristics of these DoD contracts are identical to the ones the Appellate Body found for NASA contracts and DoD assistance instruments. In other words, even for the limited number of characteristics that the EU considers relevant, the facts do not support the legal conclusion it seeks to draw.
- 417. Whether "both parties commit resources." This is one of the factors from the Appellate Body's summary paragraph that the EU highlights. The EU notes that Boeing contributes the effort of its own employees, facilities, and equipment, and then asserts that "{t}here is no dispute that . . . Boeing also contributes its own resources to DOD RDT&E-related research efforts through its Independent Research and Development ("IR&D")." The EU is wrong on the latter point. Procurement contracts do not allow DoD to accept funds from contractors assistance instruments are the only proper vehicle for that sort of contribution. Moreover, DoD

⁵⁶⁹ US – Large Civil Aircraft (AB), para. 585.

⁵⁷⁰ US – Large Civil Aircraft (AB), para. 586 (emphasis in original).

⁵⁷¹ EU SWS, para. 455, first bullet.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 140

regulations explicitly prohibit contractors from treating expenses related to a particular contract as IR&D expenditures. Thus, IR&D costs are not resources that a contractor commits to a contract, but an investment that the contractor makes to maintain its technical competence and ability to meet DoD's future technological needs. With respect to the DoD side of the transaction, the EU asserts only that DoD "commits to provide financial resources." This balance of contributions – one side providing exclusively funding and the other engaging in services through the application of its own facilities, equipment, and employees – is characteristic of a purchase of services, and not "akin to a joint venture."

- 418. Whether "the parties share the fruits of the research." The United States does not dispute that Boeing obtains title to patents for inventions its employees invent while working under these contracts, and that the government obtains a royalty-free license for government purpose use. The EU, however, does not dispute the U.S. observation that if a DoD employee working alone invents an invention, the department obtains sole ownership of any patent. ⁵⁷⁴ Of course, given that the EU has provided no evidence of DoD employee involvement in these contracts, it is highly unlikely that a DoD employee would be the inventor or co-inventor (with a Boeing employee) of an invention under the contract. Furthermore, under DoD contracts, Boeing's "share" of the fruits of the research is largely formal. For any weapon system produced or upgraded under one of these contracts, DoD is the sole customer in the United States, and requires express approval of the U.S. government before the contractor can sell to another entity. On the civil side, the United States has demonstrated that research under the challenged program elements has little applicability to large civil aircraft. ⁵⁷⁵
- 419. Whether "the subjects to be researched are determined collaboratively between the parties." The EU attempts to show "collaboration in determining the scope of the research" because DoD issues solicitations asking proposers to devise the best solution to reach a research goal set by DoD and, if a proposal is accepted, enters into negotiations to finalize the statement

⁵⁷² US – Large Civil Aircraft (Panel), para. 7.1316 ("IR&D and B&P payments are not related to the underlying contract").

⁵⁷³ EU SWS, para. 455, first bullet, second sub-bullet.

⁵⁷⁴ EU SWS, para 455, second bullet.

⁵⁷⁵ This is particularly true of systems acquisition contracts, as any knowledge gained is designed to satisfy highly particularized requirements applicable to that system. In this way, developing military aircraft differs greatly from developing large civil aircraft, which all fit into a relatively narrow set of performance constraints and missions. In terms of performance, large civil aircraft fly at cruising speeds of around Mach 0.75-0.85, have ranges in the thousands of miles, and share a basic planform. The single mission is to transport people and cargo. By contrast, different military aircraft have a widely different speed regimes, ranges, and planforms, The missions assigned to each aircraft also differ greatly. Knowledge gained from integrating multiple technologies to satisfy the particular requirements of one military aircraft will not transfer readily to another military aircraft, let alone to a large civil aircraft.

⁵⁷⁶ The EU attempts to re-write the Appellate Body's finding to insert that often is "certainly not always," and contends (without support) that this was "not a necessary feature." As neither of these comments was part of the Appellate Body finding, there is no reason to add them now.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 141

of work.⁵⁷⁷ This argument fails for several reasons. The Appellate Body focuses on collaboration in determining "the subjects to be researched." For a systems acquisition or upgrade, DoD identifies its military requirements through an internal process before issuing an RFP. During the drafting of proposals, DoD will respond to questions about its requirements, but will not work with the proposers in any way to help with conceiving or drafting the proposal. Thus, there is none of the working together that is the essence of collaboration. The EU disagrees, but the only evidence it cites is a discussion of the process for awarding S&T contracts. As both parties agree that S&T contracts, which are funded primarily through what the EU characterizes as "general research" program elements, operate differently from systems acquisition and upgrade contracts, it is difficult to see the relevance of the EU's observation in evaluating the acquisition and upgrade contracts under the "military aircraft" program elements. ⁵⁷⁹

- 420. Whether "{f}unding {i}s provided in expectation of some kind of return." The Appellate Body did not identify this as a factor supporting the characterization of NASA contracts or DoD assistance instruments as "akin to a joint venture." Rather, it made this inquiry as part of its evaluation of whether the contracts, correctly characterized as "akin to a joint venture," were "analogous to an equity infusion." Thus, the EU seems to be mixing two steps of the analysis that the Appellate Body considered as separate. In any event, under the EU's simplistic understanding, this cannot be a defining characteristic of the DoD contracts because *all* transactions that provide funding involve expectation of some kind of return. Additionally, the EU is mistaken to characterize the "return" from these contracts as being "scientific and technical information, discoveries, and data." DoD's "return" is that it acquires a product capable of meeting the stated military requirements.
- 421. Whether there is "no certainty that the research will be successful." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts and DoD assistance instruments as "akin to a joint venture." In any event, the EU errs in arguing that an analogy between the uncertain return on an equity investment and the uncertainty that research will produce the desired results led the Appellate Body to find research joint ventures analogous

⁵⁷⁷ EU SWS, para. 455, third bullet.

⁵⁷⁸ EU SWS, para. 455, third bullet.

⁵⁷⁹ In any event, as the United States explained in its first written submission, the negotiation of a systems acquisition contract is anything but collaborative. Each side is, in fact, trying to get the best deal for itself, with the contractor seeking the greatest remuneration possible, while DoD seeks to get optimal performance at the lowest cost.

⁵⁸⁰ US – Large Civil Aircraft (AB), paras. 593-609.

⁵⁸¹ US – Large Civil Aircraft (AB), para. 624.

⁵⁸² The one exception is a grant, but the EU is not alleging that DoD contracts were grants.

⁵⁸³ US – Large Civil Aircraft (AB), paras. 593-609.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 142

to an equity investment. This cannot be the case, as the Appellate Body upheld the original panel's finding that NASA and Boeing learned valuable lessons from research that failed. In any event, the analogy does not work with respect to contracts funded through "military aircraft" program elements. A systems acquisition or upgrade contract starts with known scientific principles and technologies generally already advanced to TRL 6, and seeks to operationalize them in the form of a finished product. The risk at this stage is not whether the research will succeed, but rather whether the contractor can devise a product design and manufacturing process that will achieve the performance requirements. (There may, literally, be thousands of these on a complex project.) The fact that one technology does not work well in tandem with other candidate technologies on a particular weapons system (or conversely that it does work) provides little information as to whether it will work with a different set of technologies aimed at a different set of criteria. This is not the risk of a joint venture, but instead the risk associated with commissioning any large engineering or manufacturing project.

- 422. Whether the "funder's risks are limited to the amount of money they commit and the opportunity cost of other support they provide." Again, the EU seems to be mixing the two separate steps of the analysis outlined by the Appellate Body, which did not identify this as a factor supporting the characterization of NASA contracts and DoD assistance instruments as "akin to a joint venture." In any event, this pertains equally to a purchase of goods or of services, so it cannot be a defining characteristic of a joint venture.
- 423. Finally, the EU takes issue with U.S. references to the Appellate Body observations that the NASA contracts before it had the following characteristics:
 - "the value of such access {to facilities, equipment, and employees} was significantly higher than the value of the payments;"
 - "the transactions involve NASA and Boeing pooling non-monetary resources and employees;" and
 - "LERD clauses grant Boeing exclusive rights to exploit critical technologies developed under certain NASA contracts for at least five years from the date the data is reported." 585

The EU asserts that these references are either "unsupported by the Appellate Body" or "not an essential aspect of a joint venture." However, these are direct quotes from the Appellate Body report describing the relevant characteristics of the transactions at issue. The fact that they are not true of DoD contracts funded through the "military aircraft" program elements provides yet

⁵⁸⁴ US – Large Civil Aircraft (AB), paras. 593-609.

⁵⁸⁵ US – Large Civil Aircraft (AB), paras. 595-596.

⁵⁸⁶ EU SWS paras. 456 and 458.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 143

further evidence that the EU is mistaken in arguing that those contracts are essentially the same as the earlier contracts addressed by the original panel and the Appellate Body.

- 424. In sum, the primary characteristics of these transactions are that in most of them, DoD paid Boeing money in exchange for Boeing providing either goods, or upgrading existing goods. Any involvement of DoD facilities, equipment, or employees did not have a meaningful effect on the magnitude of the financial contribution. The objective of the effort was to obtain weapons systems meeting DoD's military requirements, and any civil applicability was incidental. These characteristics support the conclusion that the transactions are purchases of goods or services, as indicated above, and are not joint ventures.
 - b. Purchases of services are not a financial contribution under Article 1.1(a)(1)(iii) of the SCM Agreement.
- 425. The U.S. analysis in section II.A.5.a.iii applies to the arguments the EU advances generically with respect to post-2006 NASA contracts and all DoD procurement contracts. To summarize, the United States finds the original panel's reasoning on this point compelling. The EU's primary reason for opposing this conclusion is that the Appellate Body declared the panel's ultimate findings moot. However, that finding of mootness indicates only that the original panel should not have reached the issue. As the Appellate Body did not uphold or reverse the panel report on that issue, the Panel should accord the original panel's findings the same status as those of an unadopted panel report, and "find useful guidance in the reasoning." 587
 - 4. The EU has not established that contracts funded through the "military aircraft" program elements conferred a benefit.
- 426. The U.S. observations in section II.A.5.b apply to the arguments the EU advances generically with respect to the "military aircraft" program elements. To summarize, the EU's argument as to the existence of a benefit is that DoD obtained fewer intellectual property rights than a commercial sponsor of the same research. That is not the proper standard. The context provided by Article 14(d) of the SCM Agreement indicates that government purchases confer a benefit only when the government pays more than adequate remuneration for whatever it receives. In this proceeding, the EU has failed to address this standard, so it has not made a *prima facie* case.
- 427. In contrast, the U.S. first written submission demonstrated that DoD ensured that it paid no more than adequate remuneration by subjecting solicitations funded through the "general research" program elements to competitive bidding. The Appellate Body has endorsed just this approach, finding in *Canada Renewable Energy* that a "benchmark may also be found in price-discovery mechanisms, such as competitive bidding or negotiated prices, which ensure that the price paid by the government is the lowest possible price offered by a willing supply

⁵⁸⁷ *Japan – Alcohol (AB)*, pp. 14-15.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 144

contractor."⁵⁸⁸ The EU ignores this finding completely in arguing that bidding cannot under any circumstances achieve such a result in these circumstances.

- 5. The EU's generic specificity argument regarding NASA, DoD, and FAA measures does not establish specificity with regard to the benefit alleged (incorrectly) to exist.
- 428. The U.S. observations in section II.A.7 of this submission apply to the arguments the EU advances generically with respect to specificity for all of the alleged NASA, DoD, and FAA financial contributions. To summarize, the only non-market term that the EU identified in these transactions was that the allocation of intellectual property was more favorable than under certain benchmark transactions proposed by the EU. 589 The United States explained that this element of the EU claim is wrong because the Appellate Body has already found that this treatment of intellectual property rights, if it were a benefit, is available under all U.S. government contracts in all sectors of the economy. 590 The EU reiterates its assertion that NASA and DoD programs taken separately are specific, but the Appellate Body found that this argument is not sufficient to demonstrate specificity when multiple authorities are implementing the same measure.⁵⁹¹ The EU contends that its subsidy allegation goes beyond the patent terms, and applies to the entire financial contribution. However, the EU argument misses the point. Even if looked at from the point of view of the entire transaction, the fact is that all U.S. government agencies that enter into research transactions, in all sectors, do so on the basis the terms that the EU is challenging here. Thus, the subsidy alleged by the EU, assuming arguendo, that it is a subsidy, is not specific.

E. FAA Continuous Lower Energy, Emissions, and Noise ("CLEEN") Program

429. The EU's claim concerning the Federal Aviation Administration's ("FAA") CLEEN program is not properly within the terms of reference of this compliance proceeding, as discussed above at section II.B.7. In addition, the United States, in its first written submission, demonstrated that the EU failed to establish that the CLEEN program confers a specific subsidy

⁵⁸⁸ Canada – Renewable Energy (AB), para. 5.239.

⁵⁸⁹ EU FWS, paras. 182-190 and 373-384.

⁵⁹⁰ US FWS, paras. 259-262, 291-294, 394-397, 428, and 473.

⁵⁹¹ US – Large Civil Aircraft (AB), paras. 757-759.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 145

to Boeing. ⁵⁹² As a general matter, the EU proceeds as if the original panel's findings against NASA contracts and DoD assistance instruments create a presumption of WTO-inconsistency with respect to the FAA. However, the EU ignores important differences between the FAA CLEEN OTA on the one hand, and NASA contracts and DoD assistance instruments on the other hand. Most significantly, the level of Boeing's contribution of funding and resources is higher under the CLEEN Other Transaction Agreement ("OTA") than under the NASA contracts and DoD assistance instruments. Therefore, in order to establish a *prima facie* case with respect to the FAA contract, the EU would have to evaluate whether the "equilibrium" of funding and resources that each party contributes "is more favourable to the commissioning party" in a commercial joint venture than in the FAA OTA. ⁵⁹³ The EU fails to perform such an analysis, and therefore it fails to establish a *prima facie* case of WTO-inconsistency. Furthermore, for the reasons already discussed above with respect to NASA contracts and DoD agreements, the EU also fails to demonstrate that the CLEEN OTA confers a specific subsidy to Boeing.

1. The EU's Claims Against the FAA Are Limited To the Contribution of Funding, Facilities, Equipment, and Employees Under the CLEEN OTA.

- 430. The EU has identified only one contract under the FAA CLEEN program that provides funding to Boeing: the OTA DTFAWA-10-C-00030. In its first written submission, the EU asserted that "{t}he Boeing CLEEN Agreement" confers a financial contribution, and it also asserted that the FAA "provides Boeing with access to government facilities, equipment and employees" through the OTA. 595
- 431. The EU does not claim that FAA has provided Boeing with any financial contribution outside the context of the OTA. In particular, the EU does not allege that FAA confers a benefit to Boeing through the ecoDemonstrator program. Although the EU discussed the ecoDemonstrator tests in its discussion of the CLEEN Program's "Factual Aspects" section of its first written submission, ⁵⁹⁶ this was apparently for background purposes only, since the EU does not discuss the ecoDemonstrator program in the "Legal Assessment" section of its first written

⁵⁹² US FWS, paras. 481-489. The EU asserts that the United States does not take issue with any aspects of the European Union's factual description of the CLEEN program, its operation, or the substance of related research and development. EU SWS, para. 333. That is incorrect. *See, e.g.*, US FWS, para. 487, note 778. Moreover, the EU continues to demonstrate a fundamental misunderstanding about the nature of the CLEEN program. The CLEEN program was established to accelerate the development of technologies to reduce the fuel burn, emissions, and noise of civil subsonic aircraft. US FWS, para. 476. The United States notes again its surprise at the EU's confusion, considering that such program goals are not unlike the EU's Clean Sky Initiative.

⁵⁹³ See US – Large Civil Aircraft (AB), para. 662.

⁵⁹⁴ FAA CLEEN Contract DTFAWA-10-C-00030 (Exhibit EU-17).

 $^{^{595}}$ See EU FWS, para. 218 & note 512 (referencing facilities and equipment allegedly conveyed through the OTA).

⁵⁹⁶ EU FWS, paras. 206-210.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 146

submission or the "Legal analysis" section of its second written submission, nor does it mention the ecoDemonstrator program in its panel request. ⁵⁹⁷ Therefore, the United States does not discuss the ecoDemonstrator program in responding to the EU's CLEEN-related subsidy allegations. ⁵⁹⁸

2. The EU fails to establish that FAA provided any facilities, equipment, or employees to Boeing pursuant to the CLEEN OTA.

- 432. The United States explained in its first written submission that the EU was wrong to assert that the CLEEN OTA provides a financial contribution in the form of access to government facilities, equipment and employees. There is, in fact, no evidence that the CLEEN OTA made such provisions. The only examples the EU provides are of meetings between government personnel and Boeing employees, but these are situations in which the contractor provides information to government consumers, or receives instruction from government funders. However, these situations do not provide Boeing with access to government employees in a way that defrays any of Boeing's research-related expenses.
- 433. Moreover, the EU apparently misunderstood the only evidence cited in its first written submission to support the claim that the OTA conveys facilities, equipment, and employees to Boeing. Specifically, the EU asserted incorrectly that a reference in the Boeing OTA to "Facilities and Infrastructure" meant that the FAA provided these to Boeing, when it fact it was simply an accounting category. In its second written submission, the EU appears to concede that it was mistaken on this point. 601
- 434. However, the EU now attempts to rehabilitate its facilities, equipment and employees argument by citing new evidence which in fact is irrelevant. First, the EU asserts that Boeing was provided access to NASA test facilities for its CLEEN program research into a ceramic matrix composite acoustic exhaust nozzle, citing to Exhibit EU-1019 and Exhibit EU-1060(BCI). Notably, the EU refrains from claiming that the CLEEN program or OTA provided such access to Boeing. This is a significant distinction. If NASA in fact provided Boeing access to one of its facilities, that is irrelevant to the question of whether the *FAA*

⁵⁹⁷ Given that the EU does not make any claims under Articles 1 and 2 of the SCM Agreement with respect to the ecoDemonstrator, the alleged adverse effects of the ecoDemonstrator are irrelevant to this compliance dispute. *See, e.g.*, EU SWS, paras. 968, 1054-1055, 1130-1139.

⁵⁹⁸ In any event, the ecoDemonstrator program is separate from CLEEN, and it involved no financial contribution and no benefit. Indeed, Boeing shouldered the overwhelming proportion of costs related to the ecoDemonstrator. See Section IV.

⁵⁹⁹ US FWS, para. 482.

⁶⁰⁰ US FWS, para. 482.

⁶⁰¹ EU SWS, para. 337.

⁶⁰² EU SWS, para. 338.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 147

CLEEN program provided facilities to Boeing. The documents to which the EU cites also fail to show that the FAA authorized Boeing's use of NASA facilities. As this is the only evidence the EU cites in support of its claims of provisions of goods under the CLEEN Program, it has failed to meet its burden of proof for that element of its claim.

- 435. The EU next asserts that government employees assist Boeing in defining and carrying out its research under the CLEEN OTA based on a portion of Boeing's Monthly Technical Progress Report from June 2010 indicating [***]."⁶⁰⁴ However, the EU fails to explain how such [***] constitutes a provision of goods or services within the meaning of Article 1.1(a)(1)(iii) of the SCM Agreement. The EU fails to appreciate the significance of the fact that [***]. Thus, the [***] was not an effort to help Boeing for its own sake, but to ensure that Boeing's work was satisfying [***] of potential government users of the information at the FAA, NASA, and DoD. This type of [***] is not a service to the contractor, but the best way for the FAA to ensure that the contractor delivers what it has committed to deliver.
- 436. The EU makes a passing reference to Boeing's participation in semi-annual government-led consortium meetings to discuss CLEEN research. However, this reference does not support the EU's claims either. The consortium meetings are simply a mechanism for the government parties to keep apprised of Boeing's research, as indicated in the following description provided in response to the Panel's request for information:

Each of the companies with whom the FAA has entered into an OTA under the CLEEN program (Boeing, GE, Honeywell, P&W, and Rolls-Royce) participates in semi-annual CLEEN consortium meetings held during the spring and fall of each year.

The spring CLEEN consortium meeting includes extended government-only sessions held individually with each of the five companies and constitutes an annual review that is required under each OTA. The spring consortium meeting also includes a shorter plenary session for all CLEEN companies and government attendees on CLEEN-specific topics that involve all five companies.

⁶⁰³ In its first written submission, the EU does not dispute the U.S. explanation that the "facilities and equipment" account for CLEEN does not pay for the provision of facilities or equipment to Boeing. It nonetheless asserts that "the United States does not argue that the amounts referred to as "Facilities and Equipment" should be excluded from the calculation of financial contribution" EU SWS, para. 337. The United States considered it obvious that something that is not a financial contribution should not be included in the calculation of the financial contribution. However, to remove the confusion the EU appears to be experiencing on this point, it is the view of the United States that the "facilities and equipment" account should *not* be included in the calculation of the value of any financial contribution.

⁶⁰⁴ EU SWS, para. 338 (emphasis added); *CLEEN Monthly Technical Progress Report*, Boeing (June 2010) (Exhibit EU-1061(BCI)).

⁶⁰⁵ EU SWS, para. 338.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 148

During the fall consortium meeting, shorter government-only sessions are held individually with each CLEEN company. On the middle day of the three-day meeting, there is a plenary session open to the public where each of the five companies presents an update on progress of their technology maturation efforts under CLEEN. The agenda and presentations from the November 2012 consortium meeting can be found at the following website:

 $http://www.faa.gov/about/office_org/headquarters_offices/apl/research/aircraft_te~chnology/cleen/^{606}$

Thus, the evidence that the EU cites in support of its assertion that the CLEEN program provides goods and services to Boeing in fact demonstrates the opposite, that the government is a consumer of services and research results generated by CLEEN.

437. In addition, for the reasons discussed above at section II.F, the transfer of intellectual rights to Boeing is not a provision of goods or services other than general infrastructure within the meaning of Article 1.1(a)(1)(iii) SCM. Moreover, the EU fails to identify any such transfer that has occurred. [***]. Therefore, the EU fails to establish a *prima facie* case that the CLEEN OTA resulted in the provision of any goods or services other than general infrastructure to Boeing.

3. The CLEEN program does not confer a benefit to Boeing.

- 438. The United States also demonstrated in its first written submission that the EU failed to make a *prima facie* case that the CLEEN program confers a benefit under Article 1.1(b) of the SCM Agreement. 608 In particular, the EU failed to identify the appropriate benchmark against which to compare the terms of the Boeing OTA, and it failed to assess whether the OTA was more favorable to Boeing than the benchmark. 609 In its second written submission, the EU claims it "relied on the same benchmarks (including sample contracts submitted by the United States) and comparison that the Appellate Body relied upon when analyzing the NASA R&D contracts." 610
- 439. Thus, the EU seems to believe that the Appellate Body's findings in the original dispute indicate that *any* contract between Boeing and the United States automatically confers a subsidy,

⁶⁰⁶ Response of the United States to the Panel's Request for Information Pursuant to Article 13 of the DSU (Feb. 28, 2013), paras. 89-91.

⁶⁰⁷ Response of the United States to the Panel's Request for Information Pursuant to Article 13 of the DSU (Feb. 28, 2013), para. 110; [***] (Exhibit USA-362(BCI)).

⁶⁰⁸ US FWS, para. 486-487.

⁶⁰⁹ US FWS, para. 487.

⁶¹⁰ EU SWS, para. 353.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 149

regardless of the value of the funding and resources that Boeing contributes. ⁶¹¹ However, the Appellate Body's findings were not so broad, as they applied only to contracts where Boeing's contribution was at most equal to that of the U.S. government. ⁶¹² Moreover, the Appellate Body ruled out the broad-brushed analysis now proposed by the EU, explaining that degree of cost-sharing by the contractor must impact the benefit analysis:

We note that one of the salient features of the assistance instruments is that the USDOD and Boeing jointly fund the research projects and share, to some extent, the results of the research. In its appeal, the United States emphasizes that the funds provided by Boeing to this research must be considered in the determination of benefit. These are features of the USDOD measures that should be taken into account in identifying a market benchmark against which to compare those measures for purposes of determining whether a benefit has been conferred. Moreover, we note that any monetary contribution made by the recipient to a joint research project affects the net value obtained by the firm from the project. If the contribution of the recipient firm to the project is neglected, there is a risk of overestimating the value obtained by the firm from the project and, hence, a finding of benefit could be made where a benefit did not in fact exist. 613

In this case, the CLEEN OTA involves a contribution by Boeing that is greater than the FAA's contribution, and is greater (on a proportional basis) than any of the contracts and agreements examined by the Appellate Body in the original dispute. Therefore, pursuant to the Appellate Body's guidance, this contribution "affects the net value obtained by" Boeing through the OTA, and ignoring it would "risk . . . overestimating the value obtained by the firm from the project." The EU itself indicates in its discussion of specificity that "the benefit . . . constitutes the difference between what FAA demands of Boeing in return for these financial contributions, and what a market-based actor would demand." Yet in its benefit analysis, there is no indication of "what FAA demands" or "what a market-based actor would demand," and no comparison between the two, except for a superficial comparison to the IP allocation terms of NASA and DoD agreements. Therefore, the EU fails to demonstrate that the CLEEN program confers a benefit under Article 1.1(b) of the SCM Agreement.

4. The subsidy alleged by the EU is not specific.

440. The U.S. observations in section II.A.7 apply to the arguments the EU advances generically with respect to specificity for all of the alleged NASA, DoD, and FAA financial contributions. To summarize, the only supposedly better-than-market term that the EU identifies

⁶¹¹ See US – Large Civil Aircraft (Panel), para. 7.1279.

⁶¹² See US – Large Civil Aircraft (AB), paras. 663-664.

⁶¹³ US – Large Civil Aircraft (AB), para. 663.

⁶¹⁴ EU SWS, para. 363.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 150

in these transactions is their IP allocation terms. ⁶¹⁵ The United States explained that this element of the EU claim is wrong because the Appellate Body has already found that this treatment of intellectual property rights, if it were a benefit, is available under all U.S. government contracts in all sectors of the economy. ⁶¹⁶ The EU reiterates its assertion that NASA and DoD programs taken separately are specific, but the Appellate Body found that this argument is not sufficient to demonstrate specificity when multiple authorities are implementing the same measure. ⁶¹⁷ The EU also contends that its subsidy allegation goes beyond the patent terms, and applies to the entire financial contribution. ⁶¹⁸ However, the EU argument misses the point. Even if looked at from the point of view of the entire transaction, the only feature of the agreement in virtue of which an alleged subsidy exists is the IP allocation terms, and such terms are common to *all* research contracts with U.S. government agencies, regardless of the industry to which any particular contractor belongs. Thus, assuming that the CLEEN OTA confers a subsidy to Boeing – which it does not, as explained above – it is not specific.

- F. The EU has failed to demonstrate that the Boeing's rights to patents for inventions invented under the NASA and DoD contracts, DoD assistance instruments, or the FAA CLEEN OTA at issue are a separate financial contribution, confer a benefit, or are specific.
- 441. The United States observed in its first written submission that the EU's one-paragraph assertion that patents rights owned by Boeing as a result of the challenged NASA, DoD, and FAA contracts and agreements were a provision of goods for purposes of Article 1.1(a)(1) contained numerous errors. As the EU made essentially identical arguments with regard to patents related to each of those instruments, the United States addresses them collectively in this section. In each case, the EU's efforts to rebut the U.S. demonstration only serve to underscore the fallacy of its claims.
- 442. In begins its discussion by injecting confusion, characterizing this argument as, variously, and "alternative conception," and argument "in the alternative," and an "additional" argument. The EU needs to be clear on this score, as the Panel may not need to address an "argument in the alternative" if the contingency that triggers the argument (which the EU does not identify) fails to occur.

⁶¹⁵ EU FWS, paras. 182-190 and 373-384.

 $^{^{616}}$ US FWS, paras. 259-262, 291-294, 394-397, 428, and 473.

⁶¹⁷ US – Large Civil Aircraft (AB), paras.757-759.

⁶¹⁸ See EU SWS, paras. 366-367.

 $^{^{619}\,}EU$ SWS, paras. 253-257, 340-344, and 464-464.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 151

1. The EU has failed to demonstrate that the patent rights at issue are a financial contribution.

- 443. The United States explained in its first written submission that these patent rights are not a financial contribution because U.S. law assigns ownership of a patent in the first instance to the inventor. Boeing only comes to own a patent if the inventor assigns its rights in the patent to Boeing. Thus, any patent rights that Boeing enjoys are a provision by the original owner, and not a provision (of goods or otherwise) by the government. Indeed, in the case of the FAA, the EU challenges patents that do not actually exist, as Boeing has received no patents for technologies developed under CLEEN. 620
- 444. The EU recognizes that this is true of U.S. law in general. However, it argues that a different rule prevails for inventions made in performance of a NASA contract because section 135 of the Space Act grants title in such inventions to the NASA Administrator, "unless the Administrator waives all or any part of the rights of the United States to such invention in conformity with the provisions of subsection (g)." The EU then asserts that the decision whether to allow the inventor to retain title "is a decision to be made by NASA, and the inventor has no power over this decision." However, the EU misunderstands the situation. Section 135 of the Space Act essentially acts as an exception to the general rule for patent ownership, but grants the NASA Administrator the right to restore ownership to the inventor. The original panel noted that NASA's regulations create a presumption that a timely waiver request will be granted to U.S. companies unless the interests of the United States will be better served by denying the request in whole or in part. In fact, NASA has granted every single waiver request it received since 1985. NASA's essentially automatic return to the inventor of a right otherwise available to it under U.S. law is, accordingly, not a provision of anything by the government.
- 445. The United States also observed that ownership of a patent cannot be provision of a good because a patent is not a good, a conclusion confirmed by the separate coverage of intellectual property in the TRIPS Agreement, rather one of the agreements in Annex 1A of the WTO Agreement. The EU responds by arguing that the ordinary meaning of "good" is "property" or "possessions," and that a patent is a form of intellectual "property." This position is facile in the extreme. To begin, the EU edits the dictionary definition of "goods" that it cites, which reads in full "{p}roperty or possessions; *esp.* moveable property. Now only in *pl.*" The EU also omits mention of a subsequent relevant definition of goods as "In *pl.* Saleable commodities;

⁶²⁰ In response to the Panel's request for information, the United States indicated that Boeing had applied for a patent with respect to an invention invented in course of work funded through the CLEEN OTA. ⁶²⁰ [***]

⁶²¹ Space Act, section 135(b)(2).

⁶²² EU SWS, para. 254.

⁶²³ US – Large Civil Aircraft (Panel), para. 7.1289.

⁶²⁴ EU SWS, para. 255.

⁶²⁵ New Shorter Oxford English Dictionary, p. 1116 (underlining added; italics in original).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 152

merchandise, wares. Also occas. in *sing*., a type of merchandise." ⁶²⁶ As intellectual property is not "moveable," "commodities," "merchandise," or "wares," the EU's effort to categorize intellectually property as a good is inconsistent with the very definition of "goods" that it cites, when that definition is considered in full.

- 446. The EU also argues that the omission of the TRIPS Agreement from Annex 1A of the SCM Agreement reflects the fact that intellectual property can cover goods and service. This argument is unconvincing, as Annex 1A contains other agreements (the SCM Agreement, for example) affecting both services and goods. Rather, the omission carries the significance identified by the United States that the TRIPS Agreement is not one of the "Multilateral Agreements on Trade in Goods."
- 447. The EU ends by agreeing with the United States that any intellectual property rights arising out of a contract are an effect of the contract, but arguing that "in the alternative, it is possible to conceptualise one of the financial contributions *arising from that same contract* as a provision of goods." The United States disagrees with that alternative conceptualization. The SCM Agreement differentiates between the subsidy and the effects of a subsidy. In the case of NASA and DoD research contracts and agreements, the parties typically do not know at the time of the signature whether it will yield any patentable inventions. It is difficult to see a patent that does not exist and may never exist as a financial contribution. And, assuming *arguendo* that such a patent could be "conceptualized" as a financial contribution, it is doubly difficult to see how it could be analyzed separately from the underlying contract.
 - 2. The EU has not alleged that the "conceptualization" of a patent as a provision of goods confers a benefit.
- 448. The sections of the EU first written submission on the benefits allegedly arising from alleged NASA and DoD financial contributions does not assert that the provision of a good in the form of a patent has conferred a benefit. Therefore, it has failed to meet its burden of proof with regard to this argument.
 - 3. The Appellate Body has already found that intellectual property rights arising from U.S. government contracts, if a subsidy, are not specific.
- 449. The EU's claim that patents owned by Boeing by reason of its contracts with NASA and DoD is essentially the same as its earlier claim regarding the allocation of patent rights under NASA contracts and NASA and DoD agreements with Boeing. The Appellate Body has already found that, assuming *arguendo* such treatment is a subsidy, it is not specific because it is available under all U.S. government contracts, in all sectors. The same reasoning applies to

EU SWS, para. 257.

⁶²⁶ New Shorter Oxford English Dictionary, p. 1116 (italics in original).

⁶²⁷ EU SWS, para. 257.

⁶²⁸ US – Large Civil Aircraft (AB), para. 789.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 153

the EU's alternative conceptualization in this proceeding. In addition, the EU has not even argued that this alleged subsidy is specific. Therefore, it has failed to meet its burden of proof.

G. FSC/ETI

- 450. The United States, in its first written submission, confirmed that Boeing has not used Foreign Sales Corporation and Extraterritorial Income ("FSC/ETI") tax benefits after 2006. The United States also explained that nothing had changed since the original panel declined to find that Boeing would continue to receive FSC/ETI tax benefits in the post-2006 period. 630
- 451. The evidence now before the Panel is the same as when the original panel last considered this issue: at the time, the EU submitted a December 2006 IRS memorandum purporting to show that FSC remained available to Boeing, and the United States submitted an affidavit from Boeing's Vice President of Tax, James H. Zrust, confirming that Boeing had not received tax benefits after 2006. The original panel found that the mere availability of FSC did not indicate that Boeing had "actually used" it. 631 Indeed, the EU's continued allegations regarding FSC, and its simplistic assumption that the mere availability of a tax break is *prima facie* evidence of its receipt even when the taxpayer's Vice President of Tax already confirmed that this is false 632 –illustrates that the EU fails to understand its burden to demonstrate a "*prima facie* case."
- 452. In addition, the original panel considered that the EU's own evidence contradicted its FSC/ETI claims:

{T}he assertion of the European Communities that Boeing will continue to benefit from FSC/ETI tax exemptions and tax exclusions in the post-2006 period is inconsistent with the fact that a document submitted by the European Communities on the amounts of subsidies in the period 1989-2006 and 2007-2024 indicates that the amount of FSC/ETI subsidies in the period 2007-2024 is \$0.

⁶²⁹ US FWS, para. 490.

⁶³⁰ US FWS, para. 491.

⁶³¹ US – Large Civil Aircraft (Panel), para. 7.1425 ("{W}hile it may be true, as argued by the European Communities on the basis of the December 2006 memorandum of the Internal Revenue Service, that it is possible in certain circumstances for a company to continue to benefit from the FSC/ETI measure through the prospective interpretation of the TIPRA repeal provision, this must be weighed against other evidence before the Panel that suggests that Boeing has not actually used this possibility.").

⁶³² See US FWS, para. 493; Statement of James H. Zrust (July 20, 2009) Exhibit USA-232.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 154

This document explicitly states that "{t}he benefits from FSC/ETI after 2006 are zero due to the repeal of the grandfather provisions relating to FSC/ETI." 633

The EU's second written submission claims that by citing this paragraph of the original panel's report, the United States "relies primarily on an obvious clerical error in a table." According to the EU, "the entries in the referenced table should have indicated "N/A" (for "not available") rather than \$0."635 However, as is clear from the second sentence of this paragraph, the panel's concern was not limited to the "\$0" in the table, but also with the *explicit statement* in that exhibit stating that "{t}he benefits from FSC/ETI after 2006 are zero due to repeal of the grandfather provisions relating to FSC/ETI." It is unclear whether the EU's position is that this sentence is also a "clerical error." Nevertheless, it is clear that the panel considered the EU's own evidence to be inconsistent with its assertion that Boeing would continue to benefit from FSC/ETI tax exemptions. 637

453. The EU has not submitted any new evidence in the compliance proceeding. With respect to Mr. Zrust's statement, the EU now claims it is deficient because it does not satisfy the EU's demand for a statement signed "under penalty of perjury." ⁶³⁸ The United States does not consider that documents submitted in a WTO proceeding must be "signed under penalty of perjury" to be persuasive. And, given that the EU's own evidence does not accord with such a standard, neither apparently does the EU. ⁶³⁹ The EU also asserts that the statement is merely retrospective. ⁶⁴⁰ To the contrary, the statement notes that Boeing's 2006 annual report indicated that "2006 will be the final year for recognizing any export tax benefits" and confirms that Boeing in fact did not receive any FSC benefits after 2006. ⁶⁴¹

⁶³³ US – Large Civil Aircraft (Panel), para. 7.1426. The panel was referring to Exhibit EC-17 ("Amount of Subsidies to Boeing's LCA Division, Exhibit EC-17, p.7"), which was submitted by the EU in the original proceeding. The panel further explained "{w}hile the European Communities argues that the non-inclusion of future amounts of FSC/ETI subsidies is due to a lack of information resulting from an absence of cooperation by the United States, we see nothing in this document that suggests that future amounts of FSC/ETI subsidies could not be calculated because of a lack of cooperation by the United States."

⁶³⁴ EU SWS, para. 538.

⁶³⁵ EU SWS, para. 538.

⁶³⁶ Exhibit EC-0017 to original proceeding. Exhibit USA-363.

⁶³⁷ US – Large Civil Aircraft (Panel), para. 7.1426.

⁶³⁸ EU SWS, para. 541.

⁶³⁹ See, e.g., Exhibit EU-27.

⁶⁴⁰ EU SWS, para. 541.

 $^{^{641}}$ Statement of James H. Zrust (July 20, 2009) Exhibit USA-232.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 155

- 454. The EU also asserts that the word "use" in the U.S. first written submission (as in "Boeing did not use FSC or ETI tax benefits after 2006") confirms the EU's claim because it "necessarily implies...that the benefit was conferred on Boeing by the relevant measure at issue, since otherwise the opportunity to use it would never even arise." This exercise in hair-splitting proves nothing. Indeed, the original panel itself deployed the term "use" in precisely the same way as the United States (as in "Boeing has not actually used" FSC/ETI benefits). The term is equally appropriate now, given that the EU has not pointed to any relevant new facts.
- 455. In sum, the EU's arguments regarding so-called "clerical errors," "penalty of perjury," and the word "use" are really just attempts to obscure the fact that the EU has failed to establish a *prima facie* case.

H. Washington Measures

1. Washington State B&O tax rate

- 456. The EU's claim concerning the Washington State B&O tax rate is the only claim regarding the State of Washington that is properly within the terms of reference of this compliance proceeding. The U.S. first written submission demonstrated that the State of Washington is applying the B&O tax rate such that the magnitude of any remaining subsidy is too small to cause adverse effects. Therefore, the United State complied with the DSB's recommendations and rulings with respect to the Washington B&O tax rate through the removal of adverse effects.
- 457. The U.S. first written submission also demonstrated that the EU significantly overstated the value of the B&O tax rate reduction to Boeing. The United States re-submitted as Exhibit USA-264(BCI) the Washington State Department of Revenue ("DOR") calculations of the value to Boeing of the (i) Washington State B&O tax rate; (ii) Washington State B&O tax credit for preproduction development; (iii) Washington State B&O property tax credit; and (iv) the Washington State sales and use tax exemptions for computer hardware, software, and peripherals. The DOR's calculations indicate the value of each tax measure for years 2006 to 2012 based on actual amounts, and forecasts of the value for years 2013 to 2024. This information was originally submitted by the United States in response to a question that the Panel had asked at the EU's urging through the Article 13 process, but the EU ignored this information in its first written submission.
- 458. The EU's second written submission first objects to the form of the document, complaining that "these figures...are provided on a single piece of paper that has no signs of

⁶⁴² EU SWS, para. 542.

⁶⁴³ US – Large Civil Aircraft (Panel), para. 7.1425.

⁶⁴⁴ US FWS, para. 496.

⁶⁴⁵ Exhibit USA-264 (BCI).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 156

authenticity."⁶⁴⁶ The United States understands the EU's complaint to be limited to the purported lack of authenticity, as opposed to the page length of the document. The United States confirms that these figures were provided by the Washington State DOR.⁶⁴⁷

- 459. For years 2007⁶⁴⁸ to 2012, the DOR's records indicate that the value of the B&O tax rate reduction was significantly lower than the EU's estimates. The DOR calculates the total value for these years to be [***], whereas the EU estimates the total value to be \$431 million.⁶⁴⁹ The EU notes in its second written submission that the DOR's calculations are lower than the EU's estimates and asserts that "the United States needs to explain this discrepancy before the Panel accepts the validity of the US' figures for these years."⁶⁵⁰ The United States considers that it does not have a burden to explain the flaws in the EU's estimates where the United States has put forward numbers from the relevant authority. In any event, the discrepancy is easily explained: the DOR's calculations are based on the actual amounts of money that it received from Boeing, whereas the EU's are not.⁶⁵¹ Of course, a calculation using the actual tax data is inherently more reliable than a calculation that relies on estimates of that same data.
- 460. For the years 2013 to 2024, the DOR's calculations are also significantly lower than the EU's estimates. As an initial matter, the United States questions the relevance of the EU's projections extending to 2024. Whether provided by the United States or the EU, a forecast necessarily becomes less reliable the further into the future the forecast is extended. That said, if the Panel considers forecasts to be useful to its assessment of the EU's claims, the DOR provides a significantly more reliable estimate than the EU's forecast for several reasons, including the fact that the Washington DOR is well positioned to provide a reliable estimate of the State of Washington's own tax revenue. Moreover, the DOR's estimate is based on the most recent revenue forecast for the state, combined with the most up to date information about the LCA industry as a whole, and Boeing in particular. The United States notes that the Panel in the original proceeding found other estimates provided by the DOR to be reliable as well.

⁶⁴⁷ The EU takes issue with the fact that the table is not on Washington DOR letterhead. The United States notes that the DOR does not print internal documents on its own letterhead.

⁶⁴⁶ EU SWS, para. 569.

 $^{^{648}}$ The EU's estimates do not include a value for 2006, so that year is not included in this discussion.

⁶⁴⁹ Compare Exhibit USA-264 with Exhibit EU-38 (revised).

⁶⁵⁰ EU SWS, para. 571.

⁶⁵¹ Exhibit USA-264(BCI) indicates that the figures for 2006 to 2012 [***]."

⁶⁵² As Exhibit USA-264 makes clear, [***] This is certainly a more sophisticated analysis than the simplistic (and flawed) assumptions underlying the EU's analysis, as discussed below.

⁶⁵³ US – Large Civil Aircraft (Panel), para. 7.254; EU FWS, para. 439 ("The original panel estimated the dollar value of the financial contribution by referencing a September 2003 presentation from Washington State and a spreadsheet prepared by the Washington Department of Revenue.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 157

- 461. Further, the EU has opportunistically rejected the DOR's calculations with regard to the B&O tax rate, but accepted its calculations contained in the same exhibit and calculated in the same manner with regard to the preproduction tax credit and the property tax credit. This is true with respect to both the "actual amounts" reported for years 2006 to 2012 and for the forecasted values from 2013 to 2024. The EU apparently does not find the DOR's calculations problematic when they are higher than the EU's estimates.
- 462. The EU's second written submission questions the data underlying the Washington DOR's calculation and asserts that it is more appropriate to rely on Boeing's Current Market Outlook for 2012. The EU implies misleadingly that it is relying directly on Boeing's own commercial projections. This is not the case. The EU relies on the estimates prepared by ITR LLC for purposes of this proceeding.
- Moreover, even from a cursory review of the EU's estimates, it is clear that they are 463. fundamentally flawed. The United States notes the apparent absence of continuity between the EU's two sets of estimates. Despite the fact that the EU's own (albeit inflated) estimates for the years 2007 to 2012 indicate only a gradual increase in the value of the B&O tax rate, the EU asserts it will jump to more than twice the previous year's value (from \$94.4 million in 2012 to \$210.81 million in 2013), and then remain at that same level from 2013 to 2024. 657 This is explained by a fundamental flaw in the EU's analysis prepared by ITR. 658 The ITR report derives an estimate of the value of the Washington B&O tax rate based on its estimates of Boeing's Washington State revenue. The fundamental problem with the ITR's approach lies with its estimate of Boeing's revenue, which is derived based on the simple assumption that the world market for aircraft will double in 20 years. ITR estimates Boeing's total revenue for years 2012 to 2031 and then allocates that total revenue amount evenly over each year of that 20-year span. In other words, ITR ignores that Boeing's revenue would be expected to increase gradually from one year to the next and, instead, treats it as if it will significantly increase in the first year of that span and remain constant thereafter. This results in an allocation of revenue to Boeing in the early years of the 20-year period that would not actually be realized until over a decade later in the latter years of the 20-year period. 659 The effect of ITR's reliance on this misallocation – which is inconsistent with what would be expected in the market, Boeing's past practice, and the EU's own figures for prior years – is that the ITR's estimate of the values of the B&O tax rate reduction are significantly inflated as well.

⁶⁵⁴ See, e.g., EU SWS, paras. 576, 579.

⁶⁵⁵ EU SWS, para. 572.

⁶⁵⁶ EU SWS, para. 572.

⁶⁵⁷ Exhibit EU-38 (revised).

⁶⁵⁸ Exhibit EU-25.

⁶⁵⁹ Under the ITR's approach, its allocation methodology inflates the estimates for early years, but would understate the revenue in later years. However, given that those later years are excluded from the scope of the EU's estimate (concerning years 2013 to 2024), they are not reflected in the EU's figures.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 158

464. Finally, the United States also noted that the EU's estimates were outdated and internally inconsistent. They were outdated because the figures for years 2006 to 2011 were based on the forecast used by the original panel. The EU's response, that its figures for 2012 through 2024 were prepared by ITR on more recent data, is irrelevant. However, with regard to the internal inconsistency, the EU appears to have corrected the error resulting in a decrease in its overall estimate of the value of the B&O tax rate reduction. Nevertheless, the EU's estimate remains significantly inflated for the reasons described above.

2. Measures that were not found to cause adverse effects

- a. Washington State B&O tax credit for preproduction development
- 465. The EU's claim concerning the Washington State B&O tax credit for preproduction development is not properly within the terms of reference of this compliance proceeding, as explained section II.B.8.a of this submission. The original panel found that the tax credit was a specific subsidy to Boeing, but it did not find the tax credit to cause serious prejudice. Therefore, there is no DSB ruling that the Washington State B&O tax credit for preproduction development is inconsistent with the SCM Agreement.
- 466. The Washington State DOR calculations submitted with the U.S. first written submission included the DOR's calculation of the value of the B&O tax credit for preproduction development to Boeing. These values were calculated in the same manner as the values of the B&O tax rate reduction: the values for 2006-2012 were based on actual amounts as reported to the DOR and the values for 2013-2024 were based on the DOR's forecast. Although the EU rejects the DOR's estimates with regard to the B&O tax rate, it accepts the DOR's calculations regarding the tax credit for preproduction development as "the best information available". It is accordingly apparent that the EU's concerns regarding the reliability of the DOR's estimates in regard to the B&O tax rate, discussed above, which were calculated by the DOR in the same manner, are disingenuous.
 - b. Washington State B&O tax credit for property taxes
- 467. The EU's claim concerning the Washington State B&O tax credit for property taxes is not properly within the terms of reference of this compliance proceeding, as explained in section II.B.8.a of this submission. The original panel found that the tax credit was a specific subsidy to

⁶⁶⁰ US FWS, para. 496, note 795.

⁶⁶¹ Exhibit EU-38 (revised).

⁶⁶² US – Large Civil Aircraft (Panel), para. 7.1834.

⁶⁶³ Exhibit USA-264(BCI).

⁶⁶⁴ Exhibit USA-264(BCI).

⁶⁶⁵ EU SWS, paras. 575-577.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 159

Boeing, but it did not find the tax credit to cause serious prejudice. Therefore, there is no DSB ruling that the Washington State B&O tax credit for property taxes is inconsistent with U.S. obligations under the SCM Agreement.

- 468. As described above, the United States submitted the DOR's calculations, including its calculation of the value of the property tax credit to Boeing for 2006-2024. The EU's second written submission indicates that the DOR's calculation should be used as the "best information available" rather than the EU's own initial (lower) estimates because it is a "US admission against interest." As noted above, the EU is playing games with the data by rejecting DOR estimates only in those instances where it serves its interests. The U.S. presentation of data compiled by government personnel who work with those data as part of their normal responsibilities is not an "admission", nor is it "against interest" for the United States to seek to ensure that the Panel bases its conclusions on accurate information. Nor, for that matter, does the United States accept the proposition that DOR becomes more accurate or credible when its calculations yield figures higher than those advanced by the EU.
 - c. Washington State sales and use tax exemptions for computer hardware, software and peripherals
- 469. The EU's claim concerning the Washington State sales and use tax exemptions for computer hardware, software and peripherals is not properly within the terms of reference of this compliance proceeding, as explained above at II.B.8.a. The original panel found that the sales and use tax exemptions to be specific subsidies to Boeing, but it did not find them to cause serious prejudice. 669
- 470. As described above, the United States submitted the DOR's calculations, including its calculation of the value of Washington State sales and use tax exemptions for computer hardware, software, and peripherals. The EU's second written submission raises concerns regarding authentication of Exhibit USA-264, which section III.H.1 shows to be unwarranted.
- 471. The EU also asserts that the U.S. figures do not "comport with the publicly available evidence." But what the EU really means is that they do not comport with the EU's own

⁶⁶⁶ US – Large Civil Aircraft (Panel), para. 7.1834.

⁶⁶⁷ Exhibit USA-264(BCI).

⁶⁶⁸ EU SWS, para. 579.

⁶⁶⁹ US – Large Civil Aircraft (Panel), para. 7.1834.

⁶⁷⁰ Exhibit USA-264(BCI).

⁶⁷¹ EU SWS, para. 586. The EU also complains that the reference to "firm data" in Exhibit USA-264 is unclear. This refers to data provided to the DOR by the taxpayer – in this case, Boeing.

⁶⁷² EU SWS, para. 588.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 160

estimates, because the DOR's estimates of the sales and use tax exemptions are lower than the EU's estimates. Apparently, the EU considers that the DOR's calculations can only be credible if they are higher. As the United States explained in section III.H.1, this should not be a factor in evaluating the credibility of DOR's data.

d. City of Everett B&O tax rate

- 472. The EU's claim concerning the City of Everett B&O tax rate is not properly within the terms of reference of this compliance proceeding, as explained above at section II.B.8.a. The original panel found that the City of Everett B&O tax rate was a specific subsidy, but it was not found to cause serious prejudice.
- 473. The U.S. first written submission demonstrated that the EU's estimate of the value of the City of Everett B&O tax rate reduction was overstated. In particular, the United States submitted information regarding the City of Everett B&O tax revenue from Boeing, including the actual tax revenue from 2006 to 2012, and the projected tax revenue from 2013 to 2023. This data was provided by the City of Everett based on Boeing's actual data and forecasts from the Airline Monitor, an industry journal.
- 474. The EU's second written submission asserts that the U.S. figures should be disregarded because "these are not figures showing the US' position on the correct value of the subsidy". The EU further complains "{i}t is not the role of the European Union, or of the Panel, to make the case for the United States on what these figures precisely indicate about the valuation of the tax benefit in the City of Everett, and how those figures might compare to the EU's figures." The EU's protest reflects an apparent misunderstanding of the EU's own calculations. In the EU's first written submission, the EU explained that it used estimates of the City of Everett's gross revenue for Boeing to calculate the tax savings that would result from the reduction to Boeing's tax rates. As the EU is no doubt aware, the greater the revenue figure, the greater the calculation of the value of the tax savings. Given that the EU's figures for the City of Everett's gross revenue for Boeing are overstated as evidenced by comparing those figures with the actual gross revenue figures provided by the United States, and as noted in the U.S. first written submission of the EU's estimates of the tax savings derived from those figures are

⁶⁷³ EU SWS, para. 588.

⁶⁷⁴ US FWS, paras. 507-508.

⁶⁷⁵ US FWS, para. 507. Exhibit USA-175.

⁶⁷⁶ EU SWS, para. 593.

⁶⁷⁷ EU SWS, para. 593.

⁶⁷⁸ EU FWS, para. 514.

⁶⁷⁹ US FWS, para. 508.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 161

similarly overstated. In other words, under the EU's own model, if the correct data is used, the calculated value falls significantly.

3. Other measures not within the terms of reference

- a. Washington State B&O tax credit for leasehold excise taxes
- 475. The EU's claim concerning the Washington State B&O tax credit for leasehold excise taxes is not properly within the terms of reference of this compliance proceeding, as explained above at section II.B.8.c.
- 476. The U.S. first written submission explained that the value to Boeing's LCA division of the Washington B&O tax credit for leasehold taxes is zero and Boeing does not claim credits for leasehold excise taxes. The United States also explained that the EU's first written submission simply assumed that Boeing claimed the excise tax credit and failed to provide any supporting evidence that Boeing had in fact done so. 681
- 477. The EU now asserts that it met its burden of proof by submitting evidence purportedly showing that Boeing was *eligible* to claim the credit. According to the EU, it is the burden of the United States to introduce evidence demonstrating that Boeing has not *claimed* the credit. This is a misunderstanding of the burden of proof and ignores that it is the EU's burden to establish a *prima facie* case on the basis of evidence and legal argument. Even if the EU could demonstrate that Boeing was eligible to claim the credit which the United States does not concede it would not constitute a *prima facie* showing that Boeing claimed the credit. In fact, Boeing did not.
 - b. Washington State Joint Center for Aerospace Technology Innovation
- 478. The EU's claims concerning the Washington State Joint Center for Aerospace Technology Innovation (JCATI) are not properly within the terms of reference of this compliance proceeding, as explained above at section II.B.8.b. Moreover, the EU has failed to demonstrate that the JCATI activities constitute a specific subsidy to Boeing.
- 479. In its first written submission, the United States explained that the EU had failed to show that the JCATI confers a financial contribution or benefit. The EU initially claimed that the JCATI provides the aerospace industry with "a direct transfer of funds" within the meaning of

⁶⁸⁰ US FWS, para. 510.

⁶⁸¹ US FWS, para. 510.

⁶⁸² EU SWS, para. 582.

⁶⁸³ EU SWS, para. 582.

⁶⁸⁴ US FWS, para. 528.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 162

Article 1.1(a)(1)(i) of the SCM Agreement. In particular, the EU asserted that "Boeing has been awarded \$570,159 worth of grant money". However, the U.S. first written submission noted a basic fact that the EU had overlooked or chosen to ignore: the only eligible applicants for any JCATI awards are the University of Washington, Washington State University, and other public four-year institutions of higher education. 687

- 480. In its second written submission, the EU does not appear to contest this fact. Rather, the EU responds that a subsidy can exist even if the recipient of the financial contribution from the government is different from the recipient of the benefit. The United States does not disagree with that assertion. However, the EU does not conduct an adjusted benefit analysis to assess whether a subsidy has been conferred, and if so the value of the benefit, based on the EU's seeming acknowledgment that, contrary to the assertion in its first written submission, Boeing has not been awarded a grant of \$570,159. Nevertheless, the EU maintains that Boeing received a benefit in that same amount. 689
- 481. The EU thus has failed to show that the JCATI confers a subsidy to Boeing based on the actual facts or correctly valued any benefit. (The EU also claimed that Boeing benefited from the transfer of technologies and other goods services a point which the EU had failed to substantiate with actual evidence but that it was unable to estimate a value for this further provision of goods and services. ⁶⁹⁰)

I. Kansas IRBs

- 482. The United States demonstrated in its first written submission that the City of Wichita is applying its Industrial Revenue Bond ("IRB") program in a manner consistent with the SCM Agreement. ⁶⁹¹ The United States has both withdrawn the subsidy and taken appropriate steps to remove its adverse effects.
- 483. The original panel found that the state and local property tax breaks available through the issuance of IRBs constitute specific subsidies under Articles 1.1 and 2.1(c) of the SCM Agreement. The Appellate Body upheld the original panel's finding of specificity under

⁶⁸⁵ EU FWS, paras. 528-529.

⁶⁸⁶ EU FWS, para. 534.

⁶⁸⁷ US FWS, para. 518.

⁶⁸⁸ EU FWS, para. 598.

⁶⁸⁹ Exhibit EU-38.

 $^{^{690}}$ EU FWS, para. 537 ("The European Union is unable to estimate a value for this further provision of valuable goods and services.").

⁶⁹¹ US FWS, para. 522.

⁶⁹² US FWS, para. 523. US – Large Civil Aircraft (Panel), paras. 7.711, 7.779.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 163

Article 2.1(c), but on the basis that the United States had not provided sufficient evidence to undermine the original panel's assessment that granting 69 percent of IRBs to Boeing and Spirit was disproportionately large. The U.S. first written submission explained that the City of Wichita has not provided any IRBs to Boeing since 2007. Thus, there is no longer any basis to consider that the amount of IRBs issued to Boeing (*i.e.*, zero) is disproportionately large, and it is therefore no longer *de facto* specific under Article 2.1(c).

- 484. The EU appears to misunderstand the U.S. argument. The United States does not assert that the measure has been withdrawn simply because Boeing has not been granted IRBs since 2007. The measure has been withdrawn because IRBs no longer constitute a specific subsidy. A significant portion of the EU's response is simply irrelevant because it addresses the wrong argument. However, even where the EU does address the issue of specificity, it fails to rebut the U.S. demonstration, as described below.
- 485. In regard to specificity, the EU first claims the U.S. assertion that IRBs are no longer specific is wrong because "the United States is defining the subsidy at issue as the issuance of IRBs." That is incorrect. As indicated above and in the U.S. first written submission, the panel and Appellate Body found the subsidies to be the state and local property tax breaks provided through the issuance of IRBs. And, as already explained, the City of Wichita has not issued any IRBs to Boeing since 2007. Although unclear, the EU appears to take issue with the fact that the United States cites the amount of IRBs that have been issued to Boeing since 2007 as evidence that the subsidy is no longer specific. However, the amount of IRBs issued to Boeing (and Spirit) was the basis of the panel and Appellate Body's finding of specificity, as well as the basis for the EU's assertion in its first written submission that the subsidy has not been withdrawn. Therefore the EU's criticism is misplaced.
- 486. The EU also claims that the U.S. assertion regarding the absence of specificity is flawed because it is based on the amount of IRBs issued to Boeing since 2007 (again, zero), instead of

⁶⁹³ US – Large Civil Aircraft (AB), paras. 888-889.

⁶⁹⁴ US FWS, para. 523.

⁶⁹⁵ See EU SWS, paras. 547-551. The EU asserts that the United States has failed to demonstrate the subsidy has been withdrawn because the EU estimates that the value of Boeing of the tax breaks available through the previously issued IRBs will be \$2.3 million in 2013, \$1.5 million in 2014, \$0.7 million in 2015, \$0.3 million in 2016, and \$0.2 million in 2017. EU SWS, para. 549. This indicates that even if the panel were to find that IRBs do still constitute specific subsidies, the amount is minimal and too small to cause adverse effects.

⁶⁹⁶ EU SWS, para. 556.

⁶⁹⁷ US – Large Civil Aircraft (AB), paras. 884-889. In fact, this was based on the information the EU submitted to the panel: "{i}n this dispute, the European Communities submitted to the Panel that Boeing and its successor, Spirit, received approximately 69% of all IRBs granted by the City of Wichita between 1979 and 2005."

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 164

the amount issued to Boeing during the entire life of the program. ⁶⁹⁸ However, as the EU knows (because it quotes the passage), the panel stated that it might not always be appropriate to look at the entire period:

{I}t is arguable that when a subsidy programme has been in operation for a long period of time, such as the IRB programme, aggregating data over the entire life of the subsidy may not always be appropriate. That may be the case where there has been a significant change in the structure of the economy and the importance of the subsidized activities in the economy over the life of the subsidy. 699

Looking at the period from 1979 to 2005, the original panel indicated that there was no evidence before it indicating such a change had occurred in Wichita. However, since that time, there has been a significant change in the structure of the Wichita economy and the importance of LCA manufacturing, which in turn justifies using a more recent period. On this basis, and in light of the fact that the City of Wichita has issued no IRBs to Boeing since 2007, the Panel should conclude that the United States has withdrawn the subsidy.

J. South Carolina Measures

1. Site Lease and Bond-Funded Facilities and Infrastructure

487. The EU fails to establish that the Project Site Lease and the state bond-funded provision of facilities and infrastructure confer a specific subsidy to Boeing. With respect to the Project Site Lease, it was Vought, a private company, and not the government of South Carolina, that provided Boeing the right to use the Project Site through 2041, as part of its asset sale to Boeing. Therefore, the Project Site Lease is not a financial contribution from South Carolina

⁶⁹⁸ EU SWS, para. 557.

⁶⁹⁹ US – Large Civil Aircraft (Panel), para. 7.757.

⁷⁰⁰ US – Large Civil Aircraft (Panel), para. 7.757.

⁷⁰¹ For instance, employment in airplane manufacturing in Wichita dropped to 29,000 at the beginning of 2012 from 42,000 in 2008. *Boeing's Departure Shakes Wichita's Identity as Airplane Capital*, N.Y. Times, Jan. 18, 2012 (Exhibit USA-338). Boeing sold its LCA operations in 2005, and announced in January 2012 that it would close its military aircraft manufacturing facilities. *See id.*

The term "Project Site Lease" is used interchangeably with the term "Ground Sublease," which is the November 19, 2009 amendment of the South Carolina Public Railways ("SCPR") existing sublease with Vought. *Amended and Restated Ground Sublease between Boeing Commercial Airplanes South Carolina, Inc. and South Carolina Public Railways* (Nov. 19, 2009) ("Ground Sublease") (Exhibit EU-471). The Ground Sublease is distinct from a prior "Emerald Ground Sublease" that South Carolina had concluded with Vought. *Ground Sublease between Vought Aircraft Industries, Inc. and South Carolina Public Railways* (Aug. 25, 2006) (Exhibit EU-474).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 165

to Boeing.⁷⁰³ In addition, if examined in isolation (as the EU's claim asks the Panel to do), the Project Site Lease had a [***] to Boeing, and therefore did not confer a benefit.

The EU also fails to establish that the bond-funded provision of facilities and infrastructure under Projects Emerald and Gemini confers a specific subsidy to Boeing. With respect to Project Emerald, as with the Project Site Lease, there is no financial contribution within the meaning of Article 1.1(a)(1) because Vought, rather than any government authority, provided Boeing the right to use the Project Emerald facilities and infrastructure. With respect to Project Gemini, there is no benefit because Boeing adequately remunerated South Carolina. In particular, from 2010 through the third quarter of 2012, Boeing spent approximately [***] on investments in the Project Site, including [***] on real property investment at the Project Site. 704 The EU itself asserts that South Carolina took title to the facilities and infrastructure that Boeing constructed on the Project Site. 705 Thus, according to the EU's own arguments. Boeing gave South Carolina an in-kind contribution of at least [***], only \$270 million of which was defrayed by state bond funding. (The EU does not challenge this \$270 million reimbursement itself as a financial contribution.) ⁷⁰⁶ The EU has not attempted to show that Boeing's significant investment in the Project Site is inadequate remuneration for 30 years' use of the facilities and infrastructure. Indeed, the EU has not even specified what "facilities and infrastructure" are covered by its claims. 707 Furthermore, the EU fails to demonstrate that the provision of bondfunded facilities and infrastructure is a specific subsidy. Therefore, the EU fails to establish a

⁷⁰³ To the extent that South Carolina made any financial contribution to Vought, the EU does not claim that any resulting benefit passed through to Boeing. EU SWS, para. 722 ("the European Union does <u>not</u> claim that Boeing received any benefits prior to completing its acquisition of the entirety of Project Emerald, or that any benefits received by Vought or Global Aeronautica passed through to Boeing.") (emphasis in original).

⁷⁰⁴ Boeing Investment in South Carolina (2010-3Q2012) (Exhibit USA-324(BCI)). In addition, Boeing spent a further [***] during the same period on Boeing's Interior Responsibilities Center, a manufacturing operation which is located near but not on the Project Site.

⁷⁰⁵ EU FWS, paras. 574-575, 702 ("The State of South Carolina maintains title to the facilities and infrastructure constructed with the bond proceeds. . . . The bond-funded facilities and infrastructure all fall under the Category I, indicating that Boeing has only a leasehold interest in these facilities and infrastructure, while the State of South Carolina retains underlying and residual title."). The EU's legal interpretation is not necessarily correct. The Ground Lease states: "All Category I Improvements made with the Leased Premises during the Term shall remain the property of Operator {*i.e.*, South Carolina Public Railways}, *or any assignee or sublessee of Operator* {*e.g.*, Boeing}, as applicable, until expiration or termination of this Agreement, at which time all Category I Improvements shall automatically become the property of Authority." *Ground Lease Agreement between Charleston County Aviation Authority and South Carolina Public Railways* (Aug. 25, 2006) ("*Ground Lease*") (Exhibit EU-473), Section 6.06 (emphasis added).

⁷⁰⁶ See infra, fn. 764.

 $^{^{707}}$ The EU would have to establish that any facilities and infrastructure covered by its claims are not "general infrastructure." See Article 1.1(a)(1)(iii) SCM; US FWS, fn. 902.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 166

 $prima\ facie\ case\ of\ WTO$ -inconsistency with respect to either the Project Site Lease or the bond-funded provision of facilities and infrastructure. ⁷⁰⁸

a. Key Facts

i. Project Emerald

489. In 2004, Vought and Global Aeronautica ("GA," a joint venture between Vought and the Italian company Alenia) established Project Emerald to set up manufacturing facilities in North Charleston, on the same 240-acre parcel of land near the Charleston International Airport (the "Project Site") that would eventually be the site of Boeing's manufacturing facilities. The Project Site was scarred with man-made defects, as it had been the site of a former phosphate mine. ⁷⁰⁹ The Charleston County Aviation Authority ("CCAA") had [***] until Vought and GA agreed to locate their manufacturing facilities at the Project Site, as part of a broader deal with South Carolina – the Project Emerald Agreement – that provided state bond funding and other incentives to Vought and GA. ⁷¹¹

490. As outlined in the Project Emerald Agreement – and later finalized in ground lease and sublease agreements with the CCAA and South Carolina Public Railways ("SCPR") on August 25, 2006⁷¹² – Vought had the right to lease the Project Site and all buildings on it for \$1 per year through 2041, provided that certain investment and employment thresholds were met. 713 In

⁷⁰⁸ The EU expressly disclaims that it is challenging the WTO-consistency of the bond proceeds themselves. *See* EU SWS, para. 729 ("The European Union has never claimed that the bond proceeds constitute the financial contribution."). Thus, the EU appears to have abandoned an earlier argument in the alternative, which it alluded to in its first written submission but did not explain. *See* EU FWS, paras. 577.

⁷⁰⁹ Cite US FWS; Exhibit USA-214(BCI).

⁷¹⁰ Letter from [***].

The Confidential Initial Site Development and Incentive Agreement between Vought Aircraft Industries, Inc. (on behalf of itself and the two entities that comprise Project Emerald), the South Carolina Department of Commerce, South Carolina Public Railways, Charleston County, and the Charleston County Airport District (Nov. 29, 2004) ("Project Emerald Agreement"), Art. 5.3 (Exhibit EU-560). Specifically, the lease term lasted until December 31, 2021, but Vought had four five-year options to extend the lease rates. *Id.* The rental rate was contingent on Vought's "meeting and maintaining the employment and investment levels" set forth in the agreement. *Id.*

⁷¹² Ground Lease Agreement between Charleston County Aviation Authority and South Carolina Public Railways (Aug. 25, 2006) ("Ground Lease") (Exhibit EU-473); Emerald Ground Sublease (Exhibit EU-474).

⁷¹³ Project Emerald Agreement, Arts. 5.3, 6, Exhibit B (Exhibit EU-560). The lease term lasted until December 1, 2021, but Vought had four five-year options to extend the lease rates. *Ibid.* The rental rate was contingent on Vought's "meeting and maintaining the employment and investment levels" set forth in the agreement. *Ibid.*

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 167

addition, under the terms of the lease, all "Category I improvements" made during the lease term would "remain the property of Operator {*i.e.*, SCPR, the lessee}, or any assignee or sublessee of Operator, as applicable, until expiration or termination of the Agreement {in 2041 at the latest}, at which time all Category I Improvements shall automatically become the property of the Authority." The lease defines Category I improvements to include "Improvements encompassing building locations, heights, elevations, materials used in the exterior construction, landscaping and any other exteriors." ⁷¹⁵

- 491. In 2005 and 2006, Vought remediated a portion of the Project Site and constructed manufacturing and employee facilities for itself and GA on that portion. The costs of construction were partially offset with \$120 million in State economic development bonds, as provided for under the Project Emerald Agreement. The manufacturing facilities at the Project Site were for the aft (Vought) and mid body (GA) portions of the Boeing 787. Vought also constructed several other buildings and structures, such as a "HUB" building for employee services and a "Component Paint" building to paint the subassemblies manufactured at the Project Site. Vought and GA then conducted manufacturing activities at the Project Site.
- 492. In a series of transactions in 2008 and 2009, Boeing purchased Vought and GA's South Carolina operations for more than \$1 billion. On July 6, 2009, as the final step in Boeing's acquisition of these operations, Boeing entered into an asset purchase transaction with Vought. Under the asset purchase agreement, Boeing acquired Vought's interest in "all assets, properties and rights of every kind (whether tangible or intangible), including real and personal property," in South Carolina. Accordingly, on July 30, 2009, Vought assigned its sublease for the

⁷¹⁴ Ground Lease Agreement Between Charleston County Aviation Authority and South Carolina Public Railways (Aug. 25, 2006) ("Ground Lease"), Section 6.06(A) (Exhibit EU-473).

⁷¹⁵ Ground Lease, Section 1.01(F) (Exhibit EU-473).

⁷¹⁶ See Project Emerald Reimbursement Document (Exhibit USA13-288(BCI)).

⁷¹⁷ See Project Emerald Agreement, Section II.

⁷¹⁸ 2009 Annual Report, Boeing, p. 67 (Exhibit USA-265).

⁷¹⁹ Asset Purchase Agreement By and Between Vought Aircraft Industries, Inc. and BCACSC, Inc. (July 6, 2009), Section 2.1 (Exhibit USA-325).

⁷²⁰ Asset Purchase Agreement By and Between Vought Aircraft Industries, Inc. and BCACSC, Inc. (July 6, 2009), Section 2.1 (Exhibit USA-325). The EU argues that Vought transferred its land use rights to Boeing through a separate legal instrument for \$10. EU SWS, para. 726. However, the price of the land transfer is irrelevant, since the EU does not claim that any benefit passed through from Vought to Boeing. EU SWS, para. 722. In any event, the EU is incorrect to allege that the price of the land transfer was \$10, since it took place in July 2009 as one element of the broader asset purchase agreement between Vought and Boeing.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 168

Project Site to Boeing. Thus, as of July 30, 2009, Boeing had acquired from Vought the rights to use the Project Site through December 31, 2041, on the same terms as Vought had.

ii. Project Gemini

- 493. On October 28, 2009, Boeing announced its decision to build a second final assembly line for the 787 in Charleston, South Carolina. Press reports indicated that Boeing's new assembly line would be at the same Project Site that housed the former Vought facilities, now in Boeing's possession. The new facilities were planned to be sited on the then-unimproved and still-defective portion of the Project Site.
- 494. On November 19, 2009, SCPR amended its existing sublease with Vought so as to eliminate Vought's role in leasing the Project Site, providing Boeing with a direct sublease from the State. This amendment did not alter the geographical or temporal scope of Boeing's existing land use rights with respect to the Project Site, which it had purchased from Vought. In addition, this amendment did not alter the definition or title of Category I improvements to the Project Site.
- 495. On January 1, 2010, Boeing and the South Carolina Department of Commerce ("SCDOC"), acting on behalf of the State of South Carolina, entered into the Project Gemini Agreement. This agreement was concluded in light of Boeing's plans to "establish{} a second

⁷²¹ Assignment and Assumption of Vought Sublease between Vought Aircraft Industries, Inc. and Boeing Commercial Airplanes South Carolina, Inc. (July 30, 2009) (Exhibit EU-476).

⁷²² Boeing later entered into an amended and restated Ground Sublease on November 19, 2009, formalizing Boeing's role as a successor-in-interest to Vought. The South Carolina Department of Commerce sought and received prior approval from the State Budget and Control Board Office of General Services for the amendment to the Ground Lease between the CCAA and SCPR and to the amended and restated Ground Sublease.

⁷²³ Boeing Picks Charleston For New 787 Line, Seattle Times (Oct. 28, 2009) (Exhibit USA-326).

⁷²⁴ Boeing Picks Charleston For New 787 Line, Seattle Times (Oct. 28, 2009) (Exhibit USA-326).

⁷²⁵ *See* EU FWS, para. 551.

⁷²⁶ See Ground Sublease, para. 1 (Exhibit EU-471) (referring to the parties' intent that "by Sublessor's executing this Amended and Restated Sublease, it shall assume no additional or greater liabilities or obligations than those that existed prior to the Assignment and prior to the Effective Date hereof."). The main purpose of the amendment was apparently to impose additional penalties on Boeing if it fails to meet certain investment and employment thresholds. *Id.*, Exhibit B. However, these "Emerald Additional Rent Provisions" were subsequently superseded by increased investment and employment requirements imposed on Boeing in connection with Project Gemini. Project Gemini Agreement, Section IV.B.

⁷²⁷ Project Gemini Agreement Between The Boeing Company and the State of South Carolina (Jan. 1, 2010) ("Project Gemini Agreement") (Exhibit EU-467).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 169

assembly line facility as well as related facilities and infrastructure to support Boeing's 787 Program at the site where Boeing currently operates" (*i.e.*, the Project Site). Under the agreement, SCDOC agreed to seek the approval and issuance of \$220 million in economic development bonds and \$50 million in air hub bonds for "infrastructure" at the Project Site, including land remediation, site preparation, and certain construction costs. In exchange, Boeing committed to an investment of \$750 million in the state of South Carolina, as well as to "employ or cause to be employed in the State 6,000 employees".

- 496. From 2010 through the third quarter of 2012, Boeing's total investment in the Project Site was [***], including [***] that Boeing spent on real property investments in the Project Site, and a further [***] that Boeing spent on tooling, equipment, and other personal property to be used at the Project Site. State bond funding defrayed \$270 million of these expenditures.
 - b. The EU fails to establish that the lease of the Project Site and the alleged provision of facilities and infrastructure associated with Projects Emerald and Gemini confer a specific subsidy to Boeing.
- 497. The EU challenges three alleged provisions of facilities and infrastructure as subsidies to Boeing that violate the U.S. compliance obligations in this dispute: (i) South Carolina's alleged provision to Boeing of "a lease of government-owned land for its 787-related manufacturing facilities," (ii) South Carolina's alleged provision of "facilities and infrastructure . . . to Boeing for its 787 fuselage fabrication and integration complex," in connection with Project Emerald; and (iii) South Carolina's alleged "provision of facilities and infrastructure" to Boeing, which it sometimes describes as "Boeing's 787 Final Assembly and Delivery Facility," in connection with Project Gemini. These claims rest on conceptual and factual errors on the EU's part. Accordingly, even if the EU's claims regarding these measures were within the Panel's terms of reference, they still fail.

⁷²⁸ Project Gemini Agreement, p. 1 (Exhibit EU-467).

⁷²⁹ Project Gemini Agreement, p. 3 (Exhibit EU-467); *see* S.C. Code § 11-41-30(3) (defining "infrastructure") (Exhibit EU-477).

⁷³⁰ Project Gemini Agreement, p. 4 (Exhibit EU-467).

⁷³¹ Boeing Investment in South Carolina (2010-3Q2012) (Exhibit USA-324(BCI)). This [***] figure also includes [***] which Boeing spent during the same period on its [***], which is located near but not on the Project Site. *See ibid.*

⁷³² EU FWS, para. 551.

⁷³³ EU SWS, para. 723.

⁷³⁴ EU FWS, para. 580.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 170

i. Project Site Lease

- (A) The EU claim related to the Project Site Lease
- 498. The claims set out in the EU second written submission differ in important respects from those set out in the first written submission, so it is useful to review the current claims in detail before proceeding to the analysis. The EU frames the challenged measure as South Carolina's provision of the Project Site land to Boeing for less than adequate remuneration. The EU claims that "{t}he lease of the project site to Boeing provides a financial contribution by a government under the *SCM Agreement*. The State of South Carolina allows Boeing exclusive use of government-owned land at Charleston International Airport for its 787 manufacturing facilities in exchange for a nominal fee."
- 499. The EU does not indicate the starting point for the alleged financial contribution. In particular, the EU does not specify whether it considers that the financial contribution occurred on July 30, 2009, when Boeing assumed the sublease from Vought, or on November 19, 2009, when South Carolina amended the sublease to eliminate Vought's role. However, the EU implicitly denies the occurrence of any relevant financial contribution prior to July 30, 2009, because it states that "the European Union does <u>not</u> claim that Boeing received any benefits prior to completing its acquisition of the entirety of Project Emerald, or that any benefits received by Vought or GA passed through to Boeing." ⁷³⁷
- 500. The EU alleges that the financial contribution from the Project Site Lease results in a benefit to Boeing, because Boeing inadequately remunerates South Carolina for the land use rights that it receives pursuant to the Ground Sublease. 738
 - (B) The EU fails to establish that the "lease of the project site to Boeing" provides a financial contribution to Boeing.
- 501. South Carolina provided its land use rights for the Project Site in 2004 and 2006 to Vought, through the Project Emerald Agreement and the ground sublease with Vought. These legal instruments gave Vought the right to use the Project Site, and the improvements on it, through December 31, 2041. Vought then autonomously assigned these rights to Boeing as part of Boeing's arm's length, fair market value purchase of Vought's South Carolina operations

⁷³⁵ The United States understands that the EU does not allege that the Project Site Lease provides Boeing with subsidized facilities and infrastructure, since the EU addresses this claim separately.

⁷³⁶ EU FWS, para. 557.

⁷³⁷ EU SWS, para. 722 (emphasis in original).

⁷³⁸ EU SWS, para. 617. The EU did not articulate this "inadequate remuneration" argument in its first written submission.

⁷³⁹ Project Emerald Agreement, Art. 5.3 (Exhibit EU-560).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 171

in July 2009 (as well as Boeing's purchase of GA in 2008). Accordingly, Boeing obtained the right to use the Project Site and the improvements on it from Vought, a private company, not the Government of South Carolina, and therefore Boeing received no "financial contribution by a government under the *SCM Agreement*," as the EU alleges. 741

- 502. Indeed, South Carolina's only role in this private-party transfer of land use rights was its after-the-fact, primarily ministerial November 19, 2009 Ground Sublease, which formalized Boeing's role as a successor-in-interest to Vought. By that point, Boeing had already completed the purchase of Vought's South Carolina operations approximately four months earlier. Moreover, the EU itself does not assert that the Ground Sublease expanded Boeing's property use rights in any relevant way, nor does the United States believe that it did. The substitute of the substi
- 503. Consequently, the Project Site Lease did not give Boeing anything that it did not already have by virtue of its private dealings with Vought. In addition, as mentioned above, the EU is not claiming that any benefit passed through from Vought to Boeing, and indeed it has failed to provide the affirmative evidence that would be necessary to show pass-through. Consequently, the EU fails to establish that any relevant "financial contribution by a government under the *SCM Agreement*" occurred with respect to the Project Site Lease.
 - (C) The EU fails to establish that Boeing's remuneration for the Project Site Lease, even if it were a financial contribution to Boeing, is inadequate.
- 504. The United States demonstrated in the first written submission that the Project Site Lease had a [***] to Boeing, if examined in isolation. In particular, Boeing[***]. Together, these costs to Boeing exceed the value of the land. Therefore, if examined in isolation (as the EU asks the Panel to do), the Project Site Lease confers no benefit to Boeing, even if *arguendo* it constituted a financial contribution to Boeing.

⁷⁴⁰ See US FWS, paras. 550-552.

⁷⁴¹ EU FWS, para. 557.

⁷⁴² SCDOC sought and received prior approval from the State Budget and Control Board Office of General Services for the amendment to the Ground Lease between the CCAA and SCDPR and to the amended and restated Ground Sublease between SCDPR and Boeing.

⁷⁴³ See EU FWS, para. 554. Indeed, by taking on the Ground Sublease, Boeing incurred additional obligations to meet certain investment and employment thresholds. Ground Sublease, Exhibit B.

⁷⁴⁴ See supra, fn. 737 & accompanying text.

⁷⁴⁵ See US FWS, para. 557. The EU does not contest this amount.

 $^{^{746}}$ No industrial land of comparable size in Charleston County has sold for more than \$75,000 per acre in recent years.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 172

The EU responds by asserting that it is "inconceivable" that Boeing would have entered 505. into the Project Site Lease if the U.S. argument were correct. 747 In fact, however, it is quite conceivable that one party would take a loss on one aspect of a transaction if it is part of an overall arrangement that is advantageous to it. (Note that the EU does not challenge this overall arrangement itself as a subsidy.) For example, private parties agree to lease or purchase socalled "negative cash value" brownfield (i.e., environmental cleanup) sites, as a result of government enticements to develop the land and/or defray environmental costs and liabilities. 748 The Project Site is similar to brownfields in that it contained significant man-made defects that were costly to remediate. Therefore, the EU's argument is misinformed. Indeed, in this case, Boeing assumed the sublease even though the Project Site land had a consistency of pudding, and the mining activity left high ridges and deep troughs. As a result of these defects, the land had not been used since the mining activity last took place in the early 1900's. To use the land, Boeing had to clear the site, muck it out to a reported depth of six feet and backfill with suitable soil to support buildings and improvements. The resulting land remediation costs were significant, and Boeing would not have incurred them if it had chosen a different site for its second 787 final assembly line.

506. The EU also criticizes [***] the U.S. valuation of the Project Site by pointing out that they disagree as to whether the Project Site was worth [***]. However, a divergence in [***] merely reflects the [***] independence, and in any case the divergence between them is small. Moreover, [***] contradict the EU's unsupported valuation of the Project Site at \$150.03 million, which would make it the most expensive piece of land in North Charleston. ⁷⁵¹

507. Accordingly, the EU fails to undermine the original U.S. conclusion that the Project Site Lease, if examined in isolation, has a [***] to Boeing, and that Boeing's actual remuneration to South Carolina of \$1 per year is more than adequate. 752

⁷⁴⁷ EU SWS, para. 620.

⁷⁴⁸ See, e.g., The Basics of Brownfield Redevelopment: A Guide for Local Governments in British Columbia, p. 5 (Exhibit USA-327) (noting that "most brownfield sites are either neutral or negative cash value sites.").

⁷⁴⁹ *See* US FWS, para. 555.

⁷⁵⁰ See US FWS, para. 556.

⁷⁵¹ Exhibit EU-39; see also EU SWS, para. 615.

As explained above, the Project Site and the provision of facilities and infrastructure pursuant to Projects Emerald and Gemini are not within this Panel's terms of reference. In addition, none of these measures confers a benefit to Boeing. However, should the Panel find otherwise, then the [***] of the Project Site Lease should offset any putative benefit conferred to Boeing by the provision of facilities and infrastructure.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 173

(D) Specificity

- 508. The EU claims that the Project Site Lease is specific to Boeing, based on its perennial confusion between the *identification* of an alleged subsidy recipient and a *limitation on access* to the recipient (or the class of enterprises to which it belongs). In particular, the EU concludes that because "the project site lease was entered into with Boeing alone" and because "CCAA consented to the sublease," CCAA "explicitly limited access to the subsidy to certain enterprises." However, none of this information indicates that CCAA or any other South Carolina entity restricted access to the project site lease, or to other similar measures, from parties other than Boeing. Therefore, the EU fails to demonstrate that the measure is specific within the meaning of Article 2.1(a).
- 509. In addition, the EU claims that the Project Site Lease is *de facto* specific, based on its misleading assertion that "it has been more than 10 years since *South Carolina* has entered into any other leases or subleases . . . for nominal value." However, the EU neglects to mention that political subdivisions of South Carolina, including Charleston County (through CCAA), "routinely provide nominal leases of publicly owned property." Thus, contrary to the EU's assertions, the Project Site Lease is part of a broader program to provide site leases to industrial lessees in exchange for nominal lease payments, and the EU has not attempted to demonstrate that this program is specific within the meaning of Article 2.1(c). Therefore, the EU fails to establish a *prima facie* case of either *de jure* or *de facto* specificity.
 - ii. South Carolina's provision of bond-funded facilities and infrastructure in connection with Project Gemini and Project Emerald does not confer a specific subsidy to Boeing.
 - (A) The EU claim related to the provision of bond-funded facilities and infrastructure at the Project Site
- 510. The claims set out in the EU second written submission differ in important respects from those set out in the first written submission, so it is useful to review the current claims in detail before proceeding to the analysis. The EU frames the challenged measures as the ongoing provision of State-owned, bond-funded facilities and infrastructure to Boeing, for less than

⁷⁵³ EU SWS, para. 630.

⁷⁵⁴ EU SWS, para. 630.

⁷⁵⁵ EU SWS, para. 631 (emphasis added).

⁷⁵⁶ Response of the United States to the Panel's Request for Information Pursuant to Article 13 of the DSU, para. 153.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 174

adequate remuneration.⁷⁵⁷ With respect to Project Emerald, the EU challenges the provision of "facilities and infrastructure . . . to Boeing for its 787 fuselage fabrication and integration complex."⁷⁵⁸ With respect to Project Gemini, the EU argues that South Carolina provides "facilities and infrastructure for Boeing's 787 Final Assembly and Delivery Facility."⁷⁵⁹

- 511. The EU second written submission clarifies that these two sets of claims are the same, except that they cover different "facilities and infrastructure." However, the EU does not specify which facilities and infrastructure it considers that its claims cover. ⁷⁶¹
- 512. For the financial contribution, the EU alleges incorrectly, as discussed below that South Carolina constructed and acquired the facilities and infrastructure in question, assuming and "retain{ing} underlying and residual title" to them. The EU's view, South Carolina then provides these facilities and infrastructure to Boeing on an ongoing basis, essentially playing the role of a lessor of facilities and infrastructure. The EU claims that this provision of already-constructed facilities and infrastructure to Boeing is a provision of goods or services within the

⁷⁵⁷ With respect to the EU's assertion that South Carolina owns the facilities and infrastructure in question, *see* EU FWS, para. 575 ("The bond-funded facilities and infrastructure all fall under the Category I, indicating that Boeing has only a leasehold interest in these facilities and infrastructure, while the State of South Carolina retains underlying and residual title."); *ibid.*, para. 702.

⁷⁵⁸ EU SWS, para. 723.

⁷⁵⁹ EU SWS, para. 633.

⁷⁶⁰ See EU SWS, paras. 724-725 (explaining that both sets of measures challenge South Carolina-constructed "facilities and infrastructure, funded by the proceeds of state general obligation bonds, which are currently being provided to Boeing for the duration of its project site lease{}", and accusing the United States of improperly construing the two sets of claims differently).

Thus, the EU claims do not cover many buildings and infrastructure on the Project Site, such as the Component Paint Building, the Site Support Buildings, the Welcome Center, the Flight Line, the HUB buildings, and all other facilities and infrastructure at the Project Site. Furthermore, construction of the Delivery Center was not funded with the proceeds of State bonds. *See* USA13-287(BCI). Therefore, the only "facilities and infrastructure" covered by the EU's claim related to Project Gemini is the Final Assembly Building.

⁷⁶² EU FWS, para. 575, 702.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 175

meaning of Article 1.1(a)(1)(iii) SCM.⁷⁶³ In its second written submission, the EU states that it is *not* claiming that the provision of bond proceeds is itself a financial contribution.⁷⁶⁴

- 513. The EU claims that this provision of facilities and infrastructure confers a benefit to Boeing because Boeing inadequately remunerates South Carolina for the "value that Boeing receives from its use of the facilities and infrastructure in each year." The EU asserts that the actual amount of remuneration from Boeing to South Carolina is "absolutely nothing." The EU argues that the amount of remuneration due to South Carolina is more than \$400 million from 2011 to 2035. The EU states that it is not asserting that any subsidy benefit to Vought and/or GA passed through to Boeing.
 - (B) The EU fails to demonstrate that South Carolina provides Project Emerald-related bond-funded facilities and infrastructure to Boeing.
- 514. Vought not South Carolina constructed the facilities and infrastructure related to Project Emerald, and then sold its right to use the facilities and infrastructure to Boeing as part of the 2008-2009 transactions with Boeing, including the July 6, 2009 asset purchase agreement. Boeing obtained this right through its own private dealings. Consequently, there is no basis for the EU to argue that South Carolina provides (or provided) anything to Boeing in relation to facilities and infrastructure for the "787 fuselage fabrication and integration complex."

⁷⁶³ EU SWS, para. 729 ("The European Union has never claimed that the bond proceeds constitute the financial contribution. Indeed in any circumstance involving a provision of goods, the goods will have been constructed or acquired before they are provided."); *ibid.*, paras. 633, 723.

⁷⁶⁴ EU SWS, para. 729 ("The European Union has never claimed that the bond proceeds constitute the financial contribution."); *see also id.*, para. 725. The EU also confirms that there is no difference between the EU legal theories with respect to the provision of State bond-funded facilities and infrastructure for Project Emerald and Gemini, other than the particular facilities and infrastructure encompassed by each claim. *See id.*, paras. 724-725 (criticizing the United States for supposedly interpreting the two EU claims differently, and affirming that the EU intended for them to mirror each other). Accordingly, the EU now disclaims its argument in the alternative at paragraph 577 of its first written submission.

⁷⁶⁵ EU SWS, paras. 636-637. The EU did not articulate this "inadequate remuneration" argument in its first written submission.

⁷⁶⁶ EU SWS, para. 637 (emphasis removed).

⁷⁶⁷ See EU SWS, para. 636. Oddly, the EU arrives at this figure by a series of calculations based on the \$270 million figure, which it explicitly states is not a financial contribution leading to a benefit that is being challenged in this dispute. See Exhibit EU-39. The EU has not attempted to justify this methodology.

⁷⁶⁸ EU SWS, para. 722 ("the European Union does <u>not</u> claim that Boeing received any benefits prior to completing its acquisition of the entirety of Project Emerald, or that any benefits received by Vought or Global Aeronautica passed through to Boeing.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 176

- 515. As discussed above, Boeing acquired the Project Emerald facilities and infrastructure from Vought by purchasing GA from Vought and Alenia in 2008, and by purchasing Vought's assets in 2009. The Vought asset purchase agreement included a "North Charleston Sublease Assumption" and a "GA Sublease Assumption" transferring Vought's and GA's real property interests in the Project Site to Boeing. South Carolina was not a party to this transaction, and Boeing would have enjoyed the right to use the Project Site and the buildings on it even if it had never entered into the Project Gemini Agreement. Consequently, Boeing's use of bond-funded facilities and infrastructure constructed in connection with Project Emerald does not result from any financial contribution.
- 516. The EU's error may be due in part to its mistaken belief that "South Carolina constructed facilities and infrastructure, funded by the proceeds of state general obligation bonds." However, the EU does not present any evidence to support this view. As mentioned above, the documents provided in response to the Panel's Article 13 request show that Vought and Boeing not South Carolina constructed the facilities and infrastructure at the Project Site. This error appears to be yet another instance of the EU ignoring the very documents it urged the Panel to request from the United States.
- 517. The United States does not dispute that South Carolina made a financial contribution to Vought. This, however, is not the financial contribution challenged by the EU. Furthermore, the EU does not claim that any benefit possibly conferred to Vought passed through to Boeing. Therefore, the fact that the 2008-2009 Vought acquisition was not a financial contribution fully rebuts the EU claim that the resulting provision of the "787 fuselage fabrication and integration complex" confers a subsidy to Boeing.
 - (C) The EU fails to establish that the provision of Project Emerald- and Project Gemini-related bond-funded facilities and infrastructure confers a benefit to Boeing.
- 518. The EU alleges that South Carolina gives Boeing the free use of certain facilities and infrastructure on the Project Site. However, the EU ignores the fact that Boeing spent [***] of its own money on Category I improvements, to which, according to the EU, South Carolina

⁷⁶⁹ US FWS, paras. 550-552.

⁷⁷⁰ Asset Purchase Agreement By and Between Vought Aircraft Industries, Inc. and BCACSC, Inc. (July 6, 2009), Section 9.1(e)(x) and (e)(xi) (Exhibit USA-325).

⁷⁷¹ EU SWS, para. 724 (emphasis added).

⁷⁷² EU SWS, para. 722 ("the European Union does <u>not</u> claim that Boeing received any benefits prior to completing its acquisition of the entirety of Project Emerald, or that any benefits received by Vought or Global Aeronautica passed through to Boeing.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 177

holds "underlying and residual title." As explained above, Boeing's investment in the Project Site (*i.e.* excluding its investments elsewhere in South Carolina) totaled [***] from 2010 to the third quarter of 2012, including [***]. State bond funding (which the EU is not challenging as a financial contribution) defrayed only \$270 million of these expenditures. Thus, Boeing remunerated South Carolina amply, and the EU fails to show that this remuneration is inadequate for the temporary use of the Project Gemini facilities and infrastructure. ⁷⁷⁴

- 519. Indeed, the EU fails to put forward any benchmark for the alleged subsidy whatsoever. As the United States explained in its first written submission, such a benchmark would have to reflect the market price for renting facilities and infrastructure of a similar class (*e.g.*, industrial, office, etc.) and square footage as the actual facilities and infrastructure that are properly covered by the EU claims, and are not "general infrastructure" within the meaning of Article 1.1(a)(1)(iii). 775
- 520. In addition, the EU fails to establish a *prima facie* case with respect to its parallel claim for Project Emerald. As explained above, this measure does not confer any financial contribution to Boeing, and therefore it confers no benefit. Furthermore, as with Project Gemini, the EU fails to account for any contribution by Vought to South Carolina as part of Project Emerald, and it fails to put forward a proper benchmark. Therefore, even if there were any relevant financial contribution in connection with the Project Emerald-related provision of facilities and infrastructure which there is not, because the EU does not claim that any benefit

⁷⁷³ See EU FWS, paras. 575, 702. As noted above, the Ground Lease itself states: "All Category I Improvements made with the Leased Premises during the Term shall remain the property of Operator {i.e., South Carolina Public Railways}, or any assignee or sublessee of Operator {i.e., Boeing}, as applicable, until expiration or termination of this Agreement, at which time all Category I Improvements shall automatically become the property of Authority." *Ground Lease* (Exhibit EU-473), Section 6.06 (emphasis added).}

⁷⁷⁴ Indeed, the EU indicates that its benefit argument with respect to the Project Gemini facilities and infrastructure only succeeds if the EU is able to show that the remuneration to South Carolina is "absolutely nothing." *See* EU SWS, para. 637 (emphasis removed). The United States notes that the EU claims to rely upon Boeing's own depreciation methods to estimate the value of project property upon termination of the lease. EU SWS, para. 625. In fact, the EU inserts its own unfounded assumptions into the depreciation method, including the notion that Boeing depreciates new buildings and land improvements over a period that is shorter than 40 years. *Id*.

⁷⁷⁵ In this regard, the EU asserts that the United States "ignores the fact that the facilities and infrastructure were tailor-made to Boeing's specifications and, thus, would not have been available on the commercial market." EU SWS, para. 637. However, the EU fails to state which features of the facilities and infrastructure in question allegedly make them "tailor made" to Boeing, and/or unusable by a third party. Indeed, facilities like the Final Assembly Building – which is essentially a large shed – could be used by a variety of industrial lessees. Other buildings on the Project Site are similarly amenable to being used for manufacturing, office space, employee amenities, storage, utilities, etc. Thus, the United States disagrees that the facilities and infrastructure in question are "tailor-made" for Boeing in any relevant way.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 178

passed through from Vought to Boeing ⁷⁷⁶ – the EU still fails to establish that any benefit to Boeing was thereby conferred.

- 521. Accordingly, the EU fails to undermine the original U.S. conclusion that the Project Site Lease, if examined in isolation, has a [***] to Boeing. The EU also fails to propose any valid benchmark for assessing whether Boeing's actual remuneration to South Carolina is adequate. Such a benchmark would have to be based on land with characteristics similar to those of the actual project site, such as land that is equally distressed. In addition, the EU's benchmark would have to take into account any potential increase in the value of surrounding land owned by the State that might have accrued to South Carolina and/or the Charleston County Aviation Authority as a result of Boeing's substantial investment in the Project Site.
- 522. The absence of any benefit in relation to Projects Emerald and Gemini is also confirmed by the [***] to Boeing of the Project Site Lease. Accordingly, the EU fails to establish a *prima facie* case of WTO-inconsistency with respect to the provision of bond-funded facilities and infrastructure.
 - (D) The EU fails to demonstrate that the alleged provision of facilities and infrastructure to Boeing in connection with Project Emerald and Project Gemini is specific under Article 2.1 SCM.
- 523. The EU continues to assert that the provision of bond-funded facilities and infrastructure to Boeing is specific to Boeing or the aeronautical industry but this assertion is contradicted by the facts. The South Carolina laws authorizing the issuance of state bonds for economic development do not contain any explicit limitation on access to the aeronautical industry, and the EU fails to quote any provision of law that would suggest otherwise. Moreover, many public and private entities outside the aeronautical industry have received South Carolina state bond funding to defray the cost of high-investment, job-creating infrastructure projects, including BMW (the German auto manufacturer), Bridgestone (a Japan-based tire manufacturer), Continental Tire, First Quality Tissue (a U.S.-based tissue manufacturer), the City of Greenville, Trident Technical College, the City of Myrtle Beach, and others. The EU fails to address this fact, instead attempting to distort the analytical framework to the point where South Carolina bond money has flowed only to one recipient outside the aeronautical industry (*i.e.*, BMW). Even if this premise were valid which the EU's own footnotes confirm not to be the case 780 the EU nonetheless fails to articulate how it relates to the factors discussed at Article 2.1 of the

⁷⁷⁸ See US FWS, paras. 530, 534; EU FWS, note 1377.

⁷⁷⁶ EU SWS, para. 722.; US FWS, paras. 546-552.

⁷⁷⁷ *See supra*, n. 752.

⁷⁷⁹ See EU SWS, para. 642 & note 1064; see also EU FWS, note 1377.

 $^{^{780}}$ See EU SWS, para. 642 & note 1064; see also EU FWS, note 1377.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 179

SCM Agreement. Therefore, the EU fails to establish a *prima facie* case of either *de jure* or *de facto* specificity with respect to the alleged provision of bond-funded facilities and infrastructure to Boeing.

South Carolina law contains no explicit limitation on access to bond-funded facilities and infrastructure within the meaning of Article 2.1(a) SCM.

- 524. The EU claims that the alleged provision of facilities and infrastructure to Boeing is *de jure* specific for two reasons: (i) the State Budget and Control Board identified Boeing when it issued economic development bonds ("EDBs") and air hub bonds ("AHBs") to partially defray the cost of Project Gemini, ⁷⁸¹ and (ii) "the statutory provisions pursuant to which the economic development bonds and air hub bonds were issued {supposedly} contain explicitly limitations to certain enterprises." Neither argument is valid.
- 525. First, by identifying Boeing as the recipient of funds raised through State bonds, the SBCB did not "explicitly limit{} access" to such funds to Boeing within the meaning of Article 1.1(a) of the SCM Agreement. This is yet another instance where the EU incorrectly equates *identification* of the recipient of an alleged subsidy, with a *limitation on access* to the alleged subsidy program. Moreover, as explained above, many public and private entities outside the aeronautical industry have received state bond funding to partially defray the cost of facilities and infrastructure. Therefore, the alleged subsidy is not explicitly limited to the aeronautical industry.
- 526. Second, the EU mischaracterizes South Carolina law in asserting that there is a "statutory provision pursuant to which the economic development bonds and air hub bonds were issued" containing an explicit limitation on access to certain enterprises. The legislation authorizing economic development bonds, which like numerous other South Carolina measures is designed to encourage new investment and job creation, provides for the issuance of such bonds to defray infrastructure costs incurred by any business or industry certified as meeting minimum statutory investment and job criteria. Similarly, the statute authorizing air hub bonds is not limited to any particular enterprise, but was enacted by South Carolina for the express purpose of offsetting costs of qualifying air carrier hub terminal facilities in the same way that the State may authorize state highway bonds for road construction or state institution bonds to fund construction of facilities for state four-year colleges and universities.

⁷⁸¹ See EU SWS, para. 639; EU FWS, para. 584 & note 1369.

⁷⁸² EU SWS, para. 639. Even if correct, this argument would fail to establish that the alleged provision of facilities and infrastructure to Boeing in connection with bonds issued for Project Emerald is specific.

⁷⁸³ EU SWS, para. 639.

⁷⁸⁴ See S.C. Code, Chapter 41, Title 11 (Exhibit EU-477)

⁷⁸⁵ See S.C. Code §§ 55-11-500, -505 & 55-11-520 (Exhibit USA-478).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 180

As originally enacted, the State General Obligation Economic Development Bond Act 527. ("EDBA") of 2002 (codified at S.C. Code, Chapter 41, Title 11) authorized the issuance of State general obligation bonds for financing "infrastructure," and it also raised the State's "debt service limit" from 5% of the revenues of the preceding fiscal year (as provided by Article X, Section 13 of South Carolina's State Constitution) to 5.5%. (i.e., thereby creating additional debt service capacity that became dedicated to the issuance of economic development bonds). ⁷⁸⁶ The provisions of the EDBA authorized the issuance of economic development bonds for any business or industry certified as creating a minimum of 400 new jobs and investing a minimum of \$400 million at an economic development project within an eight year period. This preexisting statute further provided authorization of debt to be issued outside the 5.5% debt limit to support any business or industry meeting the minimum job and investment thresholds upon two-thirds vote of each House of the State General Assembly. In 2004, the State General Assembly broadened the availability of the economic development bond funding to other public initiatives, such as, inter alia, projects for the City of Greenville, Trident Technical College, and the City of Myrtle Beach. In 2009, the State General Assembly amended the EDBA through HB 3130, which authorized the issuance of \$170 million of EDBs pursuant to the authority established in the EDBA of 2002. 787 The state then issued EDBs pursuant to the EDBA as amended, and it also issued AHBs under separate statutory authority. 788 However, to repeat. neither the EDBA as enacted in 2002, nor the EDBA as amended by HB 3130, nor the statute providing for the issuance of AHBs contains any explicit limitation on access to the proceeds of State bonds by certain enterprises. Rather, both statutory provisions have the same "overarching purpose" of allowing the issuance of debt to raise funds for partially offsetting costs of infrastructure to promote the economic growth of the State of South Carolina.⁷⁸⁹

528. Since both of the EU's arguments under Article 2.1(a) of the SCM Agreement fail, and since the EU does not cite any other relevant legal instrument supposedly containing an explicit limitation on access to the proceeds of state bond funding to certain industries, the EU fails to establish a *prima facie* case of *de jure* specificity under Article 2.1(a).

South Carolina's bond scheme is not de facto specific within the meaning of Article 2.1(c) SCM.

529. The EU's *de facto* specificity argument is based on the following misrepresentation: "South Carolina has issued economic development bonds only for Boeing, the Project Emerald companies, and BMW."⁷⁹⁰ In fact, as the EU itself acknowledges in its first written submission,

⁷⁸⁶ See South Carolina Act 254, State Bill No. 1200 (Exhibit USA-328).

⁷⁸⁷ See HB 3130, Section 5 (Exhibit EU-466).

⁷⁸⁸ See S.C. Code § 55-11-500(a) (Exhibit EU-478).

⁷⁸⁹ See United States – Large Civil Aircraft (AB), para. 752. The United States reiterates that none of the instances of the application of the EDBA, the Air Hub bond statute, or any other South Carolina laws is a subsidy to Boeing.

⁷⁹⁰ EU SWS, para. 641.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 181

South Carolina has issued EDBs not only for Boeing, Vought, GA, and BMW, but also for the City of Greenville, Trident Technical College, and the City of Myrtle Beach. Moreover, as mentioned above, South Carolina has issued other types of bonds to defray the cost of facilities and infrastructure for other high-investing, job-creating companies in South Carolina, such as Bridgestone, Continental Tire, and First Quality Tissue. Such bonds should be taken into account for purposes of the *de facto* specificity analysis because they all have the same "overarching purpose": ⁷⁹³ attracting manufacturers to locate large industrial projects in South Carolina by partially defraying the cost of infrastructure and other capital investments through the proceeds of State bonds. Thus, South Carolina does not limit access to the alleged subsidy to enterprises in the aeronautical sector, either in law or in fact.

- 530. The EU attempts to paper over its error with the following footnote: "Because specificity is assessed with respect to enterprises and industries, the European Union does not include economic development bonds issued for public entities, such as cities or public colleges." However, the EU fails to cite any legal authority for this proposition. ⁷⁹⁵
- 531. The EU also argues that funding flowing from one particular type of bond i.e., industrial revenue bonds ("IRBs") should be excluded from the specificity analysis, because they are secured debt issued by a county or municipality. In fact, however, the issuance of IRBs takes place pursuant to *State* statute, and it must be authorized by the *State* Budget and Control Board. The EU also fails to explain why its proposed distinction between secured and unsecured debt should have any bearing on the specificity analysis. In any event, even if IRBs are excluded from the specificity analysis, the fact remains that many other private and public entities have had the cost of facilities and infrastructure defrayed by precisely the same state bonds that Boeing received (i.e., EDBAs and AHBs). Consequently, the EU's arguments regarding IRBs are insufficient to establish *de facto* specificity.
- 532. Finally, the EU also makes the facile assertion that the United States "does not dispute many of the European Union's other arguments that this subsidy is specific." To be clear, the United States disputes all the EU's arguments that the bonds are specific.

⁷⁹¹ EU FWS, note 1377; see also US FWS, para. 630.

⁷⁹² See US FWS, paras. 530, 534; EU FWS, note 1377.

⁷⁹³ US – Large Civil Aircraft (AB), para. 752.

⁷⁹⁴ EU SWS, note 642.

⁷⁹⁵ The EU also fails to provide an explanation of why, under Article 2.1(c), the alleged subsidy would be specific even if Boeing, Vought, GA, and BMW were the only recipients. *See* EU SWS, para. 641.

⁷⁹⁶ EU SWS, para. 641.

⁷⁹⁷ See US FWS, paras. 530, 534; EU FWS, note 1377.

⁷⁹⁸ EU SWS, para. 642.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 182

2. Other Measures

- a. Boeing FILOT
 - i. The EU has failed to demonstrate that the Boeing FILOT Agreement is a subsidy under Article 1.1 of the SCM Agreement
 - (A) Factual background
- 533. The Emerald Fee Agreement, the Boeing Fee Agreement, and every other FILOT agreement in the state of South Carolina is authorized by statewide legislation, which was enacted in stages between 1988 and 1997. The stated purpose of the FILOT program is to "induce companies to locate in the State and to encourage companies now located in the State to expand their investments and thus make use of and employ workers and other resources of the State." In practice, the FILOT program counteracts the disadvantage that the property tax assessment rate of 10.5 percent, which is written into the state constitution, places on both the real and personal property of manufacturers and the personal property of other commercial businesses in the state vis-à-vis other states in the southeastern United States. For example, in Georgia and North Carolina, which are adjacent to South Carolina, property taxes are much lower.

The first act, in 1988, was the so-called "Big Fee" FILOT statute, followed successively by the "Little Fee" and "Simplified Fee" statutes. S.C. Code §§ 4-29-67 (Exhibit USA-243); 4-12-30 (Exhibit USA-330); and 12-44 (Exhibit EU-539). The "Super" or "Enhanced Investment" Fee under which Boeing's FILOT agreement operates is contained at § 12-44-50-(A)(1)(a) of the "Simplified Fee" statute, which provides for a four percent assessment ratio "for those projects qualifying under the enhanced investment definition", *i.e.*, a project resulting in a total investment of at least \$150 million and creating at least 125 new fulltime jobs, investing at least \$400 million, or meeting certain other objective statutory criteria for eligibility. S.C. Code § 12-44-30(7).

 $^{^{800}}$ Boeing Fee Agreement, Dec. 1, 2010, p. 1 (Exhibit EU-470); see also S.C. Code $\$ 12-44-20(1)-(3) (Exhibit US-245).

⁸⁰¹ See The Economic Impact of Boeing in South Carolina, Alliance for South Carolina's Future, May 2010, p. 3 (Exhibit EU-489).

⁸⁰² The Economic Impact of Boeing in South Carolina, Alliance for South Carolina's Future, May 2010, p. 3 (Exhibit EU-489) (noting that some counties in Georgia offer full property tax exemptions to new industry for the first 10 years, and, for a \$50 million investment in South Carolina, a taxpayer would pay three or four times the property taxes as compared with a similar investment in North Carolina); see 50 State Property Tax Comparison Study, Lincoln Institute of Land Policy (Apr. 2012), p. 20 (Exhibit USA-331) (finding an effective tax rate in Columbia, South Carolina of 3.387 percent; an effective tax rate in Atlanta Georgia of 1.628 percent; and an effective tax rate in Charlotte, North Carolina of 0.965 percent).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 183

- The South Carolina Department of Revenue is responsible for administering the 534. statewide FILOT program. 803 Under the FILOT program, assessment rates for a particular industrial project can be set at 4 percent or 6 percent, provided that the taxpayer satisfies certain investment and employment requirements. In particular, any company investing \$2.5 million is eligible for a 6 percent assessment rate, under one of three types of fee agreements: "Little Fee," "Big Fee," and "Simplified Fee." In addition, there are special provisions for very large investments. These provisions are known as "Super Fee" with respect to the Little and Big Fee, and as the "Enhanced Investment Fee" with respect to the Simplified Fee, although the requirements and resulting assessment rates for both types of agreements are substantially the same. 805 Any company investing \$150 million and creating 125 new jobs, or investing \$400 million (regardless of job creation), qualifies for a 4 percent assessment rate under a "Super Fee" or "Enhanced Investment Fee" agreement. 806 Before entering into a FILOT agreement, the relevant county must enact an ordinance making certain findings of fact regarding the project's eligibility. 807 In addition, individual counties assess the value of project property and collect FILOT payments. 808
- 535. FILOT is the preferred form of property assessment for qualified taxpayers in a wide range of industries in every South Carolina county. As the U.S. first written submission noted, the amount of manufacturing property in South Carolina subject to FILOT is greater than the amount of such property subject to *ad valorem* property taxes. (The EU questions this

⁸⁰³ South Carolina Department of Revenue, 2010-2011 Annual Report (Exhibit USA-333).

⁸⁰⁴ South Carolina Tax Incentives for Economic Development, South Carolina Department of Revenue ("South Carolina Tax Incentives for Economic Development"), p. 204 (Exhibit EU-494). Pursuant to State law, in certain "reduced investment counties" where the unemployment rate is high relative to the State average and for Brownfields sites, a lower threshold of \$1 million may apply. See *ibid.*, p. 205.

⁸⁰⁵ South Carolina Tax Incentives for Economic Development, South Carolina Department of Revenue, pp. 175, 204 (Exhibit EU-494).

⁸⁰⁶ For taxpayers investing in a county with an average annual unemployment rate of at least twice the state average during the past 24 months and for Brownfields sites, the minimum investment amount is \$1 million under the Little Fee statute. S.C. Code § 4-12-30(B)(3) (Exhibit USA-330).

⁸⁰⁷ S.C. Code § 4-12-30(B)(5)(f) (Exhibit USA-330).

⁸⁰⁸ See South Carolina Tax Incentives for Economic Development, South Carolina Department of Revenue, p. 204 (Exhibit EU-494).

⁸⁰⁹ US FWS, paras. 560-561. FILOT is not limited to any particular type of business or industry. Manufacturing companies are the most common users of FILOT arrangements because manufacturing has the 10.5% assessment rate for both real and personal property.

⁸¹⁰ US FWS, para. 561;S.C. Department of Revenue Report, Manufacturing Properties, Tax Year 2012, Summary of Accounts, Taxable Only and Fee in Lieu, as of October 22, 2012 (Exhibit USA-332).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 184

fact, but its criticism is groundless. ⁸¹¹) Today, well over 500 taxpayers in South Carolina have FILOT agreements, including at least 44 Super Fee and Enhanced Investment Fee agreements to a wide range of U.S. and non-U.S. companies, such as BMW, Robert Bosch LLC (an engineering and electronics company headquartered in Germany), and Michelin (a tire company headquartered in France). ⁸¹²

- 536. In fact, FILOT agreements are so widely used in South Carolina that the United States is aware of no instance in which a financially sound company meeting the minimum statutory requirements necessary for FILOT qualification has been denied a FILOT arrangement. 813 Furthermore, South Carolina has informed the United States that it is aware of no South Carolina taxpayer seeking to obtain and satisfying the statutory criteria for a "Super Fee" that has ever been unable to obtain one. Indeed, individual counties have every incentive to attract industrial taxpayers by making it easy to conclude FILOT agreements with them.
 - (B) The EU has failed to establish that the Emerald and Boeing Fee Agreements involve revenue foregone that is otherwise due from similarly situated taxpayers
- 537. The Emerald and Boeing Fee Agreements do not involve revenue foregone that is otherwise due, because Boeing receives the same tax treatment as similarly situated taxpayers, *i.e.*, large industrial taxpayers in South Carolina.
- 538. As explained above, under the FILOT statutes, industrial taxpayers in South Carolina qualify for either a 6 percent assessment rate or a 4 percent assessment rate depending on their level of investment and employment. Given Boeing's particularly large investment and employment levels in South Carolina, Boeing qualifies for the 4 percent rate. However, any other industrial taxpayer with a sufficiently high level of investment and employment qualifies for the 4 percent rate as well, as 44 other similarly situated taxpayers can attest.

⁸¹¹ In particular, the EU attempts to contest the U.S. assertion regarding the value of property subject to each form of tax, by pointing to figures showing that more tax *revenue* comes from property subject to manufacturing tax. Obviously, the two types of property are subject to different rates of tax, and thus more tax revenue from one category does not imply that the value of property subject to such tax is higher.

⁸¹² The EU asserts that the United States "admits that *only* six 4 percent FILOT agreements exist in the entire state of South Carolina." EU SWS, para. 721. In fact, there were six such FILOT agreements in place in 1997. According to updated information from the State of South Carolina, there are 44 today. *South Carolina Super Fee Agreements* (Exhibit USA-334).

⁸¹³ Since 2007 when the threshold for the 6% FILOT qualification was lowered to \$2.5 million, the United States understands that in highly developed areas of the state, the minimum investment required for FILOT qualification is \$10 million.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 185

- 539. According to the Appellate Body, there are three steps in determining whether government revenue that is otherwise due is foregone, as the EU alleges in this case:⁸¹⁴ (i) "identify the tax treatment that applies to the income of the alleged recipients," (ii) "identify a benchmark for comparison that is, the tax treatment of comparably situated taxpayers," and (iii) "compare the reasons for the challenged tax treatment with the benchmark tax {the panel} has identified after scrutinizing a Member's tax regime."
- 540. For the first step: the property tax treatment that applies to Boeing determined pursuant to the terms of the Enhanced Investment Fee provisions of the Simplified Fee statute. That is, provided that Boeing employs 125 employees and makes an investment of \$150 million dollars over a period of eight years (to complete the required investment; 13 years to complete the project) or meets alternative statutory criteria (such as a \$400 million investment), ⁸¹⁶ Boeing qualifies for a 4 percent assessment rate. This is the rate applied to property associated with Projects Emerald and Gemini. The EU does not contest this characterization.
- 541. For the second step: taxpayers similarly situated to Boeing are other large industrial taxpayers in the State. Consequently, the property tax treatment that such taxpayers receive is the relevant benchmark for determining whether the Emerald and Boeing Fee Agreements confer a subsidy to Boeing. This benchmark makes sense, because the EU claims that Boeing in particular receives special tax treatment vis-à-vis all other companies in South Carolina. Thus (to complete step three), there is no difference between the challenged tax treatment and the benchmark tax treatment, and therefore no financial contribution. 817
- 542. Regarding the benchmark, the EU advances an array of brief objections, none of which undermines the basic United States conclusion that under the South Carolina code, any large industrial taxpayer in South Carolina is similarly situated. In particular:
- The EU faults the United States for "refer{ring} to its benchmark as 'companies that are eligible for FILOT agreement{s}'", because this benchmark does not honor the distinction between Super/Enhanced Investment Fee agreements and other types of

⁸¹⁴ EU FWS, para. 670.

⁸¹⁵ US – Large Civil Aircraft (AB), paras. 812-814.

⁸¹⁶ Negotiated Fees in Lieu of Property Taxes and Comparison Chart (Exhibit EU-494).

⁸¹⁷ Thus, the EU is incorrect to state that the United States "appears to concede" that the Boeing FILOT Agreement confers a benefit to Boeing. EU FWS, para. 716. The United States does not discuss benefit at length because there is no relevant financial contribution, not because it is making a concession, as the EU would have it.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 186

FILOT agreements. The EU faults the United States for the same supposed transgression again in the next paragraph, and then again three paragraphs later. However, the EU misquotes the United States, which actually stated "In South Carolina, taxpayers 'similarly situated' to the Project Emerald site (*i.e.*, companies that are eligible for FILOT agreements because they invest over \$150 million and create 125 jobs, or invest \$400 million) are generally assessed pursuant at a rate of less than 4 percent through FILOT agreements coupled with SSRCs." Thus the U.S. benchmark appropriately reflects the distinction between Super/Enhanced Investment Fee agreements and other types of FILOTs.

- The EU faults the United States for "describ{ing} companies that are eligible for Super or Enhanced Investment fee agreements, not the projects by those companies that are actually subject to one of those types of FILOT agreements." However, the import of this accusation is obscure, as the relevant question in the analysis is to identify a similarly situated taxpayer, not similarly situated property.
- The EU observes that "companies that are eligible for Super or Enhanced Investment FILOT agreements are not the same as beneficiaries of such agreements." The EU also accuses the United States of "fail{ing} entirely to . . . explain how a discretionary incentive . . . is an appropriate benchmark." However, the EU fails to establish that the "incentive" is in fact "discretionary." As mentioned above, the United States is not aware of any case where a company meeting the statutory criteria for a Super Fee has ever been denied an agreement, and the EU points to no evidence that this has ever happened.

⁸¹⁸ EU SWS, para. 708 ("while the United States refers to its benchmark as 'companies that are eligible for FILOT agreement', its characterisations of these companies with respect to eligibility criteria and the potentially applicable assessment ratio demonstrate that it means only those companies that are eligible for 'Super' or 'Enhanced Investment' fee agreements, which are a subset of negotiated FILOT agreements."); US FWS, para. 566 ("In South Carolina, taxpayers "similarly situated" to the Project Emerald site (*i.e.*, companies that are eligible for FILOT agreements because they invest over \$150 million and create 125 jobs, or invest \$400 million) are generally assessed at a rate of less than 4 percent through FILOT agreements coupled with SSRCs.").

⁸¹⁹ EU SWS, para. 709 ("While the United States asserts that its comparably situated 'companies that are eligible for FILOT agreements' are generally assessed at a rate of less than 4 percent, the evidence on the record actually indicates otherwise.").

⁸²⁰ EU SWS, para. 712 ("The United States fails entirely to engage with the variations in tax treatment provided under different FILOTs").

⁸²¹ US FWS, para. 566.

⁸²² EU SWS, para. 708, second bullet.

⁸²³ EU SWS, para. 708, third bullet.

⁸²⁴ EU FWS, para. 712.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 187

- The EU asserts that only two companies other than Boeing received "Super Fee" agreements in Charleston County. However, the EU fails to explain why this county-specific statistic is relevant, because industrial taxpayers throughout the state receive the same tax treatment as Boeing if they meet the statutory investment and employment thresholds, which today are much lower than the eligibility criteria applicable to these two companies that previously located in Charleston County. In fact, South Carolina has informed the United States that the lower "Super Fee" eligibility criteria applicable today will most certainly lead to a much higher number of "Super Fee" arrangements in Charleston County and statewide.
- The EU accuses the United States generally of other "false or misleading statements in its description of FILOT agreements." One of these "false or misleading statements" is supposedly that the United States makes the "simply not credible" claim that "more manufacturing property in both South Carolina and Charleston County is subject to a FILOT agreement than to *ad valorem* property taxes." 827 The EU has not done its research diligently. 828 According to 2012 reporting from a database maintained by the South Carolina Department of Revenue regarding manufacturing properties subject to *ad valorem* property tax and manufacturing properties subject to FILOT, there is in fact more manufacturing property in South Carolina that is subject to FILOT than is subject to *ad valorem* taxation.
- 543. Thus, the EU fails to advance any reason to doubt the U.S. demonstration that large industrial taxpayers are similarly situated to Boeing.
- 544. The United States first written submission also addressed the EU's alternative argument that the Boeing FILOT Agreement, and the Special Source Revenue Credits ("SSRCs") in particular (which rebate a portion of the fee in lieu of tax), involves a "direct transfer of funds" within the meaning of Article 1.1(a)(1)(i) of the *SCM Agreement*. Specifically, the United States noted that tax rebates do not necessarily entail any transfer of funds from the State to Boeing, because the amount to be rebated does not belong to the State in the first place. In response, the EU "maintains its view that the check or wire payments from Charleston County to Boeing" constitute a direct transfer of funds. However, the EU fails to respond to the U.S.

⁸²⁵ EU SWS, para. 711.

⁸²⁶ EU SWS, para. 713.

⁸²⁷ EU SWS, para. 713.

⁸²⁸ S.C. Department of Revenue Report, Manufacturing Properties, Tax Year 2012, Summary of Accounts, Taxable Only and Fee in Lieu, as of October 22, 2012 (Exhibit USA-332).

⁸²⁹ US FWS, para. 567.

⁸³⁰ US FWS, para. 567.

 $^{^{831}}$ EU SWS, para. 715. The EU does not demonstrate that any payments by check or wire actually took place.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 188

argument that SSRCs cannot entail a transfer of funds because the funds do not belong to the State. 832 In addition, the EU fails to specify the amount of the supposed SSRCs, or to identify the "check or wire payments" that it claimed occurred. Therefore, the EU fails to establish a *prima facie* case that the SSRCs confer a financial contribution or a benefit to Boeing, or that the alleged subsidy is specific.

- ii. The EU has failed to demonstrate that the Boeing FILOT Agreement is specific under Article 2.1 of the SCM Agreement
- 545. FILOT agreements are widely available throughout South Carolina to taxpayers meeting the statutory criteria. The 4 percent rate that Boeing is assessed under its Enhanced Investment Fee agreement is likewise routinely available throughout the state to any taxpayer meeting the statutory criteria for the Enhanced Investment Fee (or the Super Fee). The FILOT authorizing legislation does not explicitly limit access to FILOT agreements to "certain enterprises"; there are "objective criteria or conditions" for qualification; and, accordingly, FILOT agreements are made available routinely to companies meeting minimum statutory criteria making reduced assessment rates pursuant to FILOT agreements the rule in South Carolina state-wide and therefore not *de facto* specific. ⁸³³ Therefore, under Article 2 of the *SCM Agreement*, FILOT agreements are not specific.
- 546. The EU responds by seeking to narrow the specificity analysis to an unreasonably constrained analytical framework. In particular, in the EU's view, the granting authority is Charleston County and the subsidy program is each individual FILOT agreement, despite the fact that FILOT is a statewide program, as explained above. The EU's proposed analytical approach is incorrect. Furthermore, regardless of whether the specificity analysis is performed at the statewide level or the county level, the conclusion is the same: the Emerald and Boeing Fee Agreements are not specific.
 - (A) South Carolina's FILOT program establishes objective criteria governing eligibility within the meaning of Article 2.1(a) of the SCM Agreement
- 547. South Carolina's FILOT program does not explicitly limit access to FILOT agreements within the meaning of Article 2.1(a), which states that any subsidy is specific if "the granting authority, or the legislation pursuant to which the granting authority operates, explicitly limits access to a subsidy to certain enterprises." In this case, the granting authority is the State, as the United States has explained above, because the State enacted and administers a statewide program to permit the issuance of FILOT agreements. However, regardless of whether the State or Charleston County is considered to be the granting authority, neither of them limits access to

⁸³² Boeing Fee Agreement, Dec. 1, 2010, Section 5.2(b) (Exhibit EU-470).

⁸³³ US FWS, paras. 634-636.

⁸³⁴ Article 2.1(a) SCM.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 189

FILOT agreements to "certain enterprises" – and in fact, they provide FILOT agreements to companies in all industries.

- 548. In addition, the legislation pursuant to which the granting authority acts does not limit access to "certain enterprises." Whether the granting authority is the State or the county, the authorizing legislation is the same: the FILOT legislation. As explained above, this legislation was enacted between 1988 and 1997 and does not limit access to any particular class of enterprises other than taxpayers in South Carolina that satisfy certain investment and employment requirements.
- 549. The EU appears to concede that South Carolina's FILOT legislation contains no limitation explicit or implicit on access to FILOT agreements to "certain enterprises," but it repeats its earlier argument that the Boeing FILOT Agreement is specific under Article 2.1(a) because Charleston County's authorization of the Emerald and Boeing Fee Agreements specifically identify the respective recipients. However, merely naming Project Emerald or Boeing in a county ordinance does not "explicitly limit access" to a statewide program within the meaning of Article 2.1(a). Indeed, under the EU's definition, any subsidy would be specific as long as it is conveyed through a legal instrument that names the recipient. This interpretation would effectively render Article 2.1(a) meaningless. This is especially true of alleged subsidies related to taxes on property, where the recipient must be named in order to implement the applicable assessment rate. Therefore, the mere mention of the alleged subsidy recipient in a County Ordinance does not satisfy the requirement for *de jure* specificity.
 - (B) South Carolina's FILOT program establishes objective criteria governing eligibility within the meaning of Article 2.1(b)
- 550. FILOT agreements are not specific within the meaning of Article 2.1(b) because they contain "objective criteria or conditions" within the meaning of footnote 2 of the SCM. Article 2.1(b) states:

⁸³⁵ EU SWS, para. 717.

⁸³⁶ EU SWS, para. 717; EU FWS, para. 688.

broadly, as encompassing all FILOTs or 4% FILOTs entered into by Charleston County, each of these fee agreements is explicitly restricted to a specific company or group of companies." EU SWS, fn. 1206. Thus, by the EU's logic, any tax reduction that is a subsidy would automatically be specific, so long as the beneficiary is identified in the legal instrument conferring the tax reduction. *See also US – Large Civil Aircraft (AB)*, para. 749 ("Article 2.1(a) refers to limitations on access to 'a subsidy'. Although the use of this term in the singular might suggest a limited conception, we note that, if construed too narrowly, any individual subsidy transaction would be, by definition, specific to the recipient.").

⁸³⁸ US FWS, para. 635.

United States - Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 190

Where the granting authority, or the legislation pursuant to which the granting authority operates, establishes objective criteria or conditions government the eligibility for, and the amount of, a subsidy, specificity shall not exist. Provided that the eligibility is automatic and that such criteria and conditions are strictly adhered to. The criteria or other conditions must be clearly spelled out in law, regulation, or other official document, so as to be capable of verification. 839

In this case, the "legislation pursuant to which the granting authority operates" is the "Simplified Fee" FILOT statute, including the statutory provision for Enhanced Investment Fees, S.C. Code § 12-44-30(7) and Chapter 44, Title 12, regardless of whether the granting authority is the State or the County. 840 This legislation sets out objective criteria for qualification for a FILOT agreement: the satisfaction of certain investment and employment criteria. 841 Industrial taxpayers satisfying these criteria are eligible for and routinely enter FILOT agreements, and as noted above, the United States is not aware of any instance where a company made a valid attempt to obtain a "Super Fee" agreement and met the statutory criteria, but was unable to do so. The EU does not contest this point. Therefore, the Emerald and Boeing Fee Agreements are not specific subsidies.

551. In response, the EU argues that the objective criteria established by the South Carolina FILOT program are insufficient to disprove specificity under Article 2.1(b) because the amount of the subsidy "depends on the specific terms" that the taxpayer "negotiates" with the state. 842 However, the EU fails to explain whether or how these "negotiations" affect the eligibility for, or the amount of, the alleged subsidy. In particular, the EU has not pointed to any case where two taxpayers had projects with the same investment and employment profiles that satisfied statutory eligibility, but one of them received a FILOT and the other did not. Similarly, the EU has not pointed to any case where two such taxpayers received different assessment rates under a FILOT agreement when they had the same or comparable qualifications. Rather, in support of its claim that qualification for FILOT is discretionary, the EU resorts to conclusory assertions, such as:

⁸³⁹ Article 2.1(b) DSU.

^{840 &}quot;To obtain the benefits provided by this chapter, the sponsor and the county must enter into a fee agreement requiring the payment of fees {as described}. The county must adopt an ordinance approving the fee agreement with the sponsor." S.C. Code § 12-44-40(A) (Exhibit EU-539). Charleston County's own ordinance authorizing the Boeing FILOT agreement specifically notes that the "Enhanced Investment Fee provisions of Title 12, Chapter 44 of the Code of the Laws of South Carolina 1976, as amended" are the statutory basis for its authority. Charleston County Council Meeting Minutes (Jan. 12, 2010) (Exhibit EU-541).

⁸⁴¹ In addition, there are defined requirements for the duration of the project, the holder of title to project property, and so on. These requirements are summarized at South Carolina Tax Incentives for Economic Development, South Carolina Department of Revenue ("South Carolina Tax Incentives for Economic Development"), p. 204 (Exhibit EU-494). The EU has not claimed that any of these requirements involve the exercise of discretion.

⁸⁴² EU SWS, para. 720.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 191

"{S}pecificity is demonstrated by the manner in which Charleston County exercises its discretion, considering the process for entering into a FILOT agreement and the varying provisions contained therein." Therefore, the EU fails to overcome the requirements of Article 2.1(b) in its attempt to demonstrate specificity.

- (C) South Carolina's FILOT program is not specific "in fact" within the meaning of Article 2.1(c) of the SCM Agreement.
- 552. The EU also fails to establish *de facto* specificity under Article 2.1(c). This provision states:
 - If . . . there are reasons to believe that the subsidy may in fact be specific, other factors may be considered. Such factors are: use of a subsidy programme by a limited number of certain enterprises, predominant use by certain enterprises, the granting of disproportionately large amounts of subsidy to certain enterprises, and the manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy. In applying this subparagraph, account shall be taken of the extent of diversification of economic activities within the jurisdiction of the granting authority, as well as of the length of time during which the subsidy programme has been in operation.

The EU has the burden to establish *de facto* specificity within the meaning of Article 2.1(c). In this regard, the EU advances two facts: (i) "Charleston County has only entered into three 4% FILOTs . . . and 33 negotiated FILOTS in total," and (ii) "Boeing's two FILOT agreements account for over 55% of the total *minimum investment amounts* covered by these FILOTs." These facts fail to establish *de facto* specificity.

553. The first fact is too narrow to be meaningful, because the alleged "subsidy programme" in question is the FILOT program, which is a statewide program. The EU does not present any statistics from the State of South Carolina, and therefore its *de facto* specificity argument immediately fails. Moreover, even if the "subsidy programme" were considered to be a Charleston County program – despite the fact that Charleston County itself concludes FILOT agreements pursuant to the state FILOT statute, and not pursuant to any county ordinance; and despite the fact that all other counties in South Carolina enter into FILOT agreements as well – the EU still fails to establish a *prima facie* case of *de facto* specificity, because it fails to explain why two of three is a "disproportionately large" number for the aeronautical industry in

⁸⁴³ EU SWS, para. 717.

⁸⁴⁴ EU SWS, para. 717 (emphasis added). In addition, as noted above, the EU claims that the United States "admits that only six 4% FILOT agreements exist," but this is false. EU SWS, para. 721; *see supra* fn. 812.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 192

Charleston County, in light of the economic profile of the county. ⁸⁴⁵ Notably, Boeing is the largest private employer in the county (as well as the State), whose industrial base is tilted towards the aeronautical and manufacturing industries. ⁸⁴⁶ Accordingly, the EU fails to establish *de facto* specificity.

554. Furthermore, the EU's second fact actually undermines the EU's *de facto* specificity argument. The fact that Boeing accounts for over half of the total minimum investment amounts for FILOTs in Charleston County suggests that Boeing is the natural user of a relatively high proportion of whatever alleged subsidy exists. Therefore, merely demonstrating that Boeing receives a relatively high proportion of Super/Enhanced Investment Fee agreements (as the EU attempts to do with its first fact) is not sufficient to establish that the alleged subsidy to Boeing is "disproportionately large." Rather, it confirms that Boeing's participation in the FILOT program is proportional to its investment and employment levels.

b. Income Tax Allocation and Apportionment Agreement

555. The United States, in its first written submission, demonstrated that the EU failed to establish that the income tax allocation and apportionment agreement between Boeing and South Carolina ("Boeing apportionment agreement") confers a specific benefit to Boeing. ⁸⁴⁷ In particular, the United States showed that the EU's assertion that the Boeing apportionment agreement confers a financial contribution and benefit to Boeing was based on an apparent misunderstanding of the Boeing apportionment agreement, South Carolina income tax law and a flawed application of the Appellate Body's analysis for determining whether government revenue otherwise due is foregone. Additionally, the United States also showed that in light of the fact that apportionment agreements are widely available in South Carolina, the EU failed to establish that the Boeing apportionment agreement was specific under Article 2 of the SCM Agreement. The EU's second written submission fails to rehabilitate the EU's arguments.

 $^{^{845}}$ US – Large Civil Aircraft (AB), para. 879 (indicating that the term "disproportionately large...suggests that disproportionality is a relational concept that requires an assessment as to whether the amounts of the subsidy are out of proportion, or relatively too large. When viewed against the analytical framework set out above regarding Article 2.1(c), this factor requires a panel to determine whether the actual allocation of the 'amounts of the subsidy' to certain enterprises is too large to what the allocation would have been if the subsidy were administered in accordance with the conditions for eligibility for that subsidy as assessed under Article 2.1(a) and (b).").

⁸⁴⁶ See Charleston S.C. MSA Largest Manufacturing Employers, Charleston Regional Development Alliance (Feb. 2013) (showing that Boeing has 6,000 employees in Charleston, compared to 2,200 employees for the next-largest employer) (Exhibit USA-335).

⁸⁴⁷ US FWS, paras. 599-606, 644-646.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 193

- i. The EU has failed to demonstrate that the Boeing apportionment agreement constitutes a financial contribution and confers a benefit.
- 556. As mentioned above, the Appellate Body outlined a three-step approach to analyze whether a financial contribution exists under Article 1.1(a)(1)(ii). The first step of that analysis is to "identify the tax treatment that applies to the income of the alleged {subsidy} recipients." The United States demonstrated that the EU failed in that first step due to the EU's apparent misunderstanding of South Carolina's income tax system. The EU continues to argue that the apportionment agreement reduces Boeing's state income tax liability by altering the "treatment of sales in this state." As the United States explained, "sales in this state" only includes goods, merchandise or property that are "received by a purchaser" in the state, "after all transportation is completed." Where such receipt occurs outside the United States, there is no "sale{} in this state".
- 557. The United States also pointed out that the EU had incorrectly reported the basic formula for determining a company's corporate income tax under South Carolina law. The EU's second written submission questions the relevance of the U.S. arguments. However, an accurate understanding of the applicable tax law is of course highly relevant to the first step of the Appellate Body's analysis: without a proper understanding of South Carolina's income tax system, one cannot properly identify the tax treatment applicable to Boeing.
- 558. The second step of the Appellate Body's analysis is the identification of the proper benchmark for comparison, which the Appellate Body indicated is "the tax treatment of comparable income of comparably situated taxpayers." The EU claims that the appropriate benchmark is the "single factor apportionment method" set out in the South Carolina Code. The EU's benchmark is flawed, however, because it is premised on the assumption that a comparably situated taxpayer could not qualify to enter into an apportionment agreement with

⁸⁴⁸ US FWS, para. 587.

⁸⁴⁹ US – Large Civil Aircraft (AB), para. 812.

⁸⁵⁰ US FWS, paras. 603-606.

⁸⁵¹ EU SWS, para. 663, note 1109 (citing EU FWS, Section V.H.2.e).

⁸⁵² US FWS, para. 604; S.C. Code Section 12-6-2280(B) (Exhibit EU-509) ("The term 'sales in this state' includes sales of goods, merchandise, or property received by a purchaser in this State. The place where goods are received by the purchaser *after all transportation is completed* is considered the place at which the goods are received by the purchaser.").

⁸⁵³ US FWS, para. 605.

⁸⁵⁴ EU SWS, paras. 665-666.

⁸⁵⁵ US – Large Civil Aircraft (AB), para. 813.

⁸⁵⁶ EU FWS, para. 620.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 194

South Carolina. That is simply not the case. On the contrary, taxpayers situated similarly to Boeing would be eligible for apportionment agreements under S.C. Code Section 12-6-2320(B). Income allocation and apportionment agreements are readily available in South Carolina. Therefore, the underlying premise of the EU's benchmark is flawed.

- 559. It appears that rather than an application of the Appellate Body's analysis, the EU's approach is better characterized as a narrow "but for" analysis. Essentially, the EU would have the Panel compare treatment under the apportionment agreement of Boeing's income from a particular type of sale with treatment of income from that same sale "but for" the apportionment agreement. This allows the EU to avoid identifying the comparable tax treatment of comparably situated taxpayers or examining the structure of the domestic tax regime and its organizing principles, as directed by the Appellate Body. A simple comparison of Boeing's income with and without the Boeing apportionment agreement, which does not take into account the availability and use of such agreements by comparable taxpayers, does not answer the question of whether South Carolina has foregone revenue otherwise due in a manner consistent with the Appellate Body's three-step approach. Therefore the EU has failed to establish a *prima facie* case that the Boeing apportionment agreement constitutes a financial contribution under Article 1.1(a)(1)(ii).
 - ii. The EU has failed to demonstrate that the Boeing apportionment agreement is specific.
- 560. Even if the Boeing apportionment agreement was considered to be a subsidy, the United States demonstrated in its first written submission that it is not specific within the meaning of Article 2.1 of the SCM Agreement. This is because apportionment agreements are not explicitly limited by the granting authority or relevant legislation, but instead are readily available as part of South Carolina's effort to encourage business activity in the state. The EU fails to correct the flaws in its specificity claims under Article 2.1(a) and 2.1(c) of the SCM Agreement in its second written submission.

561. Article 2.1(a) states:

Where the granting authority, or the legislation pursuant to which the granting authority operates, explicitly limits access to a subsidy to certain enterprises, such subsidy shall be specific.

562. The use of apportionment agreements is not specific within the meaning of Article 2.1(a) because they are not explicitly limited to certain enterprises. The granting authority -i.e., the State of South Carolina – has not explicitly limited access to apportionment agreements to Boeing, and there is no legislative provision that allows only Boeing to enter into apportionment

⁸⁵⁷ US FWS, paras. 644-646.

⁸⁵⁸ US FWS, para. 645.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 195

agreements. In its first written submission, the EU argued that the alleged subsidy under consideration was the Boeing apportionment agreement and it was specific because it was entered into with Boeing alone. The EU continues to urge the Panel to adopt an overly narrow approach to the assessment of specificity in its second written submission. The United States explained the flaws in such an approach, noting that any measure will necessarily be found to be specific if the subsidy is defined by the complaining Member as narrowly as possible. Moreover, by limiting the analysis to the particular apportionment agreement with Boeing, the EU fails to address the relevant question under Article 2.1(a) of whether the relevant legislation or granting authority has expressly limited access to the subsidy to certain enterprises. Such an approach also ignores the existence and availability of other apportionment agreements in South Carolina to a wide variety of other companies that meet required job and capital investment requirements, including but not limited to, call centers, distribution facilities and corporate headquarters, in addition to all types of manufacturing facilities.

563. The EU asserts in its second written submission that the United States, by referencing the other statutory provisions authorizing the use of apportionment agreements, is seeking consideration of subsidies different from those challenged by the EU. ⁸⁶¹ To support its assertion, the EU attempts to distinguish between what it considers to be "different types of apportionment agreements for different purposes." ⁸⁶² South Carolina Code Section 12-6-2320(A) concerns apportionment agreements for where a taxpayer's business activity is unfairly represented in the state by the standard apportionment formula, whereas Section 12-6-2320(B) concerns apportionment agreements for taxpayers planning new or expanded facilities in South Carolina. ⁸⁶³ However, within 12-6-2320(B), there are three different statutory conditions that can be satisfied by a taxpayer to qualify for an apportionment agreement under the same legislation. For example, a taxpayer could seek an identical ten-year apportionment agreement under two separate provisions of the South Carolina Code, assuming it satisfies the statutory criteria. ⁸⁶⁴

564. In response to the U.S. demonstration of the EU's failure to consider the relevant question under Article 2.1(a) – namely whether the granting authority or the legislation expressly

⁸⁵⁹ EU SWS, para. 668.

⁸⁶⁰ US FWS, para. 645.

⁸⁶¹ EU SWS, para. 670.

⁸⁶² EU SWS, para. 671.

⁸⁶³ Exhibit EU-509.

⁸⁶⁴ Section 12-6-2320(B)(3)(a)(i) permits the use of a 10-year apportionment agreement where the taxpayer is planning a new or expanded facility resulting in an investment of at least \$10 million and the creation of 200 new jobs. The new jobs must have an average cash compensation level of more than three times the per capita income of the State at the time the jobs are filled. Section 12-6-2320(B)(3)(a)(ii) permits the use of a ten-year apportionment agreement where the taxpayer is planning a new facility and invests \$750 million and creates 3,800 new jobs.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 196

limited the subsidy to certain enterprises – the EU asserts that the Boeing apportionment agreement "is evidence of the action of the granting authority in limiting access to the subsidy." The EU's assertion here too is premised on the assumption that the Boeing apportionment agreement must be viewed in isolation from the relevant legislation and other available apportionment agreements. For the reasons already discussed, the specificity analysis should not be so artificially constrained.

565. The U.S. first written submission also explained that the EU failed to demonstrate that the use of apportionment agreements is specific within the meaning of Article 2.1(c) of the SCM Agreement. The EU responds in its second written submission by again trying to distinguish between different "types" of apportionment agreements, but those arguments are unpersuasive as discussed above.

566. The EU also fails to demonstrate specificity within the meaning of Article 2.1(c). Article 2.1(c) states:

- If . . . there are reasons to believe that the subsidy may in fact be specific, other factors may be considered. Such factors are: use of a subsidy programme by a limited number of certain enterprises, predominant use by certain enterprises, the granting of disproportionately large amounts of subsidy to certain enterprises, and the manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy. In applying this subparagraph, account shall be taken of the extent of diversification of economic activities within the jurisdiction of the granting authority, as well as of the length of time during which the subsidy programme has been in operation.
- 567. The EU only claims that there are two such "reasons" within the meaning of Article 2.1(c), neither of which is in fact relevant. First, the EU notes that "Boeing is the only taxpayer to receive a ten-year allocation and apportionment agreement." However, this argument neglects the fact that other South Carolina taxpayers are eligible for equivalent apportionment agreements under S.C. Code Section 12-6-2320(B)(1). Although these provisions only provide for five-year agreements, companies may enter into two consecutive agreements if they meet minimum conditions for each, making them entitled to exactly the same treatment as Boeing

⁸⁶⁵ EU SWS, para. 672.

⁸⁶⁶ US FWS, para. 646.

⁸⁶⁷ EU SWS, para. 668.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 197

would receive under the ten-year apportionment agreement. The EU has provided no evidence that Boeing is the predominant user of apportionment agreements overall, or that it has been granted a disproportionately large alleged benefit under its apportionment agreement.

568. The second supposed "reason" cited by the EU is "the discretion exercised by South Carolina in entering into the agreement and approving an apportionment method tailored to meet Boeing's specific interests." The United States explained in its first written submission that the existence of discretion alone does not render a subsidy specific and the EU had failed to articulate how the Boeing apportionment agreement evidences the use of discretion ("untrammeled" or otherwise) indicating that it was specific. 870

c. Large Cargo Freighter Property Tax Exemption

569. The United States, in its first written submission, demonstrated that the EU failed to establish that the large cargo freighter (LCF) property tax exemption confers a specific benefit to Boeing.⁸⁷¹

i. The EU has failed to demonstrate that the LCF property tax exemption constitutes a financial contribution or confers a benefit.

570. The United States explained that the EU failed to demonstrate that the LCF property tax exemption results in the foregoing of government revenue that is otherwise due. The EU simply assumes that the state sought to give incentives to Boeing without considering the availability of equivalent treatment to other entities in the state. The EU responds in its second written submission that it did, in fact, identify the comparable taxable activity of comparably situated

provisions authorizing the use of apportionment agreements, including those for five-year and for ten-year agreements, the United States "ignores the requirement that an Article 2.1 analysis avoid consideration of subsidies different from those challenged by the complaining Member." EU SWS, para. 670. As support for this assertion, the EU cites paragraph 841 of the Appellate Body report in the original proceeding. EU SWS, para. 670 & note 1124. However, this text in fact supports the U.S. approach, and demonstrates that the EU approach is too narrow. Paragraph 841 states: "The scope of the inquiry called for under Article 2.1(a) is not necessarily limited to the subsidy as defined in Article 1.1. Although the subsidy as defined in Article 1.1 is the starting point of the analysis under Article 2.1(a), the scope of the inquiry is broader in the sense that it must examine the legislation pursuant to which the granting authority operates . . . " US- Large Civil Aircraft (AB), para. 841. Accordingly, the specificity analysis must take into account not only the particular apportionment agreement that the EU challenges, but the statutory framework pursuant to which it was issued, which is laid out at S.C. Code Section 12-6-2320(B). Exhibit EU-0013.

⁸⁶⁹ EU SWS, para. 668.

⁸⁷⁰ US FWS, para. 646.

⁸⁷¹ US FWS, paras. 608-614, 652-656.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 198

taxpayers, but the EU simply refers to the same truncated discussion in its first written submission. 872

- ii. The EU's valuation of the alleged financial contribution and benefit remains flawed.
- 571. The EU attempts to value the LCF tax exemption by relying on "expert" speculation and unfounded assumptions, rather than the evidence provided to the Panel as part of the Article 13 process. Thus, the EU claim against the LCF tax exemption suffers from many of the same analytical and logical flaws that infect so many other aspects of the EU's arguments in this compliance dispute.
- 572. The U.S. first written submission explained that the EU's valuation of the LCF property tax exemption was flawed in two key respects and significantly overstated the alleged financial contribution. First, the United States explained that that there was only one LCF subject to the South Carolina property tax in 2009, as shown by a spreadsheet provided by Boeing's Corporate Tax Department and contrary to the EU's claim that there were three. The EU responds that it is entitled to use what it considers to be the "best information available" to prove its case because the United States and South Carolina are supposedly "withhold ing the evidence in their possession." This is a transparent attempt to shift the blame for the EU's own evidentiary weaknesses onto the United States and South Carolina. The EU ignores that it is the EU's burden to establish a *prima facie* case on the basis of evidence and legal argument.
- 573. The second flaw in the EU's valuation was the arbitrary selection of a depreciation rate of 5 percent to estimate the value of Boeing's LCF in future years, despite the fact that the United States had already provided the actual value of each LCF (including depreciation) "under the applicable valuation methodology for South Carolina property tax purposes." In rebuttal, the EU erroneously claims that it "used the valuation method provided in the statute 95 percent of the prior year's value." However, the EU is interpreting the statute incorrectly. The statute provides:

⁸⁷² EU SWS, para. 685; EU FWS, para. 648.

⁸⁷³ US FWS, paras. 611-614

 $^{^{874}}$ Boeing "But-For" LCF Exemption Value and Depreciation Information (Exhibit USA-336(BCI)).

⁸⁷⁵ EU FWS, para. 650; Exhibit EU-27.

⁸⁷⁶ EU SWS, para. 687.

⁸⁷⁷ US FWS, para. 614; Response of the United States to the Panel's Request for Information Pursuant to Article 13 of the DSU, para. 76 (Feb. 28, 2013)..

⁸⁷⁸ EU SWS, para. 690.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 199

The fair market value for vehicles, watercraft, and aircraft must be based on values derived from a nationally recognized publication of vehicle valuations, except that the value may not exceed ninety five percent of the prior year's value.⁸⁷⁹

- 574. Thus, the statute does not direct taxpayers to apply a depreciation rate of 5 percent, but rather a depreciation rate of 5 percent *or more*. The EU, without any evidentiary support or rationale, simply assumes that the lowest possible depreciation rate is applicable to Boeing's LCF. On this basis alone, the EU's figures can be disregarded. Furthermore, the United States now submits additional information from Boeing reconfirming the original information provided in response to the Panel's Article 13 response, which the EU has sought to discredit. 880
 - iii. The EU has failed to demonstrate that the LCF property tax exemption is specific.
- 575. The United States also demonstrated in its first written submission that the EU failed to establish that the LCF property tax exemption was specific within the meaning of Articles 2.1(a) and 2.1(c) of the SCM Agreement. 881
- 576. The United States explained that South Carolina's property tax exemptions are not specific under Article 2.1(a) because they are not explicitly limited to certain enterprises and the majority of manufacturing activity subject to *ad valorem* taxation in South Carolina qualifies for one of the exemptions. In the EU's second written submission, the EU claims that the U.S. argument was explicitly rejected by the Appellate Body in the original proceedings. The EU is incorrect. In fact, the Appellate Body stated:

The fact that a series of differential tax rates are located in the same section of the tax code, *while relevant*, cannot be dispositive as to whether they constitute part of the same subsidy for purposes of a specificity analysis under Article 2.1(a). 883

577. The EU quotes this same language in its own argument, but conveniently omits the words "while relevant." These words controvert the EU's legal argument and confirm that it is "relevant" if differential tax rates are located in the same section of the tax code.

⁸⁷⁹ S.C. Code § 12-37-90 (Exhibit EU-523) (emphasis added).

 $^{^{880}\,\}text{EU}$ SWS, para. 689; Boeing "But-For" LCF Exemption Value Estimates (Exhibit USA-336(BCI)).

⁸⁸¹ US FWS, paras. 652-656.

⁸⁸² EU SWS, para. 694.

 $^{^{883}}$ US – Large Civil Aircraft (AB), para. 853. The EU omitted "while relevant" from its quotation.

⁸⁸⁴ EU SWS, para. 694.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 200

- 578. Moreover, even if the specificity analysis were limited to the LCF property tax exemption, as the EU suggests, the text of that provision does not expressly limit the availability of the exemption to any particular industry or group of enterprises. Any company that owns two or more of the relevant aircraft, regardless of the industry in which it operates, qualifies for the exemption. The EU's only response to this point is the statement "{t}he European Union disagrees." Therefore, the EU fails to rebut the U.S. showing that the LCF property tax exemption is not specific under Article 2.1(a) of the SCM Agreement.
- 579. The LCF property tax exemption is also not specific under Article 2.1(b) of the SCM Agreement, because qualification for the exemption is automatic and completely non-discretionary. ⁸⁸⁷ The EU fails to address this point, and thus it appears to concede that the measure is not specific, pursuant to Article 2.1(b).
- 580. Finally, the United States explained that property tax exemptions are not specific under Article 2.1(c) of the SCM Agreement because they are widely available and widely used in South Carolina. The EU does not respond to this point.
 - d. Sales and Use Tax exemptions
- 581. The United States, in its first written submission, demonstrated that the EU had failed to establish that the sales and use tax exemptions for aircraft fuel, computer equipment, and construction materials confer a specific benefit to Boeing. 889
 - i. The EU has failed to demonstrate that sales and use tax exemptions constitute a financial contribution or confer a benefit.
- 582. The United States explained that the EU's application of the Appellate Body's three-step analysis of whether a financial contribution exists under Article 1.1(a)(1)(ii) in regard to the sales and use tax exemptions was flawed. The EU's second written submission essentially repeats the same flawed assertions from its first written submission.
- 583. The United States explained that the EU failed to identify the appropriate tax treatment that applies to Boeing's sales and use taxes because the EU restricts its examination to the particular exemptions for fuel, computer equipment, and construction materials. ⁸⁹¹ The EU

⁸⁸⁵ US FWS, para. 653.

⁸⁸⁶ EU SWS, para. 697.

⁸⁸⁷ US FWS, para. 655.

⁸⁸⁸ US FWS, para. 656.

⁸⁸⁹ US FWS, paras. 585-598, 657-663.

⁸⁹⁰ US FWS, para. 588.

⁸⁹¹ US FWS, para. 588.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 201

responds that it did identify the appropriate tax treatment, but simply repeats its assertion that the examination should be restricted to those particular exemptions. The EU again fails to explain why the analysis should be restricted in such a manner. The EU's overly narrow approach is inappropriate here in light of South Carolina's sales and use tax system and the availability of sales and use tax exemptions for comparable taxpayers.

- ii. The EU's valuation of the sale and use tax exemptions remains flawed.
- 584. The United States also demonstrated that the EU overstates the value of the sales and use exemptions for fuel, computer equipment, and construction materials, ⁸⁹³ and it has not remedied the problem in its second written submission.
- 585. The United States provided the value of the sales and use tax exemptions to Boeing in response to the Panel's Article 13 questions, and again in its first written submission. The EU fails to identify any valid basis not to use those numbers, instead complaining of a supposed lack of supporting documents. The information provided by the United States was from Boeing itself, and the EU fails to indicate which supporting documents it believes are still needed to corroborate this information. Thus, there is no reason to doubt the accuracy of these figures.
- 586. By contrast, the EU's own figures are based on a statement by an Airbus employee in Toulouse named Patrick Libralesso, who apparently has no familiarity with Boeing or South Carolina. Mr. Libralesso's declaration dates to February 26, 2013 two days before the United States submitted its Article 13 response to the Panel. Thus, even before it had the answer to the Panel's question about the value of the South Carolina sales and use tax exemptions to Boeing, the EU had already decided to rely on Mr. Libralesso's guesswork. It is perplexing that the EU asked the Panel to pose questions to the United States regarding the sales and use tax exemptions, even though it apparently decided in advance not to use the U.S. responses.
- 587. In any event, the United States demonstrated that the EU's reliance on Mr. Libralesso's conclusory statement was misplaced and the EU's efforts to estimate the value of the exemptions were speculative at best. The EU offers no further explanation in its second written submission and the EU's estimates therefore remain speculative and unsupported.

⁸⁹² EU SWS, para. 646.

⁸⁹³ US FWS, paras. 589-598.

⁸⁹⁴ EU SWS, para, 648.

⁸⁹⁵ See Declaration of Patrick Libralesso (Feb. 26, 2013) (Exhibit EU-26(BCI)).

⁸⁹⁶ The United States noted that Mr. Libralesso's statement contained no explanation of the proportions he devided. US FWS, para. 593.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 202

588. The United States also demonstrated that the EU's estimate of the value of the sales and use tax exemptions in years 2012 to 2035 was a complete fiction. The EU "assumes" arbitrarily that Boeing will spend \$10 million annually, from 2012 to 2035, on goods subject to the sales and use tax exemptions. In its second written submission, the EU has no defense of this figure, except to describe it as "quite conservative" because Boeing may have additional capital investments. The EU makes no effort to explain how its figure of \$10 million was derived or how it is a reflection of Boeing's current or future plans. This figure, too, remains speculative and unsupported.

589. Indeed, the United States highlighted the fact that the EU's assumption that the sales and use tax exemption for construction materials would remain significant from 2012 through 2035 conflicts with the EU's own recognition that the value of the exemption would be significantly diminished after July 2011. The EU provides the following clarification of its claim in its second written submission:

The United States also points out that the EU valuation of the exemption for construction materials should be affected by the fact that, as the European Union acknowledged, this exemption would effectively be subsumed into another exemption for construction materials, effective as of July 2011. The European Union has never claimed otherwise (the reference to "three" exemptions in paragraph 601 of the EU First Written Submission was a simple drafting error); this is one reason why the EU estimate for future years is as low as it is. ⁹⁰¹

590. The EU's clarification of its error does nothing to explain the apparent inconsistency in the EU's assertion. The exemption for construction materials constituted the bulk of the EU's estimate (albeit flawed) for years 2010-2011. Yet the EU nevertheless asserts that Boeing will spend \$10 million each year on items subject to the exemptions *other than construction materials*. The EU's clarification also further calls into question the EU's estimate for years 2010 to 2011. If the exemption for construction materials was subsumed in July 2011 by a separate exemption that the EU is not challenging, the EU's estimate for 2011, to the extent it assumes the exemption for construction materials constituted a financial contribution and conferred a benefit over the course of the entire calendar year, is overstated.

⁸⁹⁷ US FWS, para. 595.

⁸⁹⁸ EU FWS, para. 601.

⁸⁹⁹ EU SWS, para. 651.

⁹⁰⁰ US FWS, paras. 596-597.

⁹⁰¹ EU SWS, note 1089 (footnotes omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 203

- iii. The EU has failed to demonstrate that the sales and use tax exemptions are specific.
- 591. The EU fails to establish that sales and use tax exemptions are specific within the meaning of Article 2 of the SCM Agreement. When viewed in the context of South Carolina's overall sales and use tax structure and treatment of other business activities in the state, it is clear these exemptions form part of a collection of widely available exemptions that operate to ensure that the state's tax structure does not impede investment and other economic activity.
- 592. The alleged subsidy is not *de jure* specific, because the statute contains no explicit limitation restricting access to the tax exemption to certain enterprises. In addition, the criteria governing eligibility for, and the amount of, the tax exemptions are all objective, automatic, and strictly adhered to. Therefore, under both Articles 2.1(a) and 2.1(b) of the *SCM Agreement*, the subsidy is not specific. The EU's only response to these arguments is in a footnote, which points out that the criteria for eligibility includes meeting a clearly defined "investment-to-jobs-to-projects ratio." This is consistent with an absence of *de jure* specificity. Footnote 2 to the *SCM Agreement* explains:

Objective criteria or conditions, as used herein, mean criteria or conditions which are neutral, which do not favour certain enterprises over others, and which are economic in nature and horizontal in application, such as number of employees or size of enterprise.

Thus, requirements such as the number of employees and the size of an investment are "objective criteria or conditions" within the meaning of Article 2.1(b) SCM.

593. Section 12-36-2120 of the South Carolina Code lists 80 categories of sales and use tax exemptions covering a wide range of activities. In response, the EU asserts that the South Carolina Department of Revenue ("SCDOR") "does not appear to agree" because the Sales and Use Tax Manual published by the SCODR "lists six different categories of sales and use tax exemptions offered by the State of South Carolina" The EU notes that the sales and use tax exemptions for fuel, computer equipment and construction materials are listed under "business-related exemptions." The EU neglects to mention that prior to listing the six categories, the Sales and Use Manual indicates: "{t}he following briefly describes South Carolina's sales and use tax exemptions. For purposes of this discussion, South Carolina's exemptions are divided into the following categories…" The fact that the general collection of exemptions may be grouped

⁹⁰² US FWS, paras. 657-663.

⁹⁰³ EU SWS, note 1107.

⁹⁰⁴ US FWS, para. 658.

⁹⁰⁵ EU SWS, para. 657.

⁹⁰⁶ South Carolina Sales and Use Tax Manual, Chapter 9 (Exhibit EU-1118).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 204

into subcategories for ease of discussion – which is not surprising, considering how expansive the list is – fails to rebut the U.S. showing, based on the statute itself, that South Carolina's sales and use tax exemptions form part of a single, unified system of tax exemptions that are widely available to a broad spectrum of enterprises and industries in South Carolina.

- 594. Moreover, even if the specificity analysis were properly focused on sales and use tax exemptions falling within the category of "business-related exemptions" as the EU appears to suggest, 907 that category itself includes numerous exemptions widely available to businesses throughout South Carolina. The EU asserts these business-related exemptions "constitute only a narrow portion of the South Carolina economy" and the EU provides a list of 23 individual exemptions. The variety of economic activity included in the EU's list only further confirms that these exemptions are widely available to businesses throughout South Carolina. However, even a cursory review of the South Carolina Code reveals that the EU's list is incomplete, omitting entire groups of exemptions that are applicable to a wide range of industries. For example, the exemption set out at Section 12-36-2120(17) for "machines used in manufacturing... tangible personal property for sale", which would of course cover a significant portion of the South Carolina economy. The EU has therefore failed to rebut the U.S. demonstration that South Carolina's sales and use tax exemptions constitute a collection of widely available exemptions.
- 595. In the U.S. first written submission, the United States explained that even a consideration of the three sales and use tax exemptions for fuel, computer equipment, and construction materials in isolation, the EU nevertheless fails to demonstrate how the granting authority or the relevant legislation explicitly limit access to those exemptions to certain enterprises so as to render them specific under Article 2.1(a). The United States also explained that an analysis of the exemptions under Article 2.1(b) provides additional confirmation that they are not specific because they contain objective criteria (that is, the notification, investment and employment requirements) and are available to any manufacturer that meets those requirements.
- 596. In response, the EU repeats its assertion that the exemptions are limited because they explicitly require the taxpayer to meet these objective criteria. The EU's response regarding Article 2.1(b) is limited to a footnote, wherein the EU asserts the objective criteria favors certain enterprises over others, but simply highlights the unremarkable fact that a taxpayer that satisfies the objective criteria can claim the exemption, whereas one that does not satisfy the criteria cannot. ⁹¹¹ This, of course, confirms that the exemptions are not specific under Article 2.1(b).

⁹⁰⁷ EU SWS, paras. 657-659.

⁹⁰⁸ EU SWS, para. 658.

⁹⁰⁹ US FWS, para. 658.

⁹¹⁰ US FWS, para. 660.

⁹¹¹ EU SWS, note 1107.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 205

- 597. The United States also demonstrated that the EU's assertion of specificity under Article 2.1(c) is flawed because it incorrectly assumes the specificity analysis should be limited to the subsidy as narrowly defined by the EU, rather than consider the full range of sales and use tax exemptions available in South Carolina. In response, the EU disagrees, but fails to offer any meaningful explanation of why the specificity analysis should be restricted. 913
 - e. readySC workforce training
- 598. The United States, in its first written submission, demonstrated that the EU had failed to establish that the readySC workforce training program confers a specific benefit to Boeing. 914
 - i. The EU has failed to demonstrate that the readySC workforce training constitutes a financial contribution or confers a benefit.
- 599. The United States noted that the EU had failed to demonstrate that the training of workers constitutes a financial contribution within the meaning of Article 1.1(a)(1)(iii) of the SCM Agreement. In its second written submission, the EU treats this observation as a concession of the issue of financial contribution. To the contrary, the United States does not concede the issue. Rather, it was simply unnecessary to engage the EU extensively in light of the EU's truncated and conclusory two-sentence "analysis". The EU has the burden to do more than simply declare that a measure constitutes a financial contribution.
 - ii. The EU has failed to demonstrate that readySC is specific.
- 600. The United States also demonstrated that the EU's claims that readySC is specific under Articles 2.1(a) and (c) of the SCM Agreement fail. 918
- 601. readySC is not specific under Article 2.1(a) because it is not explicitly limited to certain enterprises. The United States noted that the only evidence cited by the EU to support its claim of specificity is information indicating that the State Board for Technical and Comprehensive Education requested additional funds for its budget in light of the fact that readySC had begun working on the training program for Boeing. The EU failed to articulate how this evidence

⁹¹² US FWS, para. 661.

⁹¹³ EU SWS, para. 662.

⁹¹⁴ US FWS, paras. 615-617, 647-651.

⁹¹⁵ US FWS, para. 617.

⁹¹⁶ EU SWS, para. 700.

⁹¹⁷ EU FWS, para. 663.

⁹¹⁸ US FWS, paras. 647-651.

⁹¹⁹ US FWS, para. 648.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 206

was relevant to the analysis under Article 2.1(a) and indicated that access to the readySC program was explicitly limited to certain enterprises. In its second written submission, the entirety of the EU's response to this point is "{t}he EU disagrees." Therefore, the United States showing stands unquestioned and the failure of the EU to provide the necessary legal argument to support its claim means that it has failed to establish a *prima facie* case under Article 2.1(a).

- 602. The United States also demonstrated that the EU failed to establish a *prima facie* case that readySC was specific under Article 2.1(c) of the SCM Agreement. The program is broadly available and has been widely used throughout the economy of South Carolina and readySC is not in fact used by a limited number of certain enterprises. Rather, it works with a number of businesses and industries in any given year. The United States also refuted the EU's assertion that Boeing was the "predominant user" of readySC. As explained in the United States first written submission, in light of the long history of readySC and its many users, Boeing's usage over the past two years does not make it either the "main" or "most frequent" user, and the EU has therefore failed to establish predominant use of the program by Boeing. The EU also does not appear to respond to this argument in its second written submission.
- 603. Finally, the United States explained that the EU failed to support its claim that discretion was exercised in a manner indicating specificity. In the EU's first written submission, the EU asserted such discretion was evidenced by the fact that (i) Boeing received a custom-developed training program and (ii) Boeing was provided with a more extensive set of services than other companies. The United States explained that the first assertion was unremarkable the fact that readySC conducted training on processes and equipment unique to Boeing simply reflects the approach readySC takes with regard to each of the employers of the citizens that it trains. 926
- 604. With regard to the second assertion, the United States noted that the EU had not provided any evidence to substantiate its claim. ⁹²⁷ In rebuttal, the EU simply refers back to a paragraph in its first written submission in which the EU describes the services provided to Boeing. ⁹²⁸ But the description of services that were provided to Boeing is not evidence of the services (or lack

⁹²⁰ EU SWS, para. 702.

⁹²¹ US FWS, para. 649-651.

⁹²² US FWS, para. 649.

⁹²³ US FWS, para. 649.

⁹²⁴ US FWS, para. 650.

⁹²⁵ EU FWS, para. 668.

⁹²⁶ US FWS, para. 651.

⁹²⁷ US FWS, para. 651.

⁹²⁸ EU SWS, note 1179; EU FWS, para. 660.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 207

thereof, according to the EU) that were provided to other companies participating the program. The EU's only response to its omission is to fault the United States for not providing evidence of the services provided to other companies to rebut the EU's unsupported claim. The EU forgets that it is the party advancing the proposition that Boeing received more extensive services than other companies. Therefore, under the principles of burden of proof in WTO dispute settlement, the EU (and not the United States) has the burden of justifying a presumption that its assumption is true. Absent data on services to other companies, the EU's attempted comparison fails, and it therefore has failed to meet its burden of proof.

f. MCIP jobs tax credits for Project Gemini

605. The United States, in its first written submission, demonstrated that the EU had failed to establish that corporate income tax credits for new full-time jobs created within a multi-county industrial park (MCIP) confer a specific benefit to Boeing. 930

i. The EU has failed to demonstrate that the MCIP jobs tax credit constitutes a financial contribution or confers benefit.

606. The United States showed that the EU's assertions that the MCIP income tax credit conferred a financial contribution and benefit were inconsistent with the EU's argument that Boeing has zero income tax liability in South Carolina as a result of the Boeing apportionment agreement. The EU's rebuttal fails to remedy the inconsistency. The EU claims that its argument that Boeing's South Carolina income tax liability has been eliminated was limited to 2012: "{t}he European Union stated only that Boeing had no state income tax liability for calendar year 2012 (as opposed to every year)." The EU also notes that if it is correct that Boeing owed no state income taxes in 2012, Boeing could simply carry over the MCIP tax credits to later tax years. "933" Nevertheless, the EU maintains that the value of the MCIP tax credit for Project Gemini in 2012 was \$3.8 million. "934" The EU cannot claim that Boeing owed zero income tax in SC in 2012, while also claiming that Boeing claimed \$3.8 million in income tax credits for that same year.

⁹²⁹ EU SWS, para. 703.

⁹³⁰ US FWS, paras. 571-574, 638-643.

⁹³¹ US FWS, para. 574.

⁹³² EU SWS, para. 677.

⁹³³ EU SWS, para. 677.

 $^{^{934}}$ Exhibit EU-39. The EU claims the value of the MCIP tax credit for Project Emerald in 2012 was \$1.65 million.

⁹³⁵ *See*, *e.g.*, Exhibit EU-39.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 208

- ii. The EU has failed to demonstrate that the MCIP jobs tax credit is specific.
- 607. The United States also demonstrated that, even if the MCIP tax credit was a financial contribution and conferred a benefit, it was not specific within the meaning of Article 2 of the SCM Agreement because it is both broadly available and widely used. Sa explained in the United States' first written submission, MCIPs are very common throughout South Carolina and, in practice, MCIP status is available to any substantial business that requests the counties involved to include its property in a MCIP.
- 608. The United States explained that the EU's assertion that the MCIP tax credit was specific under Article 2.1(a) of the SCM Agreement was flawed because the EU failed to examine whether "the granting authority, or the legislation pursuant to which the granting authority operates, explicitly limits access to a subsidy to certain enterprises." In the EU's first written submission, the EU claimed that the State of South Carolina was the granting authority. ⁹³⁸
- 609. However, absent from the EU's first written submission is any discussion of how South Carolina or the legislation pursuant to which it operated restricted the access to the MCIP tax credit to certain enterprises. To the contrary, the text of the relevant legislation, Section 12-6-2260(e)(1) of the South Carolina Code makes clear that the treatment available under that provision is available to all enterprises that satisfy the minimal requirements set out in that provision and that otherwise qualify for the standard job tax credit. 939
- 610. In the EU's second written submission, the EU claims "the State of South Carolina effectively delegates the role of the granting authority to the counties" and asserts the U.S. argument "depends on ignoring Charleston County's role in granting the subsidy." As an initial matter, the EU ignores that it is not just a single county that designates the MCIP (hence, the "multi" in multi-county industrial park). In regard to the particular MCIP at issue, Charleston County and Colleton County both had to approve the amendment to add Boeing to the MCIP. The EU fails to articulate its theory of delegation, but it appears to be based on part on the fact that the counties are authorized to designate the premises of certain enterprises as part of a MCIP. Those facts are irrelevant to the analysis under Article 2.1(a). The State of South Carolina is the granting authority for the MCIP tax credit, as the EU concedes. The State of South Carolina imposes the income tax and the State of South Carolina provides for the MCIP

⁹³⁶ US FWS, paras. 638-643.

⁹³⁷ US FWS, para. 643.

⁹³⁸ See e.g., EU FWS, para. 640. ("Here, the Charleston-Colleton MCIP (like other South Carolina MCIPs) is a particular geographic region, designated by two counties, within the jurisdiction of the *State of South Carolina*, *the granting authority*.") (emphasis added).

^{939 12-6-3360(}A)

⁹⁴⁰ EU SWS, para. 680.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 209

tax credits. The role of the county is, as practical matter, a minor one given that MCIP designation is commonplace in South Carolina. As mentioned, MCIP status is essentially available to any substantial business that requests that its property be included in a MCIP, and once so designated, the MCIP tax credits granted by the State of South Carolina become available to that business. Further, granting of income tax credits is exclusively a state function. Accordingly, while a county can grant MCIP status for the purpose of fee sharing among counties, counties cannot legally grant a state tax credit. By failing to examine how the granting authority or the relevant legislation limit the alleged subsidy, the EU has failed to establish that the MCIP tax credit is specific under Article 2.1(a).

- 611. The United States also demonstrated that the EU failed to establish that the new jobs tax credit is specific under Article 2.1(c). ⁹⁴¹ The EU's only rebuttal point is that the United States ignores the role of Charleston County, which is incorrect for the reasons described above.
- 612. Finally, the United States demonstrated that the MCIP tax credit was not specific under Article 2.2 of the SCM Agreement because it is not "limited to certain enterprises located within a designated geographic region." In the EU's second written submission, the EU responds that Article 2.2 of the SCM Agreement does not require a contiguous geographic region. The United States does not argue that Article 2.2 does not apply where a subsidy is limited to designated non-contiguous geographic regions. Rather, the U.S. assertion is that South Carolina does not limit the subsidy to such regions. The tax credit is available to any business operating within an MCIP, but a business can readily seek to obtain MCIP status. Additionally, as counties can freely add to (or subtract from) the MCIP at any time, it is not really a "designated" region.

g. "Phase II"

613. The EU's claims regarding Phase II illustrate two consistent themes of the EU's written submissions. First, the EU seizes on every opportunity to expand this compliance dispute beyond the limits prescribed by Article 21.5 of the DSU. Second, the factual basis for the EU's legal claims is tenuous at best, and in some cases non-existent. As explained below, the EU's arguments regarding Phase II conform to this pattern: the EU fails to articulate any valid basis for concluding Phase II to be properly within this compliance panel's terms of reference, and the EU fails to put forward sufficient evidence to establish a *prima facie* case for any of its Phase II-related claims. Indeed, the EU fails to establish that the challenged measures even exist yet, but it has prejudged them as subsidies.

⁹⁴¹ US FWS, para. 642.

⁹⁴² US FWS, para. 643.

⁹⁴³ EU SWS, para. 681.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 210

i. Factual background

- 614. "Phase II" refers to Boeing's planned expansion of facilities in South Carolina. Reportedly, Boeing's plans involve the establishment of an information technology ("IT") "center of excellence" in North Charleston that would create approximately 1,000 jobs. ⁹⁴⁴ They also involve a new paint facility and an operations center to deliver 787 components. ⁹⁴⁵ Boeing estimates that its expansion will involve the investment of an additional \$1 billion in South Carolina between now and 2020, as well as the creation of 2,000 new jobs (including the 1,000 IT jobs). ⁹⁴⁶
- 615. In connection with Phase II, South Carolina's State Budget and Control Board ("SBCB") approved the issuance of \$120 million in State economic development bonds on June 18, 2013. According to SBCB documents, the bonds proceeds are to be spent on "infrastructure" in particular, "land acquisition and site preparation, including but not limited to clearing, grading, and filling the site and environmental mitigation, and construction of any necessary water service and wastewater treatment." These bonds have not been issued and no bond proceeds have been spent.
- 616. Also in connection with Phase II, the Charleston County Council approved an ordinance on May 21, 2013, to amend the Boeing Fee Agreement and extend it to property involved in Phase II. 949 The ordinance made the Boeing Fee Agreement conditional on Boeing meeting its investment and employment targets of \$1 billion and 2,000 employees. 950 The EU does not indicate whether this amendment was executed. 951

⁹⁴⁴ *Update: Boeing S.C. confirms North Charleston Expansion*, John McDermott (Apr. 9, 2013) (Exhibit EU-1129).

⁹⁴⁵ *Update: Boeing S.C. confirms North Charleston Expansion*, John McDermott (Apr. 9, 2013) (Exhibit EU-1129).

⁹⁴⁶ Update: Update: Boeing S.C. confirms North Charleston Expansion, John McDermott (Apr. 9, 2013) (Exhibit EU-1129).

⁹⁴⁷ See State Budget and Control Board Meeting of June 18, 2013 (Exhibit EU-1127).

⁹⁴⁸ See State Budget and Control Board Meeting of June 18, 2013 (Exhibit EU-1127).

⁹⁴⁹ See Minutes of May 21, 2013, Charleston County Council (Exhibit EU-1153).

⁹⁵⁰ Minutes of May 21, 2013, Charleston County Council (Exhibit EU-1153).

⁹⁵¹ The EU claims it "knows . . . that the First Amendment has been concluded," because the Charleston County Council ordinance states that "{t}he form, provisions, terms, and conditions of the First Amendment presented to this meeting and filed with the Clerk to Council be and they are hereby approved and ratified" EU SWS, note 1305; *Minutes of May 21, 2013*, Charleston County Council (Exhibit EU-1153). However, it is unclear that this statement means what the EU supposedly "knows" it means.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 211

617. In addition, since December 2012, Boeing has been negotiating with CCAA over the purchase of a 320-acre parcel adjacent to the 240-acre parcel where its current 787 final assembly line is located. The CCAA Land Sale Committee approved the land sale on January 29, 2013, and CCAA itself approved the land sale on March 21, 2013, i.e., before the EU first written submission of March 28, 2013. However, according to press reports, this supposed land sale has not taken place, nor has the price been determined. Rather, the FAA is reviewing both the price of the deal as well as how it would affect "the airport's overall operations."

618. In its second written submission, the EU makes three new claims in connection with Phase II:

- South Carolina has allegedly "acqui{red} and prepar{ed} land for Boeing with the proceeds of state economic development bonds"; 956
- Charleston County has allegedly "reduc{ed} Boeing's property taxes associated with its Phase II expansion through a FILOT agreement"; 957 and
- CCAA has allegedly sold property to Boeing at a "discount{}". 958

As explained below, the EU fails to substantiate any of these claims.

- ii. The EU fails to demonstrate that the measures are properly within this compliance Panel's terms of reference.
- 619. The EU has not made a *prima facie* case that its claims regarding any of the alleged Phase II measures are within the compliance Panel's terms of reference. The EU's argument in this regard is limited to one sentence in a footnote, stating that "the Phase II subsidies . . . are a further expansion and supplement of the previous subsidy packages" to Vought and Boeing. 959

⁹⁵² See EU SWS, para. 746. The EU does not state why it considers that this prospective land sale is related to Phase II, nor does it state why it did not discuss the prospective land sale in its first written submission.

⁹⁵³ See EU SWS, para. 747.

⁹⁵⁴ See, e.g., FAA Worried About Boeing's Purchase of Land at Charleston Airport, Associated Press, Seattle Times (July 24, 2013) (Exhibit USA-337).

⁹⁵⁵ FAA Worried About Boeing's Purchase of Land at Charleston Airport, Associated Press, Seattle Times (July 24, 2013) (Exhibit USA-337).

⁹⁵⁶ EU SWS, para. 764.

⁹⁵⁷ EU SWS, para. 775. The EU does not claim that the special source revenue credits associated with the Phase II FILOT agreement provide a financial contribution, confer a benefit, or are specific.

⁹⁵⁸ EU SWS, para. 750.

⁹⁵⁹ EU SWS, note 190.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 212

This simplistic explanation presumes that any future action taken by South Carolina with regard to Boeing automatically affects the U.S. obligations in this dispute. However, a compliance panel's terms of reference extend only over measures taken to comply. There are no declared measures taken to comply related to Phase II, and the EU fails to argue that there are any undeclared measures taken to comply.

- 620. Because the EU has failed to demonstrate that its claims regarding the alleged Phase II measures are properly within this compliance Panel's terms of reference, the United States requests that the Panel reject the EU's claims regarding Phase II measures..
 - iii. The EU has not established a prima facie case with respect to the alleged acquisition and preparation of land.
- 621. The EU alleges that South Carolina acquired and prepared land for Boeing, thereby conferring a subsidy to the company. However, the EU fails to demonstrate that any state bonds have been provided to Boeing or spent, or that any related land has been acquired or prepared. Therefore, the EU fails to establish a *prima facie* case. Although South Carolina has passed a resolution approving the sale of bonds for this purpose (as explained above), the EU does not allege that this act itself confers a subsidy to Boeing.
- 622. Finally, as explained above and as the EU's own arguments confirm if this measure did confer a subsidy to Boeing, the subsidy would not be specific, because it is issued pursuant to a system of legislation that confers proceeds of economic development bonds to companies throughout a wide array of industries.
 - iv. The EU has not established a prima facie case with respect to the alleged Phase II FILOT agreement.
- 623. The EU does not provide any evidence that this FILOT agreement has actually been concluded. Therefore, the EU fails to make a *prima facie* case of financial contribution, benefit, or specificity.
- 624. Moreover, as explained above at section III.J.2.a, FILOT agreements are a non-specific measure and do not confer any financial contribution or benefit. They are the norm for industrial taxpayers in South Carolina, and it would not be surprising if Boeing opts to have its Phase II-related property taxed through FILOT agreements, provided that it meets the statutory eligibility criteria. Therefore, for the reasons discussed at section III.J.2.a above, a Phase II FILOT agreement would be consistent with the SCM Agreement.
 - v. The EU has not established a prima facie case with respect to the alleged discounted land sale.
- 625. The EU challenges the alleged discounted sale of a 320-acre parcel of land, but in fact the land sale has not yet occurred and the price has not yet been determined. As explained above,

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 213

the FAA is reviewing both the price of the deal as well as how it would affect "the airport's overall operations." Until the FAA issues its approval, the transaction is incomplete. Therefore, the EU fails to establish a *prima facie* case that the land sale occurred – let alone that it involves a financial contribution, that it confers a benefit to Boeing, or that it is specific.

III. EU ALLEGED PROHIBITED SUBSIDIES AND CLAIMS UNDER ARTICLE III OF GATT 1994

A. The EU has Not Met Its Burden of Proof Regarding Prohibited Subsidy Claims under Articles 3.1 and 3.2 of the SCM Agreement.

626. The EU's prohibited subsidy claims are not properly within the terms of reference of this compliance proceeding, as explained above at section II.B.1 and section II.B.2. Even aside from the fact that these claims are not within the terms of reference, the United States demonstrated that the EU failed to make a *prima facie* showing of prohibited export contingency or import substitution under Articles 3.1 and 3.2 of the SCM Agreement. 962

1. The EU's prohibited export-contingent subsidy claims fail.

627. The U.S. first written submission demonstrated that the EU fails to make a *prima facie* showing that the United States presently provides Boeing with subsidies prohibited under Articles 3.1(a) and 3.2 of the SCM Agreement. The EU first written submission presented vague claims that failed to specify with any particularity how the alleged subsidies are in fact contingent on export performance. The EU also fails to identify a single measure that confers a subsidy contingent on exports. Instead, the EU relies on a collection of unremarkable statements concerning the importance of exports to the U.S. economy, yet fails to explain the alleged connection between the statements and the factual or legal conclusions it asks the Panel to draw. Therefore, it has failed to make a *prima facie* case that these measures are prohibited export subsidies.

628. The EU's second written submission repeats verbatim the entirety of the argument set out in the EU's first written submission. He EU then claims that the United States does not contest any of the facts or evidence, and declares that the Panel must proceed on the basis that the facts and evidence are not in dispute. To the contrary, the United States

⁹⁶⁰ FAA Worried About Boeing's Purchase of Land at Charleston Airport, Associated Press, Seattle Times (July 24, 2013) (Exhibit USA-337).

⁹⁶¹ The EU has not submitted any evidence that the sale has taken place, such as a deed of sale, or of the price of the land sale.

⁹⁶² US FWS, paras. 672-678.

⁹⁶³ US FWS, paras, 672-674.

⁹⁶⁴ Compare EU FWS, paras. 751-764 with EU SWS, paras. 810-812, 814-816, 818-820, 833-834.

⁹⁶⁵ EU, SWS, paras. 817, 821, 832.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 214

questions the relevance of the EU's presentation of facts. It is simply unnecessary to address each of the EU's factual assertions if the EU fails to provide any coherent legal argument as to why those assertions, even if correct, are relevant to a claim under Article 3.1(a) and 3.2 of the SCM Agreement. It is not for the United States or the Panel to make the case for the EU, or to try to figure out what, if anything, the EU might want to or have intended to argue.

- 629. Although the EU second written submission contains a few paragraphs that go beyond parroting the first written submission, these also fail to advance the EU's argument. The United States demonstrated that the EU failed to specify with any particularity how the alleged subsidies are in fact contingent upon export. In response, the EU simply refers, without any explication, to exhibit EU-566, which is the same collection of unremarkable statements concerning the importance of exports to the U.S. economy that the EU cited without explication in its first written submission. Repeating an error does not cure it.
- 630. The EU claims that it has "specifically and particularly explained that these statements, which also speak to the structure, design and operation of the subsidies, are in the nature of both encouragement or direction going forward, and, at the same time, of reward for past export performance." The EU is incorrect. The statements do not indicate the structure or design or operation of anything. The do not provide direction or indicate rewards for past activities. And bald assertions by the EU that the statements do these things are certainly not sufficient to demonstrate that the granting of an alleged subsidy at issue in this dispute (or any alleged subsidy for that matter) "is in fact tied to actual or anticipated exportation or export earnings." Therefore the EU has again failed establish a *prima facie* showing that the United States provides Boeing with subsidies prohibited under Articles 3.1(a) and 3.2 of the SCM Agreement.

2. The EU's contingent-in-fact import substitution claims fail.

- 631. The United States explained in its first written submission that the EU failed to identify a single measure that confers a subsidy contingent on the use of domestic over imported goods. Instead, the EU presented a series of conclusory statements, citing as support a seven-page set of quotations from officials ranging from the U.S. President down to low-level county and municipal officials. The EU did nothing to relate these statements to the factual conclusions it proposes, or provide any coherent theory as to why those factual conclusions, if true, demonstrate contingency within the meaning of Article 3.1(b). The EU accordingly failed to make a *prima facie* showing that the United States presently provides Boeing with subsidies prohibited under Articles 3.1(b) and 3.2 of the SCM Agreement. ⁹⁶⁸
- 632. As it did in regard to its claims of export contingency, the EU second written submission purports to address this flaw by repeating verbatim the entirety of the contingent-in-fact import

⁹⁶⁷ SCM Agreement, note 4.

⁹⁶⁶ EU SWS, para. 824.

⁹⁶⁸ US FWS, paras. 672-674.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 215

substitution section from its first written submission. ⁹⁶⁹ The EU then asserts "{t}he United States is as dismissive of the substance of these claims as it is dismissive of the claims under Article 3.1(a), if anything, even more so" and asks the Panel to uphold the EU's claim on the basis that the United States has not provided a meaningful response. ⁹⁷⁰ If the United States is "dismissive", it is because the EU arguments deserve to be dismissed. As the Appellate Body has explained, the burden of proof for the complaining party is "to present evidence and argument sufficient to establish a presumption" that the responding Member has acted inconsistently with the relevant provision of the DSU. ⁹⁷¹ A party does not meet this burden by simply providing a list of quotations and a series of assertions with no explanation as to how the one supports the other.

633. The EU also errs in accusing the United States of failing to provide a meaningful response to its meaningless arguments. The EU fails to realize that the U.S. observation that the EU has failed to set out a coherent legal argument is a full and complete (and effective) rebuttal. To do more would have required the United States to attempt to divine the linkage the EU has not identified between evidence and argument and then address them. That is not the role of the responding party in a WTO dispute. Nor is it the role of the Panel to create that argument for the EU in order to rule in its favor. Simply repeating the full text of the EU's first written submission on this matter fails to remedy the deficiencies in the EU's argument and therefore the EU has again failed to make a *prima facie* showing that the United States provides Boeing with subsidies prohibited under Articles 3.1(b) and 3.2 of the SCM Agreement.

3. The EU's claim regarding the Boeing apportionment agreement fails.

- 634. The United States demonstrated that the EU failed to make a *prima facie* showing that the Boeing apportionment agreement confers a specific subsidy to Boeing within the meaning of Article 1, let alone a subsidy that is contingent on export performance. As such, the EU's Article 3 claims with regard to the apportionment agreement fail as well.
- 635. The EU claims in its second written submission that the United States offers no response to the EU's assertion that the measure is contingent upon exportation and, therefore, if the panel finds it is a subsidy, it must also find it is prohibited. The EU is incorrect. The United States showed that the EU failed to demonstrate either that the measure was a subsidy *or* that it was contingent on export performance. The EU failed to establish a *prima facie* case that the Boeing apportionment agreement constitutes a financial contribution because the EU fails to identify the comparable tax treatment of comparably situated taxpayers. The EU also failed to

⁹⁶⁹ Compare EU FWS, paras. 764-776 with EU SWS, paras. 835-838, 840-846, 849-850.

⁹⁷⁰ EU SWS, para. 847.

⁹⁷¹ *US – Wool Shirts (AB)*, para. 13.

 $^{^{972}}$ EU SWS, para. 807. This of course follows after the EU repeats verbatim the entire argument from its first written submission.

⁹⁷³ US FWS, para. 677.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 216

demonstrate that apportionment agreements are specific within the meaning of Article 2.1 of the SCM Agreement in light of the fact that apportionment agreements are part of a widely available effort by South Carolina to ensure that the apportionment of a taxpayer's income represents the extent of the taxpayer's business activity in the state.

636. Even if the EU could demonstrate the existence of a subsidy, it must also demonstrate that the granting of the subsidy is conditioned on export performance – which it cannot. The EU's claim of export contingency – and its bald assertion that a special rule derogating from the normal rule applies to Boeing's sales of LCA when they are "destined for export markets" – is based on an apparent misunderstanding of South Carolina law and the Boeing apportionment agreement, discussed above at section III.J.2.b.

4. The EU's claim regarding FSC/ETI fails.

637. The United States confirmed that Boeing has not used FSC/ETI tax benefits after 2006, and the EU has failed to satisfy its burden to establish a *prima facie* case that Boeing has in fact used FSC/ETI tax benefits since 2006. As Boeing did not use this subsidy after 2006, there is no basis for the EU to assert that the United States has acted inconsistently with Article 3.1 of the SCM Agreement by providing the subsidy to Boeing. The EU is mistaken when it contends that the United States declined to engage on the substance of the EU's prohibited subsidy claim. Given that the EU's claim regarding FSC/ETI was addressed earlier in the U.S. first written submission, the United States referred to that earlier discussion. Nothing has changed since that time and the EU has not pointed to anything relevant that has. Similarly with regard to the arguments in the second written submission, given that the United States has already addressed the EU's assertions the United States refers the Panel to that discussion.

B. The EU has Not Met Its Burden of Proof Regarding Derivative Claims under Article III:4 of GATT 1994

638. In its first and second written submissions, the EU makes cursory arguments that all of the measures challenged elsewhere in each submission are also inconsistent with Article III:4 of GATT 1994. It is impossible to discern the legal or factual basis for this claim, as it consists entirely of a cross-reference to the EU's factual and legal arguments regarding Article 3.1(b) of the SCM Agreement, which applies an entirely different legal standard. The United States is not in a position to hypothesize the argument that the EU intended to construct based on those facts and legal arguments, and then rebut that hypothetical argument. It is enough to observe that this approach, of treating two separate provisions of the covered agreements as being essentially the same, entirely fails to meet the EU's burden of proof to establish an inconsistency with Article III:4.

⁹⁷⁴ EU SWS, para. 805.

⁹⁷⁵ EU FWS, para. 787; EU SWS, para. 862.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 217

639. In its second written submission, the EU observes that the United States did not explicitly respond to the substance of its Article III claim, ⁹⁷⁶ which consists entirely of two paragraphs consisting of conclusory statements referencing arguments with regard to the EU's claim under Article 3.1(b) of the SCM Agreement. ⁹⁷⁷ As the United States addressed those arguments with regard to Article 3.1(b) in its first written submission, responding explicitly to their cross-reference elsewhere was superfluous. ⁹⁷⁸

640. To be clear, if one untangles the web of cross references on which the EU relies, to use the words of Gertrude Stein, there is no there there. The cross reference to the arguments on Article 3.1(b) of the SCM Agreement leads to a series of conclusory statements with citations to Exhibit EU-583. Final EU-583, in turn, consists of seven pages of quotations from federal, state, and local officials observing that Boeing has manufacturing facilities in the United States, that these facilities employ people who live in the United States and its localities, that these people make aircraft in the United States, that Boeing exports those aircraft, and that all of this is good for national, state, and local jurisdiction and the people and families who live there. The EU nowhere explains the alleged connection between the statements and the factual or legal conclusions it asks the Panel to draw. (To be sure, there is no such connection, as the statements are not the terms of measures or conditions for measures.) The EU has accordingly failed to present meaningful argumentation and is asking the Panel to construct a case for the EU⁹⁸⁰ out of materials thoroughly unsuitable for the task. The Panel should accordingly reject the EU's claims under Article III:4 of GATT 1994.

We note at the outset that the burden rests on the complainant to substantiate its claims with legal arguments and evidence in its written and oral submissions to the panel. While the DSU, and Article 11 in particular, require a panel to make an objective assessment of the matters that are before it, the panel must turn its attention to and direct its questions at claims and arguments that the parties have articulated. Where a complainant has failed to set forth arguments in its submissions before a panel sufficient to substantiate its claims, a panel may not use its interrogative powers to make good the absence of relevant substantiating arguments and evidence. We should not be understood to suggest, however, that, where arguments have been affirmatively raised by the parties, the panel should not fully scrutinize such evidence and argumentation. Where there is an absence of argumentation, however, a panel cannot intervene to raise arguments on a party's behalf and make the case for the complainant.

EC – Fasteners (AB), para. 566 (citations omitted).

⁹⁷⁶ EU SWS, para. 858.

⁹⁷⁷ EU FWS, paras. 787-788.

⁹⁷⁸ US FWS, paras. 675-676.

⁹⁷⁹ EU FWS, paras. 768-772.

⁹⁸⁰ As the Appellate Body found in EC – Fasteners:

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 218

IV. ADVERSE EFFECTS

A. Introduction

- 641. The United States demonstrated in its first written submission that the EU failed to meet its burden, under Article 7.8 of the SCM Agreement, of proving that the United States did not take appropriate steps to remove the adverse effects of any unwithdrawn subsidies. Where the original panel had found \$2.6 billion in financial contributions from NASA in the 1989-2006 period, and drawn linkages to technologies used on the 787, the post-2007 period saw only \$[***] in NASA financial contributions, and the EU points to no meaningful linkages between recent research and technology on Boeing's large civil aircraft. Thus, *even by the EU's account*, the situation that led to the finding that NASA and DoD subsidies caused adverse effects by accelerating the launch of the technologically sophisticated 787 no longer exists today. Where the Appellate Body found that the tail end of the FSC/ETI program especially problematic as both an export subsidy and a tied tax subsidy together with a few other tied tax subsidies, caused a limited number of Airbus lost sales to the 737, FSC has been withdrawn and Boeing no longer uses that benefit. The EU has no credible explanation for why the remaining measures, along with any new measures, are large enough and harmful enough to cause adverse effects.
- 642. The EU's response to this critique consists primarily of repeating and building upon the errors from the first written submission. It continues to disregard the changes in the subsidies found to exist in the original proceeding the decrease in the expenditures and change in the nature of NASA research programs, DoD's decreasing use of its only funding instruments found to confer subsidies, and the end to Boeing's use of FSC/ETI benefits. It continues to advocate the implausible theory that it would take Boeing engineers more than a decade to achieve what Airbus engineers achieved in two years the launch of a sophisticated, primarily composite aircraft. It continues to insist that measures that are not export contingent, and for the most part not tied to sales, will have the same effects as FSC/ETI. And it continues to do all of this with a lack of clarity as to what subsidies have what effects.
- 643. The remainder of this submission will dissect the EU arguments regarding the various types of subsidies and their supposed effects on Boeing and Airbus, to the extent they can be deciphered, and show that the EU has failed at each step of the analysis to establish its *prima facie* case.
- B. Issues Related to the Legal Framework Governing Adverse Effects Assessment in a Compliance Proceeding
 - 1. The United States has not misapplied the causation standard in assessing the role of non-attribution factors.
- 644. For the Article 6.3 market phenomena alleged by the EU, including each of the lost sales campaigns, the United States reviewed the evidence and demonstrated that other factors and not some price discount or acceleration of technology that could plausibly be attributed to

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 219

subsidies – genuinely and substantially caused the market effects. According to the EU, the United States ignores Appellate Body guidance that subsidies need not be the sole cause of a market effect to have a genuine and substantial causal relationship with the market effect. However, the original panel rejected lost sales claims based on similar considerations and evidence, including Boeing's prior relationship with some of its best and longest-standing customers. The EU did not even appeal these findings, so it is difficult to see the basis of the EU's objection to this analysis in this proceeding.

- 645. The fact is the EU failed to engage with the voluminous evidence placed on the record of this proceeding and, as a result, produced uncompelling arguments that technology or price effects properly attributable to the alleged subsidies played a decisive role in each of the sales campaigns it raises. "It is of course indisputable that parties carry the burden of adducing evidence in support of their claims or defences." Given the EU's failure to meet its burden, the United States may not have needed to respond at all in some cases.
- 646. This essentially moots the EU's point about a non-attribution factor having a genuine and substantial causal relationship not precluding subsidies from also having a genuine and substantial causal relationship. In any event, even had there been occasion for the United States to weigh competing causes of the market effects (*i.e.*, subsidies and one or more non-attribution factors) to test their relative importance, the EU's refusal to produce any detailed arguments of the subsidies' magnitudes and how they translate into effects renders such an analysis extremely difficult, if not impossible, as a practical matter. ⁹⁸⁴ The United States will discuss the specific non-attribution factors in greater detail in the sections below, including in addressing each sales campaign, but it suffices to say that the United States has not confused or misapplied the appropriate causation standard and the role played by non-attribution factors.

2. The EU bears the burden of proving the validity of the market delineation on which it bases its claims.

647. The EU criticizes the United States for giving "no indication of how it would change the EU product market delineation, or advance an alternative, let alone explaining a rationale for doing so." The EU also takes issue with the absence of a U.S. rebuttal supported by evidence to the EU's position that the A330 does not compete in the same market with any allegedly

⁹⁸¹ See EU SWS, para. 886. See also EU SWS, paras. 885-886. The EU also mischaracterizes the U.S. position in EC – Large Civil Aircraft (21.5) with respect to Article 7.8, but there is no reason to address the EU's error in the context of this dispute. See EU SWS, para. 884.

⁹⁸² See US – Large Civil Aircraft (Panel), para. 7.1786 and note 3725.

⁹⁸³US – Large Civil Aircraft (AB), para. 1139 (citing EC – Hormones (AB), para. 109 and its reference to US – Wool Shirts and Blouses (AB)).

⁹⁸⁴ See, infra, Section IV.G.2.

⁹⁸⁵ EU SWS, paras. 902-904.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 220

subsidized product.⁹⁸⁶ It is the EU that bears the burden of proof with respect to its claims. The United States does not bear the burden of rejiggering the EU's market definitions so to as make the EU's claims viable.

648. It is well settled that, for claims under Article 6.3, the relevant market phenomena (*e.g.*, displacement, impedance, price suppression, lost sales) can only occur where a subsidized product and like product compete against one another in a market. The Appellate Body has offered the following explanation:

The word 'market' in Article 6.3 must be read together with the concept of 'like product'. Articles 6.3(a) and 6.3(b) both refer to imports and exports of a 'like product'. This reference indicates the need to identify a 'subsidized product' that is 'like' the product the importation or exportation of which is being displaced or impeded in a particular market. The term 'like product' is defined in footnote 46 of the *SCM Agreement* to mean 'a product which is identical, i.e. alike in all respects to the product under consideration, or in the absence of such a product, another product which, although not alike in all respects, has characteristics closely resembling those of the product under consideration.' This suggests that identity or close resemblance of characteristics are one factor to consider in assessing whether products are in the same market.

As we see it, displacement is a situation where imports or exports of a like product are replaced by the sales of the subsidized product. The mechanism by which displacement operates is, in our view, essentially an economic mechanism, the existence of which is to be assessed by reference to events that occur in the relevant product market. We construe the concept of displacement as relating to, and arising out of, competitive engagement between products in a market. Aggressive pricing of certain products may, for example, lead to displacement of exports or imports in a particular market. *This, however, can only be the case if those products compete in the same market.*

- 649. Thus, there is no doubt that the EU must allege and prove that the subsidies at issue are a genuine and substantial cause of the alleged market phenomena, such as price suppression, in a specific market. If the EU has structured its claim based on invalid markets, then it has likely failed to meet its burden in most, if not all, cases.
- 650. The EU makes summary statements that even if its markets are invalid, its claims still would succeed under another market delineation (even though the EU does not know what that market delineation would be). The United States recognizes that there may be times where, even if the Panel opted for a different product market delineation, the arguments and evidence before

⁹⁸⁶ EU SWS, para. 917.

⁹⁸⁷ EC – Large Civil Aircraft (AB), paras. 1118-1119 (emphasis added) (internal citations omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 221

it would be sufficient to allow a proper analysis of the issues. But it is certainly not clear that this would be true for all claims or arguments, and the EU bears the burden of proof with respect to this *arguendo* argument. Merely making the blanket assertion with respect to any conceivable market delineation with nothing more effectively asks the Panel to impermissibly make the case for the EU if the EU's product market delineation is rejected.

- 651. Moreover, to meet its burden, the EU must allege, among other things, that each injured Airbus aircraft model is in a market with a competing Boeing aircraft model affected by the subsidies at issue. The EU has reiterated that the A330 is not in a market with any Boeing aircraft model. Having unequivocally failed to even allege the required elements of a breach under Article 6.3, any EU claims must fail with respect to the A330.
- 652. The EU invents a new test that "the effects of the subsidy are caused in the same market in which the existing product (here, the A330) competes." As the Appellate Body statement above demonstrates, the relevant effects can only exist "if those products compete in the same market." The EU's standard has no basis in the Appellate Body's guidance or the SCM Agreement.
 - 3. The United States has indicated that the EU must prove the case it has alleged, but has not endorsed its standard as a requirement under Article 7.8 of the SCM Agreement.
- 653. The EU incorrectly interprets U.S. silence as apparent agreement with the EU's position that it is required to show "present' adverse effects, based on a reference period that may reflect long-term effects." The United States has clearly stated that it "focused {its first written} submission on the key points raised in the EU first written submission. Silence with regard to any issue should be understood as silence, rather than agreement with a position we have not addressed." Physical Regard 1992
- 654. Moreover, if the United States understands the EU's reference here correctly, the United States did address this standard proposed by the EU. The United States noted that "the DSU and the SCM Agreement do not constrain a Member to adopt this approach. However, as the EU does not advance any other arguments, the question of whether it is the only way to demonstrate noncompliance under Article 7.8 is not before the Panel, and need not be resolved to fully address the EU's efforts to make a *prima facie* case." ⁹⁹³

⁹⁸⁸ See EU SWS, para. 917-918, 921.

⁹⁸⁹ EU SWS, para. 920.

 $^{^{990}}$ EC – Large Civil Aircraft (AB), para. 1119 (emphasis added) (internal citations omitted).

⁹⁹¹ EU SWS, para. 889.

⁹⁹² US FWS, para. 9.

⁹⁹³ US FWS, para. 41.

United States - Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353) August 22, 2013 – Page 222

C. The EU's Obfuscation with Respect to Its R&D Subsidy Claims Constitutes a Failure to Make a *Prima Facie* Case and Deprives the United States of a Fair Opportunity to Defend Against the Claims of Non-Compliance.

- 655. Having completed both substantive written submissions prior to the Panel meeting, the EU still has given no clear explanation of its allegations with respect to R&D subsidies. Specifically, the EU has not indicated which subsidies it alleges to cause technology effects and which subsidies it alleges to cause price effects. At this stage, the EU's refusal to clearly communicate what is being argued puts the United States in the unfair position of not knowing precisely what it is being asked to defend against and constitutes a failure to carry the EU's burden of proof.
- The EU has described its burden of proof in these compliance proceedings as follows ⁹⁹⁴: 656.

As in all proceedings, the general rules on burden of proof apply. A complaining Member (the European Union in this case) must make a *prima facie* case. ⁹⁹⁵ which means it must: make a claim; assert facts; adduce evidence; and develop argument. 996 Absent a *prima facie* case, a compliance panel must find in favour of the responding Member (the United States in this case), without the responding Member ever coming under an obligation to rebut a case that has not been

⁹⁹⁴ EU FWS, para. 32.

⁹⁹⁵ Appellate Body Report, Chile – Price Band System (Article 21.5 – Argentina), para. 136 ("... a responding party's measure will be treated as WTO-consistent unless proven otherwise ... an Article 21.5 panel determines whether {the complaining} party has discharged its burden of proof ..."); Panel Report, US – Zeroing (Japan), para. 7.5 (Id.); Panel Report, US – Zeroing (EC) (Article 21.5 – EC), para. 8.7 ("The general principles regarding the allocation of the burden of proof in WTO dispute settlement require that a party claiming a violation of a provision of a WTO agreement by another Member assert and prove its claim. These rules apply equally to proceedings under Article 21.5 of the DSU.") (footnotes omitted); Panel Report, US – Upland Cotton (Article 21.5 – Brazil), para. 9.3 (Id.); Panel Report, Korea – Certain Paper (Article 21.5 – Indonesia), para. 6.4 ("The burden of proof in these proceedings is the same as that in the original panel proceedings. We recall that the general principles applicable to burden of proof in WTO dispute settlement require that a party claiming a violation of a provision of the WTO Agreement by another Member must assert and prove its claim. In these Panel proceedings, Indonesia, which has challenged the consistency of Korea's measure, thus bears the burden of demonstrating that the measure is not consistent with the relevant provisions of the Agreement. Indonesia also bears the burden of establishing that its claims are properly before the Panel.") (footnotes omitted); Panel Report, US - Oil Country Tubular Goods Sunset Reviews (Article 21.5 – Argentina), para. 7.4.

⁹⁹⁶ Appellate Body Report, US – Gambling, para. 141 ("The evidence and arguments underlying a prima" facie case ... must be sufficient to identify the challenged measure and its basic import, identify the relevant WTO provision and obligation contained therein, and explain the basis for the claimed inconsistency of the measure with that provision."); Appellate Body Report, US – Zeroing (EC), para. 217.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 223

made. 997 As in all proceedings, a compliance panel may not make the case for either party. 998

657. Furthermore, the Appellate Body has made clear that the DSU does not tolerate the type of obfuscation engaged in by the EU. In *India – Patents*, the Appellate Body explained:

All parties engaged in dispute settlement under the DSU must be fully forthcoming from the very beginning both as to the claims involved in a dispute and as to the facts relating to those claims. Claims must be stated clearly. Facts must be disclosed freely. This must be so in consultations as well as in the more formal setting of panel proceedings. ⁹⁹⁹

- 658. The EU has failed to meet its burden of proof and deprived the United States as the responding party of a fair opportunity to answer the claims against it.
- 659. In its first written submission, the United States objected to the EU re-arguing that R&D subsidies cause adverse effects through a price effects causal mechanism that is, by permitting Boeing to lower its prices because this argument was rejected in the original proceeding. ¹⁰⁰⁰ In its second written submission, the EU has clarified that it is alleging two distinct, non-overlapping sets of R&D subsidies: one set of R&D subsidies that cause technology effects and another set of R&D subsidies that cause price effects. ¹⁰⁰¹
- 660. However, the EU refuses to clearly identify which R&D subsidies it alleges are in each set. The EU does for the first time provide a table that purports to list the subsidies the EU alleges to be causing price effects on a model-specific basis. The table includes NASA –

⁹⁹⁷ Appellate Body Report, *US – Gambling*, para. 155 ("...the Panel erred in ruling on claims relating to these state laws, where no *prima facie* case of inconsistency had been made out by Antigua ...").

Appellate Body Report, *Japan – Agricultural Products II*, para. 129 ("Article 13 of the DSU and Article 11.2 of the *SPS Agreement* suggest that panels have a significant investigative authority. However, this authority cannot be used by a panel to rule in favour of a complaining party which has not established a *prima facie* case of inconsistency based on specific legal claims asserted by it."); Panel Report, *US – Oil Country Tubular Goods Sunset Reviews (Article 21.5 – Argentina)*, para. 6.10 ("We also recall that the role of a panel is not to make the case for either party, but to clarify parties' claims through questioning, where necessary."); Panel Report, *US – Softwood Lumber V (Article 21.5 – Canada)*, para. 5.8 ("The role of the Panel is not to make the case for either party ..."); Panel Report, *EC – Countervailing Measures on DRAM Chips*, para. 7.7 ("The role of the Panel is not to make the case for either party ..."); Panel Report, *US – Softwood Lumber V*, para. 7.13 ("The role of the Panel is not to make the case for either party ..."); Panel Report, *Argentina – Poultry Anti-Dumping Duties*, para. 7.50 ("The role of the Panel is not to make the case for either party ...").

⁹⁹⁹ *India – Patents (AB)*, para. 94 (also referring to the "demands of due process that are implicit in the DSU").

¹⁰⁰⁰ See US FWS, paras, 716-719.

¹⁰⁰¹ See EU SWS, paras. 1099-1100.

¹⁰⁰² See EU SWS, para. 1072.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 224

Fundamental Aeronautics, NASA – Integrated Systems Research, NASA – Aviation Safety, NASA – Aeronautics Strategy & Management, NASA – Strategic Capabilities Assets Program, NASA – High-End Computing Program, FAA CLEEN Program, and DoD RDT&E. 1003 This covers, at the very least, all post-2006 R&D subsidies alleged in this compliance proceeding. It appears to also cover the pre-2006 DoD subsidies, as all DoD subsidies subject to the DSB's recommendations and rulings fall under the EU's DoD RDT&E allegation. It is unclear whether the pre-2006 NASA subsidies – to the extent any remain – are excluded and, therefore, still alleged to cause technology effects.

- 661. Because the sets of R&D subsidies are mutually exclusive in terms of causal mechanism, one might assume that all of the remaining R&D subsidies are being alleged to cause technology effects. This theory would lead one to conclude that, after the original reference period (post-2006), the EU alleges that no R&D subsidies continued to cause adverse effects through a technology effects causal mechanism. This is difficult to square, however, with a number of other EU arguments, including the EU's allegation that the FAA CLEEN program (which is post-2006) is causing adverse effects through a technology effects causal mechanism. The EU's technology effects arguments with respect to subsidies covered by the price effects table result in an internal inconsistency that places the Panel and the United States back in the position of not knowing which subsidies are alleged to cause effects through a price causal mechanism and which are alleged to cause effects through a technology causal mechanism.
- 662. With respect to the theoretical basis for alleging that one set of R&D subsidies cause price effects while the remaining R&D subsidies cause technology effects, the EU's explanation is limited to vague and occasional references to some research being for technology that would be unavailable to Boeing in the market and other research that would be available, but nowhere defines which research it alleges to be "for technology that would be unavailable to Boeing in the market." This too is insufficient to allow the Panel and the United States to understand clearly what the EU is alleging.
- 663. It is clear from the original proceeding as the EU now concedes ¹⁰⁰⁶ that R&D subsidies of the type at issue in this dispute cannot cause both technology effects and price effects. ¹⁰⁰⁷ An R&D subsidy's potential to cause technology effects hinges on the subsidy being essential for Boeing to have gone forward with the research at all at the time and in the manner it did. Thus, the claims on which the EU prevailed in the original proceeding were based on the theory that Boeing conducted early-stage research it would not have conducted (at least at that

¹⁰⁰³ EU SWS, para. 1072. In this and several other passages, the EU refers to its claims as involving the DoD "RDT&E Program." The United States notes that the EU has made arguments only with respect to 30 named program element and not DoD RDT&E as a whole. *See* EU FWS, paras. 246, 282, 291, and 301.

¹⁰⁰⁴ See EU FWS, paras. 961, 964, and 981.

¹⁰⁰⁵ See EU SWS, para. 1067.

¹⁰⁰⁶ See EU SWS, para. 1098.

¹⁰⁰⁷ US – Large Civil Aircraft (Panel), para. 7.1826.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 225

time in that manner) in the absence of the subsidies. This research allowed Boeing to launch the 787 earlier than it otherwise would have. And for this reason, the subsidy could not be reduced to its cash value. ¹⁰⁰⁸

- 664. A separate theory which the original panel rejected with respect to R&D subsidies at issue in the original proceeding suggests that R&D subsidies lower the cost to Boeing of the research, and that Boeing can use the savings to lower the prices of its aircraft. But a premise of this theory, which is inconsistent with the technology effects theory, is that the research would have been conducted at the same time and in the same manner even in the absence of the subsidy. This shows, again, that the two scenarios are mutually exclusive.
- 665. But the EU does not identify which research it alleges would have been conducted even in the absence of the subsidies and, therefore, arguably causes price effects and not technology effects. Moreover, after obtaining findings solely on the theory that the R&D subsidies were resulting in Boeing conducting research it otherwise would not have conducted at the same time and in the same manner in the absence of the subsidies, the EU has offered no evidence to support the notion that the R&D subsidies are now supporting research that would have been conducted regardless and are therefore simply freeing up cash.
- 666. In other words, the Panel and the United States are left with no indication as to which R&D subsidies are alleged to cause price effects as well as what reason the EU has for believing that the causal mechanism for R&D subsides has changed. The Panel and the United States simply should not be in the position of having to guess what the EU is alleging, and the EU must not be allowed to profit from its apparently deliberate opacity.
- 667. Furthermore, at this stage in the proceeding, the EU has failed to make a *prima facie* case that any R&D subsidies are causing serious prejudice. The EU bears the burden of demonstrating that a particular subsidy can and does cause serious prejudice through a technology causal mechanism, or that a particular subsidy can and does cause serious prejudice through a price causal mechanism. They are completely different arguments. Yet, by failing to even identify the causal mechanism associated with each R&D subsidy, the EU has failed to make a *prima facie* case that any particular R&D subsidy (or any group of R&D subsidies) causes Boeing to lower its prices. Nor has the EU made a *prima facie* case that any particular R&D subsidy (or any group of R&D subsidies) causes Boeing to gain technology advantages as was this case in the original proceeding. Accordingly, the EU's claims with respect to R&D subsidies must fail.

¹⁰⁰⁸ See US – Large Civil Aircraft (Panel), para. 7.1760.

¹⁰⁰⁹ A different way of stating the same argument is that, given the amount Boeing was paid for the research and the costs it incurred, participation in the research provided Boeing with better-than-market assets, such as patent rights. Either way, the issue is an incongruence between what Boeing got out of the research and the costs to Boeing associated with the research.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 226

- 668. Moreover, even if such claims were considered, there are significant implications attached to any EU arguments that R&D subsidies are acting through a price effects causal mechanism and not a technology effects causal mechanism.
- 669. First, the EU must accept the finding from the original proceeding that R&D measures at issue there cause technology effects and not price effects. To the extent that the EU is arguing that measures at issue there have not been withdrawn, and the causal mechanism through which those measures cause effects has shifted in the interim, it must demonstrate with evidence from the more recent period the existence of such a shift which it has failed to do.
- 670. Second, subsidies can only be aggregated when they share a common causal mechanism. Therefore, technology effects R&D subsidies cannot be aggregated with price effects R&D subsidies (if the EU ever reveals which are which).
- 671. Third, the EU has never shown (and cannot show) that R&D subsidies that merely allow Boeing to save money rather than develop technology it otherwise would not develop at that time and in that manner can impact Boeing's pricing decisions. And even if the EU could show that R&D subsidies *do* influence pricing, the EU would have to demonstrate what *portion* of the overall subsidy which itself is a fraction of the total program cost would be passed on to customers in the form of lower prices, as opposed to being used by Boeing for other purposes. And once that portion was established, the effects on Boeing's pricing could be reduced to the cash value of that portion. This stands in stark contrast to R&D subsidies causing technology effects, which the original panel found could not be reduced to their cash value. 1012
- 672. But again, the United States should not be put in the position of making these points in the abstract. The EU's burden which it has not met was to allege and support with evidence claims that clearly identified measures are causing particular forms of serious prejudice.

D. The EU Has Failed to Rebut the U.S. Demonstration that Many of its Claims and Arguments Cannot Properly Be Considered in this Compliance Proceeding.

673. The United States has objected to the unruly and sprawling case the EU has inappropriately tried to squeeze into this compliance proceeding, including by attempting to relitigate issues that were already resolved in the original proceeding. The EU alleges that these objections are a "cloak" for supposed U.S. opposition to the applicable reference period. ¹⁰¹³ The United States did not take any specific position on the reference period, much less cloak in other objections arguments supporting that position.

¹⁰¹⁰ See Section IV.E.1.

¹⁰¹¹ See Section IV.G.

¹⁰¹² See US – Large Civil Aircraft (Panel), para. 7.1760.

¹⁰¹³ See EU SWS, para. 890.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 227

- 674. According to the EU, the United States misunderstands the relevance of findings from the original reference period to the Panel's enquiry in these compliance proceedings for three reasons. ¹⁰¹⁴ To the extent the EU is arguing that a new reference period negates the relevance of any findings from the original reference period, it is an argument that proves too much. Compliance proceedings will always take place after original proceedings, and neither previous Appellate Body reports nor common sense supports throwing all previous analysis out the window for purposes of a compliance proceeding.
- 675. Thus, U.S. objections to the EU's unauthorized and massive expansion of claims in this compliance proceedings is not an issue of the proper reference period, and no attempts to cast it differently can justify the EU's attempts to re-litigate previously resolved issues or raise claims it could have pursued in the original proceeding but chose not to. None of the EU's three reasons to support its theory can sustain scrutiny.
- 676. *First*, the EU believes that, in some instances, the United States uses the term "claims" to refer to what are more properly characterized as "arguments." The EU understands itself to have only a single claim of present adverse effects, supported presumably by a multitude of arguments. The EU appears to be arguing that only *claims* can be finally resolved in an original proceeding. If this is the case, than the EU's notion of having a single claim is too broad. Otherwise, if a Party establishes the existence of an actionable subsidy that causes adverse effects in an original proceeding, it could argue anything under that umbrella in a compliance proceeding.
- 677. This cannot be correct. Any Party in a compliance proceeding under Article 7.8 has necessarily established at least one form of adverse effects in the original proceeding. The EU's position would mean that Parties are free to re-argue anything that was initially rejected or omitted entirely just by virtue of being in a compliance proceeding.
- 678. Moreover, not just "claims," but also defenses and issues ruled upon and conclusions reached are all part of the reports that are ultimately adopted and are thus resolved. ¹⁰¹⁷ Furthermore, the Appellate Body has previously found that Articles 3.2 and 3.3 of the DSU which reflect the importance to the multilateral trading system of security, predictability and the prompt settlement of disputes do not allow a party to reargue the treatment of a specific issue that was resolved in the original proceeding. ¹⁰¹⁸
- 679. As the United States has explained in Section I.A.4, compliance proceedings are not fora to relitigate already-resolved issues or raise new ones that could have been raised in the original

¹⁰¹⁴ EU SWS, para. 890.

¹⁰¹⁵ EU SWS, para. 891.

¹⁰¹⁶ EU SWS, para, 894.

¹⁰¹⁷ See US – Gambling (21.5) (Panel), paras. 6.56-6.57.

¹⁰¹⁸ *Mexico - Corn Syrup (21.5) (AB)*, paras. 77-79.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 228

proceeding but were not. Where the EU failed to establish that a measure was in breach of the SCM Agreement, and thus the United States had no compliance obligations with respect to that measure, the EU cannot relitigate the same claims or raise new claims with respect to that measure.

- 680. If a measure *was* found to cause adverse effects, the United States agrees that nothing precludes the EU from establishing that certain facts in the interim period have led to changes in the form of the adverse effects being caused. For example, if a subsidy is found to have caused price suppression in the Third Country X 100-200 seat market, it may very well be that later data show price suppression in the Third Country Y 100-200 seat market. This would be consistent with the findings of the original proceeding.
- 681. Assuming the measure was found to cause price suppression in market X, even if it was found that price suppression in market Y had *not* been established, the EU could potentially allege price suppression in market Y *if it is based on more recent data*. But simply repeating the same arguments or supplementing them with new or better arguments is the epitome of an "unfair second chance," which the Appellate Body has rejected. This is what the EU does in many instances, and the United States maintains that such re-argument should not be permitted.
- 682. *Second*, the EU argues that the findings of the original proceeding are not dispositive of the claims in this compliance proceeding because "the alleged 'claims' do not involve the same measures at issue in the original proceedings, as the adverse effects at issue in these compliance proceedings are caused by a group of US subsidies that is different from, and in particular broader than, the subsidies at issue in the original proceeding." Furthermore, according to the EU, there could not have been final resolution of the claims because they concern adverse effects arising after the end of the implementation period in 2012. ¹⁰²¹
- 683. The EU errs in several respects. The measures at issue are to a large extent the original measures, as a substantial part of the EU case is about the effects of pre-2007 measures and the stream of technological developments they supposedly initiated before 2007. The EU argues that the combination of these measures with new measures allows this Panel to reach conclusions different from, and in many cases diametrically opposed to, the adopted Appellate Body and original panel reports. But the EU has failed to explain why the supposed addition of new measures, many of which it characterizes as essentially the same as the original measures, work differently or cause the older measures to work differently.
- 684. The EU's position that the original dispute has no applicability to post-2006 developments, or even pre-2006 issues if post-2006 developments exist, combined with EU efforts to vastly expand the scope of this compliance proceeding, in essence requires the

¹⁰¹⁹ See US – Upland Cotton (21.5) (AB), para. 210.

¹⁰²⁰ EU SWS, para. 893.

¹⁰²¹ EU SWS, para. 894.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 229

conclusion that the original proceeding has no value once it is over. Although this would seemingly undermine any reliance by the EU on the findings in its favor in the original proceeding and the DSB's recommendations and rulings, it in some ways fits with the EU's approach of basically treating this compliance proceeding like it is a brand new dispute.

- 685. But it is not a new dispute. Compliance proceedings are mechanisms for assessing whether a Member has come into compliance with the DSB's recommendations and rulings. The DSU allows the EU to commence a new dispute if it would like to start from square one.
- 686. *Third*, the EU argues that the conclusions and recommendations sections of the panel and Appellate Body reports embody a general conclusion that U.S. subsidies cause adverse effects in the reference period, but do not identify particular sales or markets to which they pertain. ¹⁰²² This is demonstrably false. The findings and conclusions of the Appellate Body Report include the following:

reverses the Panel's finding, in paragraphs 7.1797, 7.1854(a), and 8.3(a)(i) of the Panel Report, to the extent that it relates to Kenya, Iceland, and Ethiopia (but not with respect to Australia), that the effect of the aeronautics R&D subsidies is a threat of displacement and impedance of EC exports in third-country markets within the meaning of Article 6.3(b) of the *SCM Agreement* with respect to the 200-300 seat LCA market; ¹⁰²³

687. In addition, the Appellate Body Report modifies all of the individual findings and conclusions with the phrase, "For the reasons set out in this Report." And even if that were not the case, the findings and conclusions section would hardly make sense without the entirety of the report preceding it.

E. The EU Misapplies the Appellate Body's Guidance Regarding Aggregation and Cumulation.

688. The EU treats aggregation, cumulation, and the U.S. objection to the EU's re-litigation of an abandoned cumulation claim as sub-headings under a common "assessment of collective effects" heading. The United States does not view this organization as tracking the proper sequence of analysis. While aggregation arguments can and should be assessed prior to determining whether subsidies are a genuine and substantial cause of the alleged market phenomena, cumulation analysis should only be undertaken if and after at least one subsidy or aggregated group of subsidies has been found to genuinely and substantially cause the alleged market phenomena and the Panel has assessed the genuineness of all subsidies or aggregated

¹⁰²² EU SWS, para. 895.

¹⁰²³ US – Large Civil Aircraft (AB), para. 1350(d)(1)(A)(5).

¹⁰²⁴ US – Large Civil Aircraft (AB), para. 1350.

¹⁰²⁵ EU SWS, paras. 925-954.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 230

groups of subsidies for which cumulation is sought. Nevertheless, for ease of reference, the U.S. rebuttal will adopt the EU's organizational structure in this regard. Before turning to these concepts, however, the United States addresses the EU's repeated assertion that the United States is attempting to unduly segment or atomize the analysis.

- 689. The EU alleges that the United States is arguing for the Panel to "'segment' its analysis of the effects of the US subsidies," and that "the inappropriate 'atomisation' of the analysis that the United States advocates is the *only* basis on which it can escape the previously established finding that the US subsidies result in Boeing charging lower prices than it otherwise would." As an initial matter, the EU is attempting to shift its burden to demonstrate that aggregation and/or cumulation is appropriate in the relevant contexts. The United States is not trying to segment or atomize anything because there is no presumption that the various subsidies alleged by the EU would be aggregated and/or cumulated except perhaps with respect to the measures/subsidies that were aggregated and/or cumulated in the original proceeding and found not to have been withdrawn.
- 690. It is the EU not the United States that is trying to escape from the "previously established finding" with respect to U.S. subsidies that result in Boeing charging lower prices (*i.e.*, through the EU's price effects causal mechanism). The previously established finding in this respect was:
- FSC/ETI and the Washington B&O tax rate reduction, when aggregated, allowed Boeing to lower its prices of 737s and thereby cause lost sales of the A320, and these effects were cumulated with the effects of the Wichita IRBs because the latter were found to supplement and complement the former.
- 691. There were no other findings with respect to any other measures in any market that subsidies were causing adverse effects by resulting in Boeing charging lower prices than it otherwise would. Thus, there is very little to atomize or segment.
- 692. Starting from the previously established finding, the United States has not atomized or segmented anything. The United States excluded FSC/ETI not because it analyzed its effects separately but because it unquestionably has been withdrawn.
- 693. Having excluded FSC/ETI on this basis and again, this was the only subsidy aggregated with the Washington B&O tax rate reduction in the Appellate Body's analysis of the 100-200 seat market the United States assessed the Washington B&O tax rate reduction on its own. And as the United States has shown, based on the EU's theory of how these subsidies cause effects, the EU has not substantiated and cannot demonstrate that the Washington B&O tax rate reduction alone could be a genuine and substantial cause of significant lost sales (or any other form of serious prejudice). This is consistent with the findings in the original proceeding,

¹⁰²⁶ EU SWS, para. 925 (emphasis original).

¹⁰²⁷ See US FWS, paras. 820-824, 996-997.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 231

where FSC/ETI drove the finding of a breach with respect to subsidies leading to lower 737 prices. The original panel estimated that FSC/ETI subsidies to Boeing totaled \$2.2 billion, while Boeing received \$13.8 million in Washington B&O tax rate reductions. In fact, in the 200-300 seat market, where FSC/ETI was not alleged to cause adverse effects, the Washington B&O tax rate reduction – even when aggregated with the City of Everett B&O tax rate reduction – was not found to be a genuine and substantial cause of any serious prejudice market phenomena.

- 694. The United States has also shown that the EU has not and cannot demonstrate that the Wichita IRBs alone could be a genuine and substantial cause of significant lost sales or any other form of serious prejudice. And, as explained in Section IV.E.2, if neither is a genuine and substantial cause of the relevant market phenomena, their effects cannot be cumulated (although if they were, it would not make a difference). This too is consistent with the Appellate Body's findings, where the Wichita IRBs were found to cause adverse effects only when cumulated with the tied tax subsidies already found on the back of FSC/ETI to have a genuine and substantial causal relationship to market effects.
- 695. Thus, the United States has embraced fully the previously established finding on subsidies permitting Boeing to lower its prices and thereby cause adverse effects. Other than taking into account the withdrawal of FSC/ETI, the United States has followed the analysis and guidance from the original proceeding exactly, including assuming *arguendo* that the Washington B&O tax rate reduction and the Wichita IRBs were not withdrawn.
- 696. It is the EU that attempts to deviate enormously from and massively expand the previously established finding. Of note, under the previously established findings:
- the effects of aggregated R&D subsidies were not cumulated with the effects of aggregated tied tax subsidies or aggregated untied other subsidies, and there was no finding that they should have been; 1031
- the Washington sales tax exemptions for construction services and equipment, the leasehold exemption, and the property tax exemption were not found to cause adverse effects of any kind; 1032
- the Washington B&O tax credits for preproduction development and property taxes were not found to cause adverse effects of any kind; 1033

 $^{^{1028}}$ US – Large Civil Aircraft (Panel), paras. 7.819, 7.1433, 7.1811 (also valuing the Wichita IRBs at \$475.8 million).

¹⁰²⁹ See US – Large Civil Aircraft (AB), note 1800; US – Large Civil Aircraft (Panel), para. 7.1854.

¹⁰³⁰ See US FWS, paras., 999-1000, 1069.

¹⁰³¹ See US – Large Civil Aircraft (AB), para. 1321.

 $^{^{1032}}$ See US – Large Civil Aircraft (AB), para. 1350; US – Large Civil Aircraft (Panel), paras. 7.303 and 7.1432(a)(i)-(iii).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 232

- the City of Everett B&O tax rate reduction was not found to cause adverse effects of any kind: 1034
- various measures in connection with the production of Boeing's 787 under the *Project Olympus Master Site Development and Location Agreement between the Boeing Company and the State of Washington* (the "MSA") were not found to cause adverse effects of any kind; 1035
- DoD procurement contracts were not found to be subsidies causing adverse effects; ¹⁰³⁶
- FSC/ETI was conceded to not affect the 787. 1037
- 697. Nevertheless, the EU is seeking again to add these to the findings in its favor during the original proceeding. In so doing, the EU has re-challenged measures for which it failed to obtain rulings and recommendations, challenged new measures (most of which were in existence and could have been raised in the original proceeding), brought in a federal agency (FAA) and state (South Carolina) that had nothing to do with the original proceeding, and resuscitated arguments and claims it lost before the original panel and did not pursue on appeal. It has also sought the cumulation of R&D subsidies with tied tax subsidies despite failing to pursue in the original proceeding a finding that these two sets of aggregated subsidies *should* be cumulated.
- 698. The EU is thus seeking a massive, unauthorized, and at times incomprehensible expansion of this compliance proceeding, and the U.S. unwillingness to accommodate this improper expansion hardly amounts to inappropriate atomization. It is the EU that is trying to escape the previously established finding.
- 699. Moreover, the EU frames its discussion with a misleading statement that "the Appellate Body found…that both (i) Boeing's subsidy-affected product development decisions, and (ii)

¹⁰³³ See US – Large Civil Aircraft (Panel), para. 7.1834.

¹⁰³⁴ US – Large Civil Aircraft (AB), para. 1350(d)(iii)(A).

¹⁰³⁵ US – Large Civil Aircraft (AB), para. 10. These measures include (i) specific road improvements for the benefit of Boeing's LCA production facilities in Everett; (ii) the waiver of landing fees for Boeing's 747 large cargo freighters ("LCFs") at Paine Field to lower the costs of transporting 787 components to Everett; (iii) improvements to rail-barge transfer capabilities and expansion of the South Terminal facility to facilitate the transportation of 787 components to Everett; (iv) the freezing of rates for water, sanitary sewer, solid waste, and process wastewater services utilized by Boeing's LCA production facilities in Everett; (v) the provision of coordinators to Boeing to help start up Project Olympus; (vi) the creation of a workforce development programme and the provision of an "Employment Resource Center" to train Boeing's employees who will work on the assembly of the 787; (vii) the extension to 747 LCFs of tax and other incentives provided to the 787; and (viii) the assumption of litigation costs that Boeing incurs in relation to the MSA.

 $^{^{1036}}$ See US – Large Civil Aircraft (AB), para. 620 & note 1298; US – Large Civil Aircraft (Panel), paras. 7.1113, 7.1171.

¹⁰³⁷ US – Large Civil Aircraft (AB), note 1882 (citing US – Large Civil Aircraft (Panel), para. 7.1802).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 233

Boeing's subsidy-affected pricing decisions directly impact Airbus' sales and prices." Not only did the Appellate Body not assess R&D subsidies affecting product development on a cumulative basis with subsidies affecting Boeing's pricing, but the Appellate Body did not even find that any Airbus model's sales and prices were adversely affected by both technology-effect subsidies and price-effect subsidies.

700. Rather, the Appellate Body found that certain NASA and DoD R&D subsidies, on an aggregated basis, accelerated the launch and promised deliveries of the 787, causing serious prejudice to the Original A350 and A330. And the Appellate Body separately found that FSC/ETI and the Washington B&O tax rate reduction, when aggregated, allowed Boeing to lower its prices of 737s, and when cumulated with the effects of the Wichita IRBs, constituted a genuine and substantial cause of lost sales of the A320. The Appellate Body did not find that *any* subsidy resulted in Boeing lowering its prices for 787s and thereby caused serious prejudice. Nor did the Appellate body find that *any* subsidy resulted in technology effects with respect to the 737 that caused serious prejudice.

1. The EU has failed to establish that aggregation is proper in many of the contexts in which the EU requests it.

701. The EU states in its second written submission that "{a}ggregating subsidies requires that the subsidies (i) share a 'sufficiently similar ... design, structure, and operation', (ii) have a nexus to the subsidised product, and (iii) affect markets through the same causal mechanism." In the first written submission, the United States demonstrated numerous errors in the EU's aggregation arguments, which fail to satisfy the EU's burden based on the standard it acknowledges. Not only has the EU failed to rebut those demonstrations, its clarification of its R&D subsidy allegations has only compounded the errors.

a. R&D subsidies

702. The EU states, with respect to R&D subsidies, that the United States disputes only that the FAA CLEEN program may be aggregated with the NASA and DoD R&D subsidies. The United States explains below that, not only is this not completely accurate, but the EU's partial clarification of its arguments in its second written submission gives rise to additional objections about aggregating NASA and DoD R&D subsidies. The United States will first, however, address the EU's argument that alleged FAA subsidies should be aggregated with other R&D subsidies.

703. In the first written submission, the United States observed that the EU's reliance on the original panel report was insufficient to support aggregation of NASA, DoD, and FAA R&D

¹⁰³⁸ EU SWS, para. 929 (emphasis omitted).

¹⁰³⁹ EU SWS, para 931.

¹⁰⁴⁰ US SWS, para. 932.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 234

subsidies, as the FAA CLEEN program was not even at issue in the original proceeding, much less aggregated with NASA and DoD subsidies. ¹⁰⁴¹ The EU does not and cannot dispute this fact.

- 704. The EU gives no further explanation in its second written submission of how the FAA subsidies share a common design, structure, and operation with the NASA and DoD subsidies, choosing instead to rely on the brief discussion in its first written submission, which itself cross-referenced the EU's more general discussion of the alleged subsidies. The United States has already demonstrated that many of the EU's general discussion of the FAA CLEEN program contains numerous inaccuracies. For example, the EU's suggestion that the CLEEN program is a continuation of NASA research is simply wrong. The United States has also noted structural differences between the FAA CLEEN program and NASA research. Thus, like its reliance on the original panel findings, the EU's reliance on certain inaccurate premises may be misplaced.
- 705. In any event, the EU's aggregation of all FAA, NASA, and DoD R&D subsidies unquestionably fails as a result of the EU's unelaborated distinction between alleged R&D subsidies that have technology effects and those that have price effects. ¹⁰⁴⁶ The United States addresses in Section IV.C the many difficulties associated with the EU's approach of pursuing two separate groups of R&D subsidies with different causal mechanisms, which is made far more challenging to assess in light of the EU's inexplicable refusal to identify with any clarity which R&D subsidies are alleged to cause technology effects, and which R&D subsidies are alleged to cause price effects.
- 706. But to the extent that at some point the EU is willing to reveal which R&D subsidies it alleges are in each group, the R&D subsidies identified as causing price effects cannot be aggregated with the R&D subsidies identified as causing technology effects. The EU explicitly concedes that "{a}ggregating subsidies requires that the subsidies... (iii) affect markets through

¹⁰⁴¹ US FWS, paras. 749-750.

¹⁰⁴² See EU SWS, para. 932 (citing "EU FWS, paras. 959-963, referencing arguments and evidence in EU FWS, Sections V.B.2a-c, V.C.2.a-c, and V.D.2.a-c").

¹⁰⁴³ See US FWS, paras. 474-489.

¹⁰⁴⁴ See US FWS, paras 477.

¹⁰⁴⁵ See US FWS, paras. 478,

¹⁰⁴⁶ At least with respect to the NASA and DoD measures subject to the DSB's recommendations and rulings, the United States had not questioned the appropriateness of their aggregation given that Appellate Body reports are meant to be treated as a final resolution of the particular dispute. Of course, if the subsidies are found to have been withdrawn, aggregation is a moot point. Moreover, the EU has raised numerous new claims and arguments with respect to NASA and DoD measures that the United States has demonstrated to be outside the Panel's terms of reference. To the extent the Panel considers such claims, the EU obviously cannot rely on the aggregation findings from the original proceeding.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 235

the same causal mechanism." Thus, there is no disagreement that, to the extent there are two distinct sets of R&D subsidies that do not affect markets through the same causal mechanism, they do not meet one of the requirements for aggregation.

b. Tied tax subsidies

707. The United States noted that, in addition to the South Carolina apportionment agreement not being within the scope of this compliance proceeding, not all tied tax subsidies are even alleged to affect the same aircraft. The EU has clarified that any subsidy not explicitly alleged to have a close linkage to a particular aircraft model in paragraphs 1159-1161 of the EU first written submission should be excluded from the aggregated group of subsidies for the purposes of assessing potential effects of subsidies in the market in which that model competes. Thus, the aggregated tied tax subsidies group is different for each market, meaning the magnitude for each group is different. In attempting to establish its claims, it is incumbent upon the EU to engage with the particulars in each market rather than generically refer to the U.S. subsidies as if the group is static.

c. Miscellaneous subsidies

708. According to the EU, the U.S. aggregation argument as it applies to the miscellaneous subsidies requires that the subsidies be essentially identical. This is not the case. The U.S. position is that it is insufficient to merely allege that the subsidies leave Boeing with more money that it would have in the absence of the subsidies, which is significantly different than requiring the subsidies to be identical.

709. As the EU recognizes, subsidies can only be aggregated if they are shown to, *inter alia*, share a sufficiently similar design, structure, and operation. The EU has still failed to show how the myriad subsidies it tries to lump together in its third catch-all category share a similar design, structure, and operation. Instead, the EU argues that *US – Upland Cotton* demonstrates that "subsidies that take substantially different forms may properly be aggregated, even if they are not essentially identical to one another." But *US – Upland Cotton* undermines rather than supports the EU's argument.

¹⁰⁴⁷ EU SWS, para. 931.

¹⁰⁴⁸ US FWS, para. 753.

 $^{^{1049}\} See$ EU SWS, paras. 934, 1065-1067.

¹⁰⁵⁰ EU SWS, para, 935.

¹⁰⁵¹ See EU SWS, para. 931.

¹⁰⁵² EU SWS, para. 936.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 236

- 710. There, as the EU notes, the panel aggregated three types of payments to upland cotton producers. However, the panel also refused to aggregate other subsidies it determined to be insufficiently similar. An examination of the panel's analysis is instructive.
- 711. With respect to the three subsidies the panel aggregated, it emphasized that:
- the "three subsidies {were} provided for in the same legal measure: the FSRI Act of 2002;"
- the three subsidies were price-contingent; and
- the three subsidies have a nexus with the subsidized product and the single effects-related variable world price that the panel was called upon to examine. 1053
- 712. By contrast, the panel refused to aggregate so-called PFC and DP payments, as well as insurance premiums paid by the government. The panel noted that:
- none of these subsidies were price-contingent;
- the PFC and DP payments were provided in the same legal measures as the three aggregated subsidies, but the crop insurance subsidies had a separate legal basis;
- the combination of elements indicated that these subsidies were more directed at income support; and
- this combination attenuates the nexus between these subsidies and the subsidized product and the single effects-related variable world price. 1054

The panel concluded: "Because they are of a different nature and effect, we decline to aggregate them and their effects with those of the mandatory price-contingent subsidies in our price suppression analysis here. Rather, we must consider them separately." ¹⁰⁵⁵

713. The EU has failed to make any showing here with respect to the miscellaneous subsidies that would be equivalent to the similarities among price-contingent subsidies cited in *US – Upland Cotton*. The miscellaneous subsidies include measures with widely disparate designs, structures, and operations. As just one example, the U.S. first written submission highlighted the EU's failure to demonstrate any common design, structure, and operation shared by "Wichita IRBs {that} allow Boeing to avoid sales and property taxes" and the "Joint Center for Aerospace Technology Innovation {that} provides Boeing with access to university resources for use in

¹⁰⁵³ US – Upland Cotton (Panel), para. 7.1303.

¹⁰⁵⁴ US – Upland Cotton (Panel), para. 7.1307.

¹⁰⁵⁵ US – Upland Cotton (Panel), para. 7.1307.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 237

LCA-related activities." Furthermore, not only do they not share the same legal basis, as was the case in $US-Upland\ Cotton$, they are not even provided for or administered by the same granting authority. This fact, specifically, is not dispositive, but it is telling that the EU has also not identified any design or structure similarities that can be cited in favor of aggregation. Therefore, the EU's request for aggregation of these miscellaneous subsidies fails.

- 714. Finally, the EU suggests that the real U.S. objection appears to be that the aggregation of the miscellaneous subsidies is an attempt to make otherwise insubstantial alleged subsidies seem larger by aggregating them. The United States observes that the EU's attempt to aggregate such disparate subsidies without any real explanation of what common design, structure, and operation they share likely signals the EU's awareness that, on their own, these subsidies cannot plausibly cause adverse effects. But that is not the only or "real" point made by the United States.
- 715. The United States does not, as the EU suggests, concede that the miscellaneous subsidies have a substantial causal relationship with the relevant effects if they were aggregated. In fact, the United States explicitly made that clear in the aggregation section of its submission. The United States maintains that such aggregation is not appropriate, however, because of the EU's failure to meet its burden of demonstrating with evidence that the miscellaneous subsides meet the Appellate Body's criteria for aggregation. For these reasons, and those cited in the U.S. first written submission, the EU's request that the miscellaneous subsidies be aggregated should be denied.

2. The EU has not followed the Appellate Body's cumulation guidance.

716. The EU notes the U.S. position that, where no subsidy or aggregated group of subsidies can be shown to have a genuine and substantial causal relationship with relevant market phenomena under Article 6.3, cumulation is not appropriate. The EU states that the U.S. argument "contradicts explicit guidance by the Appellate Body," but the EU never cites or reproduces any such contradiction. Instead, it transitions to a vague argument about how the two approaches to collective assessment previously employed (*i.e.*, aggregation and cumulation), "are no bar to other methodologies that could be used to assess collectively the effects of subsidies." The United States takes no position on whether other forms of collective assessment could be appropriate in a particular dispute, but to the extent the EU is pursuing a

¹⁰⁵⁶ EU FWS, para. 974.

¹⁰⁵⁷ EU SWS, para. 939.

¹⁰⁵⁸ See US FWS, note 1127 ("As demonstrated below, even when aggregated, the miscellaneous subsidies do not have a genuine and substantial relationship with the market phenomena under Article 6.3(a) of the SCM Agreement.").

¹⁰⁵⁹ EU SWS, para. 945.

¹⁰⁶⁰ EU SWS, para. 945.

¹⁰⁶¹ EU SWS, para, 945.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 238

novel form of collective assessment, there should be no confusion about which Party is taking an approach that the Appellate Body has not endorsed. 1062

- 717. Moreover, the EU is vague about whether it is actually seeking some analysis different from the cumulation analysis previously employed by the Appellate Body. ¹⁰⁶³ To the extent the EU is seeking a novel form of collective assessment of subsidies, it bears the burden of explaining the mechanics of its proposal, when this form of collective assessment is appropriate, and why it is appropriate in this instance. The EU has done none of this.
- 718. What is clear, however, is that under the cumulation analysis previously applied by the Appellate Body, including in the original proceeding of this dispute, cumulation is not appropriate where no subsidy or aggregated group of subsidies can be shown to have a genuine and substantial causal relationship with relevant market phenomena.
- 719. Indeed, it is the EU's position that is contradicted by explicit Appellate Body guidance. The Appellate Body could not have been clearer with respect to cumulation:

a panel may begin by analyzing the effects of a *single* subsidy, or an *aggregated* group of subsidies, in order to determine whether it constitutes a genuine and substantial cause of adverse effects. Having reached that conclusion, a panel may then assess whether *other* subsidies—either individually or in aggregated groups—have a *genuine* causal connection to the same effects, and complement and supplement the effects of the *first* subsidy (or group of subsidies) that was found, alone, to be a *genuine* and *substantial* cause of the alleged market phenomena. The other subsidies have to be a "genuine" cause, but they need not, in themselves, amount to a "substantial" cause in order for their effects to be combined with those of the first subsidy or group of subsidies that, alone, has been found to be a genuine and substantial cause of the adverse effects. ¹⁰⁶⁴

The Appellate Body clearly distinguishes between what the United States refers to as the "anchor" subsidy, ¹⁰⁶⁵ which must have a genuine and substantial causal relationship, and the other subsidies sought to be cumulated, which must be a genuine cause, but need not amount to a substantial cause, on their own. The EU fails to reconcile its position with this statement.

¹⁰⁶² It is also relevant that this is a compliance proceeding, not an original proceeding. Where compliance with the DSB's recommendations and rulings is being assessed, it is generally not appropriate for the complaining party to be altering the framework of the dispute.

¹⁰⁶³ This includes the EU not using the term cumulation in its heading of the section, which is "Collective assessment of the existence of a causal link based on the technology and price mechanisms of the US subsidies."

¹⁰⁶⁴ US – Large Civil Aircraft (AB), para. 1282 (emphasis original).

¹⁰⁶⁵ The use of the term "anchor subsidy" is not intended to alter the Appellate Body's analysis in any way. It is merely a useful shorthand to avoid repeating "the subsidy or aggregated group of subsidies already found to have a genuine and substantial causal relationship with the market phenomena under Article 6.3."

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 239

- 720. The EU's position would collapse the two concepts of aggregation and cumulation. Aggregation allows the Panel to assess multiple subsidies as if they are a single subsidy. Appropriately, there are certain requirements before subsidies can be treated singularly, including that they operate through the same causal mechanism. By contrast, cumulating the effects of subsidies implicates different limitations.
- 721. In the original proceeding, the Appellate Body discussed the factors to be considered when deciding whether or not to aggregate subsidies. The Appellate Body then turned to the separate concept of cumulation:

In contrast, a decision as to whether the *effects* of different subsidies can be cumulated can be taken only *after* there has been a determination, for **at least one subsidy** or group of aggregated subsidies, that it has a **genuine and substantial link** to the alleged market phenomena. **Once such a causal link has been established**, then a panel will have to address the question of whether **other subsidies** have a **genuine connection** to such phenomena. ¹⁰⁶⁷

Thus, it is the EU's position that is explicitly contradicted by the Appellate Body's guidance.

- 722. Finally, the EU's repeated references to the need to not unduly segment or atomize claims are of no import. The Appellate Body also warned about the risks of inappropriate collective assessment. Accounting for the competing risks requires a balance, and the Appellate Body has sought to strike that balance in setting out the relevant factors for the conceptual analyses it has previously undertaken aggregation and cumulation.
 - 3. The EU mischaracterizes the U.S. argument and the original panel and Appellate Body findings, and errs in contending that a party can resuscitate a claim it abandoned in the original proceeding.
- 723. As an initial matter and consistent with a pattern that pervades the EU's submissions the EU is overly vague, resulting in a repeated failure to properly distinguish between aggregation and cumulation. In so doing, the EU incorrectly characterizes the U.S. argument.
- 724. The EU suggests that the United States has argued that subsidies acting through different causal mechanisms cannot be cumulated. This is incorrect. The United States in no way contests the Appellate Body's finding that different causal mechanisms does not preclude a panel from even assessing whether *cumulation* is appropriate. The United States notes that subsidies acting through different causal mechanisms cannot be *aggregated* that is, they cannot be treated as a single subsidy. The United States also points out that, while different causal

¹⁰⁶⁶ US – Large Civil Aircraft (AB), para. 1291, note 2615.

¹⁰⁶⁷ US – Large Civil Aircraft (AB), para. 1292 (italics original, bold added).

¹⁰⁶⁸ See EU SWS, paras. 948-949.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 240

mechanisms do not act as a bar to any cumulation analysis, the complaining party still must show that the effects of two subsidies (or aggregated groups of subsidies) are appropriately (*i.e.*, *should* be) cumulated.

- 725. The EU's misrepresentation of the U.S. argument leads it to incorrectly conclude that the United States is asking the Panel "to commit the same legal error as the original panel." ¹⁰⁶⁹
- 726. The EU also misrepresents the Appellate Body's finding. According to the EU, the Appellate Body found "that the original panel erred in not conducting a collective assessment of the effects of the US subsidies." This is *not* what the Appellate Body found. The Appellate Body found that the different causal mechanisms are not an outright bar to cumulation and, therefore, the original panel should have inquired *whether or not* the effects of the tied tax subsidies complement and supplement the effects of the R&D subsidies. The Appellate Body never found that the effects of the R&D subsidies and the tied tax subsidies *should* be cumulated.
- 727. And the reason for that is because the EU explicitly indicated to the Appellate Body that it was not requesting such a finding. By contrast, the EU did request that the Appellate Body complete the analysis with respect to cumulation of the tied tax subsidies and the remaining untied subsidies "and find that, together with the tied tax subsidies, the remaining subsidies cause adverse effects." ¹⁰⁷³
- 728. Therefore, the EU is wrong to suggest that its failure to request completion of the analysis is irrelevant. The difference in its approach in these two scenarios very clearly demonstrates that, in one scenario it was seeking a finding that the effects of two aggregated groups of subsidies should be cumulated, and in the other scenario it was not seeking such a finding.
- 729. Thus, the EU deliberately chose and communicated to the Appellate Body and the United States its choice not to request a finding that the effects of the R&D subsidies and the tied tax subsidies should be cumulated. As a result of the EU's choice, it failed to establish that the effects of those two aggregated groups of subsidies should be cumulated, as was its burden. That in turn shaped the DSB's rulings and recommendations, which informed the U.S. compliance steps. It would be unfair for the EU to grant itself a remand on this issue by re-raising it in the context of this compliance proceeding. Accordingly, there is no justification for creating a new exception to the general rule that issues resolved in the original proceeding cannot be re-litigated in a compliance proceeding.

¹⁰⁶⁹ EU SWS, para. 950.

¹⁰⁷⁰ EU SWS, para. 952.

¹⁰⁷¹ US – Large Civil Aircraft (AB), para. 1321.

¹⁰⁷² US – Large Civil Aircraft (AB), para. 1321.

¹⁰⁷³ EU SWS, para. 1331.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 241

- 730. Moreover, the United States agrees with the EU that "{a}n approach to limiting the scope of these compliance proceedings that requires this Panel to identify and ascribe intent to the European Union's...decisions in the original proceedings is unworkable." The United States has not requested that the Panel base its decision on whether there is proof that the EU was trying to game the system. The point is that, from a systemic perspective, allowing the EU to re-raise this issue now would permit and even incentivize such gaming.
- 731. But it is irrelevant whether a party declines to pursue a particular finding because it is attempting to game the system, considers the issue unimportant, decides that the ultimate conclusion of the panel was correct even if the legal analysis was not, or fails to pursue a finding for some other reason. Where it does, in fact, decline to pursue a finding on appeal that it sought and did not establish before the panel, that issue is resolved, and the complaining party is not entitled to an additional bite of the apple. Because, unlike many other issues, the EU indicated its deliberate intention not to seek a finding from the Appellate Body that the effects of R&D subsidies and tied tax subsidies *should* be cumulated in this dispute, that issue should not be revisited in this compliance proceeding.

F. Technology Causal Mechanism

1. Introduction

- 732. In its first written submission, the United States demonstrated that the U.S. aeronautics R&D measures properly within the terms of reference of this Panel do not cause present adverse effects through a technology effects causal mechanism. The U.S. demonstration encompasses both the compliance steps that changed the nature and magnitude of U.S. aeronautics R&D programs related to LCA, and the expiration of the technology effects found in the original proceeding.
- 733. The EU second written submission fails to rebut this demonstration. While the EU disagrees with the United States on many points, its responses confirm that the core technology effects issue before the Panel is when the 787 would have been available absent subsidies:
 - the EU agrees that the technology effects of the NASA and DoD R&D subsidies to the 787 have a finite duration;
 - the EU either agrees or does not contest that, absent those subsidies, Boeing would have launched the 787 at some point after 2004; and

1074				
10/4	EU	SWS,	para.	397.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 242

- the EU agrees that the proper way to determine when that launch would occur is through a counterfactual timing analysis focused on when Boeing could have made the 787 available.
- 734. Having narrowed the issues in this way, the parties do disagree as to the proper framing of the counterfactual question under such an analysis, the R&D programs subject to the analysis, and the ultimate conclusion. On these issues, the EU fail to undermine the approach, analysis and conclusions presented by the United States.
- 735. *First*, the U.S. counterfactual question isolates the effect of the relevant subsidies by delaying the 787 launch by the amount of time it would take Boeing engineers, absent any knowledge and experience they gained from participating in the WTO-inconsistent NASA and DoD research contracts and agreements to reach the point of launching the 787. In contrast, the EU counterfactual question would extend this delay by adding more time for (i) work performed under DoD procurement contracts that have not been found to confer specific subsidies, *plus* (ii) R&D actually performed by Boeing and its suppliers even though this would double-count the time taken for such work.
- 736. Second, the U.S. counterfactual analysis estimated two years of additional, counterfactual R&D time by looking to Boeing's real-world experience performing early-stage R&D on the 787 program, which involved technological challenges comparable to those addressed in the NASA and DoD programs. In contrast, the EU, without disputing that the U.S. benchmarks involve early-stage R&D of comparable difficulty, proposes ten-plus years of additional time that is based on a generic rule-of-thumb for all phases of concept-to-commercial technology development.
- 737. Third, the U.S. two-year estimate, when added to Boeing's actual pre-launch R&D time for the 787, is roughly comparable to the one-to-two-year pre-launch development time for Airbus's A350 XWB. In contrast, the EU's 10-plus-year figure implies that it would have taken Boeing five to ten times longer to launch the 787 than it took Airbus to launch the A350 XWB without participating in the NASA and DoD R&D programs.
- 738. The United States elaborates on these and related issues below, demonstrating that the U.S. approach is a reasonable, evidence-based way to answer the 787 counterfactual timing question, while the EU's is not.
- 739. Having failed to overcome the U.S. demonstration that the 787 would have been launched in 2006, there is very little left to the EU's technology effects arguments. The EU

¹⁰⁷⁵ EU SWS, para. 1023 ("/t]he relevant question is how long it would have taken Boeing engineers to undertake all of the knowledge the company's decades of participation in the US Government-supported R&D programmes have brought them, and thereafter, how long it would have taken them to research, develop and produce the specific technologies employed on the aircraft - without any knowledge about what to do and which pitfalls and dead-end research to avoid – knowledge acquired only through participation in the US R&D programmes.") (emphasis added); Airbus Engineers Statement, para. 13 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 243

either accepts or does not dispute that a 787 launch in 2006 would have allowed Boeing to develop the 737 MAX and 777X at the time and in the manner it has – even if all of the EU's technology spillover arguments were accepted. This leaves no technology effects allegations of any consequence.

- 740. With respect to the alleged post-2007 R&D subsidies, the EU concedes that at least some do not cause technology effects, implying that the nature of U.S. R&D contracts and agreements has changed. Meanwhile, its specific technology effects arguments for alleged post-2007 R&D subsidies associated with the 787, 777X, are 737 MAX boil down to an FAA CLEEN program that is outside the Panel's terms of reference. In any event, the CLEEN program did not have any technology effects. At most, it *may have* contributed a tiny amount of funding for jet fuel used on *some* flight tests that tested technology [***].
- 741. Finally, the EU largely does not dispute that the United States reduced substantially the amount of funding and resources provided to Boeing under the challenged R&D programs. Assuming, *arguendo*, that the Panel were to find that any existing U.S. R&D programs conferred subsidies to LCA, such subsidies under those programs would be a fraction of the already much-reduced program values.
- 742. Below, the United States addresses the specific arguments raised in the EU second written submission concerning the effect of the R&D subsidies through a technology causal mechanism.
 - 2. The EU mischaracterizes the U.S. technology effects rebuttal as challenging the underlying findings.
- 743. The United States welcomes the EU's acknowledgement that this compliance proceeding is not an appropriate forum to appeal or relitigate the findings of the original panel and the Appellate Body. However, the EU mischaracterizes the U.S. technology effects rebuttal as "repackag{ing}" arguments already rejected in the original proceeding. 1077
- 744. The subsections below highlight the errors in the EU arguments, including repeated mischaracterization of U.S. rebuttal arguments. Even the EU's introductory paragraphs distort the U.S. rebuttal arguments and the findings from the original proceeding. The EU states: "The United States surprisingly alleges that the original panel found that the US R&D subsidies did 'not...enable the development of technologies' for the 787." The full sentence in the U.S. first written submission states: "The R&D subsidies were found to have accelerated the 2004 launch of the 787, not to have enabled the development of technologies that Boeing would not

¹⁰⁷⁶ See EU SWS, para. 978.

¹⁰⁷⁷ EU SWS, para. 982.

¹⁰⁷⁸ EU SWS, para. 979 (quoting US FWS, para. 682).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 244

have otherwise discovered."¹⁰⁷⁹ The important point the United States was making is clear from the entirety of the sentence, and it is different from the distorted sentence the EU has created.

745. The EU also criticizes as implausible the purported "US assertion that Boeing could have 'develop{ed}, launch{ed} and produc{ed} the 787' a mere two years later." Again, this badly mischaracterizes the U.S. argument. The United States has never asserted that Boeing could have produced the 787 –i.e., manufactured the aircraft to fill a customer order – by April 2006. The two-year period is rather an estimation of the 787 launch delay resulting from the absence of the R&D subsidies (i.e., the additional time needed in the pre-launch R&D phase). In the U.S. counterfactual, the 787 deliveries would be promised to start in 2010. 1081

746. The EU also criticizes the United states for "den{ying} the second counterfactual found by the original panel, that is, of a 'weaker', less innovative 767-plus replacement that would have been launched in 2004." In the original proceeding, the Appellate Body stated:

This latter scenario of a 767-plus, however, had not been specifically advanced by either of the parties, is not referred to in the evidence on record, and is not reflected in the content of the Panel's counterfactual reasoning. For this reason, we find it difficult to sustain the arguments of the United States that are predicated on the counterfactual scenario involving a 767-plus aircraft. ¹⁰⁸³

Thus, that the United States does not predicate its argument on the 767-plus counterfactual scenario that neither party advanced is hardly at odds with the Appellate Body's findings.

747. Finally, the EU apparently rounds down to zero the two-year estimation of the 787 launch delay, stating:

the United States, in essence, argues that, without the US R&D subsidies, Boeing would have launched the 787 with the same innovative technologies more or less at the same time as it did with the US R&D subsidies. The United States thus asks this Panel to abandon the findings in the original proceedings, and now to accept that the US R&D subsidies had no meaningful effect whatsoever on the development, launch and production of the 787. Accordingly, the United States does not unconditionally accept the findings of the original panel, as upheld by the Appellate Body, on technology effects. ¹⁰⁸⁴

¹⁰⁷⁹ US FWS, para. 682.

¹⁰⁸⁰ EU SWS, para. 980.

¹⁰⁸¹ US FWS, para. 799.

¹⁰⁸² EU SWS, para, 979.

 $^{^{1083}}$ US – Large Civil Aircraft (AB), para. 1025.

¹⁰⁸⁴ EU SWS, para. 981.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 245

- 748. The EU does not explain why it would treat two years later as "more or less the same time." The two years in question are the period in which the original panel found significant lost sales based on Boeing's ability to offer the 787 during that period. It is also the amount of time it took Airbus to go from having no near-term intention to replace the A330, to an unsuccessful attempt at the Original A350, to the formal launch of the A350 XWB. Accordingly, the EU criticism is misplaced. Two years is highly significant in the very competitive LCA market, especially at a time when Boeing had only a marginalized 767 to offer in the smaller twin-aisle market space.
- 749. The fact remains that the U.S. rebuttal explicitly accepts the underlying findings that the 787 would not have been launched when it was, absent the R&D subsidies found to exist. From this basis, the United States answered a core question unresolved by the original panel and the Appellate Body, and which the EU omitted from its initial arguments in this compliance dispute: what is the "significantly later" point in time at which the 787 would have been launched? The best estimate for that question is the one provided by the United States and Boeing engineers: in 2006, or approximately two years later than the actual 2004 launch date. This demonstration is fully consistent with the underlying findings, contrary to the EU arguments refuted below.
 - a. It is the EU that departs from the findings in the original proceeding regarding the disincentives for early-stage, long-term, and risky research.
- 750. The EU contends that the United States "calls into question" ¹⁰⁸⁶ the underlying findings that "there were large disincentives for private sector investment in long-term, high-risk R&D." ¹⁰⁸⁷ In its first written submission, the United States did not question that there were such disincentives, or that they would have contributed to a delay in the launch of the 787. Rather, the United States demonstrated that, in light of the underlying findings and the Boeing Engineers Statement, those disincentives are not constant over time for a given R&D project. Rather, the disincentives would diminish as the risks of undertaking the research declines with the growth in relevant knowledge, the commercial need for such research becomes more urgent, and the time for recouping the investment in research shortens. ¹⁰⁸⁸
- 751. The original panel considered it likely that Boeing would have launched the 787 without the R&D subsidies, albeit at a later time. ¹⁰⁸⁹ It follows that the disincentives cited by the original

¹⁰⁸⁵ See Airbus Engineers Statement, paras. 49-51 (Exhibit EU-1014(HSBI)). The EU was able to make customer commitments five months earlier than the official launch date. Singapore Airlines Orders 20 Airbus A350 XWB-900s and 9 Airbus A380s, Business Wire (July 21, 2006) (Exhibit USA-291).

¹⁰⁸⁶ EU SWS, para. 983.

¹⁰⁸⁷ US – Large Civil Aircraft (Panel), para. 7.1747.

¹⁰⁸⁸ US FWS, paras. 783, 794-795.

¹⁰⁸⁹ US – Large Civil Aircraft (Panel), para. 7.1775; see also id, para. 7.1759 (allowing for the possibility that "Boeing could have eventually achieved through its own resources the gains that in fact accrued to it through NASA's assistance (a matter on which we express no view)").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 246

panel would at some point cease to inhibit Boeing's own R&D activity in the technologies covered by the underlying findings. The disincentives would diminish as the risks of the R&D declined and the importance of the technology increased for Boeing. As Boeing engineers explain in their reply to the EU and Airbus engineers' criticisms:

As the relevant knowledge base grows over time, a given R&D project becomes less risky. And when a company like Boeing faces the commercial imperative to bring to market a highly-efficient new aircraft, and commits the resources to do so, the payoffs of potentially relevant early-stage R&D become more concrete and the time to recoup R&D investment shortens. ¹⁰⁹⁰

- 752. The risks of the relevant R&D have declined as Boeing's knowledge base increased through its own unsubsidized experience and advances in knowledge that were disseminated widely throughout the aerospace community. As the original panel found, "Boeing's technology developments are clearly the product of a variety of factors," including non-subsidy factors that significantly altered the state of technological development from the late 1980s/early 1990s through the early 2000s.
- 753. Boeing began work under the NASA ACT, R&D Base, HSR, HPCC, and AST programs in the 1989 to 1995 period, ¹⁰⁹³ when Boeing was in the early stages of the 777 program and had only begun to develop the 737NG. Since that time, the non-subsidy base of knowledge and experience available to Boeing grew considerably. Boeing "derived valuable knowledge and experience from lessons learned over the course of the 777 and 737NG production programmes," as the original panel found. ¹⁰⁹⁴
- 754. Meanwhile, "{i}t is also clear that during the 1990s, Boeing suppliers on the 787, such as Kawasaki Heavy Industries and Fuji Heavy Industries were developing expertise in the use of composites in primary aircraft structures contemporaneously with Boeing's development efforts." From 1995 to 2000, the use of composite materials in aerospace *trebled*. The Boeing Engineers Statement properly accounts for these and other non-subsidy sources that continued to generate knowledge, technology, and experience up through the early 2000s. Overall, as Boeing Engineers explain in their reply to the Airbus Engineers Statement:

¹⁰⁹⁰ Reply of Boeing Engineers to EU and Airbus Statements Regarding the Technologies and Development of the 787, 737 MAX, and 777X, Michael S. Burtle *et al.*, Boeing, para. 9 (Aug. 2013(BCI)) ("Boeing Engineers Reply") (Exhibit USA-359(BCI)).

¹⁰⁹¹ US FWS, para. 795.

¹⁰⁹² US -- Large Civil Aircraft (Panel), para. 7.1758.

¹⁰⁹³ Airbus Engineers Statement, para. 69 (Exhibit EU-1014(HSBI)).

¹⁰⁹⁴ US -- Large Civil Aircraft (Panel), para. 7.1757.

¹⁰⁹⁵ US -- Large Civil Aircraft (Panel), para. 7.1757.

¹⁰⁹⁶ Bair Affidavit, para. 14 (Exhibit USA-311).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 247

In each of the relevant technology areas, from composites to computational fluid dynamics (CFD) to noise reduction, the knowledge base of Boeing, its suppliers, and indeed the wider aeronautics community originated prior to the NASA and DOD programs and would grow over time regardless of whether those programs existed. The Airbus engineers fail to acknowledge this.

The relevant knowledge base available to Boeing in the early 2000s was significantly more advanced than in the late 1980s and early 1990s, when many of the NASA and DOD programs started. To take just a few examples from the area of composite materials, Boeing in the early 2000s:

- had already spent more than a decade developing and producing the 777's composite empennage and horizontal and vertical stabilizers, which included intensive work with the Toray T3900 prepreg material we would use on the 787;
- knew that Raytheon had launched and flown a business jet with a composite fuselage (the Premier 1);
- knew that Airbus would be using composites to build the A380's massive stabilizers and center wing box; and
- [***]

With these and other developments, separate and apart from Boeing's participation in the NASA and DOD programs, Boeing gained a much better understanding of what was possible and what was not.

Such developments help to explain why the disincentives that the WTO Panel found for "long term, high risk aeronautical R&D" are not constant for a given technology, even if such disincentives applied at the time the NASA and DOD R&D programs were undertaken. ¹⁰⁹⁷

755. As the risks posed by the relevant R&D declined during the 1990s and into the early 2000s with Boeing's accumulation of knowledge and experience from non-subsidy sources, the importance of 787-relevant technology increased, further altering the cost-benefit calculus. This increased Boeing's willingness to undertake the work necessary to develop the 787. In contrast to the early 1990s when it had no near-term plans to replace the 767 with an all-new aircraft, Boeing in the early 2000s was determined to address the damage done to the 767 by the A330 with an all-new, more-efficient mid-size twin-aisle aircraft. As the original panel found,

¹⁰⁹⁷ Boeing Engineers Reply, paras. 7-9 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 248

we are satisfied from the evidence that Boeing's assessment in the late 1990s that route fragmentation would lead to a larger number of lower-volume routes, best served by a mid-sized, extended range aircraft (a commercial assessment unrelated to the subsidies), along with the age of the 767, *likely meant that Boeing needed to develop an LCA to replace the 767 in the 200 – 300 seat wide-body product market, and that it would have done so in the early- to mid- 2000s.* ¹⁰⁹⁸

- 756. Thus, market factors drove the need for *near-term* application of technologies that would yield a highly efficient 767 replacement. As its engineers have explained, Boeing's willingness to conduct early-stage research is much greater when geared towards a near-term commercial priority, which Boeing faced in the early 2000s, as compared to the more generalized, ongoing interests in advancing *long-term* LCA technology that characterized Boeing's R&D programs with the government that were addressed by the original panel's technology effects analysis. ¹⁰⁹⁹ Accordingly, the different circumstances between the actual situation examined by the original panel and those obtaining in the early 2000s produce different incentives to conduct early-stage research. This is consistent with the original panel's analysis. Indeed, the EU's contrary view that of insurmountable, unchanging disincentives to conduct early-stage research relevant to the 787 conflicts with the original panel's unappealed finding that Boeing likely would have launched the 787 at a later date.
 - b. The United States does not, as the EU suggests, dispute the findings from the original proceeding regarding the magnitude of U.S. R&D subsidies.
- 757. The EU alleges that the United States attempts to relitigate the findings on the relevance of the magnitude of R&D subsidies. The EU quotes the following excerpts from the Appellate Body report:
 - {t}he absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects. Subsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market. We understand the Panel to have found this to be the case regards the effects of the aeronautics R&D subsidies. ... The Panel stressed that the aeronautics R&D subsidies allowed Boeing to overcome the disincentives in investing in risky aeronautics R&D. For the Panel, the relative magnitude of

¹⁰⁹⁸ US – Large Civil Aircraft, para. 1774 (emphasis added).

¹⁰⁹⁹ See Boeing Engineers Statement, paras. 9-10 (Exhibit USA-283(BCI)).

¹¹⁰⁰ See EU SWS, para. 987.

¹¹⁰¹ See EU SWS, para. 985. The EU states that "the United States asserts that the magnitude of the US R&D subsidies is 'so small – particularly in the context of the LCA industry – that they cannot plausibly cause adverse effects." This statement was not made specifically with respect to R&D subsidies, which the United States has withdrawn.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 249

the amounts spent by NASA and Boeing did nothing to reduce or diminish that important contribution. We see no reason to disagree. 1102

- 758. The EU argues that the United States attempts to challenge this finding by asserting that those disincentives diminish considerably when commercial pressures create an imperative for near-term advances in aircraft technologies. According to the EU, "the original panel and the Appellate Body already found that, even where 'commercial pressures create an imperative for near-term advances in aircraft technologies', the US R&D subsidies cause adverse effects through a technology causal mechanism." 1104
- 759. The EU is wrong. As an initial matter, this argument is only tangentially related to the findings on the relevance of the magnitude of the R&D subsidies. It is really a reiteration of the EU's previous argument regarding "{t}he importance of early stage research." 1105
- 760. In any event, as explained in greater detail in Section IV.F.2.a, neither the original panel nor the Appellate Body found that the disincentives associated with a given R&D project remain constant and prohibitive even as time passes, which would imply that, in the absence of the subsidies, the research would never be conducted and the 787 would never be launched. This is not what the original panel or the Appellate Body found.
- 761. Rather, the original panel and Appellate Body relied upon the fact that the research was *long term* and *high risk*. The incentives change as growth in the relevant knowledge base diminishes the risks and time horizon for developing a given technology, and as the urgent commercial priorities bring the potential returns on R&D investment closer in time. Thus, the U.S. argument that, when Boeing needed this research to launch a new twin-aisle aircraft in the early 2000s, it would have conducted the research even in the absence of subsidies does not conflict at all with the finding that Boeing would not have conducted it in a much more speculative context in the late 1980s and early 1990s.
- 762. Further, the EU attempts to create a conflict where none exists when it states that "the original panel and the Appellate Body already rejected the notion that the monetary value of the U.S. aeronautics R&D subsidies corresponds to their effects, given the nature of the research at issue." Again, the United States does not dispute this finding, and its arguments are consistent with it.

¹¹⁰² EU SWS, para. 986 (quoting US – Large Civil Aircraft (AB), paras. 1006-1007).

¹¹⁰³ EU SWS, para. 987.

¹¹⁰⁴ EU SWS, para. 987 (quoting US FWS, para. 794).

¹¹⁰⁵ See EU SWS, paras, 983-984.

¹¹⁰⁶ See US – Large Civil Aircraft (Panel), para. 7.1747.

EU SWS, para. 986 (quoting US – Large Civil Aircraft (AB), paras. 1006-1007).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 250

- 763. The Appellate Body's comment was made in the context of R&D subsidies found to cause technology effects because a subsidy that was small in comparison to, for example, Boeing's separate internal R&D costs over the same period could still have effects by acting as the tipping point in the decision to go forward with a particular research project. In other words, the subsidies allowed Boeing to conduct research that it would not have conducted at the same time and in the same manner in the absence of the studies. This is an inherent aspect of the technology effects theory.
- 764. To the extent that the EU is alleging that the R&D subsidies are still causing technology effects, the United States presented incontrovertible evidence that, as a result of its compliance steps, the amount of NASA aeronautics R&D funding to Boeing declined dramatically since the original reference period. It stands to reason that the effects of a given type of subsidy will decline as its amounts decline. This is not in conflict with the Appellate Body's finding, which did not pertain to comparisons between U.S. R&D funding amounts. To the contrary, just as a multiplier enhanced the effects of the subsidy value, the impact on the effects as a result of a reduction in that value will likewise be greater than the size of the reduction, which in this case is very large.
- 765. Moreover, the EU's arguments in this proceeding have heightened the importance of properly assessing subsidy magnitude. As explained in Section IV.C, the EU has insinuated that some or all R&D subsidies now cause price effects and not technology effects. For the EU's price effects theory, in contrast to its technology effects theory, the monetary value of any subsidies found is directly relevant to assessing their effects. Under the price effects theory, Boeing allegedly can reduce its price by some amount as a result of receiving the subsidy, although the EU has not yet alleged what percentage of an R&D subsidy's monetary value would be used to lower prices. In any event, once that ratio is provided, the resulting alleged subsidy amounts would unquestionably be useful to examine in the context of aircraft pricing and purchase decisions to assess the plausibility that that a price reduction in those amounts could actually lead to different outcomes. ¹¹⁰⁹
- 766. Finally, the United States has observed that, once due account is taken of the withdrawal of the NASA, DoD, and FSC/ETI subsidies covered by the DSB's recommendations and rulings, and of the expiration of the technology effects of the NASA and DoD subsidies considered by the original panel, all that remains is the alleged present price effects of subsidies that are of

¹¹⁰⁸ See supra Section II.A.1.a; US FWS, paras. 91.

¹¹⁰⁹ US – Large Civil Aircraft (AB), para. 1192 (quoting US – Upland Cotton (AB), paras. 461, 467 and quoting from the same source in a footnote the Appellate Body's statement that "{a} large subsidy that is closely linked to prices of the relevant product is likely to have a greater impact on prices than a small subsidy that is less closely linked to prices"); *id.*, para. 1193 ("Through scrutinizing magnitude in the light of and as part of an analysis of the particular subsidies, the particular products, and the particular characteristics of the market within which those products compete, a panel can gain an understanding of the effects that the subsidies have on prices, and of the relevance of the subsidies' magnitude to such effects.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 251

insufficient magnitude to cause adverse effects. Nothing in the underlying findings, including the quoted text from the Appellate Body report, precludes such a demonstration.

c. Acceleration of NASA R&D research

767. The EU purports to identify an inconsistency between the original panel's findings that the NASA R&D programs accelerated the development of technologies and Boeing engineers' observation, backed by a series of specific examples, that Boeing's R&D activity proceeds at a much faster pace in the context of a high-priority aircraft development program. This is a curious objection for the EU to make. The United States accepts, and the Boeing Engineers Statement is premised upon, the original panel's finding that Boeing would have developed "key, high-payoff technologies" faster with the NASA R&D subsidies than without, yielding a 787 launch in 2004 in the former scenario and a 2006 launch in the latter. The reason is that the bulk of Boeing's work under the relevant NASA programs occurred in the 1990s, when Boeing and its suppliers knew less about the technological challenges at issue, and before Boeing made replacing the 767 a top priority.

768. But this is different from suggesting that the research itself would necessarily take longer once it was started by Boeing at a time when it became commercially urgent. Again, the technology effects attributed to the R&D subsidies were premised on the notion that the research would not have gone forward at the time and in the manner it did in the absence of the subsidies. The acceleration effect then results from the research being conducted earlier than it otherwise would (*e.g.*, in the late 1980s instead of the early 2000s). Thus, there is no inconsistency with the U.S. argument and the findings from the original proceeding in this respect.

d. Non-attribution factors

769. The EU accuses the United States of re-raising two sets of arguments concerning non-attribution factors that were supposedly rejected in the underlying proceeding: (1) regarding the non-subsidized financial and technological capabilities of Boeing and its suppliers; and (2) regarding "experiences and advances in knowledge." The EU is mistaken.

770. *First*, the EU contends that that the original panel and the Appellate Body already rejected the U.S. arguments in this compliance proceeding concerning "the non-subsidy technological capacities of Boeing and its suppliers, together with the assertion that Boeing would have simply used its 'own internal funds' to finance the research itself." To the

¹¹¹⁰ See, e.g., US FWS, paras. 679 ("The United States demonstrated in the preceding sections that it has withdrawn all subsidies of any significance that were covered by the DSB's recommendations and rulings. To the extent that minor subsidies were not withdrawn, their magnitude is so small – particularly in the context of the LCA industry – that they cannot plausibly cause adverse effects to the EU's interests."), 820-823.

¹¹¹¹ See EU SWS, para. 988 (quoting Boeing Engineers Statement, para. 12 (Exhibit USA-283(BCI)).

¹¹¹² EU SWS, paras, 989-997.

¹¹¹³ EU SWS, para. 990.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 252

contrary, the U.S. arguments in the original proceeding cited those factors in support of the proposition that, absent the R&D subsidies, Boeing would have launched the 787 when it did, in 2004. Here, by contrast, the United States argues that, absent the R&D subsidies, Boeing would have launched the 787 *significantly later* than it did, *i.e.*, in 2006.

- 771. Neither the original panel nor the Appellate Body rejected this argument.¹¹¹⁴ Indeed, the counterfactual scenario described by the original Panel entailed precisely such a scenario: "Boeing would have developed a 767 replacement that incorporated all of the technologies that are incorporated on the 787, but its launch would have been significantly later than 2004 and it would not have been able to promise first deliveries for 2008." ¹¹¹⁵
- 772. Moreover, the original panel explicitly found it "reasonable to assume" that non-subsidy technology factors would eventually sever the causal link between the R&D subsidies and the application of technology on Boeing LCA, even as it found that such a point had not been reached by 2004:

Boeing's technology developments are clearly the product of a variety of factors. Indeed, it is reasonable to assume that at some point in time, the contribution of the NASA-funded research will diminish in relation to other, more recent or revolutionary technological developments that are attributable to other factors, and that it will no longer be possible to characterize the NASA research conducted in the 1990s as having contributed in a genuine and substantial way to new technologies applied to future Boeing LCA. The United States considers that this point had already been reached by 2004. For the reasons that we have set forth above, we do not agree. ¹¹¹⁶

773. The EU quotes the Appellate Body report in this context, but it too reflects the fact that the original panel's analysis was rooted in a particular temporal context:

{w}hile the {original p}anel recognized Boeing's and its suppliers' "significant investments" towards the developments of the 787, it found that, *by 2004*, these contributions had not outweighed the contributions made by the aeronautics R&D subsidies to the development of the technologies used on the 787. 1117

774. Because the issue here is the role of non-subsidy factors *after* 2004, and because the original panel contemplated that such factors could lead to the launch of the 787 absent

¹¹¹⁴ US – Large Civil Aircraft (Panel), para. 7.1759 (allowing for the possibility that "Boeing could have eventually achieved through its own resources the gains that in fact accrued to it through NASA's assistance (a matter on which we express no view)").

¹¹¹⁵ US – Large Civil Aircraft (Panel), para. 7.1775.

¹¹¹⁶ US – Large Civil Aircraft (Panel), para. 7.1758.

¹¹¹⁷ US – Large Civil Aircraft (AB), para. 944 (footnotes omitted), quoted in EU SWS, para. 990.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 253

subsidies, the EU cannot avoid the U.S. rebuttal on the basis that it somehow constitutes relitigation of settled issues.

775. Second, the EU contends that the U.S. is re-litigating an argument concerning "experiences and advances in knowledge" but finds it necessary to distort the U.S. argument with misleading quotations:

{t}he United States continues to argue that the "experiences and advances in knowledge" that Boeing gained from its participation in US Government-supported R&D programmes were "disseminated widely throughout the aerospace community." 1118

The EU asserts that this supposed U.S. argument is precluded by the Appellate Body's finding that "the benefit flowing from aeronautics R&D subsidies to Boeing was not necessarily reduced by the dissemination of R&D results." ¹¹¹⁹

776. In fact, the United States is not arguing that dissemination of results from Boeing's participation in the R&D programs reduced "the benefit flowing from aeronautics R&D subsidies" or that such dissemination is a non-attribution factor. As is clear from the full passage selectively quoted by the EU, the United States is arguing that Boeing's knowledge base in the 2000s was much enhanced by non-subsidy factors including the dissemination of knowledge throughout the aerospace community:

Boeing in the early 2000s was working from a much higher knowledge base than in the late 1980s and early 1990s, because of its own unsubsidized experience and advances in knowledge that were disseminated widely throughout the aerospace community (and were available to Airbus as it developed the A350 XWB). 1120

To be clear, these included research conducted by other commercial entities, by academic institutions, and by unsubsidized NASA and DoD projects.

777. The EU's contrary interpretation is illogical, since the dissemination to others of Boeing's research results under the NASA and DoD R&D programs would not increase Boeing's knowledge base. Accordingly, the underlying findings and arguments about patent rights raised by the EU¹¹²¹ do not address, and cannot foreclose consideration, of this issue.

¹¹¹⁸ EU SWS, para. 992.

 $^{^{1119}}$ EU SWS, para. 993 (quoting $\mathit{US-Large\ Civil\ Aircraft\ (AB)},$ footnote 2076).

¹¹²⁰ US FWS, para. 795.

¹¹²¹ See EU SWS, para. 996.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 254

3. Criticisms of the Boeing Engineers Statement by the EU and Airbus engineers are baseless.

778. In its first written submission, the United States presented an analysis of Boeing engineers that "evaluates the time that would have been required to obtain the technology learning benefits that the WTO Panel associated with the NASA and DOD programs." The Boeing engineers conducted this inquiry by:

asses{ing} the additional time required to replicate the work done by Boeing under the NASA and DOD programs using the internal resources of Boeing and its suppliers. This assessment is based on examples of the time and effort taken by Boeing and its suppliers to address early-stage R&D challenges that were either comparable to, or more demanding than, the types of activities conducted under the NASA and DOD programs. 1123

On the basis of this analysis, the Boeing engineers estimated that the additional time required to achieve the knowledge and experience that was the effect of the R&D subsidies is approximately two years.

779. The EU and Airbus engineers attempt to cast doubt on the Boeing engineers' counterfactual analysis by arguing that the post-launch delays in the 787 program undermine the proposition that "resolving any engineering problem in no time at all . . . were really only a question of dedicating 'increased engineering and budgetary resources." This is not what the Boeing Engineers Statement says, but in setting up this straw man, the Airbus engineers endorse the proposition that Boeing's "real-life experience" with the 787 program is a useful "benchmark" for assessing the additional pre-launch development time that would be required absent R&D subsidies. 1125

780. The United States agrees; indeed, it is a key premise of the Boeing engineers' analysis. The question is *what type* of real-world experience is a valid basis for estimating the additional time required in the counterfactual at issue, which pertains to early-stage, pre-launch R&D activity. In citing 787 delays that arose at a very advanced, post-launch phase of the development process, ¹¹²⁶ the EU and the Airbus engineers are comparing apples to oranges. In contrast, the Boeing engineers compare apples to apples:

This assessment is based on examples of the time and effort taken by Boeing and its suppliers to address early-stage R&D challenges that were either comparable

¹¹²² Boeing Engineers Statement, para. 6 (Exhibit USA-283(BCI)).

¹¹²³ Boeing Engineers Statement, para. 7 (Exhibit USA-283(BCI)).

¹¹²⁴ Airbus Engineers Statement, para. 9 (Exhibit EU-1014(HSBI)); EU SWS, para. 1010.

¹¹²⁵ See Airbus Engineers Statement, para. 8 (Exhibit EU-1014(HSBI)).

¹¹²⁶ See EU SWS, para. 1009-1010.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 255

to, or more demanding than, the types of activities conducted under the NASA and DOD programs. 1127

- 781. The EU does not appear to contest that the examples cited by the Boeing engineers constitute early-stage R&D, or that such examples are comparable, in terms of subject matter, complexity and effort involved, to the activities performed under the NASA and DOD programs. Thus, they have no basis for challenging the validity of the examples used by Boeing to estimate the additional time required. These examples are the best comparators on the record.
- 782. By contrast, the Airbus engineers' proposed alternative more than 10 years of additional time is highly generalized, unsupported by reference to real-world experience in the specific technologies at issue, and contradicted by the speed with which Airbus was able to launch the A350 XWB. Most egregiously, it also assumes Boeing would need to take additional time for work *not performed* under the R&D programs, such as the independent research Boeing conducted to develop the 787 technologies to the point where they were mature enough for production. ¹¹²⁸
- 783. The EU's misguided approach to fundamental 787 timing issues undermines its specific criticisms, which are flawed in their own rights:
 - a) the EU cites allegedly contradictory Boeing quotations and presentations as if they undermine the credibility of the Boeing Engineers Statement, yet the no such contradictions exist;
 - b) the EU errs in referring to the 787 delivery delays as if they are probative of the additional time required to perform R&D at a much earlier phase in the development process;
 - c) the EU uses invalid comparisons and baseless distinctions to in an attempt to avoid comparisons to the A350 XWB's rapid pre-launch development period;
 - d) the EU mistakenly assumes that the counterfactual additional R&D would damage the 787's business case;
 - e) the EU proposes that the U.S. counterfactual timing analysis should have adopted the wrong counterfactual and double-count the time required for R&D not performed under the R&D contracts and agreements; and

¹¹²⁷ Boeing Engineers Statement, para. 7 (Exhibit USA-283(BCI)).

¹¹²⁸ *Compare* Airbus Engineers Statement, para. 27 (Exhibit EU-1014), *with* Boeing Engineers Reply, para. 15 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 256

- f) the EU faults the U.S. counterfactual timing analysis for failing to account for DoD military aircraft project elements that were not considered in the original panel's technology effects analysis and are not within the Panel's terms of reference.
- 784. These errors are detailed below. The U.S. discussion of these issues confirms that the Boeing Engineers Statement remains a valid and probative estimation of the 787 launch date in the absence of R&D subsidies, as well as a valid and probative explanation of the errors the EU has made in alleging spillover effects to the 737 MAX and the 777X.
 - a. The EU's reliance on isolated public comments does nothing to undermine the credibility of the Boeing Engineers Statement.
- 785. The EU tries to undermine the credibility of the Boeing Engineers Statement by citing quotations from Boeing employees and presentations that supposedly contradict it. However, the EU manufactures these "contradictions" by taking the quotations out of context. When taken in their context, the quotations comport fully with the Boeing Engineers Statement.
 - *i.* NASA Technology Readiness Levels

786. The EU contends that a slide from an October 2010 Boeing presentation by Craig Wilsey and Robert Stoker concerning NASA Technology Readiness Levels (TRLs) "belie{s}" the Boeing engineers' "assertion that, without the US R&D subsidies, it would have taken Boeing no more than two years to 'replicate' all of the subsidy-enabled technological developments on the 787." The EU is mistaken. As Mr. Wilsey himself explains:

This slide was part of a presentation delivered to an audience composed mostly of FAA, NASA and DoD personnel. The slide was used in the context of our discussion of the phases and pace of aircraft technology development related to government R&D programs. We used the NASA TRL scale as a familiar, generalized example for the audience. The slide refers to times to progress along the TRL scale, but these times are both generic (they do not refer to a specific technology) and broad ranges ("up to 10 years" and "3 to 6 years"). It is true that, as a general matter, it may take up to 10 years to mature a major technology from TRL 1 to TRL 6, but that is not inconsistent with the fact that it can take far less time in a particular instance. We therefore consider that this slide does not undermine our counterfactual analysis estimating that Boeing would have conducted the additional R&D in approximately two years. ¹¹³⁰

Accordingly, there is no "stark contrast" between the presentation slide and the Boeing Engineers Statement. A range of "up to 10 years" for maturing major technologies from TRL 1 to TRL 6 includes maturation periods that are less than ten years.

¹¹²⁹ EU SWS, paras. 1003-1005.

¹¹³⁰ Boeing Engineers Reply, para. 30 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 257

787. Further, the Boeing engineers' two-year estimate pertains to the *additional* R&D necessary to obtain the knowledge and experience generated by the NASA and DoD R&D programs found to be specific subsidies. Notwithstanding the EU's efforts to obscure this point with truncated quotations, the two-year estimate does not purport to cover the entire technology development process. That would double-count the time Boeing spent on unsubsidized technology development, and the overall increase in generalized knowledge that would allow technology development in the early 2000s to proceed from a much more advanced stage. Therefore, there is no contradiction between the Boeing engineers' estimate and the slide cited by the EU.

ii. 737 MAX engine integration and nacelle/chevron technology

788. The EU states that "{s}everal Boeing presentations confirm that the engine integration and nacelle/chevron technology on the 737 MAX is a technique derived from the 787." However, Boeing engineers explain that there is no inconsistency between those presentations and the Boeing Engineers Statement:

[***] It would have made little sense for Boeing to [***]

. .

We understand that the EU has also referred to Boeing statements likening the chevron nacelle ends on the 787 to those on the 737 MAX. Statements that chevron technology from the 787 is the same or similar to that of the 737 MAX [***] Indeed, while they describe the two aircraft as having "similar chevron technology," the Airbus engineers themselves understand the chevrons on the 787

¹¹³¹ Boeing Engineers Statement, para. 3 (Exhibit USA-283(BCI)).

^{(&}quot;The estimate that Boeing has publicly acknowledged, namely that it would take "up to 10 years" to develop certain technologies, and an additional "3 to 6 years" to mature them to a level where they are ready for production, stand in stark contrast to the assertion by the Boeing engineers in their statement to this Panel that they would have conducted the "R&D necessary to develop, launch, and produce the 787 {within two years, namely} by April 2006, if not earlier", while also undergoing the necessary flight tests and certification so at to "promise{} deliveries starting in 2010, if not earlier"."), with Boeing Engineers Statement, para. 3 (Exhibit USA-283(BCI)) ("Based on the analysis below, we conclude that, absent Boeing's participation in the NASA and DOD programs, Boeing and its suppliers would have (a) conducted any additional R&D necessary to develop, launch, and produce the 787, and (b) launched the 787 by April 2006, if not earlier, with promised deliveries starting in 2010, if not earlier.") (emphasis added).

¹¹³³ Boeing Engineers Statement, para. 3 (Exhibit USA-283(BCI)); Boeing Engineers Reply, paras. 8-9, 15-16 (Exhibit USA-359(BCI)).

¹¹³⁴ EU SWS, para. 1000.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 258

and 737 MAX to have different purposes – cabin noise and community noise, respectively. [***]¹¹³⁵

Accordingly, the supposed contradictions identified by the EU do not exist.

iii. 737 MAX fly-by-wire spoilers

789. According to the EU, "{t}he Boeing engineers assert, in their statement, that Boeing intends to apply [***] fly-by-wire ("FBW") spoilers on the 737 MAX, whereas [[**HSBI**]] ¹¹³⁶ The cited [[**HSBI**]] ¹¹³⁷ Whatever [[**HSBI**]] to the EU and Mr. Domke of Airbus, this material in no way contradicts the Boeing engineers' statement that the "737 MAX FBW system is partial" as compared to that of the 787. ¹¹³⁸ As Boeing engineers explain:

While the supposedly contradictory statement or statements on this issue were not disclosed to us, we confirm that, unlike the 787, [***]¹¹³⁹

Accordingly, there is no contradiction.

iv. 737 MAX tail cone

790. According to the EU, {w}hile the Boeing engineers assert, in their statement, that the aerodynamic improvements achieved through revision of the shape of the 737 MAX tail cone has only superficial similarity with that of the 787, public sources confirm that the shape was influenced by the 787 tail cone design."¹¹⁴⁰ In this regard, Airbus engineers refer to the following quote from Boeing's John Hamilton: "It is more of the aero-line change in the back and so we have learned a lot with the 777 airplane and the 787 design using computational fluid dynamics."¹¹⁴¹

791. As the Boeing engineers observe:

"{t}his does not contradict the Boeing Engineers Statement, which noted that Boeing [***]:

. . . .

¹¹³⁵ Boeing Engineers Reply, paras. 32-33 (Exhibit USA-359(BCI)).

¹¹³⁶ EU SWS, para. 1000.

¹¹³⁷ [[**HSBI**]] (Exhibit EU-1178(HSBI)).

¹¹³⁸ Boeing Engineers Statement, para. 60 (Exhibit USA-283(BCI)).

¹¹³⁹ Boeing Engineers Reply, para. 34 (Exhibit USA-359(BCI)).

¹¹⁴⁰ EU SWS, para. 1000.

¹¹⁴¹ Airbus Engineers Statement, para. 108 (Exhibit EU-1014).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 259

The Airbus engineers also cite a press report to the effect that the 737 MAX tail cone is "similar to the 787's," but as we discussed in our prior statement, the 737 MAX tail cone is similar to that of the 787 in the broad sense that they are both conical, as are the tail cones on the 757 and 767. 1142

Accordingly, the supposed contradictions identified by the EU do not exist.

v. 737 MAX flight deck displays

792. The EU contends that, "{w}hile the Boeing engineers assert, in their statement, that the 737 MAX 'primary displays' are derived from the 787 displays and not from the KC-46 displays, Boeing presentations confirm that the 737 MAX flight deck displays are identical to those of the KC-46." Here the EU and Airbus engineers are drawing erroneous inferences from the cited presentations. The Boeing engineers explain why that might be happening:

We explained previously that the 737 MAX primary displays are derived from those on the 787. We also explained that the "787 displays also served as the basis for the KC-46 displays, but there was absolutely no transfer of technology or learning from the KC-46 displays to those on the 737 MAX." We understand that the European Union has referenced Boeing presentations that it interprets to mean that the 737 MAX and KC-46 displays are identical. The Airbus engineers also refer to redacted information supposedly contradicting our observation that the 737 MAX and KC-46 displays are different devices. While we have not been provided with the information referenced by the European Union and Airbus, we suspect that they are misinterpreting similarities between the 737 MAX and KC-46 displays to mean that they are identical, which would be incorrect. To a point, this is understandable, since both sets of displays derive from those on the 787.

Accordingly, the supposed contradictions identified by the EU do not exist.

vi. 777X folding wing tip

793. Lastly, the EU contends that, "{a}lthough the Boeing engineers assert, in their statement, that the 777-200 was the 'initial reference point' for the 777X Folding Wing Tip ("FWT"), [[**HSBI**]] confirmed that the 777X FWT is [[**HSBI**]] Here, the EU is relying on [[**HSBI**]] Even if such a statement were made and accurately conveyed by Mr. Domke of

¹¹⁴² Boeing Engineers Reply, paras. 37-38 (Exhibit USA-359(BCI)) (citations omitted).

¹¹⁴³ EU SWS, para. 1000.

¹¹⁴⁴ Boeing Engineers Reply, para. 39 (Exhibit USA-359(BCI)) (citations omitted).

¹¹⁴⁵ EU SWS, para. 1000.

¹¹⁴⁶ Airbus Engineers Statement, para. 122 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 260

Airbus, it does not address the critical distinctions between the two systems cited by the Boeing engineers:

The fact is that the 777X FWT is very different from the A-6E folding wing in all material respects: [***] In addition, the 777X FWT design differs markedly from even that of the aircraft Boeing did refer to as an initial design reference point, the 777-200. The Airbus engineers agree: "the 777-200 FWT is a completely different design, with very different systems, as the one used for the 777X FWT." We therefore find it hard to see how the European Union and Airbus could continue to argue that the A-6E had a meaningful influence on the 777X FWT. 1147

- 794. Accordingly, the statement referenced by the EU does not contradict the Boeing Engineers Statement.
 - b. The EU's criticism with respect to 787 delays is deeply flawed.
- 795. The EU recalls that Boeing originally sought to bring the 787 to market in May 2008, but entry in service was delayed until October 2011. The EU contends that this "four-year delay" it is actually closer to three than four contradicts the Boeing engineer's estimation that, absent the R&D subsidies, launch of the 787 would have been delayed by two years. These delays occurred at a much more advanced stage of the 787 program, long after it was launched, and have no bearing on the estimation of how much delay would result from removal of the R&D subsidies associated with early stages of technology development.
- 796. The Boeing engineers do not contend as the EU's caricature suggests that with a [***] anything can be accomplished in two years. Rather, the Boeing engineers explain the accelerated pace at which research takes place when the urgency of the research dictates that all available resources be dedicated to its achievement. The contention that this mindset would have applied to the research at issue here is consistent with the findings from the original proceeding that, absent the subsidies, the research would have been deferred until it became commercially urgent. And then, assuming this type of dedication of resources, the Boeing engineers estimate that *the particular research at issue in this proceeding* would have taken an additional two years.
- 797. In arriving at this estimation, the Boeing engineers selected benchmarks from their actual experience that account for the tendency of some research routes prove to be dead ends, while others do not:

Our analysis estimated the additional time it would take for Boeing to fill those parts on its own. It was based on the best available benchmarks: Boeing's real-

¹¹⁴⁷ Boeing Engineers Reply, para. 42 (Exhibit USA-359(BCI)) (quoting Airbus Engineers Statement, para. 121 (Exhibit EU-1014)).

¹¹⁴⁸ See EU SWS, para. 1009.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 261

world experience on comparable R&D projects undertaken in connection with the 787 program. Contrary to the Airbus critique, these benchmark experiences included iterative learning, "trials and errors," and far more than a "paper design." They also involved early-stage, pre-launch R&D, whereas the 787 program delays cited by the Airbus engineers arose during the advanced stages of product development and manufacturing. 1149

- 798. Therefore, the benchmarks used by the Boeing engineers are highly probative of the additional time it would take for Boeing to launch the 787, while the delivery delays cited by the EU are not.
 - c. The pre-launch development timeline of the A350 XWB corroborates the Boeing engineers' counterfactual analysis with respect to the 787.
- 799. The United States in its first written submission showed that the pace of development for Airbus's A350 XWB lends credibility to the Boeing engineers' conclusion that the counterfactual launch of the 787 would have occurred approximately two years later, in 2006, absent the R&D subsidies. The EU responds with the views of Airbus engineers that badly misconceive both the facts and the Boeing engineers' analysis.
- 800. *First*, the EU states that "developing the A350 XWB took much more than 'a little over two years after Boeing launched the 787', as the Boeing engineers assert in their statement." The EU then references the Airbus engineers' description of the time it took "to develop, mature, produce and certify the aircraft, including developing and maturing relevant technologies." The EU distorts the Boeing Engineers Statement, and compares the time periods for two processes that are not comparable.
- 801. The actual sentence in the Boeing Engineers Statement reads: "Airbus was able to announce orders for the A350 XWB, with a panelized composite fuselage, in July 2006, a little over two years after Boeing launched the 787, and only months after it had been accepting firm orders for its earlier A350 design." Thus, the two-year period referenced by the Boeing engineers was not for the full development of the A350 XWB, but for the amount of time it took to get to the point where Airbus could begin taking orders. The continuation of development work beyond that point is fully consistent with the Boeing engineers' point. Boeing did, in fact, launch the 787 in April 2004, 1154 and Airbus did, in fact, announce orders of the A350 XWB in

¹¹⁴⁹ Boeing Engineers Reply, para. 16 (Exhibit USA-359(BCI)).

¹¹⁵⁰ See US FWS, paras. 785-788.

¹¹⁵¹ EU SWS, para. 1011 (quoting Boeing Engineers Statement, para. 24 (Exhibit USA-283(BCI))).

 $^{^{1152}}$ EU SWS, para. 1012 (citing Airbus Engineers Rebuttal Statement, Section II.E.1 (Exhibit EU-1014(HSBI))).

¹¹⁵³ Boeing Engineers Statement, para. 24 (Exhibit USA-283(BCI)).

¹¹⁵⁴ See US – Large Civil Aircraft (Panel), para. 7.1702.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 262

July 2006, ¹¹⁵⁵ a span of little more than two years after the former. The United States described and calculated these figures correctly. The only error is the EU's, in trying to give them a significance they do not have.

802. Boeing engineers highlight a similar distortion:

The Airbus engineers try to confuse the issue with misleading comparisons of the full development period for A350 XWB technologies to our estimates of time for additional 787 pre-launch R&D, which are only part of the full development period. For example, they state that:

Developing the composite wing took us from 2004 (from the composite wing design of the original A350) to the 2013 first flight of the A350XWB, with its composite wing. Thus, it was not merely a matter of 'months' for us to develop the composite wing. Instead, it took us nine years, from 2004-2013, to research, develop, produce and test the wing, which is yet to be certified. This stands in stark contrast to the 18 months Boeing engineers allege it would have taken them to "develop a composite wing for the 787.

This is not a stark contrast because it is not a fair comparison, or one we ever made. We estimated that it would have taken us 18 months for "construction and testing of an AST-type wing box demonstrator," not that it would have taken us 18 months for the entire development of the 787 composite wing up to first flight. 1156

And, just as the Airbus engineers were able to continue their technology development work for several years after the launch of the A350 XWB, so would the Boeing engineers have been able to continue their work after the counterfactual 2006 launch of the 787. 1157

803. *Second*, the EU argues that the comparison is misplaced because the 787 and A350 XWB have different composite technology solutions. Boeing engineers explain why such differences do not invalidate the comparison:

We looked to Airbus' pre-launch experience with the A350 XWB as a rough benchmark to corroborate our counterfactual estimate of how much additional time would be required to do the work performed under the NASA and DOD

¹¹⁵⁵ Singapore Airlines Orders 20 Airbus A350 XWB-900s and 9 Airbus A380s, Business Wire (July 21, 2006) (Exhibit USA-291).

¹¹⁵⁶ Boeing Engineers Reply, paras. 22-23 (Exhibit USA-359(BCI)) (quoting Airbus Engineers Statement, para. 56 (Exhibit EU-1014)) (other citations omitted).

 $^{^{1157}}$ See Boeing Engineers Statement, para. 23 (Exhibit USA-283(BCI)) (describing some of Boeing's actual post-launch technology development efforts).

¹¹⁵⁸ EU SWS, para.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 263

R&D programs. We understand that the composites work under those programs was found by the WTO to be valuable because it generated broadly applicable knowledge about composite technology challenges, not because the technologies were the same as we applied on the 787. In addition, a program like ATCAS, which involved the study of composite panel sections, was if anything more closely related to the A350 XWB's panelized fuselage design than to that of the 787. It therefore stands to reason that performing the work under the NASA and DOD programs, in addition to the actual 787 development efforts of Boeing and its suppliers, would not result in a pre-launch development period many years longer than what Airbus experienced with the A350 XWB. ¹¹⁵⁹

804. Obviously, the two aircraft are not identical, and the United States never argued that the pre-launch R&D timeline between the two should match. Rather, the pre-launch A350 XWB timeline gives a general sense of what range of estimates is reasonable. As shown in the U.S. first written submission and confirmed in the following paragraphs, the fair comparisons, which the EU so desperately seeks to avoid, support the Boeing engineers' estimation and exposes the EU's rebuttal as implausible.

805. The relevant timing issue for the counterfactual analysis is the additional amount of time for pre-launch R&D that would be required before Boeing would be able to launch the 787, as that is when the 787 would be in the market competing against Airbus LCA for sales, and when Boeing would be able to make contractually binding commitments with customers. Aside from some systems that carried over from the SonicCruiser, Boeing began intensive prelaunch R&D for the 787 in [***]. Actual launch of the 787 took place in April 2004, and the Boeing engineers estimated that a two-year delay would have pushed launch back to April 2006. Thus, the time from the start of intensive pre-launch R&D across the entire 787 program to launch, in the absence of R&D subsidies, is estimated to be approximately [***] years, as opposed to approximately [***] years in the real world.

¹¹⁵⁹ Boeing Engineers Reply, paras. 25 (Exhibit USA-359(BCI)).

¹¹⁶⁰ US – Large Civil Aircraft (Panel), paras. 7.1774 ("The question is what sort of aircraft Boeing could have developed, and when that aircraft could have been launched and first entered into service, in the absence of the aeronautics R&D subsidies.") (emphasis added), 7.1775 ("Boeing would have developed a 767-replacement that incorporated all of the technologies that are incorporated on the 787, but its launch would have been significantly later than 2004 and it would not have been able to promise first deliveries for 2008"); 7.1777 note 3712 ("The Panel is of course aware that Boeing was not ultimately able to deliver the 787 in 2008, however, the relevant fact for purposes of our analysis is that in 2004, Boeing believed that it would be able to make its first deliveries in 2008 (and made contractual promises to its customers to this effect).") (emphasis added).

¹¹⁶¹ See, e.g., Boeing Engineers Statement, paras. 30, 33 (Exhibit USA-283(BCI)).

¹¹⁶² Boeing Engineers Statement, paras. 15-16 (Exhibit USA-283(BCI)).

¹¹⁶³ Boeing Engineers Statement, paras. 3-13 (Exhibit USA-283(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 264

806. The Airbus engineers do not indicate when Airbus began intensive research on the A350 XWB, but it appears to be sometime between late 2005 and May 2006. The A350 XWB required "a completely new design . . .retaining only the new composite wing we had already started developing for our original A350" As its engineers state, Airbus began work on the Original A350 in December 2004, when they "started developing a composite wing for the original A350." And Airbus did not begin developing the non-wing aspects of the A350 XWB until *after* "the market rejected the original A350." Airbus unveiled the primarily-composite A350 XWB and entered into customer commitments in July 2006, with the official launch in December 2006. 1168

807. Thus, the most conservative starting point would be December 2004, when Airbus began working on the Original A350. And the most conservative ending point would be the official launch in December 2006 (five months after Airbus began taking orders). Therefore, under the most conservative estimate, it took Airbus *two years* to go from the onset of intensive pre-launch R&D to official launch. [[**HSBI**]]. ¹¹⁶⁹ For the EU's repeated emphasis on the technological "knowledge, confidence, and experience" that must be developed before a launch decision can be taken, this is a very fast pace.

808. Indeed, as Boeing engineers observe, Airbus's rapid launch of the A350 XWB undermines the key premises of the EU/Airbus response to the Boeing engineers' counterfactual:

As they admit, Airbus began with the "completely new" A350 XWB design when "the market rejected the original A350," which we understand to mean sometime in late 2005 or early 2006 since this is when Airbus appears to have stopped making customer commitments for the original A350. Developing the A350 XWB involved "pre-launch research and development" and an "early study phase" that led to Airbus' first-ever composite fuselage. Airbus publicly committed to the composite fuselage A350 XWB at the Paris Air Show in July 2006 when it announced launch order commitments from Singapore Airways. It officially launched the program in December 2006 – approximately one year after deciding to undertake a "clean sheet" design. To go from the start of pre-launch R&D to launch in this timeframe is remarkable, especially when it involved Airbus' first composite fuselage. Yet the Airbus engineers' criticisms of our counterfactual analysis – that is, the unvarying disincentives to long-term, high

¹¹⁶⁴ Airbus Engineers Statement, paras. 49-51 (Exhibit EU-1014(HSBI)).

¹¹⁶⁵ Airbus Engineers Statement, para. 50 (Exhibit EU-1014(HSBI)).

¹¹⁶⁶ Airbus Engineers Statement, para. 52 (Exhibit EU-1014(HSBI)). Airbus was able to offer and sell the Original A350 to customers almost immediately.

¹¹⁶⁷ Airbus Engineers Statement, para, 50 (Exhibit EU-1014(HSBI)).

¹¹⁶⁸ Airbus Engineers Statement, paras. 49-51 (Exhibit EU-1014(HSBI)).

¹¹⁶⁹ Airbus Engineers Statement, paras. 49-52 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 265

risk R&D, and the slow pace of such R&D in the event disincentives can be overcome – imply either that Airbus did not undertake any high-risk R&D in the A350 XWB's pre-launch development phase, or that, if it did, such R&D proceeded at the same, slow pace as it would have a decade before Airbus had any intention of launching the program. Based on our experience with LCA development programs, neither proposition is credible. ¹¹⁷⁰

- 809. The EU argues that even a 10-year delay to replicate the subsidized R&D would be a gross underestimate. Adding the "gross underestimate" of 10 years for replication of subsidized research to the [***] years [***] that it actually took, the EU is arguing that a prelaunch R&D phase of 11.5 years would be a gross underestimate.
- 810. The United States is arguing that the pre-launch R&D phase would have taken approximately [***] years in the absence of the R&D subsidies.
- 811. Recognizing that the 787 and the A350 XWB are not identical, the conservative measure of the A350 XWB pre-launch R&D timeline of two years nevertheless gives a strong indication that the U.S. counterfactual timing estimate for the 787 is reasonable while the EU's is not. It is implausible that the counterfactual 787 pre-launch R&D phase would take more than six times as long as the A350 XWB pre-launch R&D phase. By contrast, it is far more likely that the counterfactual 787 launch would take a little less than twice as long.
 - d. The EU, not the Boeing engineers, misunderstands the economics of R&D and of a launch decision.
- 812. The EU argues that the Boeing engineers disregard the economics of R&D and of a decision to launch a new LCA model. The EU first criticizes two purportedly flawed assumptions relied on by the Boeing engineers. The EU then engages in an erroneous analysis of considerations for a launch decision. It is the EU that ignores the findings from the original proceeding and basic economics.
- 813. *First*, the EU criticizes the Boeing engineers' assumption that, aside from Boeing's lack of participation in the relevant NASA and DoD programs, there are no other changes concerning the "knowledge and experience, and . . . the technologies it has mastered using its independent R&D and other market-based sources." Assuming the continued role of non-subsidy factors is, however, inherent in a proper *but for* counterfactual. It is also consistent with the original panel's findings that "Boeing's technology developments are clearly the product of a variety of

¹¹⁷⁰ Boeing Engineers Reply, paras. 19 (Exhibit USA-359(BCI)).

¹¹⁷¹ EU SWS, para. 975.

 $^{^{1172}}$ See EU SWS, paras. 1014-1022.

¹¹⁷³ EU SWS, para. 1017.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 266

factors,"¹¹⁷⁴ including the independent technological advances made by Boeing¹¹⁷⁵ and its suppliers¹¹⁷⁶ during the time that Boeing was participating in the subsidized R&D programs.

- 814. Just as a proper causation analysis may not attribute the effects of non-subsidy factors to the subsidies, so must a proper counterfactual avoid removing from the analysis effects that derive from non-subsidy factors. In the real world, the Boeing engineers and the Airbus engineers did not "sit idle for decades" when it came to the application of composites in civil aviation. Thus, the counterfactual cannot assume that Boeing would sit idle while Airbus forged ahead. The Boeing engineers' working premise that the company would have done what it did outside of the NASA and DoD programs is a good proxy for the degree of technological advancement that would have occurred. 1177
- 815. *Second*, the EU argues that "the Boeing engineers essentially assert that the original panel erred in concluding that the type of R&D funded by NASA and DOD is long-term and uncertain." According to the EU, "{t}he original panel found that research funded by the government is long-term and uncertain, but the Boeing engineers consider that such research somehow becomes short-term and capable of execution just prior to launch when undertaken by Boeing on its own account." 1179
- 816. It is the EU's position that is odds with the findings in the original proceeding, in addition to suffering from apparent confusion about the meanings of "short term" and "long term."
- 817. The crux of the findings in the original proceeding were that disincentives to conducting *long-term*, *risky* research would result in it not being conducted absent subsidies. But when the commercial urgency for the R&D arrives, it is no longer long term. This should be obvious. Moreover, the world does not stand still. As overall levels of knowledge of composites increased, the degree to which the 787 technologies were a "long-term" prospect would have diminished. This is also obvious.
- 818. The EU's position is that the R&D remains equally long term and risky forever, and the calculus never changes. The logical implication is that, absent subsidies, the benefits would never outweigh the disincentives, and the R&D would never be conducted. Accordingly, the 787 would never be launched. This is decidedly not what the original panel and Appellate Body

¹¹⁷⁴ US – Large Civil Aircraft (Panel), para. 7.1758.

¹¹⁷⁵ US – Large Civil Aircraft (Panel), para. 7.1757.

¹¹⁷⁶ US – Large Civil Aircraft (Panel), para. 7.1757.

¹¹⁷⁷ To frame the matter somewhat differently, the resources Boeing devoted to self-funded research is a known quantity, and in light of Airbus's work in these areas, it is indisputable that Boeing's own work would have made it vastly more sophisticated in the use of composites in [***], even without the relevant NASA and DoD contracts and agreements, than it was for most of the late 1980s and 1990s while that work was going on.

¹¹⁷⁸ EU SWS, para. 1018.

¹¹⁷⁹ EU SWS, para. 1018.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 267

found. They found that the NASA and DoD research at issue *accelerated* technology, not that it was the sole source for technology. ¹¹⁸⁰

819. Rather, the *but for* counterfactual scenario on which the original Panel focused entailed the launch of the 787 later than 2004. ¹¹⁸¹ The original panel also found it "reasonable to assume" that non-subsidy technology factors would eventually sever the causal link between the R&D subsidies and the application of technology on Boeing LCA, even as it found that such a point had not been reached by 2004. ¹¹⁸² Therefore, the findings from the originally proceeding actually assume that at some point the commercial necessity of the research would outweigh decreasing disincentives and that Boeing (and other sources accessible to Boeing) would have performed some, but not all, of the R&D sponsored by NASA and DoD in the real world that was necessary for the 787 to be launched when it was.

820. Finally, the EU turns to the economics of a launch decision purportedly ignored by the Boeing engineers. The EU provides the following rationale:

First, adding fundamental research at the beginning of the 787 development process would have deferred the revenue stream from deliveries of 787 aircraft by two years. Neither the Boeing engineers nor the United States address the significant impact this delay in revenues would have, in terms of reducing the expected return of the business case for the 787. Second, the Boeing engineers and the United States fail to account for the impact of adding two years of basic research at the beginning of the business case, in terms of increased development cost in the early years – coupled with heightened risks about the amount to be spent on basic research given the uncertainty about the level of research required. The heightened risk would require a much higher hurdle rate, significantly reducing the expected return of the business case for the 787. And the increased costs would further significantly reduce the expected return of the business case for the 787.

The EU concludes that {"t}he Boeing engineers' statement {falsely} assumes that their additional two years of fundamental research, and all of the additional cost and delayed entry into service associated with it, could be undertaken without any impact on the business case' expected return and net present value underpinning the launch decision." 1184

¹¹⁸⁰ See, e.g., US – Large Civil Aircraft (Panel), para. 7.1758.

¹¹⁸¹ US – Large Civil Aircraft (Panel), para. 7.1775.

¹¹⁸² US – Large Civil Aircraft (Panel), para. 7.1758.

¹¹⁸³ EU SWS, para. 1020.

¹¹⁸⁴ EU SWS, para. 1021. The Airbus engineers provide a similar argument that, in proposing that early-stage R&D progresses more quickly in the pre-launch phase of a commercial aircraft program than under a NASA

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 268

821. The EU makes a basic and glaring oversight in failing to realize that the absence of R&D subsidies delays the launch by lengthening the *pre-launch* R&D phase. However, at the time the *launch decision* is made – whenever that is – the pre-launch R&D has been completed and any attendant costs are ignored as sunk costs. Boeing engineers explain the EU's error:

In the beginning of the pre-launch development phase for a new aircraft program such as the 787, Boeing [***]

With regard to the European Union's argument about the 787 business case, Boeing's pre-launch Independent R&D expenditures [***] Accordingly, conducting an additional two years of pre-launch R&D as contemplated in our counterfactual analysis would not have impacted the 787 business case, even if it would have delayed the program's launch and anticipated entry into service. 1185

- 822. Thus, it is the EU, not the Boeing engineers, that misunderstands the economics of the 787 launch decision.
 - e. The EU attempts to turn an issue of semantics into a substantive criticism of the counterfactual used by the Boeing engineers.
- 823. The EU and Airbus engineers contend that the Boeing Engineers Statement poses the wrong counterfactual, seizing on the term "replicate" as if it denotes a rote exercise of repeating research in technologies that, with the benefit of "hindsight," Boeing already knew existed and were feasible. Thus, the Boeing engineers do not pose the wrong counterfactual; the EU wrongly attributes to the Boeing engineers a question that they did not, in fact, pose.
- 824. To be clear, the Boeing engineers did *not* estimate how long it would take to replicate only the fruitful research, using the benefit of hindsight to ignore the pitfalls and dead-ends that materialized. Rather, they assessed how much additional time it would have taken to launch the 787 if Boeing had not participated in the subsidized R&D at issue, which includes the wrong turns inherent in research. This is the appropriate counterfactual.
- 825. In contrast, the EU proposes an erroneous counterfactual, stating that:

the relevant question is how long it would have taken Boeing engineers to *undertake* all of the knowledge the company's decades of participation in the US Government-supported R&D programmes have brought them, and thereafter, how

research program, the Boeing engineers are asserting that Boeing would have "thrown caution and profit-maximizing principles aside." Airbus Engineers Statement, para. 14 (Exhibit EU-1014(HSBI)).

¹¹⁸⁵ Boeing Engineers Reply, paras. 11-12 (Exhibit USA-359(BCI)).

¹¹⁸⁶ See EU SWS, paras. 1023-1024; Airbus Engineers Statement, para. 13 (Exhibit EU-1014(HSBI)).

¹¹⁸⁷ See Boeing Engineers Statement, para. 3 (Exhibit USA-283(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 269

long it would have taken them to research, develop and produce the specific technologies employed on the aircraft - without any knowledge about what to do and which pitfalls and dead-end research to avoid – knowledge acquired only through participation in the US R&D programmes. ¹¹⁸⁸

This counterfactual has several flaws.

i. The proper counterfactual question

- 826. The relevant question is the length of delay in reaching the launch of the 787 that would result from the absence of NASA and DoD R&D programs that helped Boeing to arrive at, and were a prelude to, the technologies it applied on the 787 but did not actually give Boeing those technologies.
- 827. The original panel considered the technology concepts studied by Boeing under the NASA R&D subsidies to be relevant parts of a process including Boeing's own work in which "solutions to technological problems are developed." It found that, absent the R&D subsidies, gaps in Boeing's knowledge would have delayed the 787's launch, as Boeing would lack knowledge that served as a prelude to later advances, such as understanding the separate composite fuselage panel sections studied under ATCAS before developing a 360-degree composite barrel fuselage. The original panel also allowed for the possibility that "Boeing could have eventually achieved through its own resources the gains that in fact accrued to it through NASA's assistance," but found that achieving such gains would require additional time.
- 828. The issue, then, is how long it would take Boeing to fill the gaps in its knowledge that would serve as a prelude to the development of the 787. This does not presuppose or require that Boeing would know, "with the benefit of hindsight," what technologies "were feasible." Rather, it would involve investigating the same technologies that Boeing was interested in and studied under the R&D programs to learn what is, and is not, feasible before advancing further in the 787's pre-launch development.
- 829. Once Boeing would have done the additional, counterfactual R&D, it would then have the knowledge and experience to perform the actual pre-launch R&D that led to the technologies Boeing had at the time of the 787's launch. Boeing's counterfactual additional R&D activity, together with non-subsidy sources of knowledge and experience recognized by the original panel, would put Boeing in a pre-launch technology position comparable to what it obtained

¹¹⁸⁸ EU SWS, para. 1023.

¹¹⁸⁹ US – Large Civil Aircraft (Panel), para. 7.1750.

¹¹⁹⁰ US – Large Civil Aircraft (Panel), para, 7,1750-7,1751.

¹¹⁹¹ US – Large Civil Aircraft (Panel), para. 7.1759.

¹¹⁹² Cf. EU SWS, para. 1024.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 270

through participation in the R&D programs examined by the original panel. Accordingly, at the time of counterfactual launch, there would be no reason why it would adopt a post-launch development and entry-into-service schedule that differed from Boeing's actual plans at the time of launch in 2004.

- 830. Indeed, it is the EU and the Airbus engineers who pose the wrong counterfactual. The EU and Airbus engineers adopt the erroneous presumption that, absent the R&D subsidies, Boeing would need additional time to develop the 787 technologies from start to finish. The Airbus engineers consider that the counterfactual analysis should determine "how many years it would have taken Boeing to develop, mature, produce and certify novel technologies" used on the 787. This includes not only the development of "basic ideas for innovative technologies" which the Airbus engineers concede may be possible in two years 1195 but also testing of full-scale airframe structures, making different technologies operate together, flight testing, and predelivery certification with governmental aviation authorities. 1196
- 831. They are mistaken as to the appropriate counterfactual analysis under the SCM Agreement. The R&D subsidies concerned only parts – typically very preliminary parts – of the technology development process leading to the technologies used on the 787. The effect of those subsidies was to increase Boeing's knowledge and experience in ways relevant to the 787's development. A proper counterfactual analysis assesses how long it would take Boeing to attain that increased knowledge and experience so that it could proceed with the development of technologies used on the 787. For example, the original panel found Boeing's research under the ATCAS contract to be important for the 787 fuselage because it entailed work -i.e., a better understanding of separate composite panel sections and preliminary costing studies for barrel fuselage sections – that were preliminary steps to be taken before Boeing's own subsequent work on the composite fuselage technology solution ultimately adopted for the 787. 1197 A proper counterfactual must focus on the time required to take those preliminary steps, to fill the gap in knowledge and experience, that were provided by the R&D subsidies. Boeing's subsequent development, maturation, production and certification of the technologies actually used on the 787, which often were different from the technologies studied under the R&D programs, are not themselves the effects of the subsidies. The effect of the subsidies is that Boeing achieved these technologies earlier than would otherwise have been the case.
- 832. To propose the contrary, as the EU and the Airbus engineers do, is inconsistent with the original panel's findings and double-counts the time taken for Boeing's non-subsidy development of 787 technologies. The original panel found that "Boeing's technology

¹¹⁹³ Boeing Engineers Reply, paras. 15-16 (Exhibit USA-359(BCI)).

¹¹⁹⁴ Airbus Engineers Statement, paras. 13, 26 (Exhibit EU-1014(HSBI)).

¹¹⁹⁵ Airbus Engineers Statement, para, 27 (Exhibit EU-1014(HSBI)).

¹¹⁹⁶ Airbus Engineers Statement, paras. 35-38 (Exhibit EU-1014(HSBI)).

¹¹⁹⁷ US – Large Civil Aircraft (Panel), para. 7.1751.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 271

developments are clearly the product of a variety of factors," ¹¹⁹⁸ arising before, during, and after Boeing's research under the R&D programs:

The Panel is not, of course, of the view that the technologies applied to the 787 are entirely and exclusively attributable to work that Boeing and McDonnell Douglas conducted for NASA and DOD pursuant to the aeronautics R&D subsidies. The Panel is well aware that, from 2000 onwards, Boeing and its suppliers have made significant investments in R&D in the respective technology areas, first in the context of the development of the Sonic Cruiser, and subsequently, the 7E7/787. Moreover, as regards the technologies on the 787 in particular, the Panel notes that, prior to performing the research under the aeronautics R&D contracts at issue in this dispute, Boeing had already developed expertise in the application of composites in secondary structures, as well as in primary structures such as the 777 empennage. It is also clear that during the 1990s, Boeing suppliers on the 787, such as Kawasaki Heavy Industries and Fuji Heavy Industries were developing expertise in the use of composites in primary aircraft structures contemporaneously with Boeing's development efforts. The Panel acknowledges that Boeing had also derived valuable knowledge and experience from lessons learned over the course of the 777 and 737NG production programmes. 1199

- 833. The technological progress achieved through these non-subsidy factors cannot properly be attributed to the R&D subsidies, lest the counterfactual analysis double-count the time Boeing took on R&D activities that are not the effect of the subsidies. Yet, the EU and the Airbus engineers propose exactly this when they ask the Panel to assess how long it would have taken Boeing to start from scratch in developing, maturing, producing, and certifying develop, mature, produce, and certifying the technologies actually used on the 787 *in addition to* conducting the type of research covered by the R&D programs.
- 834. The EU's ten-year delay theory also conflicts with the original panel's findings that that the counterfactual time of the 787 launch would be "significantly later" than 2004, ¹²⁰⁰ while it also was "satisfied" that Boeing, in developing an LCA to replace the 767, "would have done so in the early- to mid-2000s." The original panel also rejected the proposition that "it would have taken Boeing as much as 11 years longer to develop the 787 in the absence of the aeronautics R&D subsidies." Yet the EU contends that it would have taken Boeing more than ten years longer, putting the 787 launch date not in the "mid-2000s" but in 2014 or beyond.

¹¹⁹⁸ US – Large Civil Aircraft (Panel), para. 7.1758.

¹¹⁹⁹ US – Large Civil Aircraft (Panel), para. 7.1757 (emphasis added).

¹²⁰⁰ US – Large Civil Aircraft, para. 1775.

¹²⁰¹ US – Large Civil Aircraft, para. 1774.

¹²⁰² US – Large Civil Aircraft, para. 1748.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 272

835. Therefore, the EU counterfactual ignores the other sources of technology that the original panel found had contributed to Boeing's technology developments for the 787, and that would, over time, erase any advantage conferred by the subsidies. It is accordingly incorrect for purposes of evaluating causation in this proceeding.

ii. Sources of knowledge and technology development

836. The EU incorrectly states that "Boeing only knows that the 787's novel technologies were feasible because of decades of the company's participation in US Government-supported R&D programmes." As Boeing engineers explain, the uncertainty of R&D is captured in the benchmarks they used:

Our analysis explicitly adopted the WTO Panel's finding that, absent those programs, Boeing would have lacked the knowledge and experience to proceed with the 787 when it did. Our analysis then assessed how long it would have taken to acquire that knowledge and experience before proceeding with the subsequent stages of the 787 development program as we did. We did not assume that Boeing would be undertaking rote research exercises where the outcome was known in advance. In fact, we controlled for this by evaluating the types of research activities performed under the NASA and DOD programs against Boeing's own R&D experience with early-stage technology problems that were at least as challenging (typically more so), and where the outcome of the research was similarly unknown at the outset. 1204

837. The EU's argument on this point also conflicts with Boeing's actual experience in developing the 787:

The Airbus engineers try to dismiss our actual experience by asserting that "Boeing engineers only knew that the 787's novel technologies, for example the full barrel carbon fibre-reinforced plastic ("CFRP") fuselage, were feasible, because of decades of the company's participation in US Government-supported R&D programmes." This is nonsensical. If those R&D programs had given Boeing the knowledge that the one-piece barrel was feasible, then Boeing [***] 1205

838. In the absence of the R&D subsidies, Boeing's knowledge base and experience would have been less in 2000 than they were in reality, with the benefit of the subsidized research. But they would not, as the EU's argument implies, have been equivalent to Boeing's knowledge and

¹²⁰³ EU SWS, para. 1024.

¹²⁰⁴ Boeing Engineers Reply, para. 6 (Exhibit USA-359(BCI)).

¹²⁰⁵ Boeing Engineers Reply, para. 18 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 273

experience in the late 1980s or early 1990s. As Boeing Engineers explain in their reply to the Airbus Engineers Statement:

In each of the relevant technology areas, from composites to computational fluid dynamics (CFD) to noise reduction, the knowledge base of Boeing, its suppliers, and indeed the wider aeronautics community originated prior to the NASA and DOD programs and would grow over time regardless of whether those programs existed. The Airbus engineers fail to acknowledge this.

The relevant knowledge base available to Boeing in the early 2000s was significantly more advanced than in the late 1980s and early 1990s, when many of the NASA and DOD programs started. To take just a few examples from the area of composite materials, Boeing in the early 2000s:

- had already spent more than a decade developing and producing the 777's composite empennage and horizontal and vertical stabilizers, which included intensive work with the Toray T3900 prepreg material we would use on the 787;
- knew that Raytheon had launched and flown a business jet with a composite fuselage (the Premier 1);
- knew that Airbus would be using composites to build the A380's massive stabilizers and center wing box; and
- [***]

With these and other developments, separate and apart from Boeing's participation in the NASA and DOD programs, Boeing gained a much better understanding of what was possible and what was not.

Such developments help to explain why the disincentives that the WTO Panel found for "long term, high risk aeronautical R&D" are not constant for a given technology, even if such disincentives applied at the time the NASA and DOD R&D programs were undertaken. ¹²⁰⁶

839. Indeed, in the 2000s, the state of knowledge available outside of participation in the subsidized NASA and DoD programs was such that Airbus could offer customers a composite wing on the original A350 in December 2004, just months after Boeing launched the 787 in April 2004. Airbus also was able – in the space of approximately one year – to embark on a clean-sheet design for the A350 XWB in late 2005 or early 2006, make customer commitments

¹²⁰⁶ Boeing Engineers Reply, paras. 7-9 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 274

for the composite fuselage A350 XWB a few months later in July 2006, and then followed by launch in December of that year.

840. Despite Airbus's rapid pre-launch development of the A350 XWB, the EU and Airbus engineers contends that the Boeing engineers' two-year estimate is a "gross underestimation" that "does not allow for time to conduct – and learn from – the many trials and errors involved in aeronautics research and development." To the contrary, the two-year estimate does allow for iterative learning and trial-and-error because such processes occurred in the work that the Boeing engineers used as benchmarks:

Our analysis estimated the additional time it would take for Boeing to fill those parts on its own. It was based on the best available benchmarks: Boeing's real-world experience on comparable R&D projects undertaken in connection with the 787 program. Contrary to the Airbus critique, these benchmark experiences included iterative learning, "trials and errors," and far more than a "paper design." 1208

- 841. In this context, the EU also repeats its arguments concerning notional times to progress along NASA's TRL scale and the economics of R&D and LCA programs. As noted above in Sections IV.F.3.a.i, however, these arguments are baseless.
 - f. The Boeing engineers' estimate of the 787 launch delay is based on the appropriate set of NASA and DoD programs.
- 842. The EU complains that "the Boeing engineers' statement is silent on the valuable dualuse experience Boeing engineers gained on a number of military aircraft PEs" *i.e.*, the CV-22, V-22, F/A-18 Squadrons, JSF, and C-17. This criticism is misplaced. The Boeing Engineers Statement covers all NASA and DOD measures found to confer WTO-inconsistent subsidies in the underlying proceeding, including the assistance instruments under those military aircraft PEs. Although the EU and the Airbus engineers cite statements by Boeing personnel as evidence of connections between Boeing's experience on military aircraft programs and the 787, they fail to demonstrate that the alleged connections are attributable to the assistance instruments under the PEs at issue, as opposed to Boeing's work under procurement contracts under those PEs, which are not specific subsidies, and/or under Boeing's manufacture of those aircraft or components thereof, which the EU itself excluded from the underlying dispute.

¹²¹⁰ Boeing Engineers Statement, para. 4, note 3 (Exhibit USA-283(BCI)) (listing the NASA and DOD programs considered by the authors); Boeing Engineers Reply, para. 27 (Exhibit USA-359(BCI)).

¹²⁰⁷ EU SWS, para. 1025 (quoting Airbus Engineers Statement, para. 13 (Exhibit EU-1014(HSBI)).

¹²⁰⁸ Boeing Engineers Reply, para. 16 (Exhibit USA-359(BCI)).

¹²⁰⁹ EU SWS, para. 1042.

¹²¹¹ EU SWS, paras. 1042-1043; Airbus Engineers Statement, paras. 18-24 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 275

- 843. With respect to NASA programs, the EU does not explain what programs it views as excluded by the Boeing engineers. The EU does state that the Boeing engineers merely address NASA's ATCAS and AST programs and DoD's VITAL program. But surely the EU realizes that the two-year estimation in the Boeing Engineers Statement is not based on just these three programs. Perhaps this is why the EU does not explicitly pursue this line of argument any further.
- 844. In fact, it is important to note that it will likely be quite rare for one of the military aircraft program elements to fund an assistance instrument. As the original panel found, a procurement contract is the appropriate instrument for the acquisition of goods or services of direct benefit and use to the U.S. government. As noted in Section II.D of this submission, the purpose of the "military aircraft" program elements is to buy new weapons systems or upgrade existing systems, which is clearly for the direct benefit and use of the U.S. government. Thus, it would be a rare situation in which one of those program elements would fund an assistance instrument. The information before the Panel demonstrates that this is the case. Of 65 assistance instruments listed in Annex B to the DoD Licensing Agreement, only six were funded by the military aircraft program elements five through the Comanche helicopter program (0604223A), and one through the Long-Range Strike Bomber (0604015). The fixed wing aircraft programs cited by the EU (CV-22, V-22, F/A-18 Squadrons, JSF, and C-17) did not fund any assistance instruments.
- 845. Accordingly, this EU criticism fails to undermine the Boeing engineers' analysis.
 - 4. The EU errs in criticizing the U.S. position with respect to the finite duration of technology effects.
- 846. In discussing the U.S. arguments concerning the finite duration of the R&D subsidies' effects, the EU concedes that "the technology effects of the US R&D subsidies may be finite." The United States welcomes this statement, as it underscores the point that a core technology effects issue for the Panel is to determine whether the effects of the R&D subsidies ended before the compliance deadline.
- 847. The EU, however, contends that "the end point is far from being reached today, let alone in 2006." Its rationale for this statement is notable because it reveals a basic misunderstanding as to what the end of the R&D subsidies' effects do and do not entail.

¹²¹² See EU SWS, paras. 1045-1047.

¹²¹³ EU SWS, para. 1045.

¹²¹⁴ US – Large Civil Aircraft (Panel), para. 7.1153; DoD Agreements Listed in Annex B to the U.S. Compliance Notification (Exhibit EU-80).

¹²¹⁵ EU SWS, para. 1048.

¹²¹⁶ EU SWS, para. 1048.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 276

848. The EU cites to statements by Boeing's Scott Fancher that both the 787 and its technologies will be in the market for many years into the future. The EU fails, however, to acknowledge that the market presence of the 787 and its technologies cease to be attributable to the R&D subsidies when they would be in the market absent the subsidies. The United States has demonstrated that this point was reached well before the compliance deadline. After that point, the 787 and its technologies are no longer a legitimate object of complaint under the SCM Agreement, even if they remain in the market into the future.

849. A similar flaw lies in the EU's discussion of Boeing's patent rights and trade secrets. In the course of unfairly dismissing the U.S. steps to improve access to NASA and DoD research, the EU observes that Airbus cannot use Boeing's patents and does not know what Boeing's trade secrets are. However, the patents in question are the result of research conducted under NASA and DoD contracts and agreements. Thus, in the counterfactual, those patents would still have resulted, just at a later date. Moreover, in the counterfactual, the patents are more valuable to Boeing because the company performed the research itself, so that that patents would not be subject to the government use license that attaches to all patents that result from research under a government contract. Trade secrets cannot result from government-funded research. Therefore, the EU references to patents and trade secrets do not extend the duration of technology effects.

5. The EU's threat of future technology effects argument is not permitted under the SCM Agreement and is contradicted by the facts.

850. The EU contends that some alleged R&D subsidies – associated with PRSEUS and FAA's CLEEN program – "cause a threat of serious prejudice . . . in the form of *future* technology effects." This theory, while novel, cannot support a claim of adverse effects under Articles 5 and 6 of the SCM Agreement. Article 5 uses the term "cause" in the present tense in providing the discipline on causing adverse effects. This means that causation must be presently occurring, even if the form of adverse effects is imminent or threatened rather than current serious prejudice. Here, the EU is arguing that the causal mechanism is not presently operating, but will operate in the future. As a matter of law, this is insufficient under Article 5. If the SCM Agreement were intended to cover such a claim, Article 5 would say "cause or threaten to cause," but it does not. Accordingly, the Panel should reject this argument.

6. Conclusion

851. For the reasons discussed above, the EU has failed to overcome the key aspects of the U.S. rebuttal to its technology effects causation arguments. The United States refutes other EU technology effects arguments in Sections IV.H.1 and IV.I.1 below.

¹²¹⁷ EU SWS, para. 1049.

¹²¹⁸ EU SWS, para.1050.

¹²¹⁹ EU SWS, para. 1051.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 277

G. Price Causal Mechanism

- 852. The DSB recommendations and rulings included a finding that an aggregated group of FSC/ETI and the Washington B&O tax rate reduction, when cumulated with the effects of the Wichita IRB's, constituted subsidies to the 737 that were causing price effects leading to serious prejudice in the form of significant lost sales in the 100-200 seat market. The United States has achieved compliance with respect to these measures, the only ones found to cause serious prejudice through a price causal mechanism. The withdrawal of FSC/ETI alone ensures that U.S. subsidies are no longer causing adverse effects through a price causal mechanism.
- 853. Unwilling to accept U.S. compliance as a positive result, the EU puts forward a multitude of arguments, including some that appear to be deliberately opaque. This effort includes a contention that some unspecified group of R&D subsidies cause price effects now instead of technology effects. It includes a resuscitated argument that the price effects subsidies should be cumulated with technology effects R&D subsidies. It includes the re-litigation of claims and arguments that were already rejected in the original proceeding. It includes new claims against measures that existed at the time of the original panel request but were not challenged in the original proceeding. And it includes claims against measures that, even if they were subsidies, have no close nexus with the U.S. measures taken to comply. In its second written submission, the EU doubles down on its pursuit of this misguided and unauthorized expansion of its price effects case. The particular flaws of the EU's approach are examined in the four sub-sections below.
- 854. *First*, the EU has failed to cure the errors identified by the United States in the EU's price causal mechanism arguments, and in some cases, it has compounded earlier errors. The vague and cryptic nature of the EU's arguments, particularly those that relate to R&D subsidies, unfairly place the Panel and the United States at a significant disadvantage in addressing claims of non-compliance.
- 855. *Second*, consistent with this pattern, the EU still does not engage in a meaningful analysis of the magnitude of subsidies alleged to affect each relevant market, which constitutes a failure to meet its burden as the complaining party.
- 856. *Third*, as a result of numerous errors, the EU has failed to establish that miscellaneous subsidies not subject to the DSB's recommendations and rulings are capable of and do cause Boeing to lower prices and thereby cause serious prejudice.
- 857. *Fourth*, and again as a result of numerous errors, the EU has failed to establish that R&D subsidies are capable of and do cause Boeing to lower prices and thereby cause serious prejudice.

¹²²⁰ US – Large Civil Aircraft (AB), para 1350(d)(iii)-(iv).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 278

1. The EU's price effects claims still suffer from a lack of clarity.

- 858. The United States previously noted the lack of clarity that pervades the EU's first written submission, particularly with regard to subsidies alleged to cause price effects. 1221
- 859. First, the United States observed that the EU appeared to allege that all subsidies caused serious prejudice through a price effects causal mechanism. ¹²²² This was problematic because the R&D subsidies subject to the DSB's recommendations and rulings were found to act through a technology effects causal mechanism, and the EU claim that those subsidies acted through a price effects causal mechanism was rejected and not appealed. ¹²²³
- 860. Second, the United States explained that, even though the subsidies in an aggregated group (*e.g.*, tied tax subsidies) appeared to differ depending on the market, the EU did not address how those differences affected the analysis for each market. The United States viewed generic discussion of the effects caused by "the U.S. subsidies" to be insufficient if differences did indeed exist with respect to the different markets in which the EU alleges serious prejudice. ¹²²⁴
- 861. With respect to the first problem, the EU's clarification that it is alleging two mutually exclusive sets of R&D subsidies one that causes technology effects and one that causes price effects has only compounded the lack of clarity. As explained in Section IV.C, the EU refuses to identify with clarity which R&D subsidies it alleges are in each set, and there the EU's chart of subsidies alleged to have price effects does not appear to be susceptible to a reading that is internally consistent with the remainder of the EU's submission. The EU's obfuscation in this regard is deeply problematic, and it prevents the Panel and the United States from discerning which measures are subject to which arguments to the detriment of the ability of the United States to defend its interests, and to the detriment of the Panel to make an objective assessment of the matter. Furthermore, as explained in Section IV.G.3 below, the EU has failed to make a *prima facie* case that any subsidy leads to Boeing lowering its prices and thereby causes serious prejudice (*i.e.*, causes serious prejudice through a price effects causal mechanism).
- 862. The EU has partially clarified the second problem. The EU previously provided arguments about "close links" between certain subsidies and aircraft models (or subsets thereof). The EU has now confirmed that it is not making any allegations of subsidy-aircraft model combinations that did not appear in those paragraphs. The United States notes that, as

¹²²¹ See, e.g., US FWS, paras. 712-714.

¹²²² US FWS, para. 712.

¹²²³ See US FWS, para. 712.

¹²²⁴ See US FWS, paras, 712-714.

¹²²⁵ See EU FWS, paras. 1135, 1159-1161.

¹²²⁶ See EU SWS, paras. 1065-1067, 1072.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 279

a result, the EU has confirmed that at least some of the aggregation groups (*e.g.*, tied tax subsidies and miscellaneous subsidies) do indeed include different sets of subsidies depending on the market. While the United States continues to consider this a flaw in the EU's attempt to demonstrate that any particular set of aggregated subsidies are indeed causing serious prejudice in a particular market, the United States at least understands what the EU is alleging with respect to the aircraft models impacted by the tied tax subsidies and the miscellaneous subsidies. ¹²²⁷

2. The EU still refuses to address the magnitude of the subsidies for each market.

863. The EU continues to rely on cursory statements that the magnitude of the subsidies is sufficient for them to have a genuine and substantial causal relationship with the relevant market phenomena. The EU must do more to established a *prima facie* case that the alleged subsidies are having price effects.

864. The EU's price effects theory is that subsidies allow Boeing to lower its prices in strategic sales campaigns. The prices of the relevant aircraft inform what magnitude of price reductions could even plausibly impact the outcome of a sales campaign. It is incumbent upon the EU to make a detailed showing of the magnitude of the subsidies alleged, how it calculated that magnitude, and what type of impact that could arguably have on Boeing's pricing (which also would seemingly require some estimation of how many aircraft are at issue for at least the R&D and miscellaneous subsidies so that the magnitude could be evaluated on an aircraft- or order- specific basis). The lack of detail is particularly egregious given that, at the EU's urging, the Panel requested and the United States provided voluminous documentation, including initial and final offers for the various sales campaigns, which the EU ignored completely in its first written submission, and which the EU has still not used for the purpose of supporting its contention that the magnitude of subsidies causing price effects at issue is sufficient to alter the outcome of a sales campaign.

865. The Panel and the United States are entitled to a clear understanding of what the EU is arguing and an opportunity to address such arguments. The EU's own impressions about the

¹²²⁷ The United States notes that analysis may still prove difficult where the EU has alleged subsidies to sub-sets of aircraft models. For example, Washington tax credits for pre-production development (putting other objections aside) are alleged to impact the 737MAX and the 787-10, as well as the 787-8/-9 in earlier years. EU SWS, para. 1066. Another example would be the South Carolina apportionment agreement, which is alleged to impact "the 787 LCA that are either produced in South Carolina or produced elsewhere and delivered to foreign purchasers in South Carolina." EU SWS, para. 1066. Given the complexity of parsing those allegations and the procedural objections to those claims, the United States will defer attempting to untangle the implications at this stage.

In addition, the United States does not concede that the EU is permitted to argue that each of these subsidies impacts the aircraft models it alleges. For example, the EU claims that FSC/ETI impacts the 787 despite that it did not make such a claim in the original proceeding. The EU cannot raise this argument for the first time now unless it can show, the alleged impact of FSC/ETI on the 787 is the result entirely of intervening events since the original proceeding.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 280

existence of adverse effects may be based on flawed assumptions or invalid premises, but the United States cannot address these questions if the EU refuses to provide a specific explanation as to how it values these subsidies and how it alleges these subsidies are impacting pricing. The EU has not and cannot meet its burden of proof based on summary statements that the magnitude of the subsidies is sufficient for them to genuinely and substantially cause the alleged market phenomena.

3. The EU has failed to demonstrate that each of the miscellaneous subsidies is capable of and does cause price effects.

866. The EU still has not provided any argumentation that *each* of the miscellaneous subsidies would be used by Boeing to reduce prices in strategic sales campaigns. Rather, the EU's argument relies on a general premise that all miscellaneous subsidies would be used to lower Boeing's prices by virtue of the fact that they increase Boeing's non-operating cash flow. In other words, the EU relies on the theoretical premise that each time an additional dollar is freed up by any of these subsidies, part or all of it (the EU does not indicate to what degree) will be used to reduce prices. This argument has no basis in evidence or economic theory.

867. The EU is effectively arguing that Boeing faces capital constraints that limit its ability to optimally price its products. The EU does not allege, much less support with evidence, this proposition in this proceeding. The EU tried to argue this in the original proceeding. The original panel noted that the EU "present{ed} an econometric simulation model by Professor Luís Cabral which seeks to address the question of how the provision of subsidies affects the business decisions of Boeing; specifically, how the receipt of an additional dollar of a particular category of subsidy affects the amount that Boeing chooses to invest in the development of new aircraft, and to price more aggressively." Professor Cabral's theory was that, upon receipt of these "cash flow" subsidies not tied to production or sales of aircraft, Boeing would directly and immediately apply a significant proportion to investments in aggressive pricing to capture market share. One of Professor Cabral's assumptions was that Boeing had capital constraints.

868. The original panel found that was "not persuaded that the European Communities has demonstrated that Boeing inherently lacked the financial means to price and develop its LCA in the manner in which it did." The original panel further found that "Professor Cabral's model does not support the existence of a causal link between the receipt by Boeing of {subsidies in

¹²²⁸ US – Large Civil Aircraft (Panel), para. 7.1832.

¹²²⁹ US – Large Civil Aircraft (Panel), Appendix VII.F.1, para. 68.

¹²³⁰ EC – Large Civil Aircraft (Panel), para. 7.1759; *id.*, para. 7.1831 ("once the amount of the subsidies received by Boeing between 1989 and 2006 is reduced from \$19.1 billion to our own estimate of the total amount of the subsidies {*i.e.*, 'at least \$5.3 billion,' para. 7.1433}, the argument that Boeing's LCA division would not have been 'economically viable' in the absence of the subsidies unless it altered its prices or product development behaviour becomes untenable, whichever basis for assessing economic viability is used.").

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 281

which the amount of subsidy does not vary in direct proportion to the number of aircraft produced or sold}, and lower Boeing LCA pricing." ¹²³¹

- 869. Economic logic confirms that the EU's argument relies on the premise that Boeing faces capital constraints. This is because a rational producer will price its products to maximize profitability. Although there is no evidence it has happened in this case, a producer may even rationally sell below the marginal cost of production if, for instance, the sale is important for relationship building that is expected to net large profitable sales in the future. But even where a producer finds it wise to make a sale as a "loss leader," the producer is setting that price optimally for long-term profitability.
- 870. The only reason a producer would not lower the price to the optimal level is if the producer faced capital constraints that precluded lowering the price further. In the example where a producer may find it rational to sell at a price below the marginal cost of production, the difference between the price (revenue) and the cost of production must be financed by the producer. If the producer cannot afford to use cash on hand or borrow money to cover those costs, the producer is prevented from lowering the price. In this example, the producer may lower prices upon receipt of additional cash.
- 871. But again, the EU has provided no evidence that, absent the subsidies at issue, these types of capital constraints would force Boeing to sell above optimal prices. Therefore, the EU has provided no evidentiary basis or theoretical basis to conclude that, as a rule, all subsidies found to have the effect of freeing up cash, will lead to some level of price reductions.
- 872. In addition, where the value of a subsidy does not increase as sales in strategic campaigns increase, the subsidy becomes less important and less likely to have any effect the more sales are made in strategic campaigns. To make this point concrete, consider the U.S. calculations in its first written submissions showing the amounts by which various subsidies would reduce prices on a per-aircraft basis if the entirety of the subsidy was put to that purpose. Those calculations required counting the number of aircraft at issue in the strategic campaigns identified by the EU in this proceeding. In its second written submission, the EU has added additional lost sales allegations, which will require increasing the denominator of those calculations. As a result of the same value of the Wichita IRBs being spread across more aircraft orders, the amount of the price reduction attributable to the subsidies will *shrink* on a per-aircraft basis. The EU's failure to engage in a detailed discussion of magnitudes masked this feature of its argument.

¹²³¹ US – Large Civil Aircraft (Panel), Appendix VII.F.1, para. 76 (emphasis original) (quoting European Communities' first written submission, para. 1309 and adding the emphasis).

¹²³² See, e.g., US FWS, para. 1000.

¹²³³ See US FWS, para. 1000.

¹²³⁴ The United States does this in Section IV.J.1.c.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 282

873. In conclusion, the EU certainly has not shown, and cannot show, that all subsidies not tied to production or sales would necessarily affect pricing decisions. And the EU has not even attempted to establish that each miscellaneous subsidy, in particular, would change Boeing's calculus about the lowest price it would accept in a given sales campaign. Accordingly, its claims with respect to the myriad miscellaneous subsidies not subject to the DSB's recommendations and rulings cannot be sustained.

4. The EU has not and cannot demonstrate that certain R&D subsidies are capable of and do cause price effects.

- 874. The United States reviewed in its first written submission that "the European Union {did} not contend{} on appeal, as it did before the Panel, that the aeronautics R&D subsidies *directly* affected Boeing's *prices*, in addition to the effects that they had on Boeing's development of technologies used on the 787." The United States argued that the EU's effort to revisit this issue is inappropriate and that the logic that impelled the original panel's conclusion remains true today. ¹²³⁶
- 875. The EU has responded by clarifying that it is not claiming in this compliance proceeding that present US R&D subsidies generate both present technology and present price effects. Rather certain R&D subsidies are allegedly causing technology effects, and the remaining subsidies are alleged to be causing price effects. The EU, however, fails to even identify which R&D subsidies it is alleging to cause price effects and not technology effects. As explained in Section IV.C, the EU's deliberate obfuscation in this regard should be permitted at the expense of U.S. interests in a fair opportunity to respond to claims of non-compliance.
- 876. Moreover, the EU did not establish in the original proceeding that R&D subsidies are capable of causing price effects. Therefore, even if the EU were permitted to argue that new subsidies were causing price effects or changes since the reference period caused R&D subsidies to have different effects that they were found to have previously, the EU would have to prove that such subsidies are capable of and are in fact having such effects. To do so, the EU

¹²³⁵ US FWS, para. 718 (quoting *US – Large Civil Aircraft (AB)*, para. 1313 (emphasis original)). *See also ibid.*, para. 717 (quoting the Appellate Body's observation that the Appellate Body observed that, "{a}t the oral hearing, both participants accepted that the Panel had not made any findings with respect to the effects of the aeronautics R&D subsidies on Boeing's prices").

¹²³⁶ US FWS, para. 718.

¹²³⁷ See EU SWS, paras. 1098-1101.

¹²³⁸ See EU SWS, paras, 1098-1101.

¹²³⁹ See US – Large Civil Aircraft (AB), para. 1313, note 2643; US – Large Civil Aircraft (Panel), para. 7.1826.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 283

presumably would need to provide some explanation of how it determined which subsidies cause technology effects and which cause price effects. 1240

- 877. The EU has not done so. As with the miscellaneous subsidies, the EU's theory is that, in the absence of "certain" R&D subsidies, ¹²⁴¹ "Boeing would be forced to generate greater revenue from higher prices for LCA." There are two glaring problems with this theory.
- 878. First, it cannot withstand the most basic economic scrutiny. The whole point of the EU's claims is that, if Boeing sold its aircraft for slightly highly prices, Airbus would win the sales. So if Boeing charged a higher price, it would not get the greater revenue it would be seeking. It would, in fact, be sacrificing revenue. It should be obvious that, if Boeing could simply generate more revenue by charging higher prices, it would.
- 879. Second, as explained with respect to miscellaneous subsidies in the preceding section, this theory again implicitly assumes resource constraints. This is because the EU's argument assumes that, if Boeing did not receive subsidies, it could not price the way it has and still conduct essential research. In other words, Boeing is unable to do both essential research and price its products optimally. Thus, this argument also fails because the EU has provided no evidence to demonstrate that Boeing faces these types of capital constraints. Boeing does the research it determines to have positive value, and it simultaneously prices its products at optimal levels. Having failed to prove otherwise, the EU's claims that R&D subsidies cause serious prejudice through price effects (*i.e.*, lowering of Boeing's prices) cannot succeed.
- 880. Finally, even if the EU could show that some portion of certain R&D subsidies would be passed on to customers in the form of lower prices, such subsidies can be reduced to the *portion* of the subsidy's cash value that the EU demonstrates is being passed through to customers. This stands in stark contrast to R&D subsidies causing technology effects, which the original panel found could not be reduced to their cash value. ¹²⁴⁵ As such, the EU must grapple with the fact

¹²⁴⁰ See, infra, Section IV.C.

 $^{^{1241}}$ The EU cryptically describes these are R&D subsidies that support technology that would be available at market . In 1,500 pages across two written submissions the EU never explains what this means or to which subsidies it applies.

¹²⁴² EU SWS, para. 100.

¹²⁴³ See EU SWS, para. 1100. A capitally constrained firm that cannot do the optimal level of research and price its products optimally may do both sub-optimally. In this instance, as it received additional cash, it would choose to allocate the cash to research or lower pricing or some of each to maximize the marginal investment. The EU does not even attempt to show that Boeing faces capital constraints, much less explain how it would allocate subsidies between these two (and the many other) uses. Thus, the EU has not provided any argument that would reliably establish the magnitude of the subsidies that would potentially lower Boeing's prices if they were capable of doing so.

¹²⁴⁴ See EU SWS, para. 1100.

¹²⁴⁵ See US – Large Civil Aircraft (Panel), para. 7.1760.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 284

that the magnitude of the R&D subsidies subject to the DSB recommendations and rulings has declined substantially.

H. The EU Still Has Failed to Demonstrate that Alleged Subsidies to the 787 and/or the 777X Cause Adverse Effects In the Form of Significant Price Suppression, Significant Lost Sales, Displacement, Impedance, or Threat Thereof With Respect to the A350 XWB.

1. Alleged technology effects

- 881. As discussed above, the EU has made a fundamentally flawed attempt to overcome the U.S. rebuttal demonstration that, absent the R&D subsidies, the 787 program would have been delayed by approximately two years. The United States addresses the EU's technology-specific arguments concerning the 787 below in Section IV.H.1.a..
- 882. The EU also does not contest that a counterfactual 787 launch in 2006 would leave sufficient time for the alleged technology spillovers to flow from the 787 to the 787-9/10 and 777X. Accordingly, the EU has failed to substantiate the alleged technology spillover effects from the R&D subsidies, which cover the most significant technologies at issue for the 787-9/10 (derivatives of the 787) and the 777X (wing and systems). The supposed "new" technology effects are insignificant in comparison. The United States addresses the EU's technology-specific arguments concerning the 777X below in Section IV.H.1.b.
 - a. Alleged technology effects regarding the 787
 - i. Composite fuselage
- 883. The composite fuselage technology studied under NASA's ATCAS project was a primary focus of the parties' arguments in the underlying proceeding and of the original panel's technology effects analysis. The EU even described the work under ATCAS as providing a roadmap of "quintessential foundational knowledge and technologies" for Boeing's eventual 360-degree barrel approach to the 787, as the original panel noted. Accordingly, the Boeing engineers focused on ATCAS in assessing the additional time required for early-stage composite fuselage research. As benchmarks, they used the time required for far more ambitious early stage projects in this area:
 - [***]¹²⁴⁸
 - [***]. ¹²⁴⁹

¹²⁴⁶ US – Large Civil Aircraft (AB), paras. 963-964.

¹²⁴⁷ US – Large Civil Aircraft (Panel), para. 7.1751.

¹²⁴⁸ Boeing Engineers Statement, paras. 16-17 (Exhibit USA-283(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 285

884. In response, the EU asserts that Boeing [***] "because of the knowledge and experience Boeing had accumulated in decades of participation in US Government supported R&D programs." However, the EU does not contest that, during this period, Boeing was starting from preliminary concepts, that it conducted early-stage research to develop those concepts, or that this work was more challenging than the work Boeing performed under ATCAS. The EU also cannot explain how the pace of this early-stage stage research is attributable to the R&D subsidies when Airbus itself took only one year or less to go from a "clean sheet" on all A350 XWB non-wing designs and technologies to program launch. As such, the EU has done nothing to call into question the critical points made through these examples – that it is possible to move quite quickly from early-stage research to the point where product launch is justified, and that obtaining the relevant knowledge and experience gained under the NASA and DoD contracts and agreements was likely to occur with an additional two years of R&D efforts.

885. For their part, the Airbus engineers criticize the Boeing engineers for failing to account for the benefits flowing from research undertaken by non-Boeing members of the ATCAS engineering team. However, the EU itself maintained in the original proceeding, and the Panel agreed, that "the most important benefit that the ACT program provided to Boeing was the ability for its engineers to gain experience and work under real development program restrictions with clear cost targets." This very similar to the type of work and experience the Boeing engineers contemplate in their counterfactual analysis, with the difference being that the real development program conditions in the pre-launch phase of the 787 program would be much more intense. A vague notion of other benefits from non-Boeing personnel does not undermine the validity of that analysis.

886. The Airbus engineers make another vague criticism in faulting the Boeing engineers for focusing their composite fuselage analysis on the ATCAS program, the same program that was the focus of the original panel and the EU in the original proceeding. ¹²⁵⁴ In attempting to make this point, they reference a graph from the original Wacht Report that plots several NASA R&D programs, covering a wide array of subjects, over time. Such a generalized objection fails to demonstrate that the Boeing engineers' estimated additional time for R&D in this area is understated to any material degree, particularly since it accounts for the time to obtain what the EU in the underlying proceeding said was a critical "roadmap" for future composite fuselage technology development.

¹²⁴⁹ Boeing Engineers Statement, paras. 18-22 (Exhibit USA-283(BCI)).

¹²⁵⁰ EU SWS, para. 1126.

¹²⁵¹ Cf. EU SWS, para. 1126.

¹²⁵² Airbus Engineers Statement, para. 68 (Exhibit EU-1014(HSBI)).

¹²⁵³ US – Large Civil Aircraft (Panel), para. 7.1756 note 3684.

¹²⁵⁴ Airbus Engineers Statement, para. 69 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 286

ii. Composite wing

- 887. As Boeing engineers explained, the main challenge for the 787 composite wing was scaling-up the composite horizontal stabilizer from the 777. The Airbus engineers grant that lessons from the 777 horizontal stabilizer may have helped Boeing, but they improperly attempt to link this to R&D subsidy technology effects. To the contrary, the EU never claimed that subsidies to the 777 caused technology effects, and the original panel found this experience to be a non-subsidy source of Boeing technology developments.
- 888. This is the sum of the Airbus engineers' critique. Its weakness is underscored by their statement elsewhere in their report that Airbus was able to offer customers an original A350 with a composite wing only months after Boeing launched the 787 in 2004, and an even shorter time after it decided to market a replacement for the A330.

iii. More electric systems architecture

- 889. The Airbus engineers erroneously state that the Boeing engineers "focus only on the 'electrical generators' rather than the 787's more electric systems architecture overall, to suggest that the NASA and DOD programmes at issue played no role in the development of the 787's more electric systems architecture." ¹²⁵⁶ This is incorrect. In fact, the Boeing engineers recount [***] ¹²⁵⁷
- 890. The Airbus engineers find a failure to discuss Boeing's participation "in military aircraft PEs," but they fail to identify any work performed by Boeing under applicable DoD assistance agreements that would materially affect the estimate provided by the Boeing engineers.

iv. Health management systems.

891. The Boeing engineers explained that "there was no need for significant early-stage R&D" in connection with the health management systems for the 787 because it employed "an enhanced version of the highly capable health management technology used on the 777 with operational software provided by the same supplier (Honeywell)." The Airbus engineers contend that this is "inconsistent with Boeing's own public statements," but the first slide they cite confirms that the 787 incorporated the 777's central maintenance computing function – *i.e.*, the system backbone on which other health management functions run – in addition to other key

¹²⁵⁵ Airbus Engineers Statement, para. 71 (Exhibit EU-1014(HSBI)).

¹²⁵⁶ Airbus Engineers Statement, para. 74 (Exhibit EU-1014(HSBI)).

¹²⁵⁷ Boeing Engineers Statement, para. 33 (Exhibit USA-283(BCI)).

¹²⁵⁸ Airbus Engineers Statement, para. 75 (Exhibit EU-1014(HSBI)).

¹²⁵⁹ Boeing Engineers Statement, para. 37 (Exhibit USA-283(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 287

features from the 777. The Airbus engineers fail to show that, with this core system architecture available because of the 777's unsubsidized technology, the 787 health management system required significant additional early-stage R&D to achieve the enhancements listed in the cited Boeing materials and acknowledged by the Boeing engineers.

892. The Airbus engineers also attempt to assign a technology effect to RFID devices, even as they admit that "RFID was not directly funded by CLEEN." They try to avoid this inconvenient fact by arguing that "Boeing piggy-backed on the CLEEN-funded 737-800 flight testbed and tested RFID on the ecoDemonstrator in 2012." As Boeing engineers point out, however, most ecoDemonstrator flight tests had no CLEEN involvement whatsoever. For Boeing technology not tested under a CLEEN contract but evaluated on the *minority* of flights that *were* partially funded by CLEEN, the role of CLEEN was, at most, to contribute a portion of the fuel cost incurred on the flight test. This is hardly a technology effect, even under the EU's own theory.

v. Noise reduction.

- 893. On noise reduction technologies, neither the EU nor the Airbus engineers dispute the Boeing engineers' key point that technological challenges Boeing was able to overcome in [***] are "comparable to or greater than those posed by noise-reduction technologies Boeing worked on under NASA programs cited by the European Union." ¹²⁶⁵
- 894. Rather, the Airbus engineers' response is confined to a dispute over DoD involvement in Boeing's development of the 787's simplified trailing edge technology. Assuming *arguendo* that this were both true and relevant to the counterfactual inquiry at issue, the Airbus engineers never attempt to demonstrate that the alleged DoD technology effects arose under an assistance instrument covered by the DSB's recommendations and rulings. This leaves nothing for the United States to rebut.
 - vi. Aerodynamics and structural design; open systems architecture
- 895. The EU has little to say about the Boeing engineers' discussion of aerodynamics and structural design and open systems architecture. This particularly notable with respect to

¹²⁶⁰ Airbus Engineers Statement, para. 77 (Exhibit EU-1014(HSBI)) (reproducing Exhibit EU-1169).

¹²⁶¹ Airbus Engineers Statement, para. 84 (Exhibit EU-1014(HSBI))

¹²⁶² Airbus Engineers Statement, para. 84 (Exhibit EU-1014(HSBI))

¹²⁶³ Boeing Engineers Reply, paras. 44-47 (Exhibit USA-359(BCI)).

¹²⁶⁴ Boeing Engineers Reply, paras. 47 (Exhibit USA-359(BCI)).

¹²⁶⁵ Boeing Engineers Statement, para. 40 (Exhibit USA-283(BCI)).

¹²⁶⁶ Airbus Engineers Statement, paras. 85-87 (Exhibit EU-1014(HSBI))

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 288

aerodynamics and structural design because elsewhere, *e.g.*, in its arguments on the 787-9 and 737 MAX, it relies so heavily on the effects of Boeing's work under the Integrated Wing Design ("IWD") element of the NASA AST program on generic TRANAIR and OVERFLOW computational fluid dynamics ("CFD") codes. Yet, they do not appear to contest the Boeing engineers' conclusion that it, in the pre-launch phase of the 787 program, it would have taken Boeing approximately six months to achieve the CFD code knowledge and experience it gained in the three years of the IWD project.

b. Alleged technology effects regarding the 777X

896. As demonstrated above and in the U.S. first written submission, the EU has failed to demonstrate that any technology spillovers from the 787 enabled Boeing's ongoing development of the 777X to occur earlier than it would have otherwise. Below, the United States discusses additional errors in the EU's arguments concerning the 777X.

i. Folding Wing Tip

- 897. The United States and Boeing engineers rebutted the EU's contention that Boeing's late-1980s/early-1990s work on the A-6E Intruder attack aircraft had a genuine connection with Boeing's development of a folding wing tip ("FWT") for the 777X. The EU and the Airbus engineers are unable to overcome this rebuttal.
- 898. First, they still have not demonstrated that any of the alleged learning from the A-6 occurred is attributable to an assistance instrument under the A-6 PE, and would have been unavailable through Boeing's procurement contracts.
- 899. Second, the Airbus engineers actually highlight the differences between the 777X FWT and the FWT of the 777-200 that Boeing used as initial reference point: "the 777-200 FWT is a completely different design, with very different systems, as the one used for the 777X FWT." This supports the Boeing engineers' views: [***]¹²⁶⁸
- 900. This includes "overall design principles" that the Airbus engineers erroneously consider to be "identical." As Boeing engineers explain,

As with many of the other EU/Airbus allegations, they use a vague term, "overall design principles," in a context where it would only be true if the term were meaningless. The 777X FWT and A-6E folding wing share "overall design principles" to the same extent as all aircraft with a wing that fold upwards, such as the Hawker Sea Fury (introduced in 1945), Douglas Skyraider (introduced in

¹²⁶⁷ Airbus Engineers Statement, para. 50 (Exhibit EU-1014(HSBI)).

¹²⁶⁸ Boeing Engineers Statement, para. 80 (Exhibit USA-283(BCI)).

¹²⁶⁹ Airbus Engineers Statement, para. 50 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 289

1946), de Havilland Sea Vixen (introduced in 1959), Blackburn Buccaneer (introduced in 1962), and the Sukhoi Su-33, a contemporary Russian naval fighter aircraft. ¹²⁷⁰

901. The Airbus engineers cite [[**HSBI**]]¹²⁷¹ between the 777X and A-6E that [[**HSBI**]] The A-6E folding wing has [***] The EU is therefore forced to rely on [[**HSBI**]]¹²⁷² Even if such a statement were made and accurately conveyed by Mr. Domke of Airbus, it does not address the critical distinctions between the two systems cited by the Boeing engineers:

The fact is that the 777X FWT is very different from the A-6E folding wing in all material respects[***] In addition, the 777X FWT design differs markedly from even that of the aircraft Boeing did refer to as an initial design reference point, the 777-200. The Airbus engineers agree: "the 777-200 FWT is a completely different design, with very different systems, as the one used for the 777X FWT." We therefore find it hard to see how the European Union and Airbus could continue to argue that the A-6E had a meaningful influence on the 777X FWT. 1273

Accordingly, the EU has failed to show a genuine connection between alleged subsidies through the A-6E PE and Boeing's development of the 777X FWT.

- ii. Hybrid Laminar Flow Control ("HLFC")
- 902. The United States has rebutted the EU allegations that the availability of HLFC technology for the 777X is enabled by alleged subsidies under the FAA CLEEN program. The EU does not contest that HLFC was not tested pursuant to the CLEEN contract *i.e.*, the measure it challenges, 1274 which should end the analysis.
- 903. The EU attempts to circumvent this conclusion with a "piggy back" argument that "{t}ests on the ecoDemonstrator test bed would not exist absent the FAA's funding." In fact, the ecoDemonstrator test bed aircraft itself is a Boeing 737 that was not funded by the CLEEN contract, most ecoDemonstrator flight tests had no CLEEN involvement whatsoever, and Boeing uses its own aircraft as flying test beds as a matter of course outside of U.S. government R&D programs. For Boeing technology such as HLFC that was not tested under a CLEEN contract

¹²⁷⁰ Boeing Engineers Reply, para. 41 (Exhibit USA-359(BCI)) (quoting Airbus Engineers Statement, para. 121 (Exhibit EU-1014)).

¹²⁷¹ Airbus Engineers Statement, para. 122 (Exhibit EU-1014(HSBI)).

¹²⁷² Airbus Engineers Statement, para. 122 (Exhibit EU-1014(HSBI)).

¹²⁷³ Boeing Engineers Reply, para. 42 (Exhibit USA-359(BCI)) (quoting Airbus Engineers Statement, para. 121 (Exhibit EU-1014)).

¹²⁷⁴ See EU SWS, para, 1139.

¹²⁷⁵ EU SWS, para. 1139.

¹²⁷⁶ Boeing Engineers Reply, paras. 44-47 (Exhibit USA-359(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 290

but evaluated on the *minority* of flights that *were* partially funded by CLEEN, the role of CLEEN was, at most, to contribute a portion of the fuel cost incurred on the flight test. This is hardly a technology effect, even under the EU's own theory. 1277

iii. Conclusion

904. As the United States has demonstrated, the EU has failed to overcome the U.S. rebuttal concerning alleged present technology effects involving the 787 and 777X.

2. Alleged price effects

- 905. In the original proceeding, the EU failed to establish that any U.S. subsidy to the 787 resulted in lower Boeing pricing. The United States demonstrated in its first written submission that the EU's claim that U.S. subsidies to the 787 are now causing lower Boeing prices that result in serious prejudice is equally meritless. The EU has failed to rebut that demonstration. 1278
- 906. The United States demonstrated that the magnitude of the subsidies alleged to cause price effects and properly before this Panel is simply far too small to plausibly cause the market phenomena alleged by the EU. The EU does not respond with a detailed analysis of the magnitude of the subsidies and an explanation of how that magnitude translates into market effects. Instead, the EU argues that previous Appellate Body guidance absolved the EU of its responsibility to prove that subsidies are indeed of sufficient magnitude to be causing adverse effects through a price causal mechanism and that the U.S. magnitude calculations improperly excluded subsidies and suffered from a methodological error. The EU is mistaken on all counts.
 - a. The EU has failed to demonstrate that the nature and magnitude of the alleged subsidies are capable of and are causing 787 price effects.
- 907. The EU criticizes the U.S. demonstration that the magnitudes of the price effects subsidies properly before this panel, if unwithdrawn, are too small to cause the market phenomena alleged by the EU. The United States notes that the EU bears the burden of demonstrating that the subsidies it asserts as having a price-based causal mechanism are actually causing adverse effects, and that for such a mechanism, the magnitude of the subsidy (and the portion of that magnitude causing lower prices) is a critical factor. Therefore, even if the EU's criticisms of the U.S. magnitude analysis were valid and they are not the EU still must do more. It fails to do so.
- 908. The United States previously criticized the EU for its failure to demonstrate that the subset of subsidies specifically alleged to cause 787 price effects are doing so. The EU characterizes the U.S. objection as one to cross-referencing. The United States does not oppose cross-referencing where it addresses the relevant issues. The problem identified in the U.S. first

¹²⁷⁷ Boeing Engineers Reply, paras. 47 (Exhibit USA-359(BCI)).

¹²⁷⁸ See EW SWS, paras. 1142-1148.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 291

written submission is that the sections cross-referenced by the EU in its model-specific price effects sections do not address the relevant issue. Thus, instead of demonstrating that subsidies to the 787 are causing price effects, the EU cross-references a general price effects discussion, which does not contain 787-specific analysis and therefore does not account for the fact that not all subsidies are alleged to impact 787 pricing. ¹²⁷⁹

- 909. The EU second written submission now provides for the first time a table listing the subsidies it is alleging to specifically cause lower 787 prices. But this list fails to fully clarify what the EU is alleging because it includes R&D subsidies that the EU asserts elsewhere in its submissions to cause technology effects. As the EU recognizes that subsidies causing price effects cannot also cause technology effects, and *vice versa*, this table simply creates confusion. ¹²⁸¹
- 910. Even ignoring this lack of clarity for the moment and taking the list at face value, the EU argument that the listed subsidies to the 787 are of a magnitude sufficient to cause serious prejudice is limited to vague and unsupported statements, such as its assertion that they are "large by any reasonable measure, and sufficient to cause the adverse effects at issue." In lieu of actually demonstrating that the magnitude of the subsidies is sufficient to cause the alleged 787 price effects, the EU argues: "As the Appellate Body explained in the original proceedings, 'the absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects', such that '{s}ubsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market'." 1283
- 911. The omitted portions of the quoted paragraph are critical. The entirety of the paragraph reads as follows:

The Appellate Body has stated previously that, while the magnitude of subsidies is important, precise quantification is not an indispensable part of a serious prejudice analysis. Moreover, the absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects. Subsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market. We understand the Panel to have found this to be the case as regards the effects of the aeronautics R&D subsidies. ¹²⁸⁴

¹²⁷⁹ See, e.g., EU FWS, paras. 1223-1225.

¹²⁸⁰ EU SWS, para. 1145.

¹²⁸¹ See, e.g., EU FWS, paras. 961, 964, 981 (alleging that the FAA CLEEN program is causing technology effects).

¹²⁸² EU SWS, para. 1155.

¹²⁸³ EU SWS, para. 1156 (quoting US – Large Civil Aircraft (AB), para. 1006).

¹²⁸⁴ US – Large Civil Aircraft (AB), para. 1006 (internal citation omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 292

- 912. Thus, the magnitude of the subsidies *is* important. In addition, just because precise quantification is not indispensable does not mean that a complaining party can meet its burden without even a rough quantification of the magnitude and an explanation of why that magnitude is sufficient given the nature and context of the subsidies.
- 913. Moreover, of critical importance, the Appellate Body does not say that all subsidies have effects disproportionate to their size. Rather, it states that this *may* be the case, allowing that subsidies may have an effect commensurate with or even less than their size would indicate. The original panel found that the R&D subsidies acting through a technology causal mechanism at issue in the original proceeding had an effect greater than their size, but made no such finding for subsidies acting through a price mechanism. The complaining party must demonstrate that, due to their nature, the subsidies at issue are among those that do in fact have disproportionately large effects.
- 914. The R&D subsidies in the original proceeding were found to have disproportionate effects relative to the face value of the subsidy because receipt of the subsidy was determined to be the difference between the research going forward and not. But the EU has not demonstrated that price effects are likewise disproportionate relative to the cash value of the subsidies. Indeed, such a contention could not be sustained in light of the price effects theory.
- 915. According to the EU's price effects theory, Boeing uses subsidies to reduce its prices, which in turn causes Airbus to suffer serious prejudice. The cash value of a subsidy therefore represents the *maximum* that Boeing could conceivably lower prices if it applied the entirety of the subsidy to that purpose.
- 916. Of course, the EU has not made an affirmative showing that, to the extent that R&D or miscellaneous subsidies are not withdrawn, any such subsidies would be used by Boeing to lower prices in strategic sales campaigns. In the original proceeding, the EU tried and failed to demonstrate that R&D subsidies can and do cause price effects. In this compliance proceeding, the EU does not even try. Instead it just assumes that if (certain unspecified) R&D subsidies left Boeing with more cash than it would have, then Boeing necessarily will use them to lower prices and that the subsidies (or the portion of subsidies used for this purpose) are large enough to fund price reduction sufficient to have the indicated effects. The EU puts forth no evidence or economic theory to support this assumption. The EU also failed to show than each of the miscellaneous subsidies would cause Boeing to lower 787 prices. As explained in Section IV.G, standard economic principles indicate that these subsidies that are not tied to sales, and therefore do not increase in proportion to increases in sales, do not affect pricing decisions in the absence of capital constraints, which the EU has not alleged, much less proven.

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¹²⁸⁵ See US – Large Civil Aircraft (AB), para. 945; US – Large Civil Aircraft (Panel), para. 7.1760.

¹²⁸⁶ See EU FWS, para. 1112.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 293

- 917. Furthermore, even if the EU had shown that such untied subsidies would be used to lower 787 prices, the EU does not explain what proportion of the subsidy would be applied by Boeing to lower prices, as opposed to other uses. This step which the EU also at least attempted in the original proceeding is critical because it potentially reduces the amount of price reductions that flow from the subsidies.
- 918. Yet, the EU does none of this. It does not attempt to demonstrate that R&D subsidies or miscellaneous subsidies would be used to lower prices, much less the portion of the subsidies that would be put this use. The EU does not even attempt to show that, even if all alleged price effects subsidies were applied in their entirety to lowering prices, they would be sufficient in the context of this industry to genuinely and substantially cause lost sales, price suppression, displacement, or impedance. In short, the EU does not attempt to do the minimum necessary to prove that the alleged price effects subsidies cause serious prejudice. Therefore, the EU's 787 price effects arguments necessarily fail.
 - b. The EU's price effects argument is based on the improper inclusion of subsidies and improper aggregation and cumulation analyses.
- 919. The EU contends that the U.S. analysis of the magnitudes of price causal mechanism subsidies improperly excludes some of the relevant subsidies. According to the EU, the United States should have considered all of the subsidies listed in its table on a collective basis. The EU's position is based on its erroneous inclusion of subsidies not properly before this Panel, subsidies not shown to cause price effects, improper aggregation of subsidies, and improper cumulation of subsidies. Therefore, the EU's criticisms of the U.S. analysis fail.
- 920. First, the EU's list of subsidies alleged to cause 787 price effects includes the City of Everett B&O tax rate reduction, Washington B&O tax credit for preproduction/aerospace product development, Washington B&O tax credit for property taxes, and Washington sales and use tax exemptions. The EU challenged these measures in the original proceeding and failed to establish that any of them constituted actionable subsidies causing adverse effects. As a result, the United States had no compliance obligations with respect to these measures. The EU cannot re-litigate in this compliance proceeding what it failed to establish in the original proceeding. Moreover, as these are the same measures addressed by the original panel, they cannot also be measures taken to comply. As the EU's 787 price effects argument relies on the improper inclusion of these measures, it necessarily fails.
- 921. Second, the EU's list of subsidies alleged to cause 787 price effects includes the Washington B&O tax rate reduction. The EU attempted to establish in the original proceeding that the Washington B&O tax rate reduction caused 787 price effects, either on its own or when

¹²⁸⁷ EU SWS, para. 1151.

¹²⁸⁸ EU SWS, para. 1153.

¹²⁸⁹ EU SWS, para. 1145.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 294

aggregated and/or cumulated with other subsidies. The EU was unsuccessful. The Washington B&O tax rate reduction was aggregated with the Everett B&O tax rate reduction as tied tax subsidies, but they were found not to cause 787 price effects. The EU's attempt to have the effects of these tied tax subsidies cumulated with the effects of other alleged subsidies to the 787 was unsuccessful. The EU has not shown any justification for repeating the analysis in this compliance proceeding.

922. Third, EU's list of subsidies alleged to cause 787 price effects includes FSC/ETI. As the Appellate Body noted in the original proceeding:

The Panel's analysis of the FSC/ETI subsidies proceeded on the basis that these subsidies could have had effects only in the 100-200 seat and 300-400 seat LCA markets, and not in the 200-300 seat LCA market. The Panel explained that this was due to the fact that the United States had repealed certain aspects of the grandfathering of FSC and ETI tax breaks for tax years beginning after 2006, and that no 787s would be delivered before that date, as well as the fact that the European Communities itself did not claim that the FSC/ETI subsidies affected the prices of the 787 and did not allocate the FSC/ETI subsidies to the 787 for purposes of its serious prejudice arguments. 1290

- 923. Despite that the EU did not even allege that FSC/ETI subsidies impacted 787 pricing in the original proceeding, it nevertheless has added it to its price effects analysis in this compliance proceeding. Not only are there compelling reasons to conclude that FSC/ETI remains inapplicable to the 787, but as FSC/ETI predates the original proceeding, it cannot be a measure taken to comply and, therefore, is not properly within this Panel's terms of reference. As the EU's 787 price effects argument relies on the improper inclusion of FSC/ETI, it necessarily fails.
- 924. Fourth, the EU's list of subsidies alleged to cause 787 price effects includes R&D subsidies. The EU tried to establish in the original proceeding that R&D subsidies to the 787 were causing price effects but was unsuccessful. As discussed above and in Section IV.C, it is not clear which R&D subsidies the EU is alleging to have price effects. However, to the extent that any of the R&D subsidies alleged to have price effects were raised in the original proceeding or could have been, the EU cannot properly raise them in this compliance proceeding. As it appears likely that the EU is alleging 787 price effects caused by at least some R&D subsidies that were raised in the original proceeding or that could have been, its 787 price effects argument relying on the inclusion of these R&D subsidies necessarily fails.
- 925. Fifth, the EU's list of subsidies alleged to cause 787 price effects includes South Carolina measures and the Washington B&O tax credit for leasehold excise taxes. As explained in Section IV.D and in the U.S. first written submission, these measures were not subject to the DSB's recommendations and rulings, are not measures taken to comply, and are not actionable

¹²⁹⁰ US – Large Civil Aircraft (AB), note 1882 (citing US – Large Civil Aircraft (Panel), para. 7.1802).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 295

subsidies for the purpose of the SCM Agreement. As the EU's 787 price effects argument relies on the improper inclusion of these alleged subsidies, it necessarily fails.

- 926. Not only does the EU erroneously include all of these subsidies in its price effects argument, but it does so based on a flawed application of the Appellate Body's aggregation test. The United States demonstrated the EU's aggregation errors in Section IV.E.1, but it bears repeating that the (unspecified) technology effects R&D subsidies and the (unspecified but different) price effects R&D subsidies clearly cannot be aggregated with one another based on the EU's acknowledgement that a common causal mechanism is a requirement for aggregation. The United States also demonstrates in Section IV.E.2 that the EU has either improperly applied the Appellate Body's cumulation guidance or has failed to explain the mechanics of its novel proposal for collective assessment of subsidies.
- 927. For all of these reasons, the EU has failed to demonstrate that subsidies to the 787 cause serious prejudice through a price causal mechanism. And because the EU's argument relies on a vague assessment of this flawed group of subsidies and lacks a detailed analysis of individual subsidies or even aggregated groups of subsidies, it cannot succeed under any other analytical framework (*e.g.*, if some subsidies are excluded, under a different aggregation analysis, or under a different cumulation analysis).
 - c. The EU's objection to the methodology underlying the U.S. magnitude calculations is erroneous.
- 928. In addition to the exclusion of subsidies addressed in the preceding sub-section, the EU objects to the methodology underlying the U.S. magnitude calculations. Specifically, the EU argues that "{w}hile the US tax subsidies in question are tied to sales revenue which, the original panel and Appellate Body recognised, is received by Boeing in major part only when the aircraft is *delivered* the United States divides the subsidy magnitude by *orders* to derive its peraircraft magnitude." This argument cannot withstand scrutiny.
- 929. According to the EU's price effects theory, Boeing uses the subsidy to lower 787 prices in strategic sales campaigns. It stands to reason that the effects of the subsidies the lowering of prices would have to take place when the prices are negotiated at the time of the order.
- 930. Moreover, even if the EU's argument were valid, it would apply only to the tied tax subsidies, as these are the only subsidies that are received to a greater extent (or with reference at all to) when the aircraft is delivered. And even then, to maintain consistency between the numerator and denominator, one would have to include all of the deliveries during the reference period of aircraft ordered in strategic sales campaigns prior to the reference period.

¹²⁹¹ See EU SWS, para 931.

¹²⁹² EU SWS, para. 1157 (emphases original) (internal citations omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 296

- 931. Therefore, the U.S. calculations remain valid and probative of the implausibility that subsidies are causing serious prejudice through lower 787 prices. In fact, there are two refinements that are appropriate, and they undermine the EU's case further.
- 932. First, the United States understood the EU to allege that the Wichita IRBs affect only the 737 MAX and 737NG, and thus allocated the annual subsidy value across the 1,467 aircraft 737 variants (1,057 737 MAXs and 410 737NGs) ordered in sales campaigns alleged by the EU to be significant lost sales. The EU's table now makes clear that it is alleging the Wichita IRBs to affect 787 pricing as well. Therefore, the subsidy value should have been allocated across the 1,830 Boeing aircraft ordered in all sales campaigns alleged by the EU to be lost sales. This adjustment alone reduces the value of the Wichita IRBs from \$36,000 per aircraft to \$29,000 per aircraft.
- 933. Second, in its second written submission, the EU alleges three new lost A350 XWB sales, which include an additional 58 787 orders, and one new lost A320neo sale, which includes 60 737 MAX orders. This brings the total Boeing aircraft in lost sales campaigns to 1,948. This would reduce the value of the Wichita IRBs further to \$27,000. 1297
- 934. And this second refinement helps illustrate a problem with the EU's theory, at least as it relates to untied subsidies (*i.e.*, R&D subsidies and miscellaneous subsidies). The increase in strategic sales campaigns results in the subsidy becoming less significant and less likely to have any effect because the subsidy value does not increase in proportion to increases in sales.

In any event, these intricacies are mostly beside the point since the per aircraft dollar amounts are so miniscule in relation to the price of the aircraft that even if the subsidies were applied in their entirety to lowering prices, it is simply implausible that they could genuinely and substantially cause the market phenomena alleged by the EU.

3. Alleged significant price suppression and threat thereof

935. The United States demonstrated in its first written submission that the EU has failed to establish significant price suppression under Article 6.3(c) of the SCM Agreement with respect to the A330 or the A350 XWB. The EU responses fail to overcome the U.S. rebuttal, as discussed below.

¹²⁹³ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)); US FWS, para. 1000.

¹²⁹⁴ See EU SWS, paras. 1072, 1145.

¹²⁹⁵ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

¹²⁹⁶ EU SWS, paras, 1260, 1274, 1289, and 1628.

¹²⁹⁷ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 297

a. Alleged significant price suppression – A330

936. As discussed in Section IV.G of the U.S. first written submission, the EU has failed to even allege facts necessary to support a claim of significant price suppression with respect to prices for the A330 because it has not alleged, much less demonstrated, that the A330 is in the "same market" as the 787 or any other allegedly subsidized U.S. product within the meaning of Article 6.3(c) of the SCM Agreement. The EU has not attempted to remedy this flawed allegation in its second written submission. As such, the EU has not established a *prima facie* case, and there is nothing for the United States to rebut. Accordingly, this claim must fail.

b. Alleged significant price suppression – A350 XWB

- 937. In its first written submission, the United States identified several flaws that prevented the EU from establishing its claim of significant price suppression regarding the A350 XWB:
 - (1) **causation:** the EU failed to establish its general technology and price effects causation theories;
 - (2) **Original A350 order conversions:** the EU improperly tried to relitigate the A350 XWB price suppression claim from the original proceeding, and it also failed to show that the US R&D subsidies are a genuine and substantial cause of the terms on which Original A350 orders were converted to A350 XWB orders, since this situation resulted from Airbus's own actions;
 - (3) **pricing data and trends:** the EU failed to support its price suppression claim by reference to pricing data and trends;
 - (4) **campaign-specific arguments:** the EU failed to support its price suppression claim on the basis of campaign-specific arguments and evidence; and
 - (5) **significance:** the EU failed to show that any price suppression is "significant" within the meaning of Article 6.3(c) of the SCM Agreement.

The EU's second written submission confirm that it cannot sustain its claim that the effect of alleged subsidies has been to significantly suppress A350 XWB prices.

i. Causation

938. The EU's claim of present price suppression after the compliance deadline is unsupported by the requisite causal link, whether under its technology effects theory or its price effects theory. The EU refers to its general causation arguments in its second written submission, 1299

¹²⁹⁸ US FWS, para. 829.

¹²⁹⁹ EU SWS, para. 1499.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 298

but these do nothing to refute the U.S. causation arguments, as discussed above in Sections IV.F and IV.G.

ii. Original A350 order conversions

939. The EU cannot justify its attempt to relitigate its failed A350 XWB price suppression claim from the original proceeding. As the United States recalled in its first written submission, ¹³⁰⁰ the original panel considered and rejected the EU's claim that A350 XWB prices were suppressed because Original A350 prices had been suppressed by the effects of subsidies to the 787. ¹³⁰¹ The EU attempts to evade the original panel's decision:

from the original panel's perspective, the question of whether the conversion of Original A350s to A350 XWBs were made at similarly suppressed prices was not sufficiently ripe *during the original reference period*. This is why the original panel explained, in the passage quoted by the United States, that it "would require some evidence in this regard in order to make an objective assessment of this issue." ¹³⁰²

In fact, the original panel never said anything about the ripeness of the EU's claim. Instead, it found that the EU had not adduced evidence to support its claim: "There is no evidence before the Panel as to price trends for the A350XWB-800, nor has the European Communities presented evidence concerning the actual pricing of the A350XWB in the context of specific LCA sales campaigns." The EU's *post hoc* explanation for the absence of evidence is the subsequent development of "facts and underlying market dynamics," but this is unavailing. Considering that it was submitting evidence to the original panel on other issues as late as the third set of questions in mid-2009, the EU had ample opportunity during the underlying proceedings to provide relevant evidence concerning events from [[HSBI]] but it declined to do so. Having raised but failed to substantiate this claim, and having declined to appeal the original panel's refusal to make the finding it requested, the EU cannot legitimately revive this claim on the grounds that it was made prematurely in the original proceeding. 1304

940. Moreover, the EU errs in characterizing the United States as having accepted "key facts" that support its legal argument, and in faulting the United States for disputing "the EU conclusion without presenting any contrary facts." The United States does indeed dispute that the EU has established facts related to the Original A350 that support a finding of significant

¹³⁰⁰ US FWS, paras. 830-831.

¹³⁰¹ US – Large Civil Aircraft (Panel), para. 7.1793.

¹³⁰² EU SWS, para. 1471.

¹³⁰³ US – Large Civil Aircraft (Panel), para. 7.1793.

¹³⁰⁴ Cf. EU SWS, paras. 1471-1472.

¹³⁰⁵ See EU SWS, para. 1468.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 299

suppression of A350 XWB prices. Such a finding would require a genuine and substantial causal link between the effects of the R&D subsidies and A350 XWB prices, such that A350 XWB prices would be significantly higher *but for* those subsidies. Instead of establishing such a link, the EU relies on an erroneous presumption. The original panel's analysis confirms that, while the effect of subsidies to the 787 was to significantly suppress prices of the technologically inferior Original A350, it does not follow that the any unwithdrawn subsidies would have the same effect on the technologically equivalent A350 XWB.

- 941. Here, Airbus's own decisions and actions, and not the R&D subsidies, led to the situation of which the EU complains. Airbus had a choice in how it would respond to the 787. Had Airbus not responded to the 787 with the technologically inferior Original A350, and instead focused from the beginning on developing the technologically equivalent A350 XWB, then **[[HSBI]]**.
- 942. Airbus also had a choice as to whether it [[**HSBI**]]. ¹³⁰⁷ This shows that there were, in fact, at reasonable alternatives available to Airbus, regardless of whether the 787 was in the market.
- 943. Accordingly, Airbus's choices are the *but for* causes of the problems it cites in this context, and the 787 is not. Indeed, while the EU contends that A350 XWB prices [***], 1308 787 prices [***]. 1309
- 944. This is not an absurd result, as the EU argues. ¹³¹⁰ Rather, it reflects the legal reality that, where Airbus had a choice between reasonable alternatives, with one leading to a potentially cognizable harm and the other not, then the results of that choice are not the effect of any subsidies. The SCM Agreement provides an actionable subsidy claim where the complaining Member can demonstrate that its industry's product was significantly suppressed when it attempted to respond to subsidized competition, but not where the complaining Member's industry responds with one product; makes binding commitments to deliver that product; decides to replace that product with a new and different product; and then [[HSBI]].
- 945. Accordingly, the EU has failed to establish its price suppression argument with respect to A350 XWB orders based on conversion of orders from the Original A350.

¹³⁰⁶ See US – Large Civil Aircraft (Panel), para. 7.1793.

¹³⁰⁷ EU SWS, para. 1476.

¹³⁰⁸ EU SWS, para. 1479.

¹³⁰⁹ Indexed Average Net Order Prices for Boeing LCA, Boeing (Exhibit USA-288(BCI)); Per-Seat Indexed Average Net Order Prices for Boeing LCA, Boeing (Exhibit USA-360(BCI)).

¹³¹⁰ Cf. EU SWS, para. 1477.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 300

iii. Pricing data and trends

- 946. With regard to its price suppression arguments regarding "new orders" for the A350 XWB, the EU has once again refused to provide the model-specific pricing data requested by the Panel, while the available pricing data provide no support for its price suppression theory.
- 947. As the United States has noted, ¹³¹¹ the EU failed to comply with the Panel's Article 13 request for "average pricing information for each of the Airbus . . .A350 XWB-800, A350 XWB-900, and A350 XWB-1000." ¹³¹² The EU attempts to distract from its non-compliance by faulting the United States for not providing model-specific pricing data. The EU fails to mention that, in contrast to the request of the EU, the Panel never made such a request of the United States. ¹³¹³
- 948. Further, the EU asserts that its preferred data set aggregated family prices on a per-seat basis is more useful than model-specific data, ignoring the possibility that such an aggregate data set may mask differences in the per-seat price of one model, such as the A350 XWB-800, as compared to another model such as the A350 XWB-900. ¹³¹⁴
- 949. The EU also presumes to withhold the model-specific data on the basis that "trends in pricing for these models are not meaningful on their own," primarily because of gaps in the data. ¹³¹⁵ If that is the problem, the EU's proposed alternative of aggregated family data would create the illusion of continuity when each year's data in reality would reflect wildly different mixes of models. The EU asserts that averages of per-seat prices will even out the differences due to size, but it nowhere supports this assertion, or demonstrates that size is the only driver of price differences among models in the same LCA model family.
- 950. Even the improperly limited body of available pricing data is at odds with the EU's price suppression arguments, as the United States demonstrated in its first written submission. The EU's responses to the U.S. rebuttal are unavailing.
- 951. *First*, the EU asserts that the U.S. arguments concerning pricing data and trends are confined to "the effects of US subsidies under the price causal mechanism" because "{t}he United States cannot claim that its 787 pricing data disproves the close causal link between US subsidies and price suppression through the mechanism of *technology* effects." No such limitation applies to the Panel's analysis. Just as the original panel could look to A330 price

¹³¹¹ US FWS, para. 834.

 $^{^{1312}}$ See EU Responses to Article 13 Questions (Feb. 28, 2013), Question 6; see also EU FWS, para. 1286.

¹³¹³ See EU SWS, para. 1488.

¹³¹⁴ See EU SWS, paras. 1487-1489.

¹³¹⁵ See EU SWS, para. 1489.

¹³¹⁶ EU SWS, para. 1492.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 301

trends in assessing technology effects, ¹³¹⁷ the same can and should be done with respect to 787 and A350 XWB price trends. Where, as here, prices for the complaining Member's product fluctuate without any discernible correlation to prices for the allegedly subsidized product, this is a strong indication that the alleged link between subsidies and prices is non-existent.

- 952. Second, the U.S. has observed that the trend in A350 XWB pricing from [***]¹³¹⁸ In response, the EU contends that the United States "has not explained how its theory is consistent with" per seat pricing data showing [***]¹³¹⁹ The obvious explanation is one noted by the United States in its first written submission: that a tiny order by PAI Aviation (2 A350 XWB-800 orders in the EU Ascend database; 1 order in the U.S. Ascend database) is not a reliable reference point for comparing large launch orders that appear in 2007.
- 953. *Third*, the EU contends that the U.S. price trend arguments based on per-aircraft average pricing data fail to address the supposedly more reliable per-seat average pricing data, yet the EU itself provided per-aircraft data in its first written submission. More important, its price suppression arguments are unsupported by either data set. The graph below presents the U.S. indexed average net order prices for the 787, as well as its estimate of the A350 XWB data provided by the EU *on a per-seat basis*.

787 and A350 XWB Indexed Net Order Prices (per-seat basis) 1320

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- 954. While the per-seat-based data differ in some respects compared to the per-aircraft-based data, the per-seat data, like the aircraft-based data, nevertheless show price movements that conflict with the EU's price suppression arguments. The EU contends that 2008 was a year in which "Boeing temporarily lost some of its competitive advantage" because of 787 delivery delays, ¹³²¹ but [***]. ¹³²²
- 955. The EU also contends that, starting in 2010, "{t}he 787 reasserted its subsidy-driven competitive advantage and aggressive pricing, as reflected in the sales campaigns below {in the

¹³¹⁷ See US – Large Civil Aircraft (Panel), para. 7.1781.

¹³¹⁸ US FWS, para. 836.

¹³¹⁹ EU SWS, para. 1479.

¹³²⁰ Sources: Per-Seat Indexed Average Net Order Prices for Boeing LCA, Boeing (Exhibit USA-360(BCI)); Price and Price Per Seat Evolution of Net Order Intakes of A330, A320ceo, and A350 XWB family LCA, Airbus (Exhibit EU-690(BCI)).

¹³²¹ EU FWS, para. 1294.

¹³²² US FWS, para. 837; Ascend database (Apr. 2013) (Exhibit USA-287).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 302

EU first written submission},"¹³²³ but as with the per-aircraft data, the per-seat data tell a different story. From 2010 to 2011, 787 prices [***]. Thus, under either data set, the pricing data contradict the EU's price effects arguments. If something was [***].

- 956. Fourth, the EU takes issue with the U.S. argument concerning the [***] in A350 XWB and 787 prices during [***]. 1324 As the United States observed, the [***] cannot explain the [***]. 1325 The EU wrongly contends that this argument conflicts with "basic economic theory," since [***] are a sign of robust demand. 1326 However, demand for LCA is not indifferent to [***]. As [***], potential customers face higher costs for pre-delivery payments and higher opportunity costs associated with a delay in replacing or expanding their fleets. This makes alternative solutions relatively more attractive and thereby decreases Airbus's bargaining power. Accordingly, the EU response on this point is unavailing.
- 957. Moreover, the EU has no alternative explanation for the [***] price trends identified by the United States. The EU repeats its generic argument that subsidies need not be the *only* genuine and substantial cause of a market phenomenon, ¹³²⁷ but this presumes that the EU has demonstrated that the alleged subsidies are *a* genuine and substantial cause of suppressed A350 XWB prices. The pricing data contradict the EU's attempts to establish this fundamental point.

iv. Campaign-specific arguments

958. The EU's references to specific sales campaigns ¹³²⁸ do not support its price suppression claim because the EU has failed to show that the availability, technology, and pricing of the 787 were caused by the alleged subsidies, as the United States demonstrates in Sections IV.H.1-2 and in its first written submission. As discussed in the context of the EU's lost sales arguments in Section IV.H.4, this includes the EU's failure to substantiate its many assertions that Boeing's 787 pricing in specific sales campaigns was "aggressive" in any meaningful sense, let alone aggressive in a manner caused by the alleged subsidies.

v. "Significant" price suppression

959. The EU has yet to demonstrate that any price suppression that could be properly attributed to the effects of alleged subsidies is "significant" within the meaning of Article 6.3 of

¹³²³ EU FWS, para. 1295.

¹³²⁴ See EU SWS, para. 1501-1505; US FWS, paras. 838-839.

¹³²⁵ US FWS, para. 839.

¹³²⁶ EU SWS, para. 1503.

¹³²⁷ EU SWS, para. 1502.

¹³²⁸ See EU FWS, paras. 1305, 1311.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 303

the SCM Agreement, even after the United States identified this failing in its first written submission. ¹³²⁹

- 960. The EU asserts that the significance of the alleged price suppression is supported by a non-exhaustive list of "numerous factors": "the structure, design, and operation of the US subsidies with price effects; the competitive conditions in the LCA markets at issue; the duopoly competition in which Boeing's actions heavily influence Airbus' pricing; the price-sensitive nature of the sales campaigns at issue; and, the continuation of any negative effects from Boeing's pricing advantage through the phenomenon of buyer switching costs." ¹³³⁰
- 961. The EU does not explain how these factors support a finding of price suppression that is "significant." Instead, it cites to its large swathes of its first written submission, including its 28-page price causal mechanism section and its entire A350 XWB price suppression section, ¹³³¹ but these sections do not address the issue either. At most these passages address *whether* the alleged subsidies affect pricing, not the significance of the effects. For instance, the EU responds to the U.S. point concerning A350 XWB production constraints with its oft-repeated argument that the causation element of an adverse effects claim may be fulfilled even if there are other genuine and substantial causes of a market phenomenon. ¹³³² That is true, but for a claim of significant price suppression, it remains to be shown that the subsidies at issue and not any other factors themselves *significantly* suppress prices. The EU has not done this. Instead, it has tried to show that A350 XWB prices would be higher absent the alleged subsidies, and it has left the Panel to figure out on its own whether those prices would be higher in a manner, or to a degree, that is significant. To do this would put the Panel in the position of improperly making a case for the EU. ¹³³³
- 962. The EU's failure on this element of its claim is all the more glaring in light of the way it has articulated its causation theories. It is not clear that the EU is even alleging that subsidies presently cause technology effects, and in any event, the United States has shown that no such effects exist. This leaves the EU's price effects theory, where the dollar amount of any subsidies is the maximum amount by which A350 XWB prices could be affected. On this point, any plausible subsidy magnitude figure is far too small to affect Airbus prices to a significant extent
 - c. Alleged threat of significant price suppression A350 XWB
- 963. The EU also fails to establish its claim of a threat of significant price suppression resulting from alleged subsidies to the 787-8/9/10 and 777X. The United States has shown that this threat claim is unsustainable because it rests on the EU's flawed general causation arguments

¹³²⁹ Compare US FWS, para. 841, with EU SWS, para. 1500.

¹³³⁰ EU SWS, para. 1500.

¹³³¹ EU SWS, para. 1500 notes 2506, 2507.

¹³³² See EU SWS, para. 1502.

¹³³³ Japan – Agricultural Products (AB), para. 129.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 304

and mere conjecture about what will happen in the future. 1334 The EU's response does nothing to change that conclusion.

- 964. *First*, the EU refers to its general causation arguments as demonstrating that the alleged subsidies will cause significant price suppression "in the near future" for the same reason they cause present significant price suppression. Because the EU cannot meet the causation standard with respect to its present significant price suppression claim, those same causation arguments cannot sustain its threat claim.
- 965. Moreover, the EU errs in contending that a demonstration of present significant price suppression "is also a demonstration that there is a *threat* of significant price suppression in that market." For this proposition, the EU cites to the panel reports in *US Upland Cotton* and *US Upland Cotton* (21.5), but those citations contradict the EU position. The original panel in that dispute "did not consider it necessary or appropriate to address Brazil's claims of threat of serious prejudice. . . ." That is, having found present serious prejudice, it did not also find a threat of serious prejudice, as the EU's legal interpretation implies. Rather, it did not address the threat claims presented because, having found present price suppression, it would be inappropriate to conduct a threat inquiry. It would be inappropriate because a demonstration of threat requires a "change of circumstances" *in the future* that would lead to significant price suppression, whereas a finding of present significant price suppression is inconsistent with such a future change in circumstances.
- 966. Here, the EU is not alleging that a future change in circumstances will lead to significant price suppression where it did not exist in the present. Accordingly, its failure to meet the causation standard with respect to its present significant price suppression claim necessarily means that it cannot establish its threat of significant price suppression claim.
- 967. *Second*, as the Appellate Body has stated, a determination of threat of serious prejudice must "be based on facts and not merely allegation, conjecture or remote possibility' and that '{t}he change in circumstances' that would create a situation in which the subsidy would cause {serious prejudice} 'must be clearly foreseen and imminent." The EU fails to meet this test.
- 968. It purports to ground its threat claim with respect to the 787-10 and 777X in "the original panel's determination that the supply of a new LCA model necessarily will result in a decline in

¹³³⁴ US FWS, paras. 842-844.

¹³³⁵ EU SWS, para. 1508.

¹³³⁶ See, supra, Sections IV.H.1-2, IV.H.3.b.i.

¹³³⁷ EU SWS, para. 1511.

¹³³⁸ US – Upland Cotton (21.5) (Panel), para. 11.3 note 561.

¹³³⁹ See EC – Large Civil Aircraft (AB), para. 1171.

¹³⁴⁰ EC – Large Civil Aircraft (AB), para. 1171.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 305

prices and sales of competing existing LCA models."¹³⁴¹ Yet the original panel made no such finding. Rather, it accepted a specific proposition and then determined that some facts in evidence fit that proposition, while some did not:

we accept the proposition that with the launch of a technologically-advanced aircraft, the price of the competing, *older technology aircraft* can be expected to decline (along with its residual values). We are satisfied that *this is what happened* to the A330 when the 787 was launched in 2004. We are persuaded that this left Airbus in a position in which it had to lower the price of the A330 in order to try to mitigate its loss of market share to the 787. *We see in the data submitted to us* an indication that price trends for the A330 declined after 2004 and that, from its former position as market leader in this product market, it lost market share to Boeing. ¹³⁴²

- 969. Here, the EU has not shown that the A350 XWB is an "older technology aircraft" as compared to the 787-10 (which is a "stretched" derivative of a model family launched before the A350 XWB) or the 777X (which Airbus has derided as a derivative of a 777 family that entered service in the 1990s and cannot truly compete with the all-new A350 XWB). ¹³⁴³ If the original panel had in fact pronounced a "necessary" rule of competitive effects with respect to "competing existing LCA models," ¹³⁴⁴ as the EU would have it, then the original panel would have found in favor of the EU's A350 XWB price suppression claim. It did not.
- 970. Moreover, the original panel's determination was grounded in evidence. While a threat inquiry is prospective, it must still be based on facts demonstrating a clearly foreseen and imminent change in circumstances that threaten to result in significant price suppression. The EU provided no such facts in its first written submission. Rather, it merely referred to the future entry of the 787-10 and 777X into the market and, based on an incorrect understanding of the original panel's analysis, treated as self-evident that the effects of alleged subsidies to those subsidies would imminently cause significant suppression of A350 XWB prices.
- 971. In response, the EU criticizes the United States for noting the absence of "hard data" to support the EU threat claim. This is unwarranted in light of analogous guidance from the Appellate Body in *US Lamb Safeguards* that an evaluation of a threat claim must use "facts

¹³⁴¹ EU SWS, para. 1510 (citing US – Large Civil Aircraft (Panel), para. 7.1781).

¹³⁴² US – Large Civil Aircraft (Panel), para. 7.1781 (emphasis added); see also id., note 3717 ("Because customers did not perceive the Original A350 to be as technologically advanced as the 787, its position in the market was similar to that of the A330").

¹³⁴³ Wide-Body Airplanes Get Plenty of Attention at IATA; Leahy Comments on 777X, A350 and A380, Leeham News and Comment (June 3, 2013) (Exhibit USA-289) (emphases added).

¹³⁴⁴ Cf. EU SWS, para. 1510.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 306

from the present and the past to justify the conclusion about the future." ¹³⁴⁵ The EU threat claim is unsupported by such facts.

972. *Third*, the EU contends that its threat claim has now been validated by the launch orders for the 787-10, but as the United States shows in Section IV.H.4.f, those orders are not the result of alleged subsidies. Accordingly, they cannot rescue the EU's hollow claim of threatened significant price suppression.

4. Significant lost sales

- 973. The United States previously demonstrated the EU's failure to establish that the subsidies at issue cause lost sales. ¹³⁴⁶ The EU has still failed to demonstrate even the basic facts that would allow a finding that subsidies to the 787 are causing significant lost sales. There are numerous errors with the EU's efforts to show that the subsidies are genuinely and substantially causing Boeing to win the sales, such that Airbus would have won the sales in the absence of the subsidies. Thus, the EU's lost sales allegations fail without regard to non-attribution factors. But even if that were not the case, the EU fails in its attempt to rebut certain non-attribution factors raised by the United States.
- 974. In sub-section a., the United States addresses some of the major deficiencies that cut across many of the individual sales campaign with respect to the EU's argument that subsidies are genuinely and substantially *causing* significant lost sales. In sub-section b., the United States addresses cross-cutting deficiencies in the EU's arguments regarding non-attribution factors. In sub-section c., the United States addresses the EU's flawed threat of significant lost sales allegations, which are based on mere speculation and conjecture instead of facts. The ensuing sub-sections address A330/Original A350 lost sales from the original proceeding that the EU attempts to treat as A350 XWB lost sales (sub-section d.), lost sales allegations rejected by the original panel and not appealed (sub-section e.), and lost sales allegations related to orders after the original reference period (sub-section f.).
 - a. The EU fails to demonstrate that subsidies are genuinely and materially causing significant lost sales.
- 975. The United States recalls the EU's failure to properly identify which R&D subsidies it alleges to cause technology effects and which R&D subsidies it alleges to cause price effects. The United States also recalls the EU's improper inclusion of subsidies not properly before this Panel, improper aggregation analysis, and improper cumulation analysis. These errors lead the EU to focus on a significantly over-inclusive, inappropriately aggregated, and inappropriately cumulated set of subsidies. Furthermore, the United States recalls that the EU's price effects causation argument is based on vague statements about this deeply flawed set of subsidies. The

¹³⁴⁵ US – Lamb Safeguards (AB), para. 136.

¹³⁴⁶ See US FWS, paras. 845-919.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 307

EU's approach thus omits detailed analyses showing that untied subsidies can and are used to lower 787 prices, what proportion of such untied subsidies are used for that purpose (if shown to be used for that purpose in the first place), and how the magnitudes of the subsidies at issue can genuinely and substantially alter the outcome of sales campaigns. The EU's 787 significant lost sales claims already fail as a result of these errors.

- 976. **Price effects.** The EU introduces for the first time pricing analysis that derives 787 "net aircraft prices" from Boeing's offer documents and compares them to purported appraisal values. ¹³⁴⁷ As an initial matter, the United States notes that the process of deriving the "net aircraft prices" is based on many assumptions that renders these figures highly speculative. Moreover, different customers weigh factors differently. For example, a cash-strapped customer may place a higher value on deferred payments or more favorable financing terms than would a customer with a lot of cash on hand. Low-cost airlines may also have different needs. Therefore, any standardized approach to valuing non-price concessions is unlikely to capture the dynamics of a specific sales campaign.
- 977. In any event, even if the comparisons were accurate, they are meaningless. The conclusion the EU draws from these comparisons is that Boeing was engaging in "aggressive pricing." But it is not relevant if 787 prices are below some appraisal benchmark or are characterized by the EU as "aggressive." The EU's burden is to demonstrate that the subsidies are genuinely and substantially *causing* the customer to order 787s instead of A350 XWBs. The relevant question is whether the terms of sale whatever they are would have been different in the absence of subsidies and, if so, whether Airbus would have won the sale had those different terms prevailed.
- 978. As explained in above, the fact that Boeing made these sales necessarily means that it viewed the sales on these terms to be in the long-term profitability of the company. In other words, Boeing was better off making the sales on these terms than not making the sales at all. Therefore, Boeing would always have been willing to offer these terms if they were necessary to make the sales. Put differently, if, as the EU suggests, offering higher prices would have resulted in Boeing not making the sales (*i.e.*, Airbus winning the sales), Boeing would have offered the lower prices that would get the sales.
- 979. The exception is if Boeing faced capital constraints such that it would lack sufficient funds to price as it did for a sustained period for example, if at lower prices the marginal costs of production would exceed revenues and the company would lack the internal funds or borrowing ability to make up for the shortfall. But the EU has not alleged, much less proven, that Boeing faced such capital constraints. This failure alone causes the EU's price effects arguments to fail with respect to all but the tied tax subsidies. To be clear, the United States does not contend that further proof is unnecessary with respect to the tied tax subsidies, but at least in a counterfactual where the tied tax subsidies are presumed not to exist, the terms of sale arguably change automatically in at least some instances.

¹³⁴⁷ See EU Comparison of Net Aircraft Price and Appraised Value (Exhibit EU-1183(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 308

- 980. Furthermore, if the subsidies could be shown to affect pricing, the EU would need to show that the magnitude of that effect was sufficient to alter the outcome of each alleged sales campaign. As discussed in Section IV.G.2, the EU does not discuss the magnitude of the price effect subsidies at all. Therefore, even ignoring the EU's failure to show that the alleged price effects subsidies do affect 787 pricing, the EU's lost sales claims cannot succeed due to the EU's failure to demonstrate that lower pricing attributable to subsidies affected the outcome of the sales campaigns raised by the EU.
- 981. For these reasons, the EU's price effects arguments which merely seek to prove that Boeing 787 prices are "aggressive" fail to establish that subsidies are genuinely and substantially *causing* Airbus to lose the sales.
- 982. **Technology effects.** The EU also repeatedly alleges that the technological features of the 787 were important for a given sale. But this argument assumes that Boeing would never have been able to offer the 787 at the time of the sale. That is contrary to the findings in the original proceeding. There, the original panel and Appellate Body did not find that the 787 would have been launched with inferior technological capabilities in the absence of the R&D subsidies causing technology effects, but rather that such subsidies accelerated the launch of the 787. Therefore, the EU's reliance on the attractive technological features of the 787 including its fuel efficiency, maintenance costs, and operating costs fail to establish that technology effects of R&D subsidies are *causing* Airbus to lose A350 XWB sales.
- 983. **Additional causation deficiencies.** The EU also continues to rely on improper assumptions instead of evidence. This also constitutes a failure to properly demonstrate the requisite causation.
- 984. For example, the EU continues to defend its reliance on an assumption that an order that results in an "unbalanced portfolio" for a leasing company is a lost sale. The EU argues that its 50-percent entitlement theory does not apply across all aircraft, but is limited to orders of large leasing companies selecting between two aircraft that serve similar purposes and are capable of offering similar values. To point out the obvious, a leasing company's purchases are in many ways a reflection of where it determines the best value to be. The EU assumes the conclusion it is trying to prove when it starts from the premise that these are equally valuable products entitled to equal market share.
- 985. Moreover, the SCM Agreement does not permit this type of assumption. There are any number of reasons why a leasing company might choose what the EU characterizes as an "unbalanced portfolio." The EU's burden is to demonstrate that the particular alleged lost sale was genuine and substantially *caused* by the subsidies at issue.

¹³⁴⁸ See US – Large Civil Aircraft (Panel), para. 7.1775; US – Large Civil Aircraft (AB), para. 1040.

¹³⁴⁹ EU SWS, paras. 1186-1187.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 309

986. The EU also relies on additional assumptions not supported by evidence specific to the particular sales campaign. For example, the EU asserts in at least one instance that, if the 787 were available later, dual-sourcing would have been less attractive. But the EU does not demonstrate that the customer expressed this view or that this could reasonably be inferred from a view expressed by the customer. It is nothing more than the EU's speculation (and is actually refuted by the evidence). Again, this type of assumption cannot suffice for the EU to meet its burden of proving that subsidies are causing the lost sales.

- b. The EU fails to rebut non-attribution factors raised by the United States.
- 987. The Appellate Body has emphasized that, where other causal factors exist, a panel must "take care to ensure that it does not attribute the effects of those other causal factors to the subsidy at issue, and that the other causal factors do not dilute the causal link between that subsidy and the alleged adverse effects such that it is not possible to characterize that link as a genuine and substantial relationship of cause and effect." The United States demonstrated that, in addition to the EU's failure to show a genuine and substantial causal relationship as discussed above, the evidence demonstrates that other causal factors drove the outcomes in the sales campaigns raised by the EU. The EU rebuttal arguments are unsuccessful, including with respect to the Airbus's Original A350 misjudgment, the relevance of A350 XWB production constraints, and the role of pre-existing customer relationships.
- 988. **Airbus's Original A350 judgment.** The United States has explained that the EU improperly attributes to U.S. subsidies what are actually consequences of Airbus's misjudgment in launching the Original A350. This misjudgment which is unrelated to U.S. subsidies caused Airbus friction with customers, [***], and deferred development of the A350 XWB. Where these factors drive the result in a given campaign, U.S. subsidies cannot be considered a genuine and substantial cause of a lost sale.
- 989. The EU responds by arguing that "Airbus' decision to launch the Original A350 does not affect the delivery positions Airbus would have been able to offer to A350XWB customers." Not surprisingly, the EU offers no evidence to support this counterintuitive position. The EU states that "{o}nly after over two years of research into the applicable technologies, in December 2006, was Airbus able to convince customers that it would be able to develop the A350XWB, such that they would place orders for it. Thus, an earlier launch of the A350XWB would not have improved Airbus' competitive position, either based on the offer of credible better technologies, or as established above, based on earlier delivery positions. Thus, Airbus' launch decision for the Original A350 does not affect either the technology or the delivery advantage that the US subsidies gave Boeing's 787." 1352

¹³⁵⁰ US – Large Civil Aircraft (AB), para. 984.

¹³⁵¹ EU SWS, para. 1175.

¹³⁵² EU SWS, para. 1176.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 310

990. First, the EU is wrong that it took until December 2006 to convince customers of the A350 XWB's credibility, as evidenced by the fact that Airbus made customer commitments for the A350 XWB in July 2006. Second, the EU mistakenly relies on the premise that, by December 2006, Airbus had conducted more than two years of research applicable to the A350 XWB. The Airbus engineers explain in their statement:

When the market rejected the original A350, we had no alternative but to embark on the design of a completely new aircraft – the A350XWB – to compete with Boeing's 787. The A350XWB is a completely new design – a "clean sheet" design, as we call it – retaining only the new composite wing we had already started developing for our original A350. 1354

Thus, it is clear that had Airbus begun working on the A350 XWB earlier, it would have reached each stage in the process (*e.g.*, launch, delivery, etc.) earlier.

- 991. **A350 XWB production constraints.** The EU attempts to rebut the U.S. reference to production constraints as a non-attribution factor by arguing that, absent the subsidies, Airbus would have faced increased demand for the A350 XWB and "would have had every reason to build a second assembly line and increase its production rate." The economics of adding an entire additional assembly line are quite complicated, and increasing the production rate is also more difficult than merely desiring to do so. The EU cites no evidence whatsoever to suggest that Airbus ever considered these options, that these options would have been viable, or that these options would have altered the outcome of a given sales campaign. Again, the EU's assumptions alone are insufficient.
- 992. **Customer relationships.** The United States has shown that many of the alleged lost sales are actually orders Boeing won from longtime loyal customers. The EU contends that the United States cannot rely on the original panel's finding regarding the role pre-existing customer relationships played in 787 sales to Continental Airlines, ANA, and JAL. The United States does not agree with the EU's criticism, as the United States has cited to numerous documents that make clear the importance of the relationship to the outcome.
- 993. Moreover, the EU also mischaracterizes the original panel's and the Appellate Body's findings with respect to customer relationships. The EU states that "the Appellate Body has already clarified that the original panel erred in the significance it attributed to {existing customer relationships as a} non-subsidy factor for the Continental Airlines, All Nippon Airways and Japan Airlines sales, and the Appellate Body reversed the panel's findings that these sales

¹³⁵³ Singapore Airlines Orders 20 Airbus A350 XWB-900s and 9 Airbus A380s, Business Wire (July 21, 2006) (Exhibit USA-291).

¹³⁵⁴ Airbus Engineers Statement, para. 50 (Exhibit EU-1014(HSBI)).

¹³⁵⁵ EU SWS, para. 1173.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 311

were not lost sales." ¹³⁵⁶ The United States draws the Panel's attention to the paragraphs cited by the EU, which do not in any way support the propositions for which they are cited. Moreover, the Appellate Body did not reverse the original panel's findings that the Continental, ANA, and JAL sales were not lost sales. The EU did not even appeal the original panel's decision that those sales were lost sales.

- c. The EU fails to make a prima facie case with respect to alleged threat of significant lost sales.
- 994. In numerous sales campaign specific arguments, the EU alleges threat of significant lost sales based on alleged options, purchase rights, or similar instruments. The EU then addresses the rationale for its threat of significant lost sales allegations in Section V.G.4.e of its second written submission. As the United States pointed out, the Appellate Body in *EC Large Civil Aircraft*, referring to Article 15.7 of the SCM Agreement as relevant guidance, stated that a determination of threat of serious prejudice must "be based on facts and not merely allegation, conjecture or remote possibility' and that '{t}he change in circumstances' that would create a situation in which the subsidy would cause {serious prejudice} 'must be clearly foreseen and imminent.'" In evaluating the underlying panel's finding of a threat of displacement based on aircraft order data for the Indian single-aisle market, the Appellate Body overturned the panel's threat finding, even though the record contained actual order data proffered as evidence of what delivery trends would be like in the future. The EU then addresses the EU alleges threat of significant lost sales allegations. The EU then addresses allegations in Section V.G.4.e of its sec
- 995. The EU's evidence of unexercised options or purchase rights clearly does not meet the requirements that a threat claim be based on facts and that serious prejudice is imminent. In some cases, the existence of the options is not even confirmed. Thus, the United States does not ignore the EU's evidence. ¹³⁶¹ Its analysis exposes the clear insufficiency of that evidence.
- 996. The EU argues that threat by its very nature precludes absolute certainty. ¹³⁶² The United States does not demand absolute certainty. But in this instance, the Appellate Body's guidance in *EC Large Civil Aircraft* provides a useful comparison, and the evidence here is far less certain than the (insufficiently certain) evidence there.
- 997. Finally, the EU mischaracterizes the panel's finding in $US Upland\ Cotton$ to no avail. The EU recalls that the panel in that dispute found that a finding of serious prejudice includes a

¹³⁵⁶ EU SWS, para. 1169 (citing *US – Large Civil Aircraft (AB)*, paras. 913, 983, 1206, 1321).

¹³⁵⁷ See, e.g., EU SWS, paras. [[**HSBI**]].

¹³⁵⁸ See EU SWS, paras. 1445-1452.

¹³⁵⁹ EC – Large Civil Aircraft (AB), para. 1171.

¹³⁶⁰ EC – Large Civil Aircraft (AB), para. 1171.

¹³⁶¹ See EU SWS, para. 1449.

¹³⁶² See EU SWS, para. 1451.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 312

finding of a threat of serious prejudice. Therefore in this dispute, the EU reasons, "the original panel's findings of present serious prejudice include findings of a threat of serious prejudice, and, specifically, its finding of significant lost sales includes a finding of a threat of significant lost sales. Thus, there existed a threat of significant lost sales in the original reference period." ¹³⁶⁴

998. The EU's reading of the finding in US – Upland Cotton is, to put it mildly, incorrect. Paragraph 7.1475 of the original panel report discusses the implications of a finding of serious prejudice under Article 5(c)/6.3(c) of the SCM Agreement for a finding of serious prejudice under Article XVI:1 of the GATT 1994. It makes no mention of a threat claim of any kind. Paragraph 7.1503 of the original panel report finds that given the prohibited subsidy findings and present serious prejudice findings, and the implementation steps that may ensue, "it is not necessary or appropriate to address Brazil's claims of threat of serious prejudice." Paragraph 11.3 of the compliance panel report states that it does not need to address the threat claim given the finding of present serious prejudice. And footnote 561 of the compliance panel report states: "The original panel also did not consider it necessary or appropriate to address Brazil's claims of threat of serious prejudice under Articles 5(c) and 6.3(c) of the SCM Agreement in light of its findings of present serious prejudice and of the existence of prohibited subsidies." Therefore, the portions of these reports cited by the EU disprove the EU's contention. They make clear that the two claims are separate and that a present serious prejudice finding renders consideration of a corresponding threat claim inappropriate and unnecessary.

d. The EU continues to grant itself the right to amend the findings of the original proceeding.

999. The United States pointed out the obvious in its first written submission – that sales found to be lost A330 or Original A350 sales could not be lost A350 XWB sales. The EU responds by asserting that "it is irrelevant whether or not the 787 orders found to be lost sales in the original reference period are lost sales for the A350 XWB, rather than the A330 or Original A350." The United States neither shares the EU's view that the original panel's and Appellate Body's findings are irrelevant, or that the EU has any right to change them.

1000. The EU bears the burden of supporting its allegations with evidence. The EU argues that subsidies to the 787 cause lost A350 XWB sales. The EU does not allege in this compliance proceeding that subsidies to the 787 are causing lost A330 or Original A350 sales. Therefore, the EU must prevent evidence that subsidies to the 787 cause lost A350 XWB sales.

¹³⁶³ EU SWS, para. 1447.

 $^{^{1364}}$ EU SWS, para. 1447 (citing $US-Upland\ Cotton\ (Panel)$, paras. 7.1475, 7.1503; $US-Upland\ Cotton\ (21.5)\ (Panel)$, para. 11.3 and note 561).

¹³⁶⁵ EU SWS, para. 1207.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 313

- 1001. It is indisputable that the Qantas (2005), Ethiopian Airlines (2005), Icelandair (2005) and Kenya Airways (2006) sales campaigns were found to be lost sales for the A330 and Original A350. The EU did not allege, much less prove, that these sales campaigns results in lost A350 XWB sales. Nor could it have. The A350 XWB was not even launched at the time of these campaigns. There is simply nothing for the parties to dispute.
- 1002. The EU is the master of its case, and it has chosen not to allege that subsidies to the 787 cause lost A330 or Original A350 sales. Therefore, evidence of lost A330 or Original A350 sales will not help it prove its case. The EU notion that it can pretend like those are lost A350 XWB sales even though that notion is contrary to the findings of the original proceeding, factually false, and impossible without a time machine defies explanation.
- 1003. The EU also repeats its argument that "{t}o the extent that these four airlines continue to retain options and purchase rights which flow from the original orders, these options and purchase rights when firmed up will lead to further adverse effects, in the form of a threat of significant lost sales." But the EU does not dispute that its sole piece of evidence for the Qantas campaign makes clear that the exercise of options is uncertain. Nor does the EU dispute that it has presented no evidence that any options or purchase rights even exist with respect to the Ethiopian Airlines, Icelandair, and Kenya Airways sales campaigns.
- 1004. The EU's threat of lost sales claim is based entirely on allegation and conjecture. Accordingly, it fails.
 - e. The EU continues to improperly pursue lost sales allegations that it already lost in the original proceeding.
- 1005. The EU attempted to establish that sales campaigns involving ANA, Japan Airlines, Air Canada, Continental Airlines, and Northwest Airlines were lost sales, but failed to do so. It did not appeal this finding.
- 1006. Nevertheless, according to the EU, the Panel and the United States must replay the argument in the hope that it can achieve a different result. This is not the purpose of a compliance proceeding.
- 1007. The EU asserts that these sales "were left unresolved because the Appellate Body did not complete the analysis." It also did not start the analysis. Because the finding that these were

¹³⁶⁶ See US – Large Civil Aircraft (AB), paras. 1044, 1054.

¹³⁶⁷ EU SWS, para. 1211. The EU's position that it can argue threat of lost sales based "to the extent" any options or purchase rights exist is at odds with its position that options exercised after 2006 "are necessarily within the scope of these proceedings, as they are arguments that the European Union did not make, and could not have made, in the original proceedings." EU SWS, para. 1216.

¹³⁶⁸ See EU SWS, para. 1211; US FWS, paras. 849.

¹³⁶⁹ EU SWS, para. 1212.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 314

not lost sales attributable to the subsidies was not appealed. These sales campaigns thus were in no way left unresolved.

1008. The EU also mischaracterizes the original proceeding when it states:

In fact, the European Union did appeal the original panel's failure to cumulate the effects of the subsidies with a technology and price causal mechanism, and the Appellate Body reversed the relevant findings by the original panel. However, the Appellate Body was not in a position to complete the analysis with respect to the cumulative effect of technology and price causal mechanisms on these sales. ¹³⁷⁰

1009. First, before the Appellate Body would have analyzed the cumulative effect of technology and price causal mechanisms, it would have had to determine that those two groups of subsidies *should* be cumulated. The EU skips this step by again distorting the Appellate Body report. The EU asserts that the Appellate Body found "that the original panel erred in failing to assess collectively the subsidies' price effects with their technology effects." This is *not* what the Appellate Body found. It found that the original panel erred in assuming that different causal mechanisms precluded cumulation of two aggregated groups of subsidies. The EU simply assumes that the Appellate Body would have determined that, under the proper analytical framework, the two groups should be cumulated, despite that the Appellate Body made no such finding.

1010. Second, it is the EU's opinion that the Appellate Body was not in a position to complete the analysis. The Appellate Body did not attempt to complete the analysis because the EU indicated that it was not requesting the Appellate Body to do so.

1011. And third, even if the Appellate Body had found that the effects in the 200-300 seat market of the R&D subsidies and the B&O tax rate reductions should be cumulated, it still would not have inquired as to whether, on a cumulated basis, these sales campaigns were lost sales because *they were not appealed*. ¹³⁷²

The EU's attempt to draw an analogy with $EC-Large\ Civil\ Aircraft$ is based on a false equivalence. There, the findings from the original proceeding are that, in the absence of massive subsidies, Airbus likely would not exist. Thus, as the United States asserts in the paragraph cited by the EU, "the EU never explains how Airbus would have been able to fill those orders with the LCA that depended on LA/MSF for their availability." There is no suggestion here that Boeing would not have LCA to deliver for the follow-on orders in the absence of subsidies.

¹³⁷⁰ EU SWS, para. 1215.

¹³⁷¹ EU SWS, para. 1219.

 $^{^{1372}}$ The EU also suggests that the United States has taken a position here that inconsistent with its position in $EC-Large\ Civil\ Aircraft$. This is incorrect. The U.S. position here is that, where the a sales campaign has been determined not to constitute a lost sale, any follow-on sales are generally not lost sales.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 315

- 1012. Finally, even if the EU could properly re-litigate these sales campaigns and show that they were lost sales, they would be lost sales of the A330 and Original A350, which the EU is not alleging to result from subsidies to the 787 in this compliance proceeding.
- 1013. The United States now turns to each of the campaigns.

i. All Nippon Airways

- 1014. The EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained in that section, this analysis is meaningless. Moreover, the EU presenting evidence of 2004 data in this compliance proceeding is the epitome of taking a second bite of the apple. For the reasons stated above, and in the U.S. first written submission, the EU cannot re-litigate this sales campaign and the follow-on orders.
- 1015. In addition, as the EU notes, [[**HSBI**]]. ¹³⁷⁴ It is difficult to imagine how subsidies alleged to cause price effects could possibly have been a genuine and substantial cause of Boeing winning this sale.
- 1016. The EU also contends that the United States does not dispute the substantial role that the technology of the 787 played in ANA's decision. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of ANA's decision. If that were the case, the EU would not have lost this sales campaign in the original proceeding.
- 1017. Finally, the EU alleges that there is a threat of further significant lost sales "given that [[**HSBI**]]. ¹³⁷⁵ Thus, not only is the EU guessing about whether Boeing will make a sale, but also guessing about what would cause the hypothetical sale. The Appellate Body has made clear that reliance on allegation, conjecture, or remote possibility instead of facts cannot support a threat of serious prejudice determination. ¹³⁷⁶

ii. Japan Airlines

1018. The EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained in that section, this analysis is meaningless. Moreover, the EU presenting evidence of 2004 data in this compliance proceeding is the epitome of taking a second bite of the apple. For the reasons stated above,

¹³⁷³ See EU SWS, para. 1225.

¹³⁷⁴ EU SWS, para. 1222.

¹³⁷⁵ EU SWS, para, 1228.

¹³⁷⁶ EC – Large Civil Aircraft (AB), para. 1171.

¹³⁷⁷ See EU SWS, para. 1232.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 316

and in the U.S. first written submission, the EU cannot re-litigate this sales campaign and the follow-on orders.

- 1019. In addition, as the EU notes, [[**HSBI**]]. ¹³⁷⁸ It is difficult to imagine how subsidies alleged to cause price effects could possibly have been a genuine and substantial cause of Boeing winning these sales.
- 1020. The EU also contends that the United States does not dispute the substantial role that the technology of the 787 played in JAL's decision. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of JAL's decision. If that were the case, the EU would not have lost this sales campaign in the original proceeding.
- 1021. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹³⁷⁹ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹³⁸⁰

iii. Air Canada

- 1022. The EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. The EU also addresses for the first time in its second written submission the offer documents provided in response to the Article 13 request. But the EU does not explain how it is able to attribute the subsidies at issue in this proceeding [[HSBI]]. 1382
- 1023. Boeing obviously made this offer because it thought a sale on these terms was positive for the company. The EU has not shown that, in the absence of subsidies, Boeing would have faced capital constraints that would have prevented it from making this offer. Nor has the EU demonstrated how the R&D or any of the miscellaneous subsidies would alter Boeing's calculus in determining whether a sale on given terms is more attractive than not making the sale. Therefore, the EU has not shown that any subsidies were a genuine and substantial cause of lower pricing in this sales campaign.

¹³⁷⁸ EU SWS, para. 1222.

¹³⁷⁹ See EU SWS, para. 1236.

¹³⁸⁰ See EC – Large Civil Aircraft (AB), para. 1171.

¹³⁸¹ See EU SWS, para. 1240.

¹³⁸² See EU SWS, para. 1240.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 317

- 1024. Moreover, the EU presenting evidence of 2005 data in this compliance proceeding is the epitome of taking a second bite of the apple. ¹³⁸³ For the reasons stated above, and in the U.S. first written submission, the EU cannot re-litigate this sales campaign and the follow-on orders.
- 1025. In addition, as the EU notes, [[**HSBI**]]. ¹³⁸⁴ It is difficult to imagine how subsidies alleged to cause price effects could possibly have been a genuine and substantial cause of Boeing winning this sale.
- 1026. The EU also contends that the United States does not dispute that Air Canada's 787 purchase decisions were genuinely and substantially due to the subsidy-enhanced technology of the Boeing offers. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Air Canada's decision. If that were the case, the EU would not have lost this sales campaign in the original proceeding.
- 1027. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹³⁸⁶ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹³⁸⁷

iv. Continental Airlines

- 1028. The EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Moreover, the EU presenting evidence of 2004 and 2006 data in this compliance proceeding is the epitome of taking a second bite of the apple. For the reasons stated above, and in the U.S. first written submission, the EU cannot re-litigate this sales campaign and the follow-on orders.
- 1029. In addition, as the EU notes, [[**HSBI**]]. ¹³⁸⁹ It is difficult to imagine how subsidies alleged to cause price effects could possibly have been a genuine and substantial cause of Boeing winning this sale.

¹³⁸³ See EU SWS, para. 1240.

¹³⁸⁴ EU SWS, para. 1222.

¹³⁸⁵ EU SWS, para. 1241.

¹³⁸⁶ See EU SWS, para. 1236.

¹³⁸⁷ See EC – Large Civil Aircraft (AB), para. 1171.

¹³⁸⁸ See EU SWS, para. 1246.

¹³⁸⁹ EU SWS, para. 1247.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 318

1030. The EU also contends that the United States does not dispute that Continental's 787 purchase decisions, or [[**HSBI**]], were genuinely and substantially due to the subsidy-enhanced attributes of the 787. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Continental's decision. If that were the case, the EU would not have lost this sales campaign in the original proceeding.

v. Northwest Airlines

- 1031. The EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Moreover, the EU presenting evidence of 2005 data in this compliance proceeding is the epitome of taking a second bite of the apple. ¹³⁹¹ For the reasons stated above, and in the U.S. first written submission, the EU cannot re-litigate this sales campaign.
- 1032. In addition, as the EU notes, [[**HSBI**]]. ¹³⁹² It is difficult to imagine how subsidies alleged to cause price effects could possibly have been a genuine and substantial cause of Boeing winning this sale.
- 1033. The EU also contends that the United States does not dispute that the technological features of the 787 played an important role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Northwest's decision. If that were the case, the EU would not have lost this sales campaign in the original proceeding.
- 1034. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹³⁹⁵

¹³⁹⁰ See EU SWS, para. 1247.

¹³⁹¹ See EU SWS, para. 1252.

¹³⁹² EU SWS, para. 1252.

¹³⁹³ See EU SWS, para. 1253.

¹³⁹⁴ See EU SWS, para. 1255.

¹³⁹⁵ See EC – Large Civil Aircraft (AB), para. 1171.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 319

- f. Alleged significant lost sales concluded subsequent to the end of the original reference period.
 - i. United Airlines 787-10
- 1035. Airbus adds as a new alleged lost sale the purchase by United of 20 787-10s, 10 of which are an up-conversion of 787s that the EU has already alleged as a lost sale. As Airbus acknowledges, it sold United 25 A350 XWB-900s that, around the time of this order, were converted to A350 XWB-1000s. United also ordered an additional 10 A350 XWB-1000s. According to the EU, absent the subsidies, Airbus would have not only sold the 35 A350 XWB-1000s, but would also have sold United at least 20 A350 XWB-900s. The EU's own evidence tells a different story.
- 1036. United's long-standing relationship with Boeing is well known and documented. ¹⁴⁰⁰ Given its position as one of Boeing's best customers for decades, it was all but a forgone conclusion that United would order 787-10s. [[**HSBI**]].
- 1037. **[[HSBI**]]¹⁴⁰¹
- 1038. The EU attempts to cast the decision as a response to pricing concessions or technological features enabled by the subsidies. However, the EU has failed to demonstrate that the pricing or technology on the 787-10 can properly be attributed to subsidies at issue.
- 1039. Furthermore, the EU's own evidence undermines its contention that the conversion from -900s to -1000s was the result of the subsidies. The relevant [[**HSBI**]] ¹⁴⁰²
- 1040. The EU neglects to mention that **[[HSBI]]**. The EU also fails to mention the critical role of United's pre-existing relationship with Boeing. It is clear that these reasons were important to United's decision which still included the purchase of 35 A350 XWB-1000s and that price or technology effects properly attributable to subsidies were not a genuine and substantial cause of United's decision.
- 1041. Finally, the evidence the EU does discuss is used as the basis upon which the EU assumes that Boeing must have offered very aggressive pricing. But "aggressive pricing" in the

¹³⁹⁶ EU SWS, para. 1260.

¹³⁹⁷ EU SWS, para. 1262.

¹³⁹⁸ EU SWS, para. 1262.

¹³⁹⁹ EU SWS, para. 1262.

¹⁴⁰⁰ See US FWS, para. 912.

¹⁴⁰¹ [[**HSBI**]] (Exhibit EU-1188(HSBI)).

¹⁴⁰² [[**HSBI**]] (Exhibit EU-1190(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 320

abstract – even if proven – does not demonstrate that the pricing was in any way affected by the subsidies at issue. Thus, the EU's pricing evidence is to no end.

ii. Singapore Airlines

- 1042. The EU adds as a significant lost sale the order by Singapore Airlines of 30 787-10s in 2013. 1403
- 1043. The EU's arguments, even if assumed to be true, would not prove that the subsidies at issue were a genuine and substantial cause of Singapore Airlines' decision. The EU argues [[**HSBI**]]. The R&D subsidies and miscellaneous subsidies have not been shown to affect such pricing considerations. And the tied tax subsidies have been shown to be so insignificant in terms of magnitude that they cannot have genuinely and substantially caused Singapore Airlines' decision.
- 1044. The EU also acknowledges that the A350 XWBs were available to Singapore Airlines [[**HSBI**]]. The EU has simply not shown that availability properly attributable to the subsidies at issue were any genuine and significant way responsible for this sale.
- 1045. For these reasons, in addition to the many flaws that cut across sales campaigns discussed above and in the U.S. first written submission, the EU has not established that this sales campaign constitutes a lost sale under Article 6.3(c).

- 1046. The EU adds as a significant lost sale the order by British Airways of 12 787-10s in 2013, along with the exercise of 6 options for 787-8/9s. This is another instance in which Airbus received the majority of aircraft orders -18 A350 XWB-1000s. 1407
- 1047. The EU's pricing evidence is again insufficient to attribute Boeing's pricing to the subsidies at issue. Consistent with its pattern, the EU merely seeks to prove that the customer asked Airbus for better terms throughout the negotiation process. This is hardly surprising. It is also obviously true that Boeing's offer was "better" based on all of the customer's concerns for at least some of the aircraft ordered. It is also clear that Boeing found the sale on these terms in the best long-term interest of the company. The question is whether the subsidies at issue allowed Boeing to agree to these terms when it would otherwise not have been able to, and if that

¹⁴⁰³ See EU SWS, para. 1274.

¹⁴⁰⁴ See EU SWS, para. 1277-1279.

¹⁴⁰⁵ EU SWS, para. 1284.

¹⁴⁰⁶ See EU SWS, para. 1274.

¹⁴⁰⁷ EU SWS, para. 1290.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 321

could be shown, whether the prevailing terms in the absence of the subsidies would have affected the customer's decision. The EU has failed to prove the former, much less the latter.

1048. In addition, the exercise of options for 6 787-8/9s is also not a lost sale. The United States has already demonstrated that the earlier British Airways order was not a lost sale. Accordingly, the exercise of options pursuant to that agreement also do not constitute a lost sale.

1049. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴⁰⁸ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁰⁹

iv. Qatar Airways

- 1050. The United States already demonstrated in its first written submission the EU's failure to demonstrate that this sales campaign constitutes a lost sale. The United States recalls that Qatar Airways ordered 80 A350 XWBs and that the EU is arguing that it would have ordered 30 more (*i.e.*, aircraft #s 81-110) instead of 30 787s. As the United States pointed out, even if the 787 delivery position was pushed back, it still would be available sooner than the first A350 XWB, so it would be available far sooner than the 81st A350 XWB.
- 1051. The EU responds that the "US argument erroneously assumes that, absent the 787 order, Airbus would have been unable or unwilling to offer Qatar Airways a more dense delivery stream to provide the airline with the capacity now supplied by the 787." The EU has not established that Airbus could have given Qatar Airways 30 additional delivery slots in the years that the 787 was available for delivery (even assuming it would be later in the absence of subsidies).
- 1052. But even if it could show that, the EU's argument would still fail. The EU argues that it was Qatar Airways that [[**HSBI**]]. ¹⁴¹¹ [[**HSBI**]], then availability was obviously not what drove the decision to purchase the 787s.
- 1053. The EU also provides the same flawed pricing analysis based on appraisal values. This analysis is meaningless for the reasons stated above.
- 1054. In addition, the EU clarifies that its reliance on A350 terms are [[**HSBI**]]. ¹⁴¹² As the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to

¹⁴⁰⁸ See EU SWS, para. 1305.

¹⁴⁰⁹ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴¹⁰ EU SWS, para, 1310.

¹⁴¹¹ EU SWS, para. 1311.

¹⁴¹² See EU SWS, para. 1316.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 322

demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.

1055. The EU also contends that the United States does not dispute that the technological features of the 787 played a significant role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Qatar Airways' decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed. the delay would have been approximately two years, prior to the customer's decision to order these aircraft in 2007.

1056. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.

1057. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴¹⁴ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴¹⁵

v. British Airways

1058. The EU continues to erroneously argue that the sale of 24 787s in 2007 constitutes a lost sale. The

1059. The EU notes that Airbus was offering [[**HSBI**]]. 1416

1060. The United States previously noted that [[**HSBI**]]. ¹⁴¹⁷ The EU responds that [[**HSBI**]]. ¹⁴¹⁸ According to the EU, "{t}he reason for that confidence is the 787 technology, which was enable by the US subsidies." ¹⁴¹⁹ Again, the EU erroneously assumes that the 787 technology would have been inferior in the absence of the subsidies, which is *not* what the original panel and Appellate Body found.

¹⁴¹³ See EU SWS, para. 1319.

¹⁴¹⁴ See EU SWS, para. 1320.

¹⁴¹⁵ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴¹⁶ See EU SWS, para. 1324.

¹⁴¹⁷¹⁴¹⁷ See US FWS, para, 879.

¹⁴¹⁸ EU SWS, para. 1325.

¹⁴¹⁹ EU SWS, para. 1325.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 323

- 1061. In addition, the EU introduces for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1062. The EU also attempts to undermine the significance of the numerous other factors the United States demonstrated were significant to the decision to purchase Boeing aircraft. The EU's blanket statement that any of these issues can simply be compensated by additional price concessions is not useful absent some showing that the sale would still have been profitable if it had to continue offering additional price concessions to offset the weaknesses in its products perceived by the customer.
- 1063. Furthermore, there is no basis for the EU's assertion that "the United States seems to accept that [[**HSBI**]], they were also an issue for the 787." The Airbus document indicated that the [[**HSBI**]]. ¹⁴²¹
- 1064. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.
- 1065. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴²² As an initial matter, this is the same argument the EU makes in paragraph 1305 with respect to the more recent sale to British Airways of 787-10s. Therefore, to include it again here is double counting.
- 1066. In any event, this argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. 1423

vi. Air Berlin

1067. The United States demonstrated in its first written submission numerous flaws in the EU's lost sales claim with respect to Air Berlin. ¹⁴²⁴ The EU's rebuttal does nothing to change the conclusion that the EU has failed to establish this sales campaign as a lost sale.

¹⁴²⁰ EU SWS, para. 1329.

¹⁴²¹ See [[**HSBI**]] (Exhibit EU-780(HSBI)).

¹⁴²² See EU SWS, para, 1331.

¹⁴²³ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴²⁴ See US FWS, paras. 883-887.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 324

- 1068. The EU also raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1069. The EU repeats its flawed argument that technological features, principally fuel efficiency, were responsible for this sale and are attributable to the subsidies. The findings in the original panel made clear that the subsidies at issue accelerated the launch of the 787, but they did not result in technology that, in the absence of the subsidies, would never have been discovered.
- 1070. The United States previously demonstrated that customer relationships played a substantial role in this sales campaign. The EU responds that Air Berlin's [[**HSBI**]]. The United States did not, as the EU suggests, take this statement out of context. To the contrary, this statement was made in the context of the 787 sales campaign. The reason it was relevant to this campaign is because, as expressed just above the quoted text, [[**HSBI**]]. 1426
- 1071. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴²⁷ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴²⁸

vii. LAN Airlines

- 1072. The EU fails to rebut the U.S. demonstration that the LAN Airlines sales campaign has not been shown to be a lost sale for the purpose of Article 6.3(c).
- 1073. The EU again calls into question the U.S. position that the 787 launch would have been delayed approximately two years in the absence of the R&D subsidies subject to the DSB's recommendations and rulings. Again, as explained in Section IV.F.3, it is the EU's position on the acceleration effects of the subsidies that is implausible.
- 1074. The EU also contends that the United States does not dispute that the technological features of the 787 played a substantial role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine

¹⁴²⁵ EU SWS, para. 1340.

¹⁴²⁶ [[**HSBI**]] (Exhibit EU-791(HSBI)).

¹⁴²⁷ See EU SWS, para. 1342.

¹⁴²⁸ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴²⁹ See EU SWS, para. 1351.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 325

and substantial cause of LAN's decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed.

- 1075. The EU also raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1076. In addition, the EU fails to rebut the U.S. showing that the [[**HSBI**]]. Again, that the EU would characterize the 787 prices as "aggressive" is of no consequence. The United States has already demonstrated that any effect the tied tax subsidies could have on Boeing pricing would be far too small to matter. Compared to the difference [[**HSBI**]] the subsidies cannot be said to be a genuine and substantial cause of LAN's decision.
- 1077. Perhaps most importantly, the EU has no rebuttal for the evidence that [[**HSBI**]]. 1431
- 1078. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.
- 1079. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴³² This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴³³

viii. ILFC

1080. The EU has still fails to establish that the ILFC order of 787s in 2007 is a lost sale. ¹⁴³⁴ The United States notes that it is a little unclear how many aircraft purchases the EU is challenging. It states that it is challenging ILFC's order of 52 787s in 2007. ¹⁴³⁵ It then states that "the US subsidies caused ILFC to place this order with Boeing, in addition to its previous orders for 22 787s in 2005/06 and its 2007 order for 20 A350 XWB aircraft." ¹⁴³⁶ In the ensuing

¹⁴³⁰ See EU SWS, para. 1353.

¹⁴³¹ See US FWS, para. 891; EU SWS, para. 1354.

¹⁴³² See EU SWS, para. 1355.

¹⁴³³ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴³⁴ EU SWS, para. 1356.

¹⁴³⁵ EU SWS, para. 1356.

¹⁴³⁶ EU SWS, para. 1356.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 326

paragraph, the EU refers to "ILFC's decision to order 30 787 Boeing LCA in 2007." Putting aside how U.S. subsidies could have "caused ILFC to place...its 2007 order for 20 A350 XWB," it is not clear whether the EU is challenging: (1) the sale of 30 787s in 2007 (but none in 2005/06); (2) the sale of 52 787s, with 30 in 2007 and 22 in 2005/06; (3) the sale of 74 787s, with 52 in 2007 and 22 in 2005/06; or (4) the sale of 52 787s in 2007 (but none in 2005/06).

- 1081. The EU begins by reiterating its theory that ILFC's unbalanced portfolio proves the EU's claim. This is false. The EU has not demonstrated that, in the absence of subsidies ILFC's portfolio would be 50/50 or tilted in Airbus's favor. And the EU cannot merely assume as much.
- 1082. Next, the EU raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1083. Moreover, the pricing evidence relied upon by the EU actually undermines the EU's case. The EU cites [[**HSBI**]]. When the incremental changes between offers are of this magnitude, there is simply no argument that the subsidies of relatively miniscule magnitude could possibly have genuinely and substantially affected the outcome of the sales campaign. At the very least, the EU has not shown how they could.
- 1084. The EU also contends that the United States does not dispute that the technological features of the 787 played a substantial role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of ILFC's decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch simply would have been delayed by approximately two years.
- 1085. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.

ix. Virgin Atlantic Airways

1086. The United States demonstrated that the EU first written submission failed to establish that Virgin Atlantic's order of 15 787s in 2007 constitutes a lost sale, and the EU has now failed to rebut that demonstration.

¹⁴³⁷ EU SWS, para. 1357.

¹⁴³⁸ EU SWS, para. 1359 (citing ILFC (2007) Final Offer Materials).

¹⁴³⁹ See EU SWS, para. 1366.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 327

1087. The EU repeats its argument that the technology effects caused by the U.S. subsidies at issue were a genuine and substantial factor in Virgin's decision. First, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed by two years, which means Boeing could have offered the same 787 at the time of this sales campaign. Second, the EU compares the 787's technology to the A330, but the EU is not even alleging lost A330 sales.

1088. In addition, the EU raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. 1441 As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.

1089. The EU also fails to rebut that Airbus did not make the sale because [[**HSBI**]]. ¹⁴⁴² But the EU fails to establish [[**HSBI**]]. Instead, the EU just assumes that the subsidies were the reason for Virgin's decision.

1090. Furthermore, the EU acknowledges that the A350 XWB did not exist at the beginning of this sales campaign. The EU [[**HSBI**]]. However, the EU has not alleged [[**HSBI**]]. Therefore, its claim with respect to this sales campaign necessarily fails.

1091. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.

1092. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴⁴⁵ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁴⁶

¹⁴⁴⁰ EU SWS, paras. 1372-1374.

¹⁴⁴¹ See EU SWS, para. 1375.

¹⁴⁴² See US FWS, para. 900; EU SWS, para. 1376.

¹⁴⁴³ EU SWS, para. 1377.

¹⁴⁴⁴ EU SWS, para. 1373.

¹⁴⁴⁵ See EU SWS, para. 1378.

¹⁴⁴⁶ See EC – Large Civil Aircraft (AB), para. 1171.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 328

x. Etihad Airways

1093. The United States demonstrated that the EU first written submission failed to establish that Etihad Airways' order of 41 787s in 2008 and 2011 constitutes a lost sale, and the EU has now failed to rebut that demonstration.

1094. The EU also contends that the United States does not dispute that the technological features of the 787, particularly its fuel efficiency and operating economics, played a substantial role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Etihad Airways' decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed by approximately two years, but Boeing still would have been able to offer the same fuel efficiency and operating economics that it did in 2008 and 2011.

1095. The EU also makes much of the availability difference despite that, for the 2011 sale, [[**HSBI**]]. The EU has not shown that the [[**HSBI**]] constituted a genuine and substantial cause of Etihad's decision. In addition, the EU acknowledges that Etihad was concerned about the possibility of further Airbus delays. The EU certainly cannot attribute Airbus delays, or its reputation for delays, to U.S. subsidies.

1096. The EU raises for the first time with respect to these sales campaigns pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign. In addition, the mere size of the price concessions the EU is discussing makes clear that the relatively magnitude of the subsidies that could even arguably affect 787 pricing could not possibly alter the outcome of the sales campaigns. At the very least, the EU has not demonstrated that they do.

1097. The EU offers no rebuttal to the U.S. point about Etihad's [[HSBI]]. 1450

1098. The EU also contends that the U.S. took out of context evidence relating to [[**HSBI**]], but that is not the case. The U.S. first written submission states:

¹⁴⁴⁷ See EU SWS, para. 1351.

¹⁴⁴⁸ EU SWS, para. 1383.

¹⁴⁴⁹ EU SWS, para. 1384.

¹⁴⁵⁰ See US FWS, para. 906; EU SWS, para. 1389.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 329

The EU's own evidence makes clear that subsidies to the 787 did not relate to [[**HSBI**]]. As a result, [[**HSBI**]]. ¹⁴⁵¹

Thus, the United States made clear that this was [[HSBI]].

- 1099. In addition, the EU argues that there had been delays with the 787, and that these **[[HSBI]]**. The EU's self-serving speculation aside, there is no evidence that Etihad was concerned about 787 delays during this sales campaign.
- 1100. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.
- 1101. Finally, the EU alleges threat of significant lost sales allegation based on [[**HSBI**]] and [[**HSBI**]]. This argument fails. It is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁵³

xi. United Airlines

- 1102. The United States demonstrated that the EU first written submission failed to establish that United Airlines' order of 25 787-8s in 2010 constitutes a lost sale, and the EU has now failed to rebut that demonstration. The United States recalls that this is another sales campaign where there was a split order and Airbus is arguing that, in the absence of subsidies, United would have purchased even more A350 XWBs. ¹⁴⁵⁴
- 1103. The United States previous explained that, if early availability was a priority, United clearly would have preferred [[**HSBI**]]. 1455
- 1104. The EU responds that the delivery positions of the 787-8 Boeing would have been able to offer [[**HSBI**]]. The EU cites no evidence that Boeing could not have moved those positions up if necessary to win the sale. The EU also ignores that, even if they were available at

¹⁴⁵¹ US FWS, para. 907 (citing [[**HSBI**]] (Exhibit EU-815(HSBI)); [[**HSBI**]] (Exhibit EU-830(HSBI)); [[**HSBI**]] (Exhibit EU-829(HSBI)); [[**HSBI**]] (EU-824(HSBI))., and quoting [[**HSBI**]] (Exhibit EU-815(HSBI))).

¹⁴⁵² See EU SWS, para. 1395.

¹⁴⁵³ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴⁵⁴ EU SWS, para. 1397.

¹⁴⁵⁵ See US FWS, para. 909.

¹⁴⁵⁶ EU SWS, para. 1401-1402.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 330

comparable times, availability concerns would still favor [[**HSBI**]]. In addition, the EU completely ignores that [[**HSBI**]]. ¹⁴⁵⁷

- 1105. The EU also repeats its assertion that, but for the U.S. subsidies, Airbus would have increased its production rate and would have been able to offer [[**HSBI**]]. Again, the addition of capacity or ability to increase production rate is very difficult, particularly early in a program, and the EU fails to offer compelling evidence that this was actual a viable and realistic alternative.
- 1106. In addition, the EU contends that the United States does not dispute that the technological features of the 787 played a substantial role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of United's decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed by approximately two years.
- 1107. Moreover, the EU raises for the first time with respect to these sales campaigns pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign. In addition, the mere size of the price concessions the EU is discussing makes clear that the relatively magnitude of the subsidies that could even arguably affect 787 pricing could not possibly alter the outcome of the sales campaigns. At the very least, the EU has not demonstrated that they do.
- 1108. The EU also argues that the United States fails to demonstrate that the [[**HSBI**]]. ¹⁴⁶⁰ The United States believes that the Airbus document speaks to the importance of this issue clearly: [[**HSBI**]]. ¹⁴⁶¹
- 1109. The EU also argues that "even though [[**HSBI**]]. ¹⁴⁶² This explanation does not make sense. The United States did not argue [[**HSBI**]]. The A350 XWB-900s [[**HSBI**]]. If [[**HSBI**]]. Clearly, United intended to fill different needs.

¹⁴⁵⁷ [[**HSBI**]] (Exhibit EU-848(HSBI)).

¹⁴⁵⁸ EU SWS, para. 1402.

¹⁴⁵⁹ See EU SWS, para. 1403.

¹⁴⁶⁰ EU SWS, para, 1409.

¹⁴⁶¹ [[**HSBI**]] (Exhibit EU-845(HSBI)).

¹⁴⁶² EU SWS, para. 1410.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 331

- 1110. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.
- 1111. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴⁶³ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁶⁴

xii. Air France-KLM

- 1112. The United States demonstrated that the EU first written submission failed to establish that the order of 25 787-9s by Air France-KLM in 2011 constitutes a lost sale, and the EU has now failed to rebut that demonstration. The United States recalls that this is another sales campaign where there was a split order and Airbus is arguing that, in the absence of subsidies, United would have purchased even more A350 XWBs. ¹⁴⁶⁵
- 1113. The EU raises for the first time with respect to these sales campaigns pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1114. In addition, the EU argues that [[**HSBI**]]. ¹⁴⁶⁶ As the United States has shown, the EU's contention that subsidies caused technology effects [[**HSBI**]] is meritless. Even in the absence of subsidies, the 787 would have launched in plenty of time [[**HSBI**]], even though as a factual matter, that is not what happened. Therefore, the EU is correct that [[**HSBI**]], this is a non-attribution factor.
- 1115. The EU also contends that the United States does not dispute that the technological features of the 787 [[HSBI]] played a substantial role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Air France-KLM's decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch would simply have been delayed by approximately two years, but Boeing still would have been

¹⁴⁶³ See EU SWS, para. 1378.

¹⁴⁶⁴ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁴⁶⁵ EU SWS, para, 1412.

¹⁴⁶⁶ EU SWS, paras. 1419-1420.

¹⁴⁶⁷ See EU SWS, para. 1421.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 332

able to offer the same fuel efficiency and lower maintenance costs at the time of this sales campaign.

- 1116. The EU fails to rebut the U.S. observation that [[**HSBI**]]. ¹⁴⁶⁸ Instead, it argues that this does not preclude a finding that subsidies were the cause of Boeing getting some of the orders. The United States ignores that it is very unlikely that an airline that is [[**HSBI**]] and has the types of [[**HSBI**]] would nevertheless put all of its eggs in the Airbus A350 XWB basket. Thus, these factors undoubtedly were a substantial reason for the split order, and the evidence simply does not support the EU's contention that subsidies had a similarly substantial effect.
- 1117. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴⁶⁹ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁷⁰

xiii. Aeromexico

- 1118. The United States demonstrated that the EU first written submission failed to establish that the order of 6 787-9s by Aeromexico in 2012 constitutes a lost sale, and the EU has now failed to rebut that demonstration.
- 1119. The EU also contends that the United States does not dispute that the technological features of the 787 played an important role in this campaign. The EU is incorrect if it means that the United States does not dispute that technology attributable to the subsidies was a genuine and substantial cause of Aeromexico's decision. As the United States has explained, the EU wrongly assumes that the technology would not have been available, when the findings from the original proceeding make clear that it would have been available. The launch simply would have been delayed by approximately two years.
- 1120. In addition, the EU fails to support its rebuttal argument that, absent subsidies, Boeing would not have been able to offer better delivery positions than Airbus. The evidence shows that even if Boeing promised deliveries starting two years later, [[HSBI]].
- 1121. The EU raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were

¹⁴⁶⁸ US FWS, para. 915 (citing [[**HSBI**]] (Exhibit EU-855(HSBI))).

¹⁴⁶⁹ See EU SWS, para. 1378.

¹⁴⁷⁰ See EC – Large Civil Aircraft (AB), para. 1427.

¹⁴⁷¹ See EU SWS, para. 1366.

¹⁴⁷² See EU SWS, para. 1428.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 333

impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.

1122. Moreover, the pricing evidence relied upon by the EU actually undermines the EU's case. The EU cites [[**HSBI**]]. ¹⁴⁷³ Given the magnitude of the pricing adjustments in this sales campaign, there is simply no argument that the subsidies of relatively miniscule magnitude could possibly have genuinely and substantially affected the outcome. At the very least, the EU has not shown how they could.

1123. But even putting all of these flaws aside, the evidence is clear that Aeromexico remained loyal to Boeing, as it had always been an all-Boeing customer. As the United States noted 1474:

- [[HSBI]]. 1475
- [[**HSBI**]]. ¹⁴⁷⁶
- [[**HSBI**]]. 1477
- [[**HSBI**]]. 1478
- [[**HSBI**]]. 1479
- [[**HSBI**]]. ¹⁴⁸⁰

1124. Moreover, the EU suggests that the United States "has [[**HSBI**]]. 1481 The evidence the United States cited is clear on this point. [[**HSBI**]]. 1482 In addition, [[**HSBI**]]. 1483 Therefore, making a change would entail risk [[**HSBI**]] would want to avoid. And that is exactly what they did. True to the Airbus employee's prediction, they [[**HSBI**]].

¹⁴⁷³ EU SWS, para. 1429.

¹⁴⁷⁴ US FWS, para. 917.

¹⁴⁷⁵ [[**HSBI**]] (Exhibit EU-860(HSBI)).

¹⁴⁷⁶ [[**HSBI**]] (Exhibit EU-859(HSBI)).

¹⁴⁷⁷ See [[**HSBI**]] (Exhibit EU-859(HSBI)).

¹⁴⁷⁸ [[**HSBI**]] (Exhibit EU-866(HSBI)).

¹⁴⁷⁹ [[**HSBI**]] (Exhibit EU-866(HSBI)).

¹⁴⁸⁰ [[**HSBI**]] (Exhibit EU-859(HSBI)).

¹⁴⁸¹ EU SWS, para. 1432.

 $^{^{1482}}$ See [[${\bf HSBI}$]] (Exhibit EU-859(HSBI)).

¹⁴⁸³ [[**HSBI**]] (Exhibit EU-860(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 334

- 1125. For these reasons, and those in the U.S. first written submission, the EU has failed to establish that this sales campaign constitutes a lost sale.
- 1126. Finally, the EU's threat of significant lost sales allegation based on [[**HSBI**]] fails. ¹⁴⁸⁴ This argument is overly speculative and based on conjecture rather than facts given that [[**HSBI**]]. Accordingly, the EU has not demonstrated the type of imminent harm necessary to substantiate a threat of serious prejudice claim. ¹⁴⁸⁵

xiv. Lion Air

- 1127. The United States demonstrated that the EU first written submission failed to establish that the order of 5 787s by Lion Air in 2012 constitutes a lost sale, and the EU has now failed to rebut that demonstration.
- 1128. The EU raises for the first time with respect to this sales campaign pricing information of the type discussed in Section IV.H.4.a above. As explained above, the EU's pricing analysis in this regard is meaningless. Furthermore, as the United States has pointed out repeatedly, "aggressive pricing" in the abstract does nothing to demonstrate that Boeing's prices were impacted by subsidies, or that any impact of the subsidies that could be shown was significant enough to alter the outcome of the sales campaign.
- 1129. It is also irrelevant that Boeing [[HSBI]]. Such a discount would be rational and likely required because [[HSBI]]. This has nothing to do with subsidies and highlights perfectly the problem with the EU's methodology of trying to prove "aggressive pricing" instead of price concessions caused by subsidies.
- 1130. Moreover, the EU's recounting of the 787's availability to Lion Air includes no proof that, had it been offered later, the outcome of the sales campaign would have been different. Merely listing delivery dates is not proof that subsidies caused Airbus to lose a sale or a rebuttal of any kind.

5. Alleged displacement, impedance and threat of impedance

1131. The United States rebutted the EU's claims of displacement, impedance, and threat of impedance with respect to the A350 XWB by showing that those claims: were unsupported by evidence demonstrating clear trends; relied unduly on lost sales allegations; re-litigated resolved issues, and relied improperly on evidence pertaining to the A330 and Original A350. The EU has finally come forward with volume and market share data, but neither this nor its other

¹⁴⁸⁴ See EU SWS, para. 1434.

¹⁴⁸⁵ See EC – Large Civil Aircraft (AB), para. 1427.

¹⁴⁸⁶ US FWS, paras. 922-967.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 335

responses remedy the flaws in its arguments. It has accordingly failed to make a *prima facie* case on these points.

- 1132. At the outset, the United States recalls that the EU has failed to demonstrate the causation and lost sales allegations on which its displacement, impedance, and threat claims rely. The United States now turns to the EU's erroneous responses to the cross-cutting issues in the U.S. rebuttal.
- 1133. **Lack of evidence and reliance on lost sales.** The United States in its first written submission cited the EU's widespread failure to substantiate its impedance claims with market data sufficient to show changes in relative market share, over a sufficiently representative period, to demonstrate clear trends, as required for such claims under Articles 6.3(a) and (b) of the SCM Agreement. The United States also noted that many EU claims relied improperly on the mere recitation of lost sales allegations. Declaring these criticisms "moot," the EU has now presented its arguments with volume and market share data for the markets at issue. The EU does not explain why it waited until now to present these arguments, especially as they are based on information in the Ascend database included in the EU first written submission. It does so without any justification for withholding such a presentation from its first written submission, notwithstanding the fact that its first submission included the Ascend database but not argumentation marshaling the data therein. In any event, the data presented by the EU do not support its claims, as the United States demonstrates below.
- 1134. **Re-litigation of resolved issues.** The United States has noted that the EU raises impedance and threat of impedance claims in the U.S., Canadian, Japanese, Ethiopian, Icelandic, and Kenyan markets that were considered and rejected in the underlying proceeding. The EU responds with a distinction between claims and arguments. Whether a claim or an argument, these issues cannot be reargued to the extent related to other claims, including with regard to subsidization, that are not properly within the Panel's terms of reference.
- 1135. **Reliance on evidence pertaining to the A330 and Original A350.** As the United States observed, many EU claims still rely on sales campaigns that it alleged in the original proceeding were lost sales of the A330 or Original A350, which cannot support displacement, impedance or threat of impedance claims with respect to the A350 XWB. The EU responds with the unsupported assertion that "had Boeing's challenged 787 orders been won by Airbus instead,

¹⁴⁸⁷ See supra Sections IV.F, IV.G, IV.H.4.

¹⁴⁸⁸ US FWS, para. 924 (citing US – Large Civil Aircraft (AB), para. 1086).

¹⁴⁸⁹ US FWS, para. 925.

¹⁴⁹⁰ Cf. EU SWS, paras. 1528-1530.

¹⁴⁹¹ US FWS, para, 927.

¹⁴⁹² See EU SWS, paras. 1518-1520.

¹⁴⁹³ US FWS, para. 928.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 336

they would have been sales and deliveries of A350XWBs." ¹⁴⁹⁴ The EU in the original proceeding did not challenge these sales as lost by the A350 XWB, and it now provides no basis for certainty that it would have been able to convert all of those orders to A350 XWB orders, especially in light of the much later delivery times for the all-new A350 XWB.

1136. **Deliveries of the 787 versus the A350 XWB.** The EU's attempt to show present impedance in any market runs headlong into the need for delivery data and the fact that the A350XWB has yet to enter service. The EU contends that the Panel "should look to actual deliveries (*i.e.*, deliveries of the 787) to find present impedance – not counterfactual deliveries of the impeded aircraft (*i.e.*, deliveries of the A350 XWB) that would have taken place absent the US subsidies." The EU errs. Under Articles 6.3(a) of the SCM Agreement, the subject of the analysis is "imports of a like product of another Member," while under Article 6.3(b), it is "exports of a like product of another Member." In the LCA industry, "imports" and "exports" refers to deliveries of LCA. There are no deliveries of the A350 XWB that could presently occur absent the alleged subsidies, because the A350XWB has yet to enter service, and the EU has not even attempted to show that the aircraft would have entered service earlier absent the subsidies. Consequently, there can be no present impedance (or displacement).

1137. **Market share assumptions not based on evidence.** In its first written submission, the EU used "as a benchmark for assessing impedance and threat thereof in large volume markets whether Boeing's market share significantly exceeds 50 percent." The United States has observed that this is an invalid basis for assessing claims of impedance or threat of impedance. The EU now explains that it "does not rely on a fixed benchmark. Instead, it uses the common sense notion that, in a supply-side duopoly with two manufacturers of roughly equal size and resources and with similar product offerings, something is wrong where one manufacturer holds over a period of several years significantly more than 50 percent of the market in high volume country markets." This only underscores the inadequacy of the EU's benchmark. A "common sense notion" that "something is wrong" does nothing to demonstrate that, absent the alleged subsidies, sales and deliveries of the A350 XWB would increase in a particular country market. Indeed, something may not be "wrong" in a particular market, and even if it were, the question remains whether that "something" is the effect of the alleged

¹⁴⁹⁴ EU SWS, para. 1521.

¹⁴⁹⁵ US FWS, para. 967.

¹⁴⁹⁶ EU SWS, para. 1523.

¹⁴⁹⁷ SCM Agreement, Article 6.3(a).

¹⁴⁹⁸ SCM Agreement, Article 6.3(b).

¹⁴⁹⁹ EU FWS, para. 1582.

¹⁵⁰⁰ US FWS, para. 926.

¹⁵⁰¹ EU SWS, para. 1525.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 337

subsidies. The EU's intuition cannot substitute for evidence and argumentation that satisfy the elements of Articles 6.3(a) and/or (b).

- a. The EU Has Failed to Demonstrate Impedance or Threat thereof in the U.S. market under Article 6.3(a) of the SCM Agreement.
- 1138. The EU's claim under Article 6.3(a) regarding the U.S. market continues to rely on failed lost sales claims regarding Continental Airlines and Northwest Airlines that it cannot revive. Once those 37 future deliveries are removed from the EU's calculations of a 60 percent future delivery market share for Boeing from 2012 through 2022 (118 787s out of 198 total), Boeing and Airbus are even at 50 percent (81 for the 787 and 80 for the A350 XWB). As the EU's displacement and impedance arguments rely on this misguided "benchmark," they fail in light of this revised figure.
- 1139. Further, the market data presented by the EU shows A350 XWB market share rising steadily from zero in 2012 to 73% in 2020. The EU provides no basis believe the A350 XWB faces a present or future trend in which more deliveries would occur absent the alleged subsidies.
- 1140. The EU's sole remaining argument for higher counterfactual Airbus market share is the 2010 United Airlines campaign, but this is not a lost sale caused by the alleged subsidies, as the United States has demonstrated. ¹⁵⁰⁵
- 1141. Finally, as the United States confirmed above, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.
- 1142. For these reasons, the EU's arguments fail.
 - b. The EU Has Failed to Demonstrate Impedance or Threat thereof in Third-Country Markets under Article 6.3(b) of the SCM Agreement.
 - *i. Canada* (alleged threat of impedance)
- 1143. The EU is precluded from re-litigating this claim and the Air Canada (2005) lost sale claim on which it relies, ¹⁵⁰⁶ notwithstanding the EU's erroneous contention that it is unbound by

¹⁵⁰² Cf. EU SWS, para. 1533.

¹⁵⁰³ See EU SWS, paras. 1532-1533.

¹⁵⁰⁴ EU SWS, para, 1532.

¹⁵⁰⁵ See Section IV.H.4.f.xi.

¹⁵⁰⁶ US FWS, paras. 935-938.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 338

the resolution of these issues in the original proceeding. There is also no basis for the EU's assertion that, in the absence of subsidies, Airbus would have otherwise won the 2007 follow-on order by Air Canada, [[**HSBI**]]. Because these sales are the only sources of deliveries for the actual and projected delivery data presented by the EU, those market data cannot support the EU claim. Accordingly, the EU's arguments fail.

ii. Chile (alleged impedance and threat thereof)

- 1144. Although it has now presented market data, the EU makes clear that its claim in the Chilean market still rests on a single alleged lost sale campaign LAN Airlines (2007). As discussed in Section IV.H.4.f.vii, the EU has failed to establish that LAN's 787 orders were genuinely and substantially caused by the alleged subsidies. Therefore, because the EU's threat of impedance claim is a consequence of that alleged lost sale, it necessarily fails.
- 1145. Moreover, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.
 - *iii. China (alleged threat of impedance)*
- 1146. The EU's response to the U.S. rebuttal still relies on its unsubstantiated use of a 50 percent market share benchmark for assessing impedance in lieu of an actual demonstration that A350 XWB deliveries into the Chinese market would be higher absent the alleged subsidies. ¹⁵¹¹ As discussed, this cannot support a finding of a threat of impedance. ¹⁵¹² The EU also presents projected delivery data showing that sole possession of the Chinese "new technology twin-aisle market" will pass from Boeing to Airbus in 2019 but fails to explain how this is a "clear trend" supporting a threat of impedance finding. Accordingly, the EU's arguments fail.
 - iv. Ethiopia (alleged impedance and threat thereof)
- 1147. The EU is precluded from re-litigating this claim, ¹⁵¹³ notwithstanding the EU's erroneous contention that it is unbound by the resolution of this claim in the original proceeding. ¹⁵¹⁴

¹⁵⁰⁷ Compare EU SWS, para. 1543.

¹⁵⁰⁸ EU SWS, para. 1542.

¹⁵⁰⁹ EU SWS, para. 1541.

¹⁵¹⁰ EU SWS, paras. 1547-1549.

¹⁵¹¹ See EU SWS, para. 1551 (citing EU FWS, paras. 1592-1593).

¹⁵¹² See supra Section IV.H.5.b.

¹⁵¹³ US FWS, paras. 942-944.

¹⁵¹⁴ Compare EU SWS, para. 1556, with Section IV.D, supra; see also DSU, Art. 17.14; US – Upland Cotton (21.5) (AB), para. 210; EC – Bed Linen (21.5) (AB), para. 98; Mexico – Corn Syrup (21.5) (AB), para. 79.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 339

- 1148. Further, the EU confirms that the projected 787 delivery data are solely the result of the Ethiopian Airlines (2005) sale, ¹⁵¹⁵ which was found to be a lost sale for the A330 or Original A350. As discussed above, by failing to seek a finding that this sale was lost by the A350 XWB, and by now claiming that the alleged impedance and threat thereof are experienced solely by the A350 XWB, the EU cannot legitimately construe the 2005 sale to have been lost by the A350 XWB.
- 1149. Even if this claim could be revisited, the EU's projected delivery data are even less persuasive than what the Appellate Body rejected as inadequate in the original proceeding. The data show that, after a two-year gap in 2016-2017 with zero deliveries from either manufacturer, Airbus will gain 100% of this market. The EU has failed to explain how these data provide clear trends showing impedance or a threat thereof.
- 1150. Finally, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.
- 1151. For these reasons, the EU's arguments fail.
 - v. Iceland (alleged threat of impedance)
- 1152. The EU is precluded from re-litigating this claim, ¹⁵¹⁷ notwithstanding the EU's erroneous contention that it is unbound by the resolution of this claim in the original proceeding. ¹⁵¹⁸
- 1153. Further, the EU still relies on the future 787 deliveries flowing from the Icelandair (2005) sale, ¹⁵¹⁹ which was found to be a lost sale for the A330 or Original A350. As discussed above, by failing to seek a finding that this sale was lost by the A350 XWB, and by now claiming that the alleged impedance and threat thereof are experienced solely by the A350 XWB, the EU cannot legitimately construe the 2005 sale to have been lost by the A350 XWB.
- 1154. Even if this claim could be revisited, and unlike its attempts to remedy its other impedance claims, the EU does not even attempt to present data that would allow the Panel to assess whether sufficiently clear trends exist in the Icelandic market to support its claim. 1520
- 1155. For these reasons, the EU's arguments fail.

¹⁵¹⁵ EU SWS, para. 1554.

¹⁵¹⁶ EU SWS, para. 1554.

¹⁵¹⁷ US FWS, paras. 945-947.

¹⁵¹⁸ Compare EU SWS, para. 1559, with Section IV.D, supra; see also DSU, Art. 17.14; US – Upland Cotton (21.5) (AB), para. 210; EC – Bed Linen (21.5) (AB), para. 98; Mexico – Corn Syrup (21.5) (AB), para. 79.

¹⁵¹⁹ EU SWS, para. 1557.

¹⁵²⁰ Cf. EU SWS, paras. 1557-1559.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 340

vi. India (alleged impedance and threat thereof)

- 1156. The EU second written submission still relies on its unwarranted use of a 50 percent market share benchmark for assessing impedance in lieu of an actual demonstration that A350 XWB deliveries into the Indian market would be higher absent the alleged subsidies. This cannot support a finding of a threat of impedance. 1522
- 1157. The EU also presents projected delivery data showing that sole possession of the Indian "new technology twin-aisle market" will, after a five-year gap with zero deliveries from 2017 to 2021, pass from Boeing to Airbus in 2022 but fails to explain how this is a "clear trend" supporting a threat of impedance finding. Accordingly, the EU's claim fails.
- 1158. Finally, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.
 - vii. Japan (alleged impedance and threat thereof)
- 1159. The EU is precluded from re-litigating these claims and the ANA and JAL lost sales claims on which they rely, ¹⁵²³ notwithstanding the EU's erroneous contention that it is unbound by the resolution of these issues in the original proceeding. ¹⁵²⁴ There is also no basis for the EU's assertion that Airbus would have otherwise won any follow-on orders flowing from the original ANA and JAL orders of 787s.
- 1160. Further, the EU does not attempt to argue that, aside from these ANA and JAL sales, the market data show clear trends of impedance or a threat thereof. ¹⁵²⁵ Accordingly, the data cannot support the EU claim.
- 1161. Moreover, the EU's response to the U.S. rebuttal still relies on its unsubstantiated use of a 50 percent market share benchmark for assessing impedance in lieu of an actual demonstration that A350 XWB deliveries into the Japanese market would be higher absent the alleged subsidies. ¹⁵²⁶
- 1162. Finally, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.

¹⁵²¹ See EU SWS, para. 1560 (citing EU FWS, paras. 1598-1599).

¹⁵²² See, supra, Section IV.H.5.

¹⁵²³ US FWS, paras. 950-954.

¹⁵²⁴ Compare EU SWS, para. 1570, with Section IV.D, supra.

¹⁵²⁵ See EU SWS, para. 1567-1569.

¹⁵²⁶ See EU SWS, para. 1567 (citing EU FWS, paras. 1600-1603).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 341

viii. Kenya (alleged threat of impedance)

- 1163. Because the Appellate Body reversed the original panel's finding of a threat of displacement and impedance in the Kenyan 200-300 seat market, which included the 787, the EU is precluded from re-litigating this claim, 1528 notwithstanding the EU's erroneous contention that it is unbound by the resolution of this claim in the original proceeding. 1529
- 1164. Further, the EU confirms that the projected 787 delivery data are solely the result of the Kenya Airways (2006) sale, ¹⁵³⁰ which was found to be a lost sale for the A330 or Original A350. As discussed above, by failing to seek a finding that this sale was lost by the A350 XWB, and by now claiming that the alleged impedance and threat thereof are experienced solely by the A350 XWB, the EU cannot legitimately construe the 2005 sale to have been lost by the A350 XWB.
- 1165. Even if this claim could be revisited, it would be futile. By relying solely on orders from the 2006 Kenya Airways sale, the EU's projected delivery data are no more persuasive than what the Appellate Body rejected as inadequate in the original proceeding. The EU has failed to explain how these data provide clear trends showing a threat of impedance.
- 1166. For these reasons, the EU's arguments fail.
 - ix. Mexico (alleged threat of impedance)

1167. As the United States has shown, the EU failed to establish its threat of impedance claim in the Mexican market because its arguments rested solely on a single alleged lost sale campaign involving six 787 orders – Aeromexico (2012). The EU again relies on the Aeromexico sale in its second written submission. As explained above, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.H.4.f.xiii above and in the U.S. first written submission, the EU has failed to demonstrate that the 2012 Aeromexico sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

 $^{^{1527}}$ See US – Large Civil Aircraft (AB), paras. 1068, 1126, 1350(d)(1)(A)(5).

¹⁵²⁸ US FWS, paras. 955-956.

¹⁵²⁹ Compare EU SWS, para. 1573, with Section IV.D, supra; see also DSU, Art. 17.14; US – Upland Cotton (21.5) (AB), para. 210; EC – Bed Linen (21.5) (AB), para. 98; Mexico – Corn Syrup (21.5) (AB), para. 79.

¹⁵³⁰ EU SWS, para. 1571.

¹⁵³¹ US FWS, paras. 957-958.

¹⁵³² EU SWS, para, 1575-1576.

¹⁵³³ See US – Large Civil Aircraft (AB), para. 1241.

¹⁵³⁴ US FWS, paras. 916-918.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 342

1168. The only new thing about this claim is the EU's presentation of projected delivery data for the Mexican market. All the EU has to say about this is that "Boeing will make 100 percent of future deliveries of new technology twin-aisle LCA in Mexico." However, with projected 787 deliveries fluctuating between three and two over 2013-2015, declining to one in 2016, and then zero in 2017 and 2018, the market data bear a striking resemblance to those for the Kenyan and Ethiopian markets that the Appellate Body found inadequate in the underlying proceeding, despite sustaining lost sales findings for these markets. The EU does not, and cannot, provide a legitimate basis for sustaining its Mexican market claim where very similar data sets were rejected as inadequate by the Appellate Body.

1169. For these reasons, the EU's arguments fail.

x. Qatar (alleged impedance and threat thereof)

1170. As the United States has shown, the EU failed to establish its threat of impedance claim in the Qatari market because its arguments rested solely on a single alleged lost sales campaign involving six 787 orders – Qatar Airways (2007). The EU again relies on the Qatar Airways sale in its second written submission. As explained above, the Appellate Body has made clear that such a limited number of aircraft is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.H.4.f.iv above and in the U.S. first written submission, the EU has failed to demonstrate that the 2007 Qatar Airways sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

1171. Furthermore, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.

1172. Nor does the EU's belated presentation of market data support its threat claim. To the extent any trend can be identified from these data, it is one of growing Airbus dominance. The A350 XWB will enter service in 2014, which is also the last year that the 787 is projected by the EU to have greater market share than Airbus in the Qatari market. For each year from its first A350 XWB deliveries into Qatar in 2015 to 2017, Airbus is projected to deliver more aircraft

¹⁵³⁵ EU SWS, para. 1574.

 $^{^{1536}}$ US – Large Civil Aircraft (AB), paras. 1087 ("There were three deliveries in 2001, two projected for 2010, four projected for 2011, and three projected for 2012. We do not consider that this represents a clear trend either."), 1088 ("Although there was an increase in the number of deliveries in Ethiopia from 2009 to 2010, and this increase was projected to be sustained in the following years, deliveries were projected to fluctuate between two and three for 2011 and 2012. We are not entirely convinced that this is a clear trend.").

¹⁵³⁷ US FWS, paras. 959-960.

¹⁵³⁸ EU SWS, para. 1578-1579.

¹⁵³⁹ See US – Large Civil Aircraft (AB), para. 1241.

¹⁵⁴⁰ US FWS, paras. 871-876.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 343

into this market than Boeing. Starting in 2018, the A350 XWB is projected to take all market share through 2023. ¹⁵⁴¹ While this is an impedance, not a displacement claim, the data hardly show a clear trend of Airbus being hindered and obstructed when it is on its way to delivering 80 A350 XWBs and pushing Boeing completely out of the market for a six-year span.

1173. For these reasons, the EU's arguments fail.

xi. UAE (alleged threat of impedance)

1174. As the United States has shown, the EU failed to establish its threat of impedance claim in the UAE market because its arguments rested solely on alleged lost sales at Etihad (2008, 2011). ¹⁵⁴² a single alleged lost sales campaign involving six 787 orders – Qatar Airways (2007). ¹⁵⁴³ The EU again relies on the Etihad sales in its second written submission. ¹⁵⁴⁴ As explained above, the Appellate Body has made clear that such a limited number of sales is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. ¹⁵⁴⁵

1175. Moreover, as explained in Section IV.H.4.f.x above and in the U.S. first written submission, ¹⁵⁴⁶ the EU has failed to demonstrate that the Etihad sales constitute lost sales under Article 6.3(c) of the SCM Agreement.

1176. Nor can the EU's belated presentation of market data support its threat claim. ¹⁵⁴⁷ To the extent any trend can be identified from these data, it is one of Airbus growing rapidly from parity with Boeing (as each start with 50 percent share in 2014) to rapidly growing Airbus dominance: Airbus's share shoots up to 82 percent in 2015 and then remains at 60 percent or greater through 2020. ¹⁵⁴⁸ In terms of volume, A350 XWB deliveries are projected to increase steadily from two in 2014, to nine in 2015, to 12 in 2016, and then, after remaining at 12 in 2017, increase again to 19 in 2019. ¹⁵⁴⁹ While this is a threat of impedance claim (rather than a displacement claim), the data hardly show a clear trend of Airbus being hindered and obstructed when it is on its way to delivering 82 A350 XWBs and capturing two-thirds of the UAE market over the 2014-2022 period.

1177. For these reasons, the EU's arguments fail.

¹⁵⁴¹ EU SWS, para. 1578.

¹⁵⁴² US FWS, paras. 961-962.

¹⁵⁴³ US FWS, paras. 959-960.

¹⁵⁴⁴ EU SWS, para. 1582-1583.

¹⁵⁴⁵ See US – Large Civil Aircraft (AB), para. 1241.

¹⁵⁴⁶ US FWS, paras. 903-907.

¹⁵⁴⁷ Cf. EU SWS, paras. 1581-1582.

¹⁵⁴⁸ EU SWS, paras. 1581.

¹⁵⁴⁹ EU SWS, paras. 1581.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 344

xii. Indonesia (alleged threat of impedance)

- 1178. The EU's claim still relies solely on a 2012 Lion Air order for five 787s, and it remains unsupported by any presentation of delivery data over time that would allow for an assessment of market trends. This compares unfavorably to the Ethiopian and Kenyan market impedance findings that were reversed by the Appellate Body, each of which involved more orders and at least an attempt to show trends in the market data. 1551
- 1179. Moreover, as explained in Section IV.H.4.f.xiv above and in Section IV.H.4.c.xi of the U.S. first written submission, the EU has failed to demonstrate that the 2012 Lion Air sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.
- 1180. For these reasons, the EU's arguments fail.

xiii. Australia

- 1181. As the United States has observed, the EU's argument concerning the 787 deliveries into Australia was nothing more than a two-sentence passage asserting a U.S. failure "to remove that threat of displacement" found by the original panel and contending that future 787 deliveries "will displace EU exports to Australia." The EU now appears to make not only a threat of displacement claim, but also, for the first time, presents displacement, impedance, and threat of impedance claims in the Australian "new technology twin-aisle market." While this is consistent with the EU's tendency to obfuscate its sprawling claims and arguments, it is not consistent with principles of due process for a complaining Member to add new allegations of WTO-inconsistency after its first written submission. The Panel should accordingly reject the EU's attempt to expand even further the range of allegations in this dispute.
- 1182. The reason why the EU would seek to augment its threat of displacement claim with impedance and threat of impedance claims is obvious: the market data belatedly presented by the EU shows that, over the 2013 to 2015 period, Airbus's projected market share remains constant at zero, while a threat of displacement claim requires an imminent decline in market share. With the A350 XWB alleged to be the only Airbus model in the market, and no A350 XWBs actually having been delivered into the Australian market, Airbus has no market share to lose, and there can be no imminent and foreseeable change in circumstances to change the

¹⁵⁵⁰ Cf. EU SWS, paras. 1564-1566.

¹⁵⁵¹ See US – Large Civil Aircraft (AB), paras. 1068, 1126, 1350(d)(1)(A)(5).

¹⁵⁵² US – Large Civil Aircraft (AB), para. 1569.

¹⁵⁵³ See EU SWS, Heading V.G.8 (referring to "Displacement, impedance and threat of impedance"), para. 1538 ("To the extent that the Panel were to consider that this evidence does not support a finding of *present displacement*, the European Union submits that the evidence establishes present and future impedance in the Australian new technology twin-aisle market.") (emphasis added).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 345

situation. 1554 Accordingly, the EU's threat of displacement allegation, and present displacement allegation, to the extent one has been made, must fail.

- 1183. Even if it were permissible for the EU to raise new impedance and threat of impedance claims at this stage, the EU would be unable to sustain them. These ostensible EU claims are based solely on "outstanding deliveries of 787 family LCA to Qantas . . under the order that formed the basis for this finding." That Qantas order was, however, a lost sale for the Original A350, not the A350 XWB. Having declined before the original panel to request lost sales findings with respect to the A350 XWB, and now having confined its impedance and threat of impedance claims to the A350 XWB, the EU cannot legitimately treat the Qantas sale lost by the Original A350 as one lost by the A350 XWB.
- 1184. Moreover, the EU cannot demonstrate present impedance of the A350 XWB because there are no present deliveries to be impeded, nor would there be in the absence of the 787 from the market.
- 1185. For these reasons, the EU claims must fail, including those impermissibly raised for the first time in its second written submission.

c. Conclusion

1186. For the reasons set forth above, the EU has failed to overcome the U.S. rebuttal showing the EU's failure to establish that the effect of any allegedly unwithdrawn subsidies is displacement, impedance or threat thereof in any market under Articles 6.3(a) and (b) of the SCM Agreement.

I. The EU Still Has Failed to Demonstrate that Alleged Subsidies to the 737 MAX Cause Adverse Effects in the Form of Significant Price Suppression, Significant Lost sales, Impedance, or Threat of Impedance with Respect to the A320neo.

1. Alleged technology effects

1187. As demonstrated above and in the U.S. first written submission, the EU has failed to demonstrate that any technology spillovers from the 787 enabled Boeing to launch the 737 MAX earlier than it did. The EU's allegations of technology spillovers are incorrect. There would also be irrelevant even if they were accurate, since absent the R&D subsidies, the 787 and its technologies would have been available to the 737 MAX in sufficient time for it to enter the market as and when it did. Below, the United States discusses additional errors in the EU's

¹⁵⁵⁴ This contrasts with the situation before the original panel, where, after delivering A330s from 2002 to 2010, Airbus was projected to lose share in the 200-300 seat Australian market. *See US – Large Civil Aircraft (Panel)*, para. 7.1790.

¹⁵⁵⁵ EU SWS, para. 1537.

¹⁵⁵⁶ US FWS, paras. 971-991.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 346

arguments concerning alleged spillover and new technology effects associated with the 737 MAX.

a. Engine Integration/Coupling

- 1188. The United States and Boeing engineers demonstrated that the 737 MAX engine integration solution was not influenced by the 787 engine installation. In response, the EU and Airbus engineers refer to alleged spillovers from Boeing's CFD tools used on the 787, ¹⁵⁵⁷ but they do not even contest the Boeing engineers analysis that, absent R&D subsidies, the experience Boeing had with CFD codes on NASA projects would have been achieved by Boeing in six months. ¹⁵⁵⁸
- 1189. The EU and Airbus engineers also refer to Boeing comments and presentations that liken the 737 MAX and 787 engine installations. There is, however, no contradiction between these materials and the Boeing Engineers Statement:
 - [***] It would have made little sense for Boeing to [***] 1559
- 1190. Accordingly, the EU fails to support its technology effects arguments regarding the alleged spillover effects of subsidies to the 787 and 737 MAX engine integration technology.
 - b. Chevrons
- 1191. The Boeing engineers have explained that the 737 MAX does not use chevron nozzle technology from the 787:

1192. The Airbus engineers assert that that "the 787 and 737 MAX both use similar chevron technology," but they [***] that the two types of chevrons are used for different purposes. ¹⁵⁶¹ They cite a [***] in support of their position, ¹⁵⁶² but this is consistent with the Boeing Engineers Statement, as Boeing engineers explain.

We understand that the EU has also referred to Boeing statements likening the chevron nacelle ends on the 787 to those on the 737 MAX. Statements that chevron technology from the 787 is the same or similar to that of the 737 MAX

¹⁵⁵⁷ Airbus Engineers Statement, para. 92 (Exhibit EU-1014(HSBI)).

¹⁵⁵⁸ See Boeing Engineers Statement, para. 30 (Exhibit USA-283(BCI)).

¹⁵⁵⁹ Boeing Engineers Reply, paras. 32 (Exhibit USA-359(BCI)).

¹⁵⁶⁰ Boeing Engineers Statement, para. 56 (Exhibit USA-283(BCI)).

¹⁵⁶¹ Airbus Engineers Statement, paras. 97-98 (Exhibit EU-1014(HSBI)).

¹⁵⁶² Airbus Engineers Statement, paras. 95 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 347

[***] Indeed, while they describe the two aircraft as having "similar chevron technology," the Airbus engineers themselves understand the chevrons on the 787 and 737 MAX to have different purposes – cabin noise and community noise, respectively. [***]¹⁵⁶³

1193. Accordingly, the EU fails to support its technology effects arguments regarding the alleged spillover effects of subsidies to the 787 and 737 MAX chevron technology.

c. Flight deck displays

1194. The United States has demonstrated that there is no connection between the 737 MAX KC-46 DoD RDT&E funding, and that the 737 MAX flight deck displays are from the 787, not the KC-46. The EU disputes this, citing [[**HSBI**]]. The EU also maintains that real point of their argument is that "it was through the KC-46 programme (specifically, the 767-2C) that Boeing learned how to *integrate* the modern, 787 displays into a legacy architecture of its other LCA models." The EU also maintains that real point of their argument is that "it was through the KC-46 programme (specifically, the 767-2C) that Boeing learned how to *integrate* the modern, 787 displays into a legacy architecture of its other LCA models."

1195. The EU is drawing an unwarranted inference from [[**HSBI**]], and it is citing an integration learning effect that does not, in fact, exist. As Boeing engineers observe:

We explained previously that the 737 MAX primary displays are derived from those on the 787. We also explained that the "787 displays also served as the basis for the KC-46 displays, but there was absolutely no transfer of technology or learning from the KC-46 displays to those on the 737 MAX." We understand that the European Union has referenced Boeing presentations that it interprets to mean that the 737 MAX and KC-46 displays are identical. The Airbus engineers also refer to redacted information supposedly contradicting our observation that the 737 MAX and KC-46 displays are different devices. While we have not been provided with the information referenced by the European Union and Airbus, we suspect that they are misinterpreting similarities between the 737 MAX and KC-46 displays to mean that they are identical, which would be incorrect. To a point, this is understandable, since both sets of displays derive from those on the 787.

What is not understandable is the Airbus engineers' contention that the KC-46 program taught Boeing how to "integrate, the modern, 787 displays into a legacy architecture of its other LCA models." This is erroneous. Boeing did not need a DOD program to teach it how to integrate a commercial flight deck display into a 737NG systems architecture that Boeing has updated numerous times over the

¹⁵⁶³ Boeing Engineers Reply, paras. 33 (Exhibit USA-359(BCI)).

¹⁵⁶⁴ US FWS, paras, 986-988.

¹⁵⁶⁵ EU SWS, para. 1603.

¹⁵⁶⁶ EU SWS, para. 1604 (quoting Airbus Engineers Statement, para. 104 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 348

years. Further, there is no meaningful "legacy architecture" display integration challenge common to the 767 and the 737. Integrating 787-type displays into the 767 does not accelerate the process of integrating such displays into the systems architecture of the 737. ¹⁵⁶⁷

1196. Accordingly, there is no causal connection between DoD RDT&E funding for the KC-46 and the 737 MAX.

d. Tail Cone

1197. The United States has demonstrated that the EU's arguments about a technology spillover from the 787 tail cone to that of the 737 MAX are incorrect. The EU asserts that a comment from Boeing's John Hamilton shows that "Boeing's decision to change the shape of the 737 MAX tail cone stems from its experience in designing the 787." However, as the Boeing engineers observe, this comment and another press report do not contradict their prior statement:

"This does not contradict the Boeing Engineers Statement, which noted that Boeing [***]:

Boeing has decades of experience designing and producing conical tail cones. Over the years, the tail cones on Boeing's commercial aircraft have varied from the conical shapes on the 757 and 767, as well as the 787, to the blade-like shape on the 777. The 737NG represents a hybrid between cone and blade. On the 737 MAX, Boeing returned to the conical shape as part of improvements to the aft body designed to improve the steadiness of air flow and eliminate the need for vortex generators on the tail. The basis for the final 737 MAX tail cone design was [***] if the 787 did not exist, we would still have designed the 737 MAX tail cone as it is, in the same timeframe.

The Airbus engineers also cite a press report to the effect that the 737 MAX tail cone is "similar to the 787's," but as we discussed in our prior statement, the 737 MAX tail cone is similar to that of the 787 in the broad sense that they are both conical, as are the tail cones on the 757 and 767. 1570

1198. Thus, the EU has failed to establish a causal relationship between the R&D subsidies to the 787 and the design of the 737 MAX tail cone.

¹⁵⁶⁷ Boeing Engineers Reply, paras. 39-40 (Exhibit USA-359(BCI)).

¹⁵⁶⁸ US FWS, paras. 982-983.

¹⁵⁶⁹ EU SWS, para. 1598 (quoting Mr.Hamilton as follows: "It is more of the aero-line change in the back and so we have learned a lot with the 777 airplane and the 787 design using computational fluid dynamics.").

¹⁵⁷⁰ Boeing Engineers Reply, paras. 37-38 (Exhibit USA-359(BCI)) (citations omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 349

e. Fly-by-Wire Spoilers

1199. The EU and Airbus try to link the 737 MAX's fly-by-wire spoilers to 787 technology, but they fail to refute the Boeing engineers observation that "the 737 MAX is very different from that of the 787" because it uses a different systems architecture and suppliers. The Airbus engineers dismiss these as "small differences," contending that "the underlying concept of both is still the same." In fact, the differences are not small, and there is no meaningful commonality in terms of an "underlying concept", as the Boeing engineers explain:

{W}e confirm that, unlike the 787, [***] We also recall that the control architecture for the 737 MAX's FBW spoilers is most similar to the control architecture applied to the FBW spoilers on the 767 and 757.

The Airbus engineers dismiss the differences between the FBW spoiler system on the 737 MAX and that on the 787 – different configurations, different systems architectures, and different suppliers – as "small," contending that "the underlying concept of both is still the same." This strikes us as a meaningless statement. The "underlying concept" could only be the "same" if the concept is defined to mean FBW in the most generic sense, regardless of differences in configuration, systems architecture, and suppliers. By this logic, the underlying concepts of the analog FBW spoiler systems on the 767 and 757 are the same as the digital system on the 787. ¹⁵⁷³

1200. Thus, the EU has failed to establish a causal relationship between the R&D subsidies to the 787 and the design of the 737 MAX fly-by-wire spoilers.

f. Technologies allegedly linked to the CLEEN program: Multi-spar Winglets, VFAN, Adaptive Trailing Wing Edge, and RFID devices

1201. The United States has rebutted the EU allegations that alleged subsidies from the FAA CLEEN program enabled Boeing's development of winglet, variable fan area nozzle (VFAN), adaptive trailing wing edge, and RFID device technology for the 737 MAX. The EU does not contest that these technologies were not tested pursuant to the CLEEN contract – *i.e.*, the measure it challenges, ¹⁵⁷⁴ or that Boeing developed these technologies itself. This should end the analysis.

¹⁵⁷¹ Boeing Engineers Statement, para. 60 (Exhibit USA-283(BCI)).

¹⁵⁷² Airbus Engineers Statement, paras. 95 (Exhibit EU-1014(HSBI)).

¹⁵⁷³ Boeing Engineers Reply, paras. 34-35 (Exhibit USA-359(BCI)).

 $^{^{1574}}$ Cf. EU SWS, para. 1602; Airbus Engineers Statement, paras. 105-106, 112-113 (Exhibit EU-1014(HSBI)).

¹⁵⁷⁵ See Airbus Engineers Statement, paras. 105-106.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 350

1202. The EU and Airbus engineers attempt to circumvent this conclusion by arguing that these proprietary Boeing technologies, developed independently by Boeing, nevertheless "piggy-backed on the CLEEN-funded 737-800 flight testbed." In fact, the CLEEN program did not have any technology effects. At most, it *may have* contributed a tiny amount of funding for jet fuel used on *some* flight tests that tested technology [***]

1203. As Boeing engineers explain, the EU and Airbus engineers are making allegations about the effects of CLEEN that bear no resemblance to reality:

The Airbus engineers confuse the relationship between the CLEEN program and the 2012 ecoDemonstrator flight tests. They assert that "the 2012 ecoDemonstrator flight test was funded by CLEEN, would not have occurred but for CLEEN, and served as the platform for Boeing's independent additional testing of the researched technologies." This is inaccurate. While it is true that CLEEN existed as a program prior to the ecoDemonstrator program and created an opportunity for synergistic testing, both programs are separate and distinct programs with distinct work statements and segregated cost management. Boeing regularly conducts self-funded tests on Boeing flying test-bed aircraft, with the ecoDemonstrator program being the most recent example. The Airbus engineers therefore have no basis to suppose that we would not have flight-tested our own technology absent CLEEN funding.

The 2012 test bed aircraft was a pre-delivery 737-800 destined for American Airlines but owned by Boeing at the time of the flight tests. The FAA did not pay either Boeing or American Airlines for making this aircraft available for flight testing. FAA CLEEN funding paid for preparation of the aircraft/instrumentation specific to CLEEN test requirements, operation, fuel and support of the aircraft during 51.5 hours of dedicated adaptive trailing edge flight testing based in Glasgow, Montana, and an apportioned percentage of the post-test refurbishment costs of the aircraft to make it suitable for commercial operation with American Airlines.

On the majority of ecoDemonstrator flight tests – that is, another 50+ flight hours in Glasgow and additional flight tests out of Boeing Field in Washington State – the CLEEN program was not involved. Boeing paid for all of the costs of conducting the tests (which involved Boeing's own technology) and operating the aircraft (again, an aircraft it built and owned). It was on the ecoDemonstrator tests based at Boeing Field that we evaluated the multi-spar winglet that will be used on the 737 MAX. The winglet was not even installed on the test aircraft during the CLEEN phase of flight testing in Glasgow.

¹⁵⁷⁶ Airbus Engineers Statement, para. 106 (Exhibit EU-1014(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 351

Accordingly, for the Boeing multi-spar winglet, HLFC, RFID, and VFAN technologies tested on the ecoDemonstrator aircraft outside of a CLEEN contract, it is misleading for the Airbus engineers to state that they "piggy-backed on the CLEEN-funded 737-800 flight testbed." Great care was employed to segregate CLEEN costs from ecoDemonstrator costs, and at most, it is possible that CLEEN funded a small portion of the fuel cost incurred for VAFN during the Glasgow-based testing (which, again, did not involve the 737 MAX winglet). We find it unreasonable to suggest that this possible fuel cost contribution had a meaningful impact on Boeing's testing of these technologies, let alone on Boeing's ability to develop the 737 MAX and 777X as it has.

1204. Therefore, alleged subsidies from the CLEEN program do not have any genuine causal relationship with Boeing's testing of these technologies on the ecoDemonstrator or their application (or non-application) on the 737 MAX.

2. Alleged price effects

1205. In the original proceeding, only FSC/ETI and the Washington B&O tax rate reduction, on an aggregated basis (tied tax subsidies), and the Wichita IRBs, when cumulated with the aggregated tied tax subsidies, were found to result in lower Boeing 737 pricing (and it was the 737NG, as the MAX did not exist at the time). The United States demonstrated in its first written submission that, with FSC/ETI unquestionably withdrawn and not even alleged as a subsidy to the 737 MAX, the Washington B&O tax rate reduction is far too small to cause price reductions sufficient to cause the alleged market effects. The United States also demonstrated that the Wichita IRBs are far too small in isolation to cause price reductions sufficient to cause the alleged market effects. All other alleged subsidies to the 737 MAX, which were not found to cause price effects in the original proceeding, are not properly before this Panel and, in any event, have not been shown to cause price effects of any kind. Therefore, the EU's claim that U.S. subsidies to the re-engined 737 MAX are now causing lower Boeing prices that result in serious prejudice is meritless. The EU has failed to rebut that demonstration.

1206. In response to U.S. allegations about the insufficient magnitudes of price effects subsidies the EU second written submission does not put forward a detailed analysis of the magnitude of the subsidies it alleges and an explanation of how that magnitude translates into market effects. Instead, the EU argues that previous Appellate Body guidance absolved the EU of its responsibility to prove that subsidies are indeed of sufficient magnitude to be causing adverse effects through a price causal mechanism and that the U.S. magnitude calculations improperly excluded subsidies and suffered from a methodological error. The EU is mistaken on all counts.

¹⁵⁷⁷ Boeing Engineers Reply, paras. 43-47 (Exhibit USA-359(BCI)) (citations omitted).

¹⁵⁷⁸ See EU SWS, paras. 1605-1620.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 352

a. The EU has failed to demonstrate that the nature and magnitude of the alleged subsidies are capable of and are causing 737 MAX price effects.

1207. The EU criticizes the U.S. demonstration that the magnitudes of the price effects subsidies properly before this panel, if unwithdrawn, are too small to cause the market phenomena alleged by the EU. The United States notes that the EU bears the burden of demonstrating that the subsidies it asserts as having a price-based causal mechanism are actually causing adverse effects, and that for such a mechanism, the magnitude of the subsidy (and the portion of that magnitude causing lower prices) is a critical factor. Therefore, even if the EU's criticisms of the U.S. magnitude analysis were valid – and they are not – the EU still must do more. It fails to do so.

1208. The United States previously criticized the EU for its failure to demonstrate that the subset of subsidies specifically alleged to cause 737 MAX price effects are doing so. The EU characterizes the U.S. objection as one to cross-referencing. The United States does not oppose cross-referencing where it addresses the relevant issues. The problem identified in the U.S. first written submission is that the sections cross-referenced by the EU in its model-specific price effects sections do not address the relevant issue. Thus, instead of demonstrating that subsidies to the 737 MAX are causing price effects, the EU cross-references a general price effects discussion, which does not contain 737 MAX-specific analysis and therefore does not account for the fact that not all subsidies are alleged to impact 737 MAX pricing. ¹⁵⁷⁹

1209. The EU second written submission now provides for the first time a table listing the subsidies it is alleging to specifically cause lower 737 MAX prices. But this list fails to fully clarify what the EU is alleging because it includes R&D subsidies that the EU asserts elsewhere in its submissions to cause technology effects. As the EU recognizes that subsidies causing price effects cannot also cause technology effects, and *vice versa*, this table simply creates confusion. ¹⁵⁸¹

1210. Even ignoring this lack of clarity for the moment and taking the list at face value, the EU argument that the listed subsidies to the 737 MAX are of a magnitude sufficient to cause serious prejudice is limited to vague and unsupported statements, such as its assertion that they are "large by any reasonable measure, and sufficient to cause the adverse effects at issue." ¹⁵⁸² In lieu of actually demonstrating that the magnitude of the subsidies is sufficient to cause the alleged 737 MAX price effects, the EU argues: "As the Appellate Body explained in the original proceedings, 'the absolute value or size of a subsidy may not correspond directly to the impact

¹⁵⁷⁹ See, e.g., EU FWS, paras. 1626-1629.

¹⁵⁸⁰ EU SWS, para. 1608.

¹⁵⁸¹ See, e.g., EU FWS, paras. 961, 964, 981 (alleging that the FAA CLEEN program is causing technology effects).

¹⁵⁸² EU SWS, para. 1617.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 353

that the subsidy may have in causing adverse effects', such that '{s}ubsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market'." ¹⁵⁸³

1211. The omitted portions of the quoted paragraph are critical. The entirety of the paragraph reads as follows:

The Appellate Body has stated previously that, while the magnitude of subsidies is important, precise quantification is not an indispensable part of a serious prejudice analysis. Moreover, the absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects. Subsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market. We understand the Panel to have found this to be the case as regards the effects of the aeronautics R&D subsidies. ¹⁵⁸⁴

- 1212. Thus, the magnitude of the subsidies *is* important. In addition, just because precise quantification is not indispensable does not mean that a complaining party can meet its burden without even a rough quantification of the magnitude and an explanation of why that magnitude is sufficient given the nature and context of the subsidies.
- 1213. Moreover, of critical importance, the Appellate Body does not say that all subsidies have effects disproportionate to their size. Rather, it states that this *may* be the case, allowing that subsidies may have an effect commensurate with or even less than their size would indicate. The original panel found that the R&D subsidies acting through a technology causal mechanism at issue in the original proceeding had an effect greater than their size, but made no such finding for subsidies acting through a price mechanism. The complaining party must demonstrate that, due to their nature, the subsidies at issue are among those that do in fact have disproportionately large effects.
- 1214. The R&D subsidies in the original proceeding were found to have disproportionate effects relative to the face value of the subsidy because receipt of the subsidy was determined to be the difference between the research going forward and not. But the EU has not demonstrated that price effects are likewise disproportionate relative to the cash value of the subsidies. Indeed, such a contention could not be sustained in light of the EU's price effects theory.
- 1215. According to the EU's price effects theory, Boeing uses subsidies to reduce its prices, which in turn causes Airbus to suffer serious prejudice. ¹⁵⁸⁶ The cash value of a subsidy therefore

¹⁵⁸³ EU SWS, para. 1618 (quoting *US – Large Civil Aircraft (AB)*, para. 1006).

¹⁵⁸⁴ US – Large Civil Aircraft (AB), para, 1006 (internal citation omitted).

¹⁵⁸⁵ See US – Large Civil Aircraft (AB), para. 945; US – Large Civil Aircraft (Panel), para. 7.1760.

¹⁵⁸⁶ See EU FWS, para. 1112.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 354

represents the *maximum* that Boeing could conceivably lower prices if it applied the entirety of the subsidy to that purpose.

- 1216. Of course, the EU has not made an affirmative showing that, to the extent that R&D or miscellaneous subsidies are not withdrawn, any such subsidies would be used by Boeing to lower prices in strategic sales campaigns. In the original proceeding, the EU tried and failed to demonstrate that R&D subsidies can and do cause price effects. In this compliance proceeding, the EU does not even try. Instead it just assumes that if (certain unspecified) R&D subsidies left Boeing with more cash than it would have, then Boeing necessarily will use them to lower prices and that the subsidies (or the portion of subsidies used for this purpose) are large enough to fund price reduction sufficient to have the indicated effects. The EU puts forth no evidence or economic theory to support this assumption. The EU also failed to show than each of the miscellaneous subsidies would cause Boeing to lower 737 MAX prices. As explained in Section VI.G, standard economic principles indicate that these subsidies that are not tied to sales, and therefore do not increase in proportion to increases in sales, do not affect pricing decisions in the absence of capital constraints, which the EU has not alleged, much less proven.
- 1217. Furthermore, even if the EU had shown that such untied subsidies would be used to lower 737 MAX prices, the EU does not explain what proportion of the subsidy would be applied by Boeing to lower prices, as opposed to other uses. This step which the EU also at least attempted in the original proceeding is critical because it potentially reduces the amount of price reductions that flow from the subsidies.
- 1218. Yet, the EU does none of this. It does not attempt to demonstrate that R&D subsidies or miscellaneous subsidies would be used to lower prices, much less the portion of the subsidies that would be put this use. The EU does not even attempt to show that, even if all alleged price effects subsidies were applied in their entirety to lowering prices, they would be sufficient in the context of this industry to genuinely and substantially cause lost sales, price suppression, displacement, or impedance. In short, the EU does not attempt to do the minimum necessary to prove that the alleged price effects subsidies cause serious prejudice. Therefore, the EU's 737 MAX price effects arguments necessarily fail.
 - b. The EU's price effects argument is based on the improper inclusion of subsidies and improper aggregation and cumulation analyses.
- 1219. The EU contends that the U.S. analysis of the magnitudes of price causal mechanism subsidies improperly excludes some of the relevant subsidies. According to the EU, the United States should have considered all of the subsidies listed in its table on a collective basis. The EU's position is based on its erroneous inclusion of subsidies not properly before

¹⁵⁸⁷ See EU SWS, para. 1613.

¹⁵⁸⁸ EU SWS, para. 1615.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 355

this Panel, subsidies not shown to cause price effects, improper aggregation of subsidies, and improper cumulation of subsidies. Therefore, the EU's criticisms of the U.S. analysis fail.

- 1220. First, the EU's list of subsidies alleged to cause 737 MAX price effects includes the Washington B&O tax credit for preproduction/aerospace product development, Washington B&O tax credit for property taxes, and Washington sales and use tax exemptions. The EU challenged these measures in the original proceeding and failed to establish that any of them constituted actionable subsidies causing adverse effects. As a result, the United States had no compliance obligations with respect to these measures. The EU cannot re-litigate in this compliance proceeding what it failed to establish in the original proceeding. Moreover, as these are the same measures addressed by the original panel, they cannot also be measures taken to comply. As the EU's 737 MAX price effects argument relies on the improper inclusion of these measures, it necessarily fails.
- 1221. Second, the EU's list of subsidies alleged to cause 737 MAX price effects includes R&D subsidies. The EU tried to establish in the original proceeding that R&D subsidies were causing price effects but was unsuccessful. As discussed above and in Section VI.C, it is not clear which R&D subsidies the EU is alleging to have price effects. However, to the extent that any of the R&D subsidies alleged to have price effects were raised in the original proceeding or could have been, the EU cannot properly raise them in this compliance proceeding.
- 1222. Third, the EU's list of subsidies alleged to cause 737 MAX price effects includes South Carolina measures, the Washington JCATI, and the Washington B&O tax credit for leasehold excise taxes. As explained above and in the U.S. first written submission, these measures were not subject to the DSB's recommendations and rulings, are not measures taken to comply, and are not actionable subsidies for the purpose of the SCM Agreement. As the EU's 737 MAX price effects argument relies on the improper inclusion of these alleged subsidies, it necessarily fails.
- 1223. Not only does the EU erroneously include all of these subsidies in its price effects argument, but it does so based on a flawed application of the Appellate Body's aggregation test. The United States demonstrated the EU's aggregation errors in Section IV.E.1, but it bears repeating that the (unspecified) technology effects R&D subsidies and the (unspecified but different) price effects R&D subsidies clearly cannot be aggregated with one another based on the EU's acknowledgement that a common causal mechanism is a requirement for aggregation. The United States also demonstrates in Section IV.E.2 that the EU has either improperly applied the Appellate Body's cumulation guidance or has failed to explain the mechanics of its novel proposal for collective assessment of subsidies.

¹⁵⁸⁹ EU SWS, para. 1608.

¹⁵⁹⁰ See EU SWS, para 931.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 356

- 1224. For all of these reasons, the EU has failed to demonstrate that subsidies to the 737 MAX cause serious prejudice through a price causal mechanism. And because the EU's argument relies on a vague assessment of this flawed group of subsidies and lacks a detailed analysis of individual subsidies or even aggregated groups of subsidies, it cannot succeed under any other analytical framework (*e.g.*, if some subsidies are excluded, under a different aggregation analysis, or under a different cumulation analysis).
 - c. The EU's objection to the methodology underlying the U.S. magnitude calculations is erroneous.
- 1225. In addition to the exclusion of subsidies addressed in the preceding sub-section, the EU objects to the methodology underlying the U.S. magnitude calculations. Specifically, the EU argues that "{w}hile the US tax subsidies in question are tied to sales revenue which, the original panel and Appellate Body recognised, is received by Boeing in major part only when the aircraft is *delivered* the United States divides the subsidy magnitude by *orders* to derive its peraircraft magnitude." This argument cannot withstand scrutiny.
- 1226. According to the EU's price effects theory, Boeing uses the subsidy to lower 737 MAX prices in strategic sales campaigns. It stands to reason that the effects of the subsidies the lowering of prices would have to take place when the prices are negotiated at the time of the order.
- 1227. Moreover, even if the EU's argument were valid, it would apply only to the tied tax subsidies, as these are the only subsidies that are received to a greater extent (or with reference at all to) when the aircraft is delivered. And even then, to maintain consistency between the numerator and denominator, one would have to include all of the deliveries during the reference period of aircraft ordered in strategic sales campaigns prior to the reference period.
- 1228. Therefore, the U.S. calculations remain valid and probative of the implausibility that subsidies are causing serious prejudice through lower 737 MAX prices. In fact, there are two refinements that are appropriate, and they undermine the EU's case further.
- 1229. First, the United States understood the EU to allege that the Wichita IRBs affect only the 737 MAX and 737NG, and thus allocated the annual subsidy value across the 1,467 aircraft 737 variants (1,057 737 MAXs and 410 737NGs) ordered in sales campaigns alleged by the EU to be significant lost sales. The EU's table now makes clear that it is alleging the Wichita IRBs to

¹⁵⁹¹ EU SWS, para. 1619 (emphases original) (internal citations omitted).

¹⁵⁹² See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations, Exhibit USA-295(HSBI)); US FWS, para. 1000. To recall, these aircraft totals were conservative in several ways. First, the United States did not include any options or purchase rights, even though the prices (and therefore any price reductions) are set at the time of the order. Second, the United States did not include allocate any of the subsidy values to aircraft in sales campaigns where Airbus won the sale and that contribute to the EU's price suppression claims. Likewise, the United States did not attempt to allocate any of the subsidy values to aircraft

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 357

affect 787 pricing as well. ¹⁵⁹³ Therefore, the subsidy value should have been allocated across the 1,830 Boeing aircraft ordered in all sales campaigns alleged by the EU to be lost sales. This adjustment alone reduces the value of the Wichita IRBs from \$36,000 per aircraft to \$29,000 per aircraft. ¹⁵⁹⁴

- 1230. Second, in its second written submission, the EU alleges three new lost A350 XWB sales, which include an additional 58 787 orders, and one new lost A320neo sale, which includes 60 737 MAX orders. This brings the total Boeing aircraft in lost sales campaigns to 1,948. This would reduce the value of the Wichita IRBs further to \$27,000. 1596
- 1231. And this second refinement helps illustrate a problem with the EU's theory, at least as it relates to untied subsidies (*i.e.*, R&D subsidies and miscellaneous subsidies). The increase in strategic sales campaigns results in the subsidy becoming less significant and less likely to have any effect because the subsidy value does not increase in proportion to increases in sales.
- 1232. In any event, these intricacies are mostly beside the point since the per aircraft dollar amounts are so miniscule in relation to the price of the aircraft that even if the subsidies were applied in their entirety to lowering prices, it is simply implausible that they could genuinely and substantially cause the market phenomena alleged by the EU.

3. Significant price suppression

- 1233. In its first written submission, the United States demonstrated that the EU had failed to establish significant price suppression with respect to the A320neo because:
 - a. it failed to demonstrate the requisite genuine and substantial causal link, under either a technology effects or price effects theory; 1597
 - b. it provided family-based pricing data evincing no discernible impact of the 737 MAX on A320neo prices, while it continued to withhold the model-specific pricing data requested by the Panel under Article 13 of the DSU; 1598

sales that are included in the EU's displacement and impedance claims except to the extent that they overlap with the EU's lost sales claims.

¹⁵⁹³ See EU SWS, paras. 1072, 1145.

 $^{^{1594}}$ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

¹⁵⁹⁵ EU SWS, paras. 1260, 1274, 1289, and 1628.

¹⁵⁹⁶ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

¹⁵⁹⁷ US FWS, para. 1001.

¹⁵⁹⁸ US FWS, para. 1003-1004.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 358

- c. it failed to show that the situation with A320neo prices is genuinely and substantially caused by the alleged subsidies, rather than competition from existing single-aisle LCA; Airbus's [[HSBI]] that preceded the 737 MAX's market entry; and Airbus's related strategy of pursuing existing Boeing customers at account after account: 1599
- d. it failed to show that any price suppression properly attributable to the alleged subsidies is "significant" under Article 6.3(c) of the SCM Agreement. ¹⁶⁰⁰

1234. The EU's response not only fails to overcome the U.S. rebuttal, it actually admits that A320neo prices were suppressed by customers' speculation that Boeing *might* develop a reengined single-aisle aircraft, not by Boeing's offer of the 737 MAX incorporating technology allegedly enabled by R&D subsidies and not by Boeing's alleged use of subsidies to lower prices. Below, the United States discusses this along with other flaws in the EU's arguments.

a. Causation

1235. The EU has failed to establish that, absent the alleged subsidies, Boeing would have been unable to offer the 737 MAX as and when it did, or that 737 MAX prices would be higher to a degree that would result in significant price suppression, as demonstrated above in Sections VI.F and VI.G and in the U.S. first written submission.

b. Pricing Data

1236. *First*, the United States observes that, as with A350 XWB pricing data, the EU still refuses to comply with the Panel's Article 13 request for model-specific order price information. It does not deny its failure to comply. Instead, it attempts to provide reasons why the Panel should ignore its withholding of the data. None are valid.

1237. *Second*, the United States recalls that the available A320neo pricing data show [***]. ¹⁶⁰⁴ [***] The EU's explanation of these data as "the market expectation of a competitive response from Boeing". ¹⁶⁰⁶ is fatal to its price suppression claim.

¹⁵⁹⁹ US FWS, paras. 1005-1008.

¹⁶⁰⁰ US FWS, paras. 1004, 1006.

¹⁶⁰¹ See EU SWS, para. 1810.

¹⁶⁰² Compare US FWS, para. 1003, and EU Responses to Article 13 Questions (Feb. 28, 2013), Question 6, with EU SWS, paras. 1805-1807.

¹⁶⁰³ EU SWS, paras. 1805-1807.

¹⁶⁰⁴ US FWS, para. 1004.

¹⁶⁰⁵ EU SWS, para. 1813; US FWS, para. 1004; Price Per Seat Evolution of Net Order Intakes of A330, A320ceo, and A350 XWB family LCA (Exhibit EU-690(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 359

1238. Citing to the Appellate Body's observation that the single-aisle LCA market has been "very competitive" historically, the EU contends that pricing for the A320neo prior to the market entry of the 737 MAX reflected customers' speculation that Boeing would launch a "new technology single-aisle" competitor to the A320neo before "very long." The EU relies on faulty logic, rather than evidence, for this theory. Even if true, it implies that A320neo prices have not been suppressed by the alleged subsidies. Customer expectations about the market entry of an unidentified and unlaunched aircraft, 1608 based on the history of competition in the single-aisle market, are not an effect of the alleged subsidies. Indeed, customer expectations could have been based on an aircraft entirely different from the 737 MAX [***] Because [***] there is strong evidence that the A320neo's prices were not suppressed by the alleged subsidy-enabled technology and pricing of the 737 MAX.

1239. Here, the United States notes that the EU is wrong to contend that the U.S. arguments concerning pricing and price trends "do not address, and therefore cannot rebut," the EU's arguments based on its technology effects causation theory. ¹⁶¹⁰ If the alleged technology effects of subsidies to the 737 MAX are supposed to have enabled it to enter the market earlier, and with more attractive features, than would otherwise be the case, this effect should be observable based on a comparison of A320neo prices from before and after the 737 MAX's entry. [***] is one of several reasons to reject the EU's claim.

1240. The EU contends that [***] after the 737 MAX's market entry "strongly suggests the deficiency of the United States' premise regarding monopoly pricing." To be clear, the A320neo's status as a monopolist during late 2010 through mid-2011 is not a U.S. "premise" but a necessary implication of the EU's product market theory, which holds that the A320neo does not compete against the existing A320ceo or 737NG. In fact, customers did have the alternative of purchasing a very similar but less fuel-efficient aircraft, the A320ceo, during this period. Whether or not A320neo prices in this period were constrained by alternatives (such as the A320ceo), the fact remains that they are reflective of the 737 MAX's absence from the market and therefore provide a good test of the EU's theory as to whether A320neo prices would be higher absent the alleged subsidies. The answer: [***]

¹⁶⁰⁶ EU SWS, para. 1811.

¹⁶⁰⁷ EU SWS, para, 1810.

 $^{^{1608}}$ See EU SWS, para. 1809 (referring to the absence of the 737 MAX from the market as "the absence of an identified and launched competitor").

¹⁶⁰⁹ Boeing Engineers Statement, paras. 46-47 (Exhibit USA-283(BCI)).

¹⁶¹⁰ Cf. EU SWS, para. 1803.

¹⁶¹¹ EU SWS, para. 1813.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 360

c. Non-subsidy factors

- 1241. The United States previously demonstrated that the EU's price suppression claim was undermined by significant non-subsidy factors affecting A320neo pricing: competition from existing single-aisle LCA, including Airbus's own A320ceo; [[HSBI]]; and Airbus's strategy of targeting the A320neo at key Boeing accounts. The EU fails to rebut these arguments.
- 1242. The EU's first response concerning these factors is to misstate, once again, the Appellate Body's guidance as having rejected the "premise underlying the US argument" and to mistake that premise. The relevant guidance from the Appellate Body is that a subsidy may be a genuine and substantial cause of a market phenomenon giving rise to adverse effects even if other, nonsubsidy factors were also genuine and substantial causes of that phenomenon. The United States is not arguing that the cited non-subsidy factors are affecting A320neo prices *in addition to* the effects from the alleged subsidies. Rather, the United States denies that the alleged subsidies are a genuine and substantial cause of the alleged significant price suppression, and it has identified non-subsidy factors that substantially account for the market situation cited by the EU. This is in keeping with the Appellate Body's guidance that a panel should take care that the effects of other factors should not be mistakenly attributed to the effects of subsidy. 1612
- A320neo prices as unaffected by competition from the A320ceo and the 737NG. ¹⁶¹³ It refers to the statement of Airbus's Christophe Mourey as confining current generation single-aisle to a "niche" but fails to address the logical implication of his analysis that customers will substitute an A320ceo or 737NG for an A320neo where the latter is not available. ¹⁶¹⁴ Further, the significant constraints from current single-aisles on A320neo pricing are evident from the fact that, long before Boeing announced the 737 MAX, Airbus based A320neo pricing on the existing A320ceo, and set this price "premium" at "one-half the net present value of the 15% fuel savings the aircraft would deliver over today's generation of A320s and Boeing's 737s." ¹⁶¹⁵ If Airbus's A320neo pricing did not face significant constraints from the A320ceo and 737NG, it would not give away to customers half of the NPV of the A320neo's fuel burn improvement.
- 1244. [[**HSBI**]]. As the United States demonstrated previously, Airbus [[**HSBI**]] and [[**HSBI**]]. In response the EU repeats its mantra of "subsidy-enabled aggressive 737 MAX pricing," but the evidence shows [[**HSBI**]], that the supposedly aggressive 737 MAX

¹⁶¹² US – Large Civil Aircraft (AB), para. 984.

¹⁶¹³ EU SWS, paras. 1818-1821.

¹⁶¹⁴ Mourey Statement, paras. 91-92 (Exhibit EU-34(BCI)).

 $^{^{1615}}$ A320 NEO to have \$7-8 Million Price Premium, Scott Hamilton, Flight International (Aug. 23, 2010) (Exhibit USA-361).

¹⁶¹⁶ US FWS, para. 1007; [[**HSBI**]] (Exhibit EU-881(HSBI)); [[**HSBI**]] (Exhibit EU-889(HSBI)).

¹⁶¹⁷ EU SWS, para. 1825.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 361

pricing [***], and as discussed below, ¹⁶¹⁸ that there is no basis for finding 737 MAX pricing to be subsidy-enabled or aggressive in any way that deviates from normal commercial behavior. conditions before the

1245. *Incumbency.* The EU discounts the effects on A320neo pricing of Airbus's systematic pursuit of Boeing single-aisle customers. As shown in the following section, however, incumbency *has* affected the pricing conditions of which Airbus complains (both through the value of fleet commonality between the 737NG and 737 MAX, and general customer relationships considerations), and Airbus *did* in fact choose to pursue longstanding Boeing customers and the aggressive pricing that such a strategy would require.

d. "Significant" price suppression

1246. Related to the EU's flawed treatment of non-subsidy factors is its continued failure to even attempt a demonstration that the alleged subsidies are causing price suppression that is "significant" within the meaning of Article 6.3(c) of the SCM Agreement. The EU does not even attempt to satisfy this element of its *prima facie* case.

1247. In light of the above demonstration, the EU has failed to overcome the U.S. rebuttal to its claim of significant price suppression regarding the 737 MAX.

4. Significant lost sales

1248. The EU continues to rest its argument that it lost sales as the result of Boeing's receipt of subsidies on three pillars: that subsidy-enabled, "aggressive pricing"; "early availability"; and technology features of the 737 MAX, were each a genuine and substantial cause of Airbus's lost sales across a number of different sales campaigns. As discussed below with regard to each sale, none of these pillars supports the EU's argument.

1249. *First*, the EU has put forward no evidence that Boeing's pricing behavior during a single one of the sales campaigns at issue was influenced or enabled by its receipt of alleged subsidies. Instead, the EU describes in campaign after campaign the ordinary commercial behavior of a profit-maximizing market actor. The EU has not provided any basis to compare Boeing's supposed aggressiveness in these sales campaigns to how it might have priced the 737 MAX absent the receipt of the alleged subsidy. Nor has it distinguished Boeing's pricing behavior from Airbus's, despite evidence in each sales campaign that the two manufacturers deploy comparable pricing strategies and techniques. More importantly, of course, the EU has failed to articulate any causal relationship between the price effects it alleges elsewhere in its second written submission and Boeing's actual pricing practices described with regard to each sale.

¹⁶¹⁸ See Section IV.I.4.

¹⁶¹⁹ Compare EU SWS, para. 1829-1834.

¹⁶²⁰ Compare US FWS, paras. 1004, 1006, with EU SWS, paras. 1798-1836.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 362

- 1250. As Airbus's Senior Vice President Christophe Mourey explained, there is a "fierce" competition between Airbus and Boeing LCA in this market segment, ¹⁶²¹ including "very intense" competition between the A320neo and 737 MAX, and that competition manifests itself through both manufacturers' deployment of an array of pricing strategies and negotiation techniques. These include, as described by Mr. Mourey, "extreme price discounting"; ¹⁶²² [***]; ¹⁶²³ and price escalation protection. ¹⁶²⁴ Mr. Mourey describes these and related pricing practices as central to the LCA industry: ¹⁶²⁵ [***]. ¹⁶²⁶
- 1251. Yet the only evidence the EU cites for the proposition that Boeing's receipt of subsidies were a genuine and substantial cause of Airbus's lost sales consists of descriptions of Boeing's "aggressive pricing," *i.e.*, the very strategies and techniques. Accordingly, the EU has identified nothing more than ordinary commercial activity in this dynamic market, without any evidence that the alleged subsidies resulted in behavior different from that which Mr. Mourey describes as typical. On the contrary, as the EU evidence suggests, Boeing's "aggressive pricing" was [***], *i.e.*, not subsidy-enhanced, but rational and market-based. And Airbus itself employed the same general pricing strategy as Boeing. It has even [[HSBI]].
- 1252. *Second*, the EU has provided no evidence that the delivery positions offered by Boeing to its customers, in any case, were subsidy-enabled or a genuine and substantial cause of any lost sales to Airbus. Instead, the EU has repeated its main effects argument with respect to the 737 MAX, and argued (without support) that Boeing's customers would have purchased more A320 neo family LCA but for the timing of the 737 MAX's availability. This is an extraordinary claim, especially because the EU still does not explain how it calculates the alleged delay in the 737 MAX's market entry. Nor does it provide evidence as to how Boeing's customers would have behaved had the 737 MAX been delayed.
- 1253. Moreover, as Mr. Mourey explained, the decision to purchase an LCA is a complex one in which the buyer must weigh a myriad of interrelated factors. These include not just price and the availability of the aircraft, but also capacity; asset value expectations; residual value assumptions; disposal of used aircraft; "family concept"; engine manufacturers; guarantees; post-

¹⁶²¹ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²² [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²³ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²⁴ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²⁵ See [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²⁶ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²⁷ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶²⁸ E.g., [[**HSBI**]] (Exhibit EU-895(HSBI)) [[**HSBI**]].

¹⁶²⁹ [[**HSBI**]] (Exhibit EU-963(HSBI)) [[**HSBI**]]).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 363

sale support; financing; the cost of diversifying; and subjective factors. ¹⁶³⁰ Certainly the timing of delivery is a factor that buyers consider and may have considered in campaigns that the EU discusses, but the EU has failed to discuss how delivery was related to these other factors. For example, as the EU's evidence shows, delay concerns generally "increase" the attractiveness of slightly older but quickly available aircraft. ¹⁶³¹ And, indeed, in many of these cases both Boeing and Airbus were able to address availability concerns by providing current generation aircraft to bridge any availability gaps with current single-aisle LCA. The EU's claim is especially hard to untangle with any clarity because in many cases, both Boeing and Airbus would "bridge" the gap between order and delivery of the 737 MAX and A320neo, respectively, with the 737NG and A320ceo. The EU generally fails to address how the availability to customers of 737NG, in each case, would have affected sales outcomes if the availability of the 737 MAX *had* been delayed.

1254. Through its omissions, the EU conceals the critical fact of nearly every one of these campaigns: even assuming, *arguendo*, that Boeing's 737 MAX deliveries would have been later but for Boeing's receipt of subsidies, the buyers in these campaigns would not necessarily have purchased from Airbus. These other factors, including, especially, the "family concept," the cost of diversifying, and the comparative capacity/range of the LCAs, were the factors that drove the airlines decision-making. Accordingly, the EU has failed to demonstrate that availability of the 737 MAX was a genuine and substantial cause of any lost sales.

1255. *Third*, the EU suggests that subsidy-enabled technology "secured" the improvement of the 737NG to make the 737 more attractive to buyers. But this is essentially the same point made by the EU's availability theory, as even if the Panel finds that Boeing's receipt of alleged subsidies facilitated its development of technological enhancements to the 737NG, Boeing would have developed those enhancements in time. (The EU itself has even blurred the distinction between these two arguments). ¹⁶³² Therefore, the Panel's analysis of Airbus's lost sales claims should generally consider the EU's technology arguments in the context of the 737 MAX's availability to customers. However, in no case has the EU demonstrated that availability, including availability of 737 MAXs enabled by allegedly subsidized technology, was a genuine and substantial cause of any lost sales to Airbus.

1256. Further, the EU virtually ignores the U.S. argument that Boeing's past relationships with nearly every one of the airlines at issue was the key driver of those airlines' decision-making and the context in which all other factors must be considered. These relationships – and the attending benefits of incumbency that follow – are not trivial factors for Boeing and Airbus customers. They mean, in many of these cases, all-Boeing or predominantly Boeing fleets, and, as Airbus was well-aware, that meant a nearly insurmountable obstacle. 1633 Nevertheless, in the one sales

¹⁶³⁰ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶³¹ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶³² EU SWS, para, 1648.

 $^{^{1633}}$ E.g., [[$\bf HSBI$]] (Exhibit EU-885(HSBI)) ([[$\bf HSBI$]]; [[$\bf HSBI$]] (Exhibit EU-897(HSBI)) ([[$\bf HSBI$]]).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 364

campaign identified by Airbus in which Boeing, not Airbus, successfully disrupted a longstanding Airbus relationship and all-Airbus fleet, [[**HSBI**]]. ¹⁶³⁴ Nevertheless, in all *other* cases in which airlines with longstanding Boeing ties (and all-Boeing or predominantly Boeing fleets) make their purchasing decision based on these factors, the EU maintains that it is Boeing's "aggressive pricing" and subsidy-enabled availability and technology that dictate outcomes. In its view, [[**HSBI**]], ¹⁶³⁵ but only if the commonality is Airbus LCA.

a. American Airlines

1257. As the United States discussed in its first written submission, Airbus's American Airlines sales campaign [[**HSBI**]]. ¹⁶³⁶ It not only made sales to a longstanding, "exclusive Boeing customer," but also [[**HSBI**]] than it ever intended to. ¹⁶³⁷ Specifically, [[**HSBI**]]. ¹⁶³⁸ Therefore, contrary to there having been any "lost' sales by Airbus, [[**HSBI**]].

1258. Moreover, as with nearly all of the EU's alleged lost sales campaigns, Airbus was the challenger seeking to break a long-standing Boeing customer relationship. As Airbus recognized at the conclusion of the sales campaign, [[**HSBI**]]. Lead the campaign, Airbus identified the [[**HSBI**]]. By the end of the campaign, Airbus acknowledged that [[**HSBI**]]. Boeing's relationship with American Airlines and several of the other customers discussed below genuinely and substantially accounted for Boeing's ability to sell 737 MAX and 737NG. But, despite Airbus recognizing its importance at the time of the sale, the EU seeks to have the Panel dismiss customer relationships as a significant factor.

1259. In its second written submission, the EU responds to the argument raised by the United States that Airbus, not Boeing, was the aggressor on pricing. But its primary response to that argument is that "Airbus offered the price that it had to offer in order to secure a portion of the deal, anticipating Boeing's subsidy-enhanced ability to respond with aggressive prices on a reengined 737." This argument proves too much, as Boeing could respond with equal logic that its prices were determined not by subsidies, but by its anticipation that Airbus would try to price

¹⁶³⁴ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶³⁵ [[**HSBI**]] (Exhibit EU-929(HSBI)) ([[**HSBI**]]).

¹⁶³⁶ US FWS, para, 1015.

¹⁶³⁷ US FWS, paras. 1015-1017.

 $^{^{1638}}$ EU FWS, para. 1636; [[\mbox{HSBI}]] (Exhibit EU-881(HSBI)).

¹⁶³⁹ [[**HSBI**]] (Exhibit EU-885(HSBI)).

¹⁶⁴⁰ [[**HSBI**]] (Exhibit EU-885(HSBI)).

¹⁶⁴¹ [[**HSBI**]] (Exhibit EU-885(HSBI)).

¹⁶⁴² US FWS, para, 1018.

¹⁶⁴³ EU SWS, para. 1644.

¹⁶⁴⁴ EU SWS, para. 1644.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 365

aggressively. The EU's entire pricing argument (with respect to this and every other lost sales campaign) is premised on the theory that Boeing's subsidies are what enables it to "aggressively price." But here, whatever Airbus's motivation, it is clear that it was equally capable of "aggressively pricing" its A320 family LCA. The EU has offered no evidence that Boeing's pricing practices are other than those of a rational market actor seeking to maximize sales. Accordingly, it has failed to demonstrate that the alleged subsidies were a genuine and substantial cause of lost sales to Airbus because of pricing in the case of American Airlines.

1260. The EU's second written submission also fails to advance its argument that technology and availability were genuine and substantial causes of its "lost" sales. There is no evidence, for example, that American Airlines would have purchased more A320 family LCA had Boeing's 737 MAX delivery been delayed. The EU states only that Boeing's ability to launch the 737 MAX when it did prevented Airbus from securing a larger order, but provides no evidence that (i) availability was a genuine and substantial factor to American Airlines; ¹⁶⁴⁵ or (ii) that American Airlines' purchasing decision would have altered based on a delay the length of which remains unspecified by the EU.

1261. On the contrary, and in addition to [[**HSBI**]], Airbus faced a number of self-imposed obstacles. These included: [[**HSBI** 1646 1647]]. 1648 The EU ignores these factors, which significantly undermine its claim that either some delay, or Boeing's [[**HSBI**]], were genuine and substantial causes of any lost sales by Airbus to American Airlines.

b. Southwest Airlines

1262. Southwest's decision to remain with Boeing rather than comingle its all-Boeing fleet with Airbus was a sound one, genuinely and substantially based on the enormous costs it would have incurred in the alternative. Indeed, one of the key components of Boeing's sales to Southwest Airlines in this case was **[[HSBI]]**. ¹⁶⁴⁹ The **[[HSBI]]**. ¹⁶⁵⁰ By one estimate, **[[HSBI]]**. ¹⁶⁵¹

¹⁶⁴⁵ The EU stated in its first written submission that American Airlines had a [[**HSBI**]]. EU FWS, para. 1641. But it does not provide support this proposition with evidence that American Airlines actually had such a goal or that it had any bearing on the outcome of the sales campaign.

¹⁶⁴⁶ [[**HSBI**]] (Exhibit EU-885(HSBI)).

¹⁶⁴⁷ [[**HSBI**]] (Exhibit EU-884)(HSBI).

¹⁶⁴⁸ [[**HSBI**]] (Exhibit EU-885(HSBI)).

¹⁶⁴⁹ [[**HSBI**]] (Exhibit USA-339(HSBI)).

¹⁶⁵⁰ [[**HSBI**]] (Exhibit USA-339(HSBI)).

¹⁶⁵¹ [[**HSBI**]] (Exhibit USA-340(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 366

- 1263. The Boeing relationship with Southwest is thus much deeper than commercial and personal familiarity, extending to the substantial, material switching costs that Southwest faced. As Airbus saw it at the time, [[**HSBI** ¹⁶⁵²]]. ¹⁶⁵³
- 1264. The EU notes in its second written submission that Southwest [[**HSBI**]]. However, once the airline fully assessed the switching costs associated with the A320s, it reasonably decided to maintain the significant operating efficiencies it had built up with its all-Boeing fleet. At the press conference announcing the order, multiple Southwest Airlines executives emphasized that commonality was a major selling point. Hospital Southwest Airlines executives
- 1265. The EU's primary evidence that this "lost sale" was the result of alleged price effects is the [[**HSBI**]]. 1656 The EU's evidence shows [[**HSBI**]]. 1657
- 1266. But even if [[HSBI]], the EU has presented no evidence that Boeing's pricing in its sale to Southwest Airlines was the result of any alleged subsidies. Instead, in its first written submission, the EU simply recounts Airbus's own pricing strategy and laments [[HSBI]]. ¹⁶⁵⁸ In its second written submission, the EU does little more, emphasizing only that Boeing [[HSBI]]. ¹⁶⁵⁹ As in its description of other sales campaigns, the EU has offered no evidence that Boeing's pricing practices in those cases were the result of its receipt of subsidies and not motivated, in this case, to preserve a longstanding, exclusive customer. Moreover, the EU's technology and availability arguments are completely unsupportable if its position is that [[HSBI]]. In any case, it has made only the conclusory statement that had Boeing been forced to offer later delivery positions for the 737 MAX, then "Southwest would have had substantially fewer reasons to select the 737 MAX," but provided no evidence in support of its conclusion. ¹⁶⁶⁰ Just because there was [[HSBI]] ¹⁶⁶¹ does not mean that Southwest Airlines felt the same way about the availability of the 737 MAX.
- 1267. Several other significant factors influenced Boeing's sale to Southwest Airlines, including range superiority, airframe maintenance costs, reliability, residual value, and

¹⁶⁵² [[**HSBI**]] (Exhibit EU-897(HSBI)).

¹⁶⁵³ [[**HSBI**]] (Exhibit EU-894(HSBI)).

¹⁶⁵⁴ EU SWS, para. 1660.

 $^{^{1655}}$ Southwest press conference on 737 MAX order, Leeham News and Comment (Dec. 13, 2011) (Exhibit USA-350).

¹⁶⁵⁶ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁶⁵⁷ [[**HSBI**]](Exhibit EU-34(HSBI)) [[**HSBI**]].

¹⁶⁵⁸ EU FWS, para. 1655.

¹⁶⁵⁹ EU SWS, paras, 1654-1655.

¹⁶⁶⁰ EU SWS, para. 1657 (citing EU FWS, paras. 1656-1657).

¹⁶⁶¹ EU FWS, para. 1656.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 367

operability. ¹⁶⁶² For example, Southwest Airlines Senior Vice President for Technical Operations specifically noted that "{w}e spent a lot of time understanding how {the A320neo} would perform our missions. At the end of the day we decided MAX better fit our profile." ¹⁶⁶³ [[**HSBI**]]. ¹⁶⁶⁴ These factors, together with Boeing's deep ties to the customer and the operational efficiencies it enjoyed with its all-Boeing fleet, were the basis for Southwest Airlines' decision not to entertain the Airbus gambit. Accordingly, the EU has failed to demonstrate that either subsidy-enabled pricing, availability, or technology was a genuine and substantial cause of any lost sales to Southwest Airlines.

c. United Airlines

1268. As the United States explained in its first written submission, Boeing's relationship with Continental – a fact that the original panel found sufficient to reject the EU's 787 claims in the underlying proceeding – has been and remains central to analyzing Boeing sales to Continental, including the merged United-Continental entity. ¹⁶⁶⁵ In its second written submission, the EU has echoed its refrain identifying [[**HSBI**]] as the subsidy-enabled factor responsible for Airbus's lost sales. ¹⁶⁶⁶ But it offers no further evidence demonstrating a causal link between the alleged subsidies and Boeing's pricing in its United Airlines ("UAL") sale; instead, the EU only describes the terms of sale that Boeing offered. ¹⁶⁶⁷

1269. The EU's evidence itself suggests that United Airlines' decision was based not on Boeing's [[**HSBI**]] but on the Boeing LCA "features and reliability," with fuel efficiency a secondary consideration. ¹⁶⁶⁸ Specifically, a key consideration for UAL was the [[**HSBI**]] ¹⁶⁶⁹ [[**HSBI**]]. ¹⁶⁷⁰ [[**HSBI**]].

¹⁶⁶² Southwest press conference on 737 MAX order, Leeham News and Comment (Dec. 13, 2011) (Exhibit USA-350) ("Plane works better at Chicago Midway Airport, among other issues"; "MAX would have to fly the same mission as NG and are satisfied it would do that.")

 $^{^{1663}}$ Southwest launches 737-8, bypasses 737-7 for now, Leeham News and Comment (Dec. 16, 2011) (Exhibit USA-349).

¹⁶⁶⁴ [[**HSBI**]] (Exhibit EU-903(HSBI)).

¹⁶⁶⁵ US FWS, para. 1021 (citing US – Large Civil Aircraft (Panel), para. 7.1786 note 3725.

¹⁶⁶⁶ EU SWS, para. 1665.

¹⁶⁶⁷ See EU SWS para. 1665.

¹⁶⁶⁸ Boeing Press Release, "Boeing Announces Historic 737 Order for United Airlines", 12 July 2012 (Exhibit EU-912) ("This order is a major step in building the world's largest airline, and we look forward to offering our customers the modern features and reliability of new Boeing airplanes, while also making our fleet more fuel efficient and environmentally friendly ... New aircraft deliveries support our flexible fleet plan, permitting us to tailor future capacity up or down, based on changes in demand or other market conditions.").

¹⁶⁶⁹ [[**HSBI**]] (Exhibit USA-341(HSBI)).

¹⁶⁷⁰ [[**HSBI**]] (Exhibit USA-344(HSBI)); [[**HSBI**]] (Exhibit USA-345(HSBI)).

¹⁶⁷¹ [[**HSBI**]] (Exhibit USA-344(HSBI)); [[**HSBI**]] (Exhibit USA-345(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 368

1270. [[\mathbf{HSBI}]]. While the EU sales team [[\mathbf{HSBI} 1673]] to succeed in its campaign, the [[\mathbf{HSBI}]].

1271. Further, it was [[**HSBI**]] that price and availability become, at best, secondary factors for UAL. ¹⁶⁷⁴ [[**HSBI** ¹⁶⁷⁵]] ¹⁶⁷⁸ In this context, Airbus identified [[**HSBI** ¹⁶⁷⁷]]. ¹⁶⁷⁸ For UAL, [[**HSBI**]]. For example:

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[[ HSBI ]]. 1679
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[[**HSBI** ¹⁶⁸⁰]]. ¹⁶⁸¹

1272. Boeing's advantages were not limited to those flowing from its incumbency, however. Airbus has a [[HSBI ¹⁶⁸²]]. ¹⁶⁸³

1273. Ultimately though, whatever Airbus's disadvantages, [[**HSBI**]]. Accordingly, the EU has not demonstrated that subsidy-enabled pricing by Boeing was a genuine and substantial cause of any lost sales to UAL.

d. SilkAir

1274. In its second written submission, the EU echoes its refrain identifying "aggressive pricing" as the subsidy-enabled factor responsible for Airbus's lost sales. Notably absent from the EU's evidence in support of its lost sales claims related to SilkAir is any indication from SilkAir itself as to the basis for its selection of Boeing LCA. As SilkAir CEO Marvin Tan stated at the time of its purchase:

¹⁶⁷² [[**HSBI**]] (Exhibit USA-344(HSBI)); [[**HSBI**]] (Exhibit USA-345(HSBI)).

¹⁶⁷³ [[**HSBI**]] (Exhibit EU-914(HSBI)).

¹⁶⁷⁴ See [[**HSBI**]] (Exhibit EU-907(HSBI)) [[**HSBI**]].

¹⁶⁷⁵ [[**HSBI**]] (Exhibit EU-907(HSBI)) ([[**HSBI**]]); [[**HSBI**]] (Exhibit EU-906(HSBI)) ([[**HSBI**]]).

¹⁶⁷⁶ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶⁷⁷ [[**HSBI**]] Exhibit EU-909(HSBI)).

¹⁶⁷⁸ [[**HSBI**]] (Exhibit EU-916(HSBI)).

¹⁶⁷⁹ [[**HSBI**]] (Exhibit EU-907(HSBI))

¹⁶⁸⁰ [[**HSBI**]] (Exhibit EU-908(HSBI)).

¹⁶⁸¹ [[**HSBI**]] (Exhibit EU-908(HSBI)).

¹⁶⁸² [[**HSBI**]] (Exhibit EU-910(HSBI)).

¹⁶⁸³ [[**HSBI**]] Exhibit EU-909(HSBI)). Even if Airbus had managed to overcome these disadvantages, the [[**HSBI**]]. [[**HSBI**]] (Exhibit EU-917(HSBI)).

¹⁶⁸⁴ [[**HSBI**]] (Exhibit EU-917(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 369

The selection of the B737 follows detailed evaluations and extensive negotiations with both Airbus and Boeing. The order will enable us to maintain a young and modern fleet, with an aircraft that has a proven track record of strong customer appeal, excellent reliability and low operating costs. ¹⁶⁸⁵

Thus, from its own perspective, SilkAir's preference for Boeing LCA was based on the customer appeal, reliability, and low operating costs of Boeing's 737-800 and 737 MAX. The EU has not demonstrated that SilkAir itself was persuaded by Boeing's pricing, availability, or technology, let alone that they were a genuine a substantial cause of any lost sales.

1275. To the contrary, the EU's evidence demonstrates that, at least from Airbus's perspective, [[**HSBI** ¹⁶⁸⁶ ¹⁶⁸⁷ ¹⁶⁸⁸ ¹⁶⁸⁹]] In addition, Airbus faced material weaknesses in its SilkAir campaign resulting from, *inter alia*, [[**HSBI**]]. ¹⁶⁹⁰ This evidence completely undermines any claim that pricing, technology, or availability – let alone subsidy-enabled pricing, technology, or availability – drove the SilkAir decision-making.

e. GOL

1276. As the United States described in its first written submission, the GOL campaign was notable not for Boeing's [[**HSBI**]] or the availability of Boeing LCA, but by Boeing's existing relationship with GOL. Specifically, Boeing's [["**HSBI**"]] was a driving factor in this sales campaign, along with the [[**HSBI**]]. 1692

1277. In its second written submission, the EU argues that Boeing's evidence in support of that claim, *i.e.*, [[**HSBI**]]. ¹⁶⁹³ That is a curious rebuttal in light of the overwhelming reliance that the EU places on [[**HSBI**]], with respect to this any every other sales campaign at issue, in asserting that Boeing's "aggressive pricing" and availability were genuine and substantial causes of Airbus's lost sales. ¹⁶⁹⁴ If, as the EU suggests in para. 1644 of its second written submission,

¹⁶⁸⁵ SilkAir to Order up to 68 New Boeing Aircraft, SilkAir, Press Release (Aug. 3. 2012) (Exhibit USA-346).

¹⁶⁸⁶ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶⁸⁷ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶⁸⁸ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶⁸⁹ [[**HSBI**]] (Exhibit EU-928(HSBI)).

¹⁶⁹⁰ [[**HSBI**]] (Exhibit EU-924(HSBI)). *See* [[**HSBI**]] (Exhibit EU-34(HSBI)) ("{P}ricing (and other elements) of a sale of a particular aircraft are usually heavily influenced by any prior sales of that same aircraft to the same buyer – especially where there is a recent prior sale.").

¹⁶⁹¹ US FWS, para. 1023.

¹⁶⁹² US FWS, para, 1023.

¹⁶⁹³ EU SWS, para. 1694.

¹⁶⁹⁴ See, e.g., EU SWS, para. 1693 note 2833 (relying on [[**HSBI**]].

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 370

evidence of the **[[HSBI]]** being a genuine and substantial cause of sales outcomes, then the EU has failed to make its *prima facie* case with respect to any lost sales.

1278. In any case, the EU's own evidence, [[**HSBI**]], tells the same story as Boeing's. Airbus believed during the GOL sales campaign that [[**HSBI**]], and it acknowledged that [[**HSBI**]]. ¹⁶⁹⁵ In fact, [[**HSBI**]]. ¹⁶⁹⁶ Accordingly, the EU has failed to demonstrate that Boeing's [[**HSBI**]], technology, or availability, least of all any subsidy-enabled [[**HSBI**]], technology or availability, were genuine and substantial factors in GOL's decision to maintain its all-Boeing fleet.

f. Norwegian Air Shuttle

1279. As the United States explained in its first written submission, the timing of Norwegian Air Shuttle's ("Norwegian") separate orders – [[**HSBI**]] – precludes a finding that Airbus "lost" any sales in its Norwegian Air Shuttle campaign. ¹⁶⁹⁷ The EU's response, in effect, is that because of [[**HSBI**]]. ¹⁶⁹⁸ But as the European Union indicated in its first written submission, [[**HSBI**]]. ¹⁶⁹⁹ In other words, [[**HSBI**]]. That Norwegian purchased *any* Airbus LCA was a surprise to industry analysts. ¹⁷⁰⁰

1280. The EU argues that [[\mathbf{HSBI}]]. This proposition, lacking any support, is inconsistent with the evidence. [[\mathbf{HSBI}]].

1281. In any case, even if the Panel finds that Norwegian's earlier order from Boeing limited its interest in Airbus, it was not Boeing's [[**HSBI**]] or any subsidy-enabled negotiating position, but Boeing's [[**HSBI**]]. Airbus, during the campaign, observed that [[**HSBI**]]." [[**HSBI**]]:

In addition to these concerns related to [[**HSBI**]]. ¹⁷⁰⁵

¹⁶⁹⁵ [[**HSBI**]] (Exhibit EU-941(HSBI)).

¹⁶⁹⁶ [[**HSBI**]] (Exhibit EU-943(HSBI)).

¹⁶⁹⁷ US FWS, para. 1026.

¹⁶⁹⁸ EU SWS, para. 1698.

¹⁶⁹⁹ EU FWS, para. 1707 note 3154.

¹⁷⁰⁰ Norwegian Air splits order with Airbus, Boeing, Leeham News and Comment (Jan. 25, 2012) (Exhibit USA-347).

¹⁷⁰¹ EU FWS, para. 1707.

¹⁷⁰² [[**HSBI**]] (Exhibit USA-280(HSBI)).

¹⁷⁰³ [[**HSBI**]] (Exhibit EU-945(HSBI)).

¹⁷⁰⁴ [[**HSBI**]] (Exhibit EU-949(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 371

1282. In fact, Airbus's view during its Norwegian campaign was that [[**HSBI**]]. ¹⁷⁰⁶ Boeing itself viewed its advantages similarly, [[**HSBI**]]. ¹⁷⁰⁷ Finally, the EU's evidence demonstrates that Norwegian itself was [[**HSBI**]]. ¹⁷⁰⁸ Therefore, not subsidy-enabled pricing, technology or availability, but Boeing's [[**HSBI**]]. The EU has failed to demonstrate that any subsidy-enabled advantage was a genuine and substantial cause of any lost sales to Norwegian.

g. Lion Air

- 1283. As the United States noted in its first written submission, Lion Air's ambitious, expansive strategy involving the acquisition of 464 total LCA was effectively impossible for any one manufacturer to meet. Accordingly, Airbus did not suffer any "lost sales" when the airline acquired 174 A320neos and 60 A320ceos along with 201 737 MAXs and 29 737-900ERs. In response, the EU asserts without support that Airbus would "at least" have won a larger share of the split order absent the subsidy-enhanced availability of the 737 MAX. He EU has provided no evidence that in this specific sales campaign Lion Air was prepared to forego expansion of what had been an all-Boeing fleet in the event of any delay. Moreover, in this case as in every other sales campaign in which the EU is alleging lost sales, it fails to specify and substantiate the length of the delay that would have resulted from the absence of alleged subsidies. Accordingly, its argument positing that Lion Air would have found the delay too onerous and thus increased its order with Airbus is completely speculative and unsupported.
- 1284. With respect to Boeing's [[**HSBI**]], in its second written submission the EU continues to simply describe [[**HSBI**]] as it did in its first written submission without demonstrating in this case that they are the result of alleged subsidies and not representative of ordinary commercial behavior by a rational market actor seeking to maximize sales. ¹⁷¹¹ On the contrary, the EU's evidence demonstrates that Airbus [[**HSBI**]]. ¹⁷¹² Moreover, Airbus appeared to have understood that [[**HSBI**]]. ¹⁷¹³
- 1285. Moreover, the EU has not advanced its arguments with respect to availability and technology, noting only hat Lion was [[**HSBI**]] and that it was [[**HSBI**]]. But these

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1705 [[ HSBI ]] (Exhibit EU-949(HSBI)).
1706 [[ HSBI ]] (Exhibit EU-956(HSBI)).
1707 [[ HSBI ]] (Exhibit USA-280(HSBI)).
1708 [[ HSBI ]] (Exhibit EU-958(HSBI)).
1709 US FWS, para. 1029.
1710 EU SWS, para. 1714.
1711 See EU SWS, paras. 1709-1711.
1712 [[ HSBI ]] (Exhibit EU-963(HSBI)).
1713 [[ HSBI ]] (Exhibit EU-963(HSBI)) [[ HSBI ]]).
1714 EU SWS, para. 1712.
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United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 372

[[**HSBI**]] do not establish that the factors were a genuine and substantial cause of any lost sales at Lion Air.

h. Avolon

1286. As the United States explained in its first written submission, the EU has not explained how exactly Boeing's receipt of alleged subsidies was a genuine and substantial cause of lost sales in a campaign in which Avolon sought "an overall balanced portfolio" and Boeing's offer likely [[HSBI]]. The EU has responded only with conclusions restating its unsupportable position: "it is due to the subsidy-enabled features of the 737 MAX, and Boeing's subsidy-enabled aggressive pricing conditions, that Avolon opted for a balanced portfolio" and "{t}his sequence of events demonstrates [[HSBI]]. These conclusions are unsupported, and contradicted, by the EU's evidence, which demonstrates that Avolon [[HSBI]]. In any case, the EU simply has not demonstrated that subsidy-enabled pricing, availability, or technology were genuine and substantial causes of any lost sales.

1287. The EU also responds to the U.S. argument that Airbus never offered Avolon more LCA than it sold by arguing that "there is no requirement that manufacturer A has made an offer to sell aircraft to a customer, for the purchase by that customer of aircraft from manufacturer B to constitute a 'lost sale' to manufacturer A." However, there is a requirement that the alleged subsidies to manufacturer B were a genuine and substantial cause of lost sales to manufacturer A, and the EU has provided no evidence demonstrating that. There is also a requirement for evidence showing that, absent the alleged subsidies to manufacturer B, manufacturer A would have won the sale. And even assuming, *arguendo*, that Airbus had been prepared to meet additional Avolon demand, Airbus [[HSBI]]. These included [[HSBI]].

i. Air Lease Corp.

1288. As the United States explained in its first written submission, the EU has not explained how exactly Boeing's receipt of alleged subsidies was a genuine and substantial cause of lost sales in a campaign in which Air Lease Corp. not only ordered A320neo aircraft from Airbus [[**HSBI**]]. In response, the EU echoes the conclusions it stated with respect to Avolon. But, as with Avolon, the EU has simply not demonstrated that subsidy-enabled pricing,

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<sup>1715</sup> EU FWS, para. 1732.
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¹⁷¹⁶ US FWS, para. 1032.

¹⁷¹⁷ EU SWS, paras. 1722 and 1724.

¹⁷¹⁸ [[**HSBI**]] (Exhibit EU-968(HSBI)).

¹⁷¹⁹ EU SWS, para. 1723.

¹⁷²⁰ [[**HSBI**]] (Exhibit EU-968(HSBI)).

¹⁷²¹ US FWS, para. 1033.

¹⁷²² EU SWS, paras. 1734-1737.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 373

availability, or technology were genuine and substantial causes of any lost sales to Boeing over Air Lease Corp's business.

1289. The entirety of Airbus's case with respect to Air Lease Corp rests on a [**[HSBI]**] but it does not demonstrate the existence of subsidy-enabled features in Boeing's 737 MAX offer to Air Lease Corp. On the contrary, it demonstrates Boeing's ordinary, market-based sales strategy. [**[HSBI**]], who considered that Boeing's pricing of the 737 MAX was [***], *i.e.*, not subsidy-enhanced, but rational and market-based.

1290. With respect to availability and technology, the EU has simply referred back to its general argument that Boeing's receipt of subsidies enabled it to provide early delivery positions of 737 MAXs, but has not demonstrated that these were genuine and substantial causes of lost sales in the case of Air Lease Corp. The EU makes no specific argument with respect to availability, ¹⁷²⁵ and Boeing's [[**HSBI**]] does not constitute evidence that subsidy-enabled technology was a genuine and substantial factor in Air Lease Corp's decision to purchase from Boeing.

i. GECAS

- 1291. As the United States explained in its first written submission, the EU has not explained how exactly Boeing's receipt of alleged subsidies was a genuine and substantial cause of lost sales in a campaign in which GECAS not only ordered A320neo aircraft from Airbus [[HSBI]]. In response, the EU echoes the conclusions it stated with respect to Avolon and Air Lease Corp. But, as with those leasing companies, the EU has simply not demonstrated that subsidy-enabled pricing, availability, or technology were genuine and substantial causes of any lost sales to Boeing over GECAS's business.
- 1292. As with its argument with respect to Air Lease Corp, the entirety of Airbus's case rests on a [[**HSBI**]] but it does not demonstrate the existence of subsidy-enabled features in Boeing's 737 MAX offer to GECAS. On the contrary, and for the same reasons described above with respect to Air Lease Corp, the EU's evidence demonstrates only Boeing's profit-maximizing, market-based pricing strategy. 1728
- 1293. With respect to availability and technology, the EU has simply referred back to its general argument that Boeing's receipt of subsidies enabled it to provide early delivery positions

¹⁷²³ [[**HSBI**]] (Exhibit EU-804(HSBI)).

¹⁷²⁴ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁷²⁵ EU SWS, para. 1743.

¹⁷²⁶ US FWS, para, 1034.

¹⁷²⁷ EU SWS, paras. 1748-1751.

¹⁷²⁸ [[**HSBI**]] (Exhibit EU-804(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 374

of 737 MAXs, but has not demonstrated that these were genuine and substantial causes of lost sales in the case of GECAS. The EU makes no specific argument with respect to availability 1729 or technology, 1730 providing no specific evidence that either subsidy-enabled delivery positions or technology were a genuine and substantial factor in GECAS's decision to purchase from Boeing.

k. Aviation Capital Group

1294. As the United States explained in its first written submission, the EU has not explained how exactly Boeing's receipt of alleged subsidies was a genuine and substantial cause of lost sales in a campaign in which Aviation Capital Group not only ordered A320neo aircraft from Airbus [[HSBI]]. In response, the EU echoes the conclusions it stated with respect to Avolon, Air Lease Corp, and GECAS. 1732 But, as with those leasing companies, the EU has simply not demonstrated that subsidy-enabled pricing, availability, or technology were genuine and substantial causes of any lost sales to Boeing over Aviation Capital Group's business.

1295. As with its argument with respect to Air Lease Corp., the entirety of Airbus's case rests on [[**HSBI**]] but it does not demonstrate the existence of subsidy-enabled features in Boeing's 737 MAX offer to GECAS. On the contrary, and for the same reasons described above with respect to Air Lease Corp, the EU's evidence demonstrates only Boeing's rational, market-based pricing strategy. ¹⁷³³

1296. With respect to availability and technology, the EU has simply referred back to its general argument that Boeing's receipt of subsidies enabled it to provide early delivery positions of 737 MAXs, but has not demonstrated that these were genuine and substantial causes of lost sales in the case of GECAS. The EU makes no specific argument with respect to availability 1734 or technology, 1735 providing no specific evidence that either subsidy-enabled delivery positions or technology were a genuine and substantial factor in Aviation Capital Group's decision to purchase from Boeing.

l. Icelandair

1297. As the United States explained in its first written submission, the EU has provided no support for its claim that subsidy-enabled "aggressive pricing" was a genuine and substantial

¹⁷²⁹ EU SWS, para. 1755.

¹⁷³⁰ EU SWS, para. 1756.

¹⁷³¹ US FWS, para. 1035.

¹⁷³² EU SWS, paras. 1758-1761.

¹⁷³³ [[**HSBI**]] (Exhibit EU-804(HSBI)).

¹⁷³⁴ EU SWS, para. 1765.

¹⁷³⁵ EU SWS, para. 1766.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 375

cause of any lost sales by Airbus to Icelandair. ¹⁷³⁶ The United States also noted that the **[[HSBI]]** gap between Boeing's offer to Icelandair and Airbus's offer is sufficiently wide that any possible subsidy-enabled pricing advantage could not have accounted for the difference. ¹⁷³⁷ In response, the EU has only repeated its arguments on pricing, and added arguments regarding technology and availability. ¹⁷³⁸ However, Icelandair, a longtime Boeing customer with an all-Boeing fleet, was **[[HSBI]]**. ¹⁷³⁹ When the Boeing-Icelandair sale was complete, Icelandair praised its "successful relationship with Boeing for decades" and noted that the 737 MAX complimented the airline's 757 fleet "perfectly." ¹⁷⁴⁰

1298. Throughout Airbus's Icelandair campaign, Airbus recognized that [[**HSBI**]]. ¹⁷⁴¹ The EU's argument continues to consist primarily of a description of Airbus's own pricing maneuvering, rather than a demonstration that any subsidy-enabled features of Boeing's offer to Icelandair were a genuine and substantial cause of lost sales. ¹⁷⁴² Regardless, Airbus [[**HSBI**]]. ¹⁷⁴³ This response led to some [[**HSBI**]]. ¹⁷⁴⁵

1299. In a separate communication to a potential customer, Airbus implicitly acknowledged that **[[HSBI]]**. ¹⁷⁴⁶ In any case, Boeing's success in the Icelandair campaign was not the result of the sales price; in fact, **[[HSBI]]**. ¹⁷⁴⁷ As noted above, however, Boeing was able to **[[HSBI**]]. ¹⁷⁴⁸]].

1300. With respect to technology and availability, the EU has simply not demonstrated that subsidy-enabled features of the 737 MAX were a genuine and substantial cause of the lost

¹⁷³⁶ US FWS, para. 1036.

¹⁷³⁷ US FWS, para. 1037.

¹⁷³⁸ EU SWS, paras. 1770-1774.

 $^{^{1739}}$ [[\mathbf{HSBI}]] (Exhibit EU-982(HSBI)) [[\mathbf{HSBI}]]; [[\mathbf{HSBI}]] (Exhibit EU-1237(HSBI)) (noting [[\mathbf{HSBI}]].

¹⁷⁴⁰ *Icelandair Group and Boeing Have Signed a Commitment for New Aircraft*, Press Release, Icelandair (Dec. 2012) (Exhibit USA-348).

¹⁷⁴¹ [[**HSBI**]] (Exhibit EU-982(HSBI)).

¹⁷⁴² See EU SWS, para. 1771.

¹⁷⁴³ [[**HSBI**]] (Exhibit EU-985(HSBI)).

¹⁷⁴⁴ [[**HSBI**]] (Exhibit EU-986(HSBI)).

¹⁷⁴⁵ [[**HSBI**]] (Exhibit EU-1221(HSBI)).

¹⁷⁴⁶ [[**HSBI**]] (Exhibit EU-1222(HSBI)).

¹⁷⁴⁷ [[**HSBI**]] (Exhibit USA-343(HSBI)).

¹⁷⁴⁸ [[**HSBI**]] (Exhibit USA-343(HSBI)).

¹⁷⁴⁹ [[**HSBI**]] (Exhibit USA-343(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 376

Airbus sales to Icelandair. The EU's technology argument [[**HSBI**]]. ¹⁷⁵⁰ [[**HSBI**]]. ¹⁷⁵¹ With respect to availability, the EU has concluded only that "Icelandair would have had substantially fewer reasons to select the 737 MAX" if Boeing had later delivery positions. ¹⁷⁵² But the EU provides no factual support for this assertion, and, even if true, having fewer reasons to select the 737 MAX would not make subsidy-enabled availability a genuine and substantial cause of lost sales.

m. AeroMexico

1301. As the United States explained in its first written submission, the EU has provided no support for its claim that either subsidy-enabled "aggressive pricing", technology, or aircraft availability was a genuine and substantial cause of any lost sales by Airbus to AeroMexico. ¹⁷⁵³ In response, the EU repeats its arguments regarding availability and pricing, but ignores the United States' demonstration that Boeing's [[**HSBI**]], is the key factor that drove AeroMexico's decision-making.

1302. The EU instead quibbles over the question of whether its concession that the [[**HSBI**]] "may" have contributed to the sale is sufficient; in fact, the evidence demonstrates this non-subsidy factors overwhelmingly account for the campaign's outcome. [[**HSBI**]]. ¹⁷⁵⁴ Accordingly, the EU has not established that either subsidy-enabled pricing, technology, or availability was a genuine and substantial cause of any lost sales to AeroMexico.

n. TUI Travel

1303. The EU has failed to demonstrate that either subsidy-enabled pricing, technology, or availability was a genuine and substantial cause of any lost sales to TUI Travel. The EU argues but does not support the proposition that U.S. subsidies were a genuine and substantial cause of Airbus's lost sales to this customer because of the time at which 737 MAX LCA were made available to TUI Travel. ¹⁷⁵⁵ In support of the proposition that delivery position was [[**HSBI**]], the EU cites only to the customer's preference for [[**HSBI**]] and the specific dates of its request. ¹⁷⁵⁶ That Boeing was ultimately able to meet TUI Travel's needs does not demonstrate that, but for the effects of subsidies alleged by the EU, Airbus would have won those sales. Nor

 $^{^{1750}}$ EU SWS, para. 1772; [[$\bf HSBI$]] (Exhibit EU-1234(HSBI)) [[$\bf HSBI$]]; [[$\bf HSBI$]] (Exhibit EU-1237(HSBI)) [[$\bf HSBI$]].

¹⁷⁵¹ [[**HSBI**]] (Exhibit EU-1224(HSBI)).

¹⁷⁵² EU SWS, para. 1774.

¹⁷⁵³ US FWS, para. 1038.

¹⁷⁵⁴ [[**HSBI**]] (Exhibit EU-875(HSBI)).

¹⁷⁵⁵ See EU SWS, para. 1632 (no citation provided for the proposition that "{h}ad the U.S. subsidies not enabled Boeing to promise these {January 2018-March 2023} delivery positions of the 737 MAX, then ... TUI Travel would have placed an order with Airbus.).

¹⁷⁵⁶ EU SWS, para. 1631.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 377

does it demonstrate that TUI Travel's desired delivery positions was more than – in the EU's term – a "goal." Accordingly, the EU has failed to demonstrate that the alleged subsidies were a genuine and substantial cause of lost sales to Airbus because of availability in the case of TUI Travel.

1304. With respect to price, the EU argues that TUI Travel confirmed that it had obtained price discounts from Boeing ¹⁷⁵⁸ and that Boeing's provision of [[**HSBI**]] was a point of [[**HSBI**]]. ¹⁷⁵⁹ But the EU has not presented any evidence that the alleged price effects enabled Boeing to provide such [[**HSBI**]] in this case. Instead, the EU only cross-references Sections V.E and V.H.2 of its submission, neither of which discusses how the price effects of the alleged subsidies relate to [[**HSBI**]]. Accordingly, the EU has failed to demonstrate that the alleged subsidies were a genuine and substantial cause of lost sales to Airbus because of pricing in the case of TUI Travel.

1305. The EU has also failed to demonstrate that subsidy-enabled technology was a genuine and substantial cause of any lost sales to TUI Travel. Its argument, [[**HSBI**]]. ¹⁷⁶⁰ Accordingly, the EU has failed to demonstrate that the alleged subsidies were a genuine and substantial cause of lost sales.

1306. Contrary to the EU's assertions, Airbus flew against a heavy wind in its TUI Travel campaign for reasons completely unrelated to Boeing pricing, availability, or technology. Airbus acknowledged during the campaign that [[**HSBI**]]. Airbus knew that it had to convince TUI Travel [[**HSBI**]]. By the end of the campaign, Airbus acknowledged [[**HSBI**]]. 1765

1307. For the reasons set forth above, the EU has failed to overcome the U.S. rebuttal showing that it has failed to establish that the alleged subsidies genuinely and substantially caused significant lost sales of the A320neo.

5. Threat of impedance

1308. As demonstrated in the U.S. first written submission, the EU failed to establish that imports of the A320neo are threatened with impedance in the U.S. market and or that exports of

¹⁷⁵⁷ EI SWS para. 1632.
¹⁷⁵⁸ EU SWS, para. 1636.
¹⁷⁵⁹ EU SWS, para. 1635.
¹⁷⁶⁰ EU SWS, para. 1638.
¹⁷⁶¹ [[HSBI]] (Exhibit EU-1215(HSBI)).
¹⁷⁶² [[HSBI]] (Exhibit EU-1216(HSBI)).
¹⁷⁶³ [[HSBI]] (Exhibit EU-1216(HSBI)).
¹⁷⁶⁴ [[HSBI]] (Exhibit EU-1216(HSBI)).
¹⁷⁶⁵ [[HSBI]] (Exhibit EU-1223(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 378

the A320neo are threatened with impedance in the third-country markets of Brazil, Iceland, Indonesia, Mexico, Norway, and Singapore as a result of subsidies causing the A320neo to lose sales to the 737 MAX. ¹⁷⁶⁶ In response, the EU has finally provided some market data, but its claims still fail for the reasons discussed below.

- 1309. **Causation.** The EU has failed to establish that, absent the alleged subsidies, Boeing would have been unable to offer the 737 MAX as and when it did, or that 737 MAX prices would be higher to a degree that would result in a threat of impedance.
- 1310. **Reliance on lost sales**. The EU premises its impedance claims on lost sales. The referenced lost sales were not, however, genuinely and substantially caused by the alleged subsidies, as demonstrated in the preceding section.
- 1311. **Lack of evidence showing imminent impedance.** The United States recalls the Appellate Body's guidance that impedance claims should be supported by evidence of changes in the relative market share, over a sufficiently representative period, to demonstrate clear trends. The EU contends that its belated presentation of volume and market share data for the country markets at issue renders this criticism moot. To the contrary, the EU still does not attempt to use volume and market data to show clear trends in the Icelandic market.
- 1312. As for the other markets, the data presented by the EU do not show clear trends of impedance that is *imminent*. In addition to clear trends, a threat of impedance claim must be based on evidence showing a "clearly foreseen and imminent" change in circumstances that would create a situation in which the subsidies would cause impedance. While there is no bright line for what constitutes an "imminent" situation, the data presented by the EU include data for years that clearly are far too remote to serve as a basis for a finding of imminent impedance. For example, the EU's market data runs out to 2026 in some cases. For convenience's sake, the United States discusses below the data through 2018. In no case do the data show a clear trend of impedance that is imminent.
- 1313. **Market share assumptions not based on evidence.** In its first written submission, the EU used "as a benchmark for assessing impedance and threat thereof in large volume markets whether Boeing's market share significantly exceeds 50 percent." In the face of the U.S. rebuttal, ¹⁷⁷² the EU now explains that it: "does not rely on such a fixed benchmark. Instead, it

¹⁷⁶⁶ See EU FWS, para. 1828.

¹⁷⁶⁷ US – Large Civil Aircraft (AB), para. 1086 (internal citations omitted).

¹⁷⁶⁸ EU SWS, para. 1842.

¹⁷⁶⁹ See EU SWS, paras. 1853-1855.

¹⁷⁷⁰ See EC – Large Civil Aircraft (AB), para. 1171.

¹⁷⁷¹ EU FWS, para. 1582.

¹⁷⁷² US FWS, para. 1043.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 379

uses the common sense notion that, in a supply-side duopoly with two manufacturers of roughly equal size and resources and with similar product offerings, something is wrong where one manufacturer holds over a period of several years significantly more than 50 percent of the market in high volume country markets." This only underscores the inadequacy of the EU's benchmark, which it relies on for its claim with respect to the Brazilian market. A "common sense notion" that "something is wrong" does nothing to demonstrate that, absent the alleged subsidies, sales and deliveries of the A320neo would increase in a particular country market. Indeed, something may not be "wrong" in a particular market, and even if it were, the question remains whether that "something" is the effect of the alleged subsidies. The EU's intuition cannot substitute for evidence and argumentation that satisfy the elements of Articles 6.3(a) and/or (b).

¹⁷⁷³ EU SWS, para. 1525.

¹⁷⁷⁴ EU SWS, para. 1840.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 380

- a. The EU has failed to demonstrate threat of impedance under Article 6.3(a) of the SCM Agreement.
- 1314. The U.S. market data now presented by the EU do not show clear trends of impedance that is imminent. Within the next five years, EU deliveries of A320neos are projected to increase dramatically: one in 2015; 52 in 2016; 87 in 2017; and 113 in 2018. Deliveries of the 737 MAX are projected to start only in 2017. While Airbus's market share is projected decline from 90 percent in 2017 to 60 percent in 2018, this hardly constitutes a clear trend showing that imports of the A320neo would be imminently obstructed or hindered, particularly since they will increase by nearly 30 percent over the same 2017-2018 period. 1778
- 1315. Further, the EU still bases its impedance claim in the U.S. "new technology single-aisle market" on the presumption that the alleged subsidies caused certain lost sales. ¹⁷⁷⁹ As explained in Sections IV.I.4.a-c above and in the U.S. first written submission, ¹⁷⁸⁰ the EU has failed to demonstrate that the 2011 American Airlines, 2011 Southwest Airlines, and 2012 United Airlines sales constitute lost sales under Article 6.3(c) of the SCM Agreement.
 - b. The EU has failed to demonstrate threat of impedance in third-country markets.
 - i. Brazil
- 1316. The Brazilian market data now presented by the EU do not show clear trends of impedance that is imminent. The data only start in 2016, and Airbus is projected to hold 100 percent of the market in that year as well as 2017, while the first 737 MAX deliveries are not projected to begin until 2018. These data do not provide a clear trend showing that exports of the A320neo would be imminently obstructed or hindered.
- 1317. Further, the EU still bases its impedance claim in the Brazilian "new technology single-aisle market" on the presumption that the alleged subsidies caused Airbus to lose the 2012 GOL sales campaign. ¹⁷⁸³ As explained in Section Sections IV.I.4.e above and in the U.S. first written

¹⁷⁷⁵ EU SWS, paras. 1846-1847.

¹⁷⁷⁶ EU SWS, para. 1846.

¹⁷⁷⁷ EU SWS, para. 1846.

¹⁷⁷⁸ EU SWS, para. 1846.

¹⁷⁷⁹ EU SWS, paras. 1846-1848.

¹⁷⁸⁰ US FWS, paras. 1015-1021.

¹⁷⁸¹ EU SWS, para. 1850.

¹⁷⁸² EU SWS, para. 1850.

¹⁷⁸³ EU SWS, paras. 1851.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 381

submission, ¹⁷⁸⁴ the EU has failed to demonstrate that the 2012 GOL sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

ii. Iceland

- 1318. For Iceland, and unlike the other "new technology single-aisle markets," the EU does not even attempt a belated presentation of market share and volume data over time. ¹⁷⁸⁵ Even if it had, the data would be inadequate for a showing of imminent impedance: the first 737 MAX deliveries into the Icelandic market are not projected to begin until 2018. ¹⁷⁸⁶
- 1319. The EU instead repeats its error in basing its threat of impedance claim on a single alleged lost sale Icelandair (2013). As explained previously, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.I.4.1 above and in the U.S. first written submission, the EU has failed to demonstrate that the 2013 Icelandair sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

iii. Indonesia

- 1320. The Indonesian market data now presented by the EU do not show clear trends of impedance that is imminent. The data only start in 2017, and assuming *arguendo* that a trend clear trend could be discerned from a two-year period, Airbus is projected to *gain* market share from 2017 to 2018, going from zero to 51 percent. These data do not provide a clear trend showing that exports of the A320neo would be imminently obstructed or hindered.
- 1321. Further, the EU still bases its impedance claim in the Indonesian "new technology single-aisle market" on the presumption that the alleged subsidies caused Airbus to lose a single sales campaign Lion Air (2012). As explained previously, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.I.4.g above and in the U.S. first written

¹⁷⁸⁴ US FWS, para. 1023.

¹⁷⁸⁵ *Cf.* EU SWS, para. 1853.

¹⁷⁸⁶ Cf. EU SWS, para. 1853.

¹⁷⁸⁷ EU SWS, para. 1854.

¹⁷⁸⁸ See US – Large Civil Aircraft (AB), para. 1241.

¹⁷⁸⁹ US FWS, paras. 1036-1037.

¹⁷⁹⁰ EU SWS, para. 1856.

¹⁷⁹¹ EU SWS, para, 1856.

¹⁷⁹² EU SWS, paras. 1856-1857.

¹⁷⁹³ See US – Large Civil Aircraft (AB), para. 1241.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 382

submission, ¹⁷⁹⁴ the EU has failed to demonstrate that the 2012 Lion Air sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

iv. Mexico

- 1322. The Mexican market data now presented by the EU do not show clear trends of impedance that is imminent. The data only start in 2017. With a data set covering only two years that could arguably be considered within the bounds of imminence (and only one delivery in the entire market in 2017), there is no clear trend that can be discerned. These data do not provide a clear trend showing that exports of the A320neo would be imminently obstructed or hindered.
- 1323. Further, the EU still bases its impedance claim in the Mexican "new technology single-aisle market" on the presumption that the alleged subsidies caused Airbus to lose a single sales campaign Aeromexico (2012). As explained previously, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.I.4.m above and in the U.S. first written submission, the EU has failed to demonstrate that the 2012 Aeromexico sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.
- 1324. For these reasons and those discussed in the introduction to this threat of impedance section, the EU's claim fails.

v. Norway

- 1325. The Norwegian market data now presented by the EU do not show clear trends of impedance that is imminent. The data only start in 2017. With a data set covering only two years that could arguably be considered within the bounds of imminence, there is no clear trend that can be discerned. These data do not provide a clear trend showing that exports of the A320neo would be imminently obstructed or hindered.
- 1326. Further, the EU still bases its impedance claim in the Norwegian "new technology single-aisle market" on the presumption that the alleged subsidies caused Airbus to lose a single sales

¹⁷⁹⁴ US FWS, paras. 1028-1031.

¹⁷⁹⁵ EU SWS, para. 1859.

¹⁷⁹⁶ EU SWS, para. 1859.

¹⁷⁹⁷ EU SWS, paras. 1859-1860.

¹⁷⁹⁸ See US – Large Civil Aircraft (AB), para. 1241.

¹⁷⁹⁹ US FWS, paras. 1038.

¹⁸⁰⁰ EU SWS, para. 1862.

¹⁸⁰¹ EU SWS, para. 1859.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 383

campaign – Norwegian Air Shuttle (2012). As explained previously, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.I.4.f above and in the U.S. first written submission, the EU has failed to demonstrate that the 2012 Norwegian Air Shuttle sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.

1327. For these reasons and those discussed in the introduction to this threat of impedance section, the EU's claim fails.

vi. Singapore

- 1328. The Singaporean market data now presented by the EU do not show clear trends of impedance that is imminent. The data only start in 2017, and 737 MAX deliveries are not projected to start until 2018. With a data set covering only two years that could arguably be considered within the bounds of imminence (and projected 737 MAX deliveries in only one of those years), there is no clear trend that can be discerned. These data do not provide a clear trend showing that exports of the A320neo would be imminently obstructed or hindered.
- 1329. Further, the EU still bases its impedance claim in the Norwegian "new technology single-aisle market" on the presumption that the alleged subsidies caused Airbus to lose a single sales campaign Silkair (2012). As explained previously, the Appellate Body has made clear that this is insufficient to show threat of impedance under Article 6.3(b) of the SCM Agreement. Moreover, as explained in Section IV.I.4.d above and in the U.S. first written submission, the EU has failed to demonstrate that the 2012 Silkair sale constitutes a lost sale under Article 6.3(c) of the SCM Agreement.
- 1330. For these reasons and those discussed in the introduction to this threat of impedance section, the EU's claim fails.

¹⁸⁰² EU SWS, paras. 1862-1863.

¹⁸⁰³ See US – Large Civil Aircraft (AB), para. 1241.

¹⁸⁰⁴ US FWS, paras. 1025-1027.

¹⁸⁰⁵ EU SWS, para. 1865-1866.

¹⁸⁰⁶ EU SWS, para. 1865-1866.

¹⁸⁰⁷ EU SWS, para. 1859.

¹⁸⁰⁸ EU SWS, paras, 1865-1866.

 $^{^{1809}}$ See US – Large Civil Aircraft (AB), para. 1241.

¹⁸¹⁰ US FWS, paras. 1022.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 384

J. The EU Has Still Failed to Demonstrate that Alleged Subsidies to the 737NG Cause Adverse Effects Through Significant Price Suppression, Significant Lost Sales, Displacement, Impedance, or Threat Thereof With Respect to the A320ceo.

1. Alleged price effects causal mechanism

- 1331. In the original proceeding, only FSC/ETI and the Washington B&O tax rate reduction, on an aggregated basis (tied tax subsidies), and the Wichita IRBs, when cumulated with the aggregated tied tax subsidies, were found to result in lower Boeing 737NG pricing. The United States demonstrated in its first written submission that, with FSC/ETI unquestionably withdrawn, the Washington B&O tax rate reduction is far too small to cause price reductions sufficient to cause the alleged market effects. The United States also demonstrated that the Wichita IRBs are far too small in isolation to cause price reductions sufficient to cause the alleged market effects. All other alleged subsidies to the 737NG, which were not found to cause price effects in the original proceeding, are not properly before this Panel and, in any event, have not been shown to cause price effects of any kind. Therefore, the EU's claim that U.S. subsidies to the 737NG are now causing lower Boeing prices that result in serious prejudice is meritless. The EU has failed to rebut that demonstration. ¹⁸¹¹
- 1332. In response to U.S. allegations about the insufficient magnitudes of price effects subsidies the EU second written submission does not put forward a detailed analysis of the magnitude of the subsidies it alleges and an explanation of how that magnitude translates into market effects. Instead, the EU argues that previous Appellate Body guidance absolved the EU of its responsibility to prove that subsidies are indeed of sufficient magnitude to be causing adverse effects through a price causal mechanism and that the U.S. magnitude calculations improperly excluded subsidies and suffered from a methodological error. The EU is mistaken on all counts.
 - a. The EU has failed to demonstrate that the nature and magnitude of the alleged subsidies are capable of and are causing 737NG price effects.
- 1333. The EU criticizes the U.S. demonstration that the magnitudes of the price effects subsidies properly before this panel, if unwithdrawn, are too small to cause the market phenomena alleged by the EU. The United States notes that the EU bears the burden of demonstrating that the subsidies it asserts as having a price-based causal mechanism are actually causing adverse effects, and that for such a mechanism, the magnitude of the subsidy (and the portion of that magnitude causing lower prices) is a critical factor. Therefore, even if the EU's criticisms of the U.S. magnitude analysis were valid and they are not the EU still must do more. It fails to do so.
- 1334. The United States previously criticized the EU for its failure to demonstrate that the subset of subsidies specifically alleged to cause 737NG price effects are doing so. The EU characterizes the U.S. objection as one to cross-referencing. The United States does not oppose

¹⁸¹¹ See EU SWS, paras. 1875-1890.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 385

cross-referencing where it addresses the relevant issues. The problem identified in the U.S. first written submission is that the sections cross-referenced by the EU in its model-specific price effects sections do not address the relevant issue. Thus, instead of demonstrating that subsidies to the 737NG are causing price effects, the EU cross-references a general price effects discussion, which does not contain 737NG-specific analysis and therefore does not account for the fact that not all subsidies are alleged to impact 737NG pricing. ¹⁸¹²

- 1335. The EU second written submission now provides for the first time a table listing the subsidies it is alleging to specifically cause lower 737NG prices. But this list fails to fully clarify what the EU is alleging because it includes R&D subsidies that the EU asserts elsewhere in its submissions to cause technology effects. As the EU recognizes that subsidies causing price effects cannot also cause technology effects, and *vice versa*, this table simply creates confusion. ¹⁸¹⁴
- 1336. Even ignoring this lack of clarity for the moment and taking the list at face value, the EU argument that the listed subsidies to the 737NG are of a magnitude sufficient to cause serious prejudice is limited to vague and unsupported statements, such as its assertion that they are "large by any reasonable measure, and sufficient to cause the adverse effects at issue." In lieu of actually demonstrating that the magnitude of the subsidies is sufficient to cause the alleged 737NG price effects, the EU argues: "As the Appellate Body explained in the original proceedings, 'the absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects', such that '{s}ubsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market'." 1816
- 1337. The omitted portions of the quoted paragraph are critical. The entirety of the paragraph reads as follows:

The Appellate Body has stated previously that, while the magnitude of subsidies is important, precise quantification is not an indispensable part of a serious prejudice analysis. Moreover, the absolute value or size of a subsidy may not correspond directly to the impact that the subsidy may have in causing adverse effects. Subsidies of a relatively small magnitude may nevertheless have substantial effects in a particular case or market. We understand the Panel to have

¹⁸¹² See, e.g., EU FWS, paras. 1842-1844.

¹⁸¹³ EU SWS, para. 1878.

¹⁸¹⁴ See, e.g., EU FWS, paras. 961, 964, 981 (alleging that the FAA CLEEN program is causing technology effects).

¹⁸¹⁵ EU SWS, para. 1887.

¹⁸¹⁶ EU SWS, para. 1888 (quoting US – Large Civil Aircraft (AB), para. 1006).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 386

found this to be the case as regards the effects of the aeronautics R&D subsidies. ¹⁸¹⁷

- 1338. Thus, the magnitude of the subsidies *is* important. In addition, just because precise quantification is not indispensable does not mean that a complaining party can meet its burden without even a rough quantification of the magnitude and an explanation of why that magnitude is sufficient given the nature and context of the subsidies.
- 1339. Moreover, of critical importance, the Appellate Body does not say that all subsidies have effects disproportionate to their size. Rather, it states that this *may* be the case, allowing that subsidies may have an effect commensurate with or even less than their size would indicate. The original panel found that the R&D subsidies acting through a technology causal mechanism at issue in the original proceeding had an effect greater than their size, but made no such finding for subsidies acting through a price mechanism. The complaining party must demonstrate that, due to their nature, the subsidies at issue are among those that do in fact have disproportionately large effects.
- 1340. The R&D subsidies in the original proceeding were found to have disproportionate effects relative to the face value of the subsidy because receipt of the subsidy was determined to be the difference between the research going forward and not. But the EU has not demonstrated that price effects are likewise disproportionate relative to the cash value of the subsidies. Indeed, such a contention could not be sustained in light of the price effects theory.
- 1341. According to the EU's price effects theory, Boeing uses subsidies to reduce its prices, which in turn causes Airbus to suffer serious prejudice. The cash value of a subsidy therefore represents the *maximum* that Boeing could conceivably lower prices if it applied the entirety of the subsidy to that purpose.
- 1342. Of course, the EU has not made an affirmative showing that, to the extent that R&D or miscellaneous subsidies are not withdrawn, any such subsidies would be used by Boeing to lower prices in strategic sales campaigns. In the original proceeding, the EU tried and failed to demonstrate that R&D subsidies can and do cause price effects. In this compliance proceeding, the EU does not even try. Instead it just assumes that if (certain unspecified) R&D subsidies left Boeing with more cash than it would have, then Boeing necessarily will use them to lower prices and that the subsidies (or the portion of subsidies used for this purpose) are large enough to fund price reduction sufficient to have the indicated effects. The EU puts forth no evidence or economic theory to support this assumption. The EU also failed to show than each of the miscellaneous subsidies would cause Boeing to lower 737NG prices. As explained in Section IV.G, standard economic principles indicate that these subsidies that are not tied to sales,

¹⁸¹⁷ US – Large Civil Aircraft (AB), para. 1006 (internal citation omitted).

¹⁸¹⁸ See US – Large Civil Aircraft (AB), para. 945; US – Large Civil Aircraft (Panel), para. 7.1760.

¹⁸¹⁹ See EU FWS, para. 1112.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 387

and therefore do not increase in proportion to increases in sales, do not affect pricing decisions in the absence of capital constraints, which the EU has not alleged, much less proven.

- 1343. Furthermore, even if the EU had shown that such untied subsidies would be used to lower 737NG prices, the EU does not explain what proportion of the subsidy would be applied by Boeing to lower prices, as opposed to other uses. This step which the EU also at least attempted in the original proceeding is critical because it potentially reduces the amount of price reductions that flow from the subsidies.
- 1344. Yet, the EU does none of this. It does not attempt to demonstrate that R&D subsidies or miscellaneous subsidies would be used to lower prices, much less the portion of the subsidies that would be put this use. The EU does not even attempt to show that, even if all alleged price effects subsidies were applied in their entirety to lowering prices, they would be sufficient in the context of this industry to genuinely and substantially cause lost sales, price suppression, displacement, or impedance. In short, the EU does not attempt to do the minimum necessary to prove that the alleged price effects subsidies cause serious prejudice. Therefore, the EU's 737NG price effects arguments necessarily fail.
 - b. The EU's price effects argument is based on the improper inclusion of subsidies and improper aggregation and cumulation analyses.
- 1345. The EU contends that the U.S. analysis of the magnitudes of price causal mechanism subsidies improperly excludes some of the relevant subsidies. According to the EU, the United States should have considered all of the subsidies listed in its table on a collective basis. The EU's position is based on its erroneous inclusion of subsidies not properly before this Panel, subsidies not shown to cause price effects, improper aggregation of subsidies, and improper cumulation of subsidies. Therefore, the EU's criticisms of the U.S. analysis fail.
- 1346. First, the EU's list of subsidies alleged to cause 737NG price effects includes the Washington B&O tax credit for property taxes and the Washington sales and use tax exemptions. The EU challenged these measures in the original proceeding and failed to establish that any of them constituted actionable subsidies causing adverse effects. As a result, the United States had no compliance obligations with respect to these measures. The EU cannot re-litigate in this compliance proceeding what it failed to establish in the original proceeding. Moreover, as these are the same measures addressed by the original panel, they cannot also be measures taken to comply. As the EU's 737NG price effects argument relies on the improper inclusion of these measures, it necessarily fails.

¹⁸²⁰ See EU SWS, para. 1883.

¹⁸²¹ EU SWS, para. 1885.

¹⁸²² EU SWS, para. 1878.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 388

- 1347. Second, the EU's list of subsidies alleged to cause 737NG price effects includes R&D subsidies. The EU tried to establish in the original proceeding that R&D subsidies were causing price effects but was unsuccessful. As discussed above and in Section IV.C, it is not clear which R&D subsidies the EU is alleging to have price effects. However, to the extent that any of the R&D subsidies alleged to have price effects were raised in the original proceeding or could have been, the EU cannot properly raise them in this compliance proceeding.
- 1348. Third, the EU's list of subsidies alleged to cause 737NG price effects includes South Carolina measures, the Washington JCATI, and the Washington B&O tax credit for leasehold excise taxes. As explained above and in the U.S. first written submission, these measures were not subject to the DSB's recommendations and rulings, are not measures taken to comply, and are not actionable subsidies for the purpose of the SCM Agreement. As the EU's 737NG price effects argument relies on the improper inclusion of these alleged subsidies, it necessarily fails.
- 1349. Not only does the EU erroneously include all of these subsidies in its price effects argument, but it does so based on a flawed application of the Appellate Body's aggregation test. The United States demonstrated the EU's aggregation errors in Section IV.E.1, but it bears repeating that the (unspecified) technology effects R&D subsidies and the (unspecified but different) price effects R&D subsidies clearly cannot be aggregated with one another based on the EU's acknowledgement that a common causal mechanism is a requirement for aggregation. The United States also demonstrates in Section IV.E.2 that the EU has either improperly applied the Appellate Body's cumulation guidance or has failed to explain the mechanics of its novel proposal for collective assessment of subsidies.
- 1350. For all of these reasons, the EU has failed to demonstrate that subsidies to the 737NG cause serious prejudice through a price causal mechanism. And because the EU's argument relies on a vague assessment of this flawed group of subsidies and lacks a detailed analysis of individual subsidies or even aggregated groups of subsidies, it cannot succeed under any other analytical framework (*e.g.*, if some subsidies are excluded, under a different aggregation analysis, or under a different cumulation analysis).
 - c. The EU's objection to the methodology underlying the U.S. magnitude calculations is erroneous.
- 1351. In addition to the exclusion of subsidies addressed in the preceding sub-section, the EU objects to the methodology underlying the U.S. magnitude calculations. Specifically, the EU argues that "{w}hile the US tax subsidies in question are tied to sales revenue which, the original panel and Appellate Body recognised, is received by Boeing in major part only when the aircraft is *delivered* the United States divides the subsidy magnitude by *orders* to derive its peraircraft magnitude." This argument cannot withstand scrutiny.

¹⁸²³ See EU SWS, para 931.

¹⁸²⁴ EU SWS, para. 1619 (emphases original) (internal citations omitted).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 389

- 1352. According to the EU's price effects theory, Boeing uses the subsidy to lower 737NG prices in strategic sales campaigns. It stands to reason that the effects of the subsidies the lowering of prices would have to take place when the prices are negotiated at the time of the order.
- 1353. Moreover, even if the EU's argument were valid, it would apply only to the tied tax subsidies, as these are the only subsidies that are received to a greater extent (or with reference at all to) when the aircraft is delivered. And even then, to maintain consistency between the numerator and denominator, one would have to include all of the deliveries during the reference period of aircraft ordered in strategic sales campaigns prior to the reference period.
- 1354. Therefore, the U.S. calculations remain valid and probative of the implausibility that subsidies are causing serious prejudice through lower 737NG prices. In fact, there are two refinements that are appropriate, and they undermine the EU's case further.
- 1355. First, the United States understood the EU to allege that the Wichita IRBs affect only the 737 MAX and 737NG, and thus allocated the annual subsidy value across the 1,467 aircraft 737 variants (1,057 737 MAXs and 410 737NGs) ordered in sales campaigns alleged by the EU to be significant lost sales. The EU's table now makes clear that it is alleging the Wichita IRBs to affect 787 pricing as well. Therefore, the subsidy value should have been allocated across the 1,830 Boeing aircraft ordered in all sales campaigns alleged by the EU to be lost sales. This adjustment alone reduces the value of the Wichita IRBs from \$36,000 per aircraft to \$29,000 per aircraft.
- 1356. Second, in its second written submission, the EU alleges three new lost A350 XWB sales, which include an additional 58 787 orders, and one new lost A320neo sale, which includes 60 737 MAX orders. This brings the total Boeing aircraft in lost sales campaigns to 1,948. This would reduce the value of the Wichita IRBs further to \$27,000. 1829
- 1357. And this second refinement helps illustrate a problem with the EU's theory, at least as it relates to untied subsidies (*i.e.*, R&D subsidies and miscellaneous subsidies). The increase in strategic sales campaigns results in the subsidy becoming less significant and less likely to have any effect because the subsidy value does not increase in proportion to increases in sales.

¹⁸²⁵ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)); US FWS, para. 1000.

¹⁸²⁶ See EU SWS, paras. 1072, 1145.

¹⁸²⁷ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

¹⁸²⁸ EU SWS, paras. 1260, 1274, 1289, and 1628.

¹⁸²⁹ See Compilation of Number of Boeing Aircraft Sold in Alleged Lost Sales Campaigns and Related Calculations (Exhibit USA-295(HSBI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 390

In any event, these intricacies are mostly beside the point since the per aircraft dollar amounts are so miniscule in relation to the price of the aircraft that even if the subsidies were applied in their entirety to lowering prices, it is simply implausible that they could genuinely and substantially cause the market phenomena alleged by the EU.

2. Significant price suppression

1358. In its first written submission, the United States demonstrated that the EU had failed to establish significant price suppression with respect to the A320ceo because:

- a. it failed to demonstrate the requisite genuine and substantial causal link, under either a technology effects or price effects theory; 1830
- b. it provided family-based pricing data that failed to support the EU's argument that the 737NG was suppressing A320ceo prices, while it continued to withhold the model-specific pricing data requested by the Panel under Article 13 of the DSU; 1831
- c. it failed to show that the situation with A320neo prices is genuinely and substantially caused by the alleged subsidies, rather than competition from new technology single-aisle LCA and Airbus's aggressive production rate hikes for the A320ceo; 1832
- d. it failed to show that any price suppression properly attributable to the alleged subsidies is "significant" under Article 6.3(c) of the SCM Agreement. 1833

The EU's response fails to overcome the U.S. rebuttal for the reasons discussed below.

a. Causation

1359. The EU has failed to establish that, absent the alleged subsidies, 737NG prices would be higher to a degree that would result in significant price suppression, as demonstrated above in Section IV.G and in the U.S. first written submission.

b. Pricing Data

1360. *First*, the United States observes that, as with A350 XWB and A320neo pricing data, the EU still refuses to comply with the Panel's Article 13 request for model-specific order price

¹⁸³⁰ US FWS, para. 1071.

¹⁸³¹ US FWS, paras. 1072-1073.

¹⁸³² US FWS, paras. 1076-1077.

¹⁸³³ US FWS, paras. 1074, 1076-1077.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 391

information.¹⁸³⁴ Rather than address its non-compliance, it attempts to provide reasons why the Panel should ignore its withholding of the data.¹⁸³⁵ The Panel should not permit the EU to flout its Article 13 request and thereby deny the Panel and the United States the opportunity to consider information relevant to the EU's claim.

- 1361. *Second*, the United States has demonstrated that the per-aircraft pricing data show average net prices for the A320ceo and 737NG [***]. ¹⁸³⁶
- 1362. The EU criticizes the United States for using per-aircraft, rather than per-seat, pricing data for this analysis, ¹⁸³⁷ but fails to explain why it thought the A320ceo per-aircraft data sufficiently relevant to provide in its first written submission. ¹⁸³⁸
- 1363. Nonetheless, the per-seat pricing data do not support the EU claim either:

737NG and A320neo Indexed Net Order Prices (per-seat basis) ¹⁸³⁹ *Contains U.S. BCI*

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1364. The per-seat data do not show the same degree [***] These data do not support the EU claim that alleged subsidies to the 737NG are significantly suppressing A320ceo prices.

c. Non-subsidy factors

1365. The United States previously demonstrated that the EU's price suppression claim was undermined by significant non-subsidy factors affecting A320ceo pricing: competition from new technology single-aisle LCA, including Airbus's own A320neo; and Airbus's aggressive production increases for the A320ceo. The EU fails to rebut these arguments.

1366. The EU's first response concerning these factors is to misstate, once again, the Appellate Body's guidance as having rejected the "premise underlying the US argument" and to mistake that premise. The relevant guidance from the Appellate Body is that a subsidy may be a genuine and substantial cause of a market phenomenon giving rise to adverse effects even if other, non-

¹⁸³⁴ Compare US FWS, para. 1072, and EU Responses to Article 13 Questions (Feb. 28, 2013), Question 6, with EU SWS, paras. 1920-1922.

¹⁸³⁵ EU SWS, paras. 1920-1922.

¹⁸³⁶ US FWS, para. 1073.

¹⁸³⁷ EU SWS, paras. 1927-1929.

¹⁸³⁸ Cf. EU SWS, para. 1928.

¹⁸³⁹ Sources: Per-Seat Indexed Average Net Order Prices for Boeing LCA, Boeing (Exhibit USA-360(BCI)); Price and Price Per Seat Evolution of Net Order Intakes of A330, A320ceo, and A350 XWB family LCA, Airbus (Exhibit EU-690(BCI)).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 392

subsidy factors were also genuine and substantial causes of that phenomenon. The United States is not arguing that the cited non-subsidy factors are affecting A320neo prices *in addition to* the effects from the alleged subsidies. Rather, the United States denies that the alleged subsidies are a genuine and substantial cause of the alleged significant price suppression, and it has identified non-subsidy factors that substantially account for the market situation cited by the EU. This is in keeping with the Appellate Body's guidance that a panel should take care that the effects of other factors should not be mistakenly attributed to the effects of subsidy. ¹⁸⁴⁰

1367. **Competition from new generation single-aisle LCA.** The EU persists in treating A320ceo prices as unaffected by competition from the A320neo and the 737 MAX. ¹⁸⁴¹ It refers to the statement of Airbus's Christophe Mourey as confining current generation single-aisle to a "niche" but fails to address the logical implications of his analysis – first, that being confined to a niche will tend to have a negative effect on prices, and second, that customers preferences for the A320ceo depend on whether the A320neo and 737 MAX are available for delivery within an acceptable period of time. ¹⁸⁴² Further, the significant competitive between the A320ceo and the A320neo and 737 MAX are apparent from the evidence that A320ceo pricing served as the basis for Airbus's A320neo pricing, with the latter's prices set at "one-half the net present value of the 15% fuel savings the aircraft would deliver over today's generation of A320s and Boeing's 737s." With Airbus offering customers half of the value of the A320neo's fuel burn advantage over the A320ceo, it is implausible that A320ceo prices would not be constrained as a result.

1368. **A320ceo production increases.** Contrary to the EU's characterization, ¹⁸⁴⁴ the U.S. argument about the effects of aggressive production increases on A320ceo prices does not require a showing that those production increases *outstrip* demand. ¹⁸⁴⁵ Rather, the U.S. argument rests on the proposition that A320ceo prices would be higher amidst rising demand for single-aisle LCA. Even before achieving its record rate of 42 A320s per month in early 2013, ¹⁸⁴⁶ Airbus had established a pattern of consistent production rate increases, as shown in the table below.

¹⁸⁴⁰ US – Large Civil Aircraft (AB), para. 984.

¹⁸⁴¹ EU SWS, paras. 1934-1936.

¹⁸⁴² Mourey Statement, paras. 91-92 (Exhibit EU-34(BCI)).

¹⁸⁴³ A320 NEO to have \$7-8 Million Price Premium, Scott Hamilton, Flight International (Aug. 23, 2010) (Exhibit USA-361).

¹⁸⁴⁴ See EU SWS, para. 1942.

¹⁸⁴⁵ US FWS, paras, 1077.

¹⁸⁴⁶ Airbus Results 2012, Outlook 2013, Presentation, Fabrice Bregier, Airbus (Jan. 17, 2013) (Exhibit USA-296).

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 393

A320ceo Family Production Rates (2004-2012) 1847

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Annual Deliveries	233	286	337	365	385	396	399	420	453
Monthly Production									
Rate	19.42	23.83	28.08	30.42	32.08	33.00	33.25	35.00	37.75

1369. Airbus's production rate increased by 24 percent from 2007 to 2012, and by *94 percent* increase from 2004 to 2012. The EU contends that "any additional price suppression from increased supply cannot rebut EU evidence that the US subsidies benefitting from the 737NG also significantly suppress A320ceo prices." However, there is no such evidence of significant price suppression. Indeed, the maximum amount of subsidies that could plausibly be attributed to the 737NG is far too small to have the alleged effects, as the United States has demonstrated.

d. "Significant" price suppression

- 1370. Related to the EU's flawed treatment of non-subsidy factors is its continued failure to even attempt a demonstration that the alleged subsidies are causing price suppression that is "significant" within the meaning of Article 6.3(c) of the SCM Agreement. ¹⁸⁴⁹
- 1371. In light of the above demonstration, the EU has failed to overcome the U.S. rebuttal to its claim of significant price suppression regarding the 737NG.
 - 3. The EU has failed to demonstrate that the alleged subsidies to Boeing benefitting the 737NG family present cause adverse effects in the form of significant lost sales of A320ceo family LCA.
- 1372. As the United States demonstrated in its first written submission, the Panel should reject the EU's claims that subsidies to the 737NG caused the A320ceo to experience significant lost sales. ¹⁸⁵⁰ In response, the EU has repeated its accusation of [[**HSBI**]]; ¹⁸⁵¹ dismissed the undisputed fact of the [[**HSBI**]] that would preclude any finding that subsidy-enabled pricing was a genuine and substantial cause of lost sales; ¹⁸⁵² and as it has with respect to its 737 MAX

¹⁸⁴⁷ Source: Ascend database (Apr. 2013) (Exhibit USA-287).

¹⁸⁴⁸ US FWS, para. 1941.

¹⁸⁴⁹ Compare US FWS, para. 1074, 1076-1077, with EU SWS, paras. 1916-1945.

¹⁸⁵⁰ US FWS, para, 1079.

¹⁸⁵¹ E.g., EU SWS, para. 1900.

¹⁸⁵² E.g., EU SWS, para. 1901.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 394

lost sales arguments – established an arbitrary distinction between [[**HSBI**]]. ¹⁸⁵³ In fact, in the two sales campaigns not addressed by the EU and the United States in connection with 737 MAX sales, Boeing's [[**HSBI**]] were the factors that drove its sales. The EU continues to fail to demonstrate that any subsidy-enabled pricing was a genuine and substantial cause of any lost sales to either Delta Air Lines or Fly Dubai.

a. Delta

1373. The United States explained in its first written submission that any price competition was not characterized by Boeing's [[HSBI]]. ¹⁸⁵⁴ The EU, in response, notes that the fact that [[HSBI]] demonstrates the effect of subsidies to the 737NG. ¹⁸⁵⁵ However, in support, the EU identifies only the same types of pricing strategy that characterize all sales in the LCA market: "extreme price discounting" and [***] are central to the LCA market and practiced by both Boeing and Airbus. ¹⁸⁵⁶ The EU continues to provide no evidence or argument that Boeing's pricing in the Delta Air Lines campaign was subsidy-enabled or a genuine and substantial cause of Airbus's lost sales. The EU has not explained, for example, how it distinguishes Boeing's [[HSBI]] ¹⁸⁵⁷ from Airbus's [[HSBI]] other than by declaring the former to be subsidy-enabled. ¹⁸⁵⁸ Indeed, it was Airbus, not Boeing that [[HSBI]]. ¹⁸⁵⁹

1374. Most significantly, the **[[HSBI]]** precludes a finding that subsidy-enabled pricing was a genuine and substantial cause of any lost sales to Airbus in this campaign. The magnitude of alleged subsidies, under any plausible calculation, would come far short of accounting for a **[[HSBI]]** to the 737NG. ¹⁸⁶⁰ In response, the EU notes that the differences between the LCA, when size and performance differences are accounted for may or may not amount to **[[HSBI]]**. ¹⁸⁶¹ If the EU's theory is that the **[[HSBI]]** is indeed a wide gap in price but size and performance differences must be factored in, then it is the EU's burden, not the United States' to do so. The EU, not the United States, is claiming that subsidy-enabled pricing was a genuine and substantial cause of lost sales in this campaign, and it has so far failed to support its claim.

¹⁸⁵³ E.g., EU SWS, para. 1902.

¹⁸⁵⁴ US FWS, para. 1080.

¹⁸⁵⁵ EU SWS, para. 1900.

¹⁸⁵⁶ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁸⁵⁷ EU FWS, para. 1852.

¹⁸⁵⁸ EU FWS, para. 1853.

¹⁸⁵⁹ [[**HSBI**]] (Exhibit USA-342(HSBI)).

¹⁸⁶⁰ See US FWS, para. 1080.

¹⁸⁶¹ EU SWS, para. 1901.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 395

1375. In any case, price simply wasn't the basis by which Delta made its decision. Once the sale was completed, [[**HSBI**]]. ¹⁸⁶² These factors, not any subsidy-enabled pricing, were the genuine and substantial causes of Delta Air Line's purchasing decision in this campaign.

b. Fly Dubai

1376. As with Delta Air Lines, the United States explained in its first written submission that the [[**HSBI**]]. ¹⁸⁶³ The EU, in response, notes that the fact that [[**HSBI**]] demonstrates the effect of subsidies to the 737NG. ¹⁸⁶⁴ However, in support, the EU identifies only the same types of pricing strategy that characterize all sales in the LCA market: as the EU's evidence shows, "extreme price discounting" and [***] are central to the LCA market and practiced by both Boeing and Airbus. ¹⁸⁶⁵ The EU continues to provide no evidence or argument that Boeing's pricing in the Fly Dubai campaign was subsidy-enabled or a genuine and substantial cause of Airbus's lost sales.

1377. The EU has also challenged the United States' estimate of an [[**HSBI**]]. ¹⁸⁶⁶ But even [[**HSBI**]]. And, as with its Delta Air Lines argument, the EU has failed to meet its burden if its theory is that the [[**HSBI**]] must be considered in light of other factors, *e.g.*, size and performance. ¹⁸⁶⁷ Accordingly, the EU has failed to demonstrate that any subsidy-enabled pricing was a genuine and substantial cause of any lost sales to Fly Dubai.

- 4. The EU has failed to demonstrate displacement, impedance or threat thereof under Article 6.3(a) or Article 6.3(b) of the SCM Agreement with respect to the 320neo.
- 1378. The EU still fails to establish that the effect of the alleged subsidies to the 737NG is to cause A320ceo family LCA to experience displacement, impedance or threat thereof any "existing technology single-aisle market."
 - a. Brazilian, Canadian, Malaysian, Norwegian, Russian, and UAE "existing technology single-aisle markets"
- 1379. With respect to these markets, the EU mischaracterizes the U.S. rebuttal arguments as "suggest{ing} recognition by the United States that the European Union has demonstrated that

¹⁸⁶² [[**HSBI**]] (Exhibit USA-342(HSBI)).

¹⁸⁶³ US FWS, para. 1081.

¹⁸⁶⁴ EU SWS, para. 1907.

¹⁸⁶⁵ [[**HSBI**]] (Exhibit EU-34(HSBI)).

¹⁸⁶⁶ EU SWS, para. 1908.

¹⁸⁶⁷ See EU SWS, para. 1908.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 396

Airbus' market share is lower than it otherwise would have been." ¹⁸⁶⁸ The U.S. arguments suggest no such thing.

1380. In fact, they are aimed squarely at a core flaws that are reflected in all EU claims and arguments based on its price effects theory: (1) the failure to demonstrate that Boeing's prices would be lower absent the alleged subsidies, and, even if that were shown, (2) the absence of any EU attempt to show that the magnitude of the alleged subsidies is sufficient to cause displacement, impedance or threat thereof. Thus, the EU has no basis for referring to "unrebutted evidence" that supports its arguments with respect to these markets. ¹⁸⁷⁰

- b. U.S., Indonesian, and Singaporean "existing technology single-aisle markets"
- 1381. The EU second written submission does nothing to remedy the flawed arguments with respect to these markets. The EU notes that for these markets it "does not rely solely on evidence of lost sales campaigns, but has also presented evidence of trends in sales volumes and market shares..."¹⁸⁷¹
- 1382. The United States observes, first, that the EU has failed to establish that the SilkAir sale it discusses or any of the other referenced lost sales have been caused by the alleged subsidies, as demonstrated above in Section IV.I.4. Further, the cited market data do nothing to address the EU's fundamental failure to demonstrate that the alleged subsidies cause Boeing to price the 737NG lower than it would otherwise, and to such an extent that the 737NG takes sales and market share from the A320ceo. ¹⁸⁷² Finally, as with the Canadian market, the EU's arguments concerning market trends in the U.S. and Indonesian markets still rely on an unsupported assumption that an approximate 50/50 market share split is a baseline for what should be expected in the absence of the alleged subsidies.
 - c. Australia (alleged displacement and threat thereof)

1383. The EU makes a halfhearted attempt to respond to the U.S. argument that, in addition to other flaws, ¹⁸⁷³ there are far too few deliveries in this market to show displacement or threat thereof. The EU admits that the number of deliveries is "small," confirming the U.S. critique. ¹⁸⁷⁴ And contrary to the EU arguments, it has not demonstrated that the deliveries were caused by the

¹⁸⁶⁸ EU SWS, para. 1953.

¹⁸⁶⁹ US FWS, paras. 1091-1095, 1100-1105, 1109-1110.

¹⁸⁷⁰ EU SWS, para. 1954.

¹⁸⁷¹ EU SWS, para. 1955.

¹⁸⁷² See US FWS, paras, 1084, 1097, 1107.

¹⁸⁷³ US FWS, paras. 1088-1090.

¹⁸⁷⁴ EU SWS, para. 1959.

United States – Measures Affecting Trade in Large Civil Aircraft: Second Written Submission of the United States Recourse to Article 21.5 of the DSU by the United States (DS353)

August 22, 2013 – Page 397

alleged subsidies. Finally, the EU is mistaken that the United States has in EC – $Large\ Civil$ $Aircraft\ (21.5)$ made claims that are comparable to the EU argument here.