UNITED STATES – MEASURES AFFECTING TRADE IN LARGE CIVIL AIRCRAFT (DS353)

Oral Statement of the United States at the second substantive meeting of the Panel with the parties

Revised

Nonconfidential Session

Introduction

- 1. Good afternoon Mr. Chairman and members of the Panel. Thank you for coming here today to help us resolve this dispute with the European Communities.
- 2. The EC's claims that alleged U.S. subsidies are causing serious prejudice to Airbus are meritless. Over the course of more than 900 pages of submissions, we have demonstrated that the EC's arguments are even inconsistent with the evidence that the EC itself submitted to the Panel. An objective assessment of that evidence alone would preclude a decision in the EC's favor. In short, it has failed completely to present a *prima facie* case, that is, one that in the absence of refutation would require the Panel as a matter of law to rule in favor of the EC. The large volume of evidence submitted by the United States further demonstrates that, except for FSC/ETI and a few other minor exceptions, the programs identified by the EC are not financial contributions, do not confer a benefit, or are not specific. Even if they were, the United States has demonstrated that the EC's assertions that the programs are causing serious prejudice or threat of serious prejudice to Airbus is completely inconsistent with the evidence.
- 3. The EC's response to the grave flaws with its *prima facie* case is to ask the Panel to ignore the evidence. Again and again, it cites the same few statements by a few government officials and Boeing personnel and asks the Panel to disregard the mass of evidence as to the substance of the measures and what the relevant states and agencies actually do. To give just a

¹ EC – Hormones (AB), para. 104.

² The Washington state B&O tax credit for preproduction development; Washington state sales and use tax exemption for computer hardware, peripherals, and software; Washington state employment resource center (first five years), and City of Chicago lease termination payments collectively account for less than \$35 million of the EC allegations. US RPQ1, paras. 26-35.

few examples, the EC selects a few statements by Dr. Creedon, a NASA official as supposedly showing that NASA took credit for the Boeing 777. It ignores all the evidence that NASA engages in general research on its own for its own use to disseminate, and engages a broad group of companies and universities to assist, and then disseminates the results. The EC then asks you to treat approximately 80 percent of NASA's non-engine aeronautics research budget as a grant to Boeing. The EC selects a quotation from Boeing employee Tony Parasida and a few articles referencing synergies between Boeing's DoD and civil businesses as supposedly showing that military contracts pay for civil research. But it disregards evidence that the company supplies research services to DoD on the same terms as other contractors, for no more than adequate remuneration. Nonetheless, it asks you to find that DoD is subsidizing Boeing's large civil aircraft operations.

- 4. You can see the same sort of selective quotation with regard to the documents cited by the EC. For example, in discussing the Space Act, NASA's authorizing statute, the EC again and again quotes the section referring to the "preservation of the United States preeminent position in aeronautics." The EC asks you to ignore the agency's missions of "expansion of human knowledge of the Earth and of phenomena in the atmosphere and space" and "improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical and space vehicles" not just for the United States, but for the world. And, on this basis, it asks you to find that NASA's purchases of services from outside contractors to advance that mission are a "sham."
- 5. We are not asking you to ignore the evidence cited by the EC, or to give extra credence to our evidence as "the best information available." Rather, we know that you will do what Article 11 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU") requires, namely, make "an objective assessment of the facts of the case, and the applicability of and conformity with the relevant covered agreements." Such an assessment will show that the evidence, when viewed in its full context, demonstrates that the EC's claims are baseless.
- 6. Our presentation today will address the subsidy claims advanced by the EC, and explain how the evidence is inconsistent with the EC's arguments. We will then discuss the key flaws with the EC's claims. After more than 900 pages of submissions to the Panel, we do not propose to address every problem with the EC's case, or elaborate on every argument advanced by the United States. Instead, we are focusing on the most important issues so that we can leave time to address the Panel's concerns.

DoD RDT&E

³ E.g., EC SWS, paras. 315, 318, 378, and 405; EC RPQ1, para. 61.

⁴ Space Act, § 102(d)(1), (2), and (9).

7. The first EC claims we will address are those related to research, development, testing, and evaluation ("RDT&E") conducted by the U.S. Department of Defense ("DoD"). The EC makes two claims with regard to these activities – first, that some contracts under which Boeing researches aeronautics technology for DoD are in part "direct payments" related to civil aircraft and, second, that DoD provides facilities and equipment to Boeing for use in developing civil aircraft. Neither claim is correct. First, we will address the RDT&E contracts, and how the EC has failed to establish the existence of a financial contribution, a benefit, or specificity.

DoD RDT&E contracts are not financial contributions to Boeing

- 8. We have explained the reasons that purchases of services are not financial contributions within the meaning of Article 1.1(a)(1) at length in our submissions, and rebutted all of the legal arguments raised by the EC.⁵ We will not repeat those observations today.
- 9. The United States has shown that DoD's RDT&E contracts whether procurement contract, cooperative agreement, or Other Transaction are purchases of services for purposes of Article 1.1(a)(1). The reasoning is straightforward. We have demonstrated that research and development are services, a point that the EC has not disputed. We have shown that DoD paid money for the services, and that they had value to DoD, another proposition that the EC does not contest. Therefore, there is a purchase of services.
- 10. The EC's arguments do not change this conclusion. It contends that RDT&E contracts should not be treated as purchases of services because Boeing is not normally a supplier of services. This is incorrect, as Boeing supplies several different types of services, including financing services and lifecycle solution and support services. The EC's point is also irrelevant, because the ordinary meanings of "purchase" and "services" focus on the activity involved, and not on whether the entities are predominantly or exclusively service suppliers.
- 11. The EC also argues that the ultimate objective of RDT&E services is the purchase of a good. However, the ordinary meaning of "service" focuses on the activity in question, and not the possibility that it may someday lead to the production of a good. Thus, auditing and accounting activities provided to a factory remain services, even if they support a factory's purchase of inputs for production. The retention of outside lawyers to advise on the drafting of a contract remains a service, even if the contract covers the purchase of goods. The examples of relationships between services and goods are endless, and do not change the fact that the services are services. The same holds true for any RDT&E services purchased by DoD.
- 12. Finally, the EC argues that DoD RDT&E contracts "do not appear as typical purchases"

⁵ US RPQ1, paras. 36-41; US Comm.1, paras. 45-65.

⁶ US FWS, paras. 44-48 and 94; US Comm.1, para. 58.

to the extent that the supplier has a subsequent civil use for the military technologies developed under the contract.⁷ The United States has shown, as a factual matter, that this situation is much more rare than the contracting challenged by the EC. As a legal matter, the EC is simply incorrect. Commercial purchases of services may indeed allow the service supplier future use of knowledge developed under the contract. For example, a lawyer does not wipe his or her mind clean each time work begins for a new client. In any event, DoD's practice of using competitive purchasing techniques produces a market price that would account for any civil or other secondary value to the company that a bidder anticipates.

- 13. Before moving to the next topic, it is also significant that the EC arguments regarding DoD's RDT&E activities demonstrate the implausibility of the case it is trying to make. The EC concedes that all RDT&E contracts provide something of value to DoD's military efforts – in other words, that there is an exchange of value between DoD and its contractor. The only contracts it challenges are those that involve research with respect to what the EC terms a "dual use" technology – one that has both military and civil uses arising from an alleged "overlap" in military and civil flight envelopes, missions, or production and design processes. But then, the EC claims that it can separate the "overlap" into a discrete military "portion" so that it can challenge the remaining "civil portion" as a "direct transfer" from DoD. If there were such a discrete "civil portion" of the R&D, however, DoD would not purchase it. As the EC concedes, the evidence establishes that DoD does not purchase research with respect to exclusively civil technologies. In truth, the technologies that the EC highlights do not have separate civil "portions" – they are individual military technologies with alleged civil uses. And, accordingly, the payments for services under these contracts do not have separate military and civil "portions" either. They call for unitary research efforts to attain specified military objectives.
- 14. Thus, the EC has failed to establish that DoD RDT&E contracts are a financial contribution. Accordingly, the analysis under the SCM Agreement should end at this point.

DoD RDT&E contracts do not confer a benefit

- 15. The EC's next failure comes in its efforts to demonstrate that DoD RDT&E contracts confer a benefit to the production of civil aircraft. The EC recognizes that to do so, it must establish that DoD's actions provide something to Boeing on terms more favorable than available on the market. However, the EC has provided absolutely no evidence that this is the case.
- 16. These contracts are for the purchase of research into topics of military interest. The only "evidence" the EC cites is its assertion with no citation to actual market practices or economic reasoning that "a commercial entity, particularly an entity with the market power of DOD, would never pay for R&D costs that are known to also relate to a good other than the good being

⁷ EC Comm. 1, para. 64.

purchased." In the first place, this assertion is demonstrably false. We need look no farther than the legal profession, in which clients routinely pay law firms for the full cost of legal research, even though they know that the firm may subsequently use the results of that research in its representation of other clients on unrelated matters. In the same way, a law firm client can assume that it is receiving the advantage of some amount of knowledge, experience, or confidence accumulated in the firm's representation of previous clients. In the same way, a contractor's accumulated experience or knowledge from other lines of business may be one of the attributes that makes its bid attractive to DoD.

- 17. The EC also disregards the fact that DoD and Boeing operate in a competitive market. DoD does not have to buy RDT&E services from Boeing. Many other companies including aerospace giants Lockheed Martin, Northrup Grumman, and BAE Systems, which is a U.K. company, supply RDT&E services to DoD. Accordingly, there is competitive pressure on Boeing to recognize any potential secondary uses of research in order to offer the lowest bid that makes commercial sense. On the flip side, however, DoD needs the services it purchases, and cannot compel its contractors including Boeing to supply its RDT&E services if the company finds the payment too low.
- 18. In short, there is competition among suppliers for DoD's business. The Federal Acquisition Regulations implement U.S. law, which mandates a preference for competition. They require agencies to "promote and provide for full and open competition" through "competitive procedure(s) contained in this subpart that are best suited to the circumstances of the contract action and consistent with the need to fulfill the Government's requirements efficiently." Where there is competition, the fact that Boeing won the contract means that DoD has concluded that Boeing's offer best meets the criteria that the solicitation establishes as the basis for the award. In R&D procurements, the basis for the award is often the best value to the government. In other words, the alternative to purchasing the RDT&E services from Boeing is to pay *more* or receive *less* from another supplier. In this situation, even if DoD *knows* Boeing has a commercial use for a technology that may result from the research, it would be completely contrary to commercial practice for DoD to choose one of the less valuable bids.
- 19. DoD's database indicates that *all* except two of the procurement contracts in our DoD RDT&E contract list were subject to competitive bidding. One of those two was a continuation of a contract that was itself competitively bid, so that the price and terms were disciplined by competition. The other was a contract for a variety of activities related to the V-22, a military helicopter produced by Boeing. DoD concluded that it would be inefficient to have a supplier that had more limited experience or understanding of the aircraft perform these activities another conclusion that a similarly placed commercial entity would make. We have provided

⁸ EC SWS, para. 481.

⁹ 48 CFR § 6.101(a) and (b) (Exhibit US-1250).

samples of the types of solicitations that DoD publishes to encourage bids for its RDT&E business and against which it evaluates proposals.¹⁰

20. In short, contrary to the EC's assertions, DoD's practices with regard to RDT&E contracting are completely consistent with commercial practices and economic logic and, therefore, confer no benefit within the meaning of Article 1.1(b).

Specificity

21. The United States has demonstrated that DoD's criteria for RDT&E contracting are related to the requirements of particular projects and, therefore, do not limit participation to certain enterprises.¹¹ Indeed, the breadth and variety of enterprises that receive DoD RDT&E contracts demonstrate that there are no limitations. The EC points to the share of RDT&E contracting by Boeing and other large defense contractors as evidence of *de facto* specificity. For the reasons set out in our first written submission, we disagree.¹²

Magnitude

- 22. The United States has explained in considerable detail why the evidence demonstrates that CRA's estimate of the value of research into allegedly dual use technologies vastly exaggerates any actual value. We will not repeat all of our observations here. But one point bears repeating. For two of the PEs analyzed by CRA, DoD reported the actual amounts spent with particular suppliers, which allows a comparison with CRA's estimates. The United States performed that comparison in its first written submission, and demonstrated that CRA's estimates of the amount of the alleged subsidy were vastly higher than what DoD actually paid Boeing. In the EC second written submission, CRA claimed to have found errors in the U.S. calculations, although it did not indicate how corrections would affect the overall results. In fact, there is no meaningful effect. We have provided a revised version of Exhibit US-65, showing that, even with the corrections, CRA's estimates overstated the actual value of Boeing RDT&E contracts by between 128 and 768 percent in 15 of 17 comparisons, and on average between 266 and 715 percent. That is, the estimates were between twice and eight times the actual values.
- 23. CRA argues that the Panel should disregard this pervasive pattern of exaggeration because the 17 comparisons are a "small sample size." CRA misses the point. If an analysis shows that

¹⁰ Materials Soliciting Bids for DoD RDT&E contracts (Exhibit US-1251).

¹¹ Materials Soliciting Bids for DoD RDT&E contracts (Exhibit US-1251).

¹² US FWS, paras. 120-123.

¹³ EC overestimate of DoD General Aviation RDT&E funding to Boeing (per CRA) (Exhibit US-1252)

¹⁴ CRA Response Report, p. 32 (Exhibit EC-1165).

the EC's methodology is consistently wrong for one group of contracts, expanding that methodology to encompass a much larger group of contracts does not make it right.

- 24. Let me give you an example. Suppose I told you that I had a methodology for estimating the height of everyone on the WTO grounds today. And suppose further that I told you that my methodology showed that you, Mr. Chairman, were 150 cm tall, that Mr. Plasai was 180 cm tall, and that everyone else in the room was between 4 and 15 meters tall. (These are roughly the range of errors in CRA's estimates.) Would an objective assessment conclude that my methodology was valid? Of course not. And would that conclusion change if I insisted that the people in this room were a small fraction of the total number of people at the WTO today, and that you could therefore believe my methodology accurately predicted the height of all people at the WTO including those in this room? Again, of course not. Yet that is what the EC asks you to do. When a simple check reveals that a methodology is consistently and dramatically wrong on a small data set, an objective assessment would *not* permit its use for a larger data set for which such checking is not possible.
- 25. These facts alone preclude any reliance on CRA's estimates of the magnitude of the alleged subsidies. However, they are not the only problems. We have identified numerous other flaws in CRA's methodology. Therefore, it is entitled to no weight in the evaluation of the magnitude of DoD's alleged dual-use RDT&E activity.
- 26. The United States, in contrast, has provided an estimate based on facts, not methodologies that are demonstrably inconsistent with the facts. The EC alleges that the set of contracts that underlies the U.S. estimate omits some contracts that the EC considers relevant. As we have explained, some of these contracts were not funded under the Program Elements subject to the EC challenge, which puts them outside this Panel's terms of reference. Others, in light of the EC's vague description of its concerns, were not recognizable as covered by the EC claim. But, more importantly, the EC's critique forgets that evaluating the magnitude of an alleged subsidy does not require a precise quantification. What is clear from the U.S. contract set, and the relatively small value of the contracts that the EC considers as properly in that set, is that the magnitude of the types of contracts subject to the EC challenge is less than one tenth of what the EC alleges.

DoD facilities, equipment, and employees

27. The EC is also attacking the alleged provision of DoD facilities, equipment, and employees under the challenged RDT&E contracts as a subsidy separate from the contracts themselves.¹⁵ The evidence does not support this claim.

¹⁵ EC SWS, para. 497.

- 28. In the first place, when DoD allows use of its facilities, equipment, or employees for the purpose of performing an RDT&E project, it is not "providing" them to a contractor. It is providing them to itself, for use to advance its own objectives. Thus, there is no financial contribution within the meaning of Article 1.1(a)(1).
- 29. Second, and perhaps more important, any benefit associated with DoD facilities and equipment used under an RDT&E contract cannot be evaluated independent of the contract because those assets form part of the basis of the exchange. I'd like to stop and underscore this point, because it is an endemic problem with the EC analysis. All of the EC claims against NASA and DoD relate to the terms of those agencies' contracts with Boeing. Whether it is the availability of facilities, the involvement of personnel, the treatment of intellectual property rights, or the inclusion of certain indirect costs in the total prices, all are terms that become effective through the conclusion of contracts between the agencies and Boeing. Many of those contracts came to Boeing because it offered a better value to the relevant agency than any other bidder, and all were subject to negotiations in which the agency sought to get the best deal from the company. Now, long after the fact, the EC seeks to pluck elements out of those transactions and treat them as free-standing "provisions" from the government to Boeing. It should be immediately obvious that this approach ignores the economic reality of the exchange.
- 30. DoD facilities, equipment, or personnel provide a good example. A contractor that has to supply facilities will charge more than a contractor that has access to DoD facilities. That will influence the price that it is willing to accept for the work. Therefore, to take facilities, equipment, or personnel (or any other contractual term) out of the contract is to ignore that they form part of the exchange of value and influence the price.
- 31. The EC would have you believe this type of a focus on the exchange between the parties would mean that "one cannot challenge as a subsidy any financial contribution that is included as part of something deemed by the government as a 'contract.'" This is not the case. A complaining party is free to challenge the exchange, and could prevail if it could demonstrate that there were a financial contribution, and that the value received by the contractor was greater than the value received by the government to an extent more favorable than the market would afford. The EC has completely failed to show that this is the case with NASA or DoD contracts.
- 32. Returning to the specific issue of the EC allegations regarding DoD facilities, equipment, and employees, the EC also is also wrong in its assertion that DoD employees conduct research *for* Boeing.¹⁷ The only evidence it cites for this proposition are statements in three of the DoD program element descriptions to the effect that "{a}ll efforts in this program element contain the resources necessary, including civilian salaries, to manage, conduct, and document the technical

¹⁶ EC SWS, para. 549.

¹⁷ EC SWS, para. 498.

activities."¹⁸ Since the evidence is clear that DoD employees conduct research activities directly for DoD as part of their regular duties, outside of any contract, ¹⁹ there is no reason to interpret statements like the one quoted by the EC as signifying that DoD employees conduct research *for contractors*.

NASA R&D

- 33. The second set of EC claims we will address today are those related to NASA, which, according to the EC, make up much of the "amount" of subsidization alleged by the EC. We have demonstrated in our previous submissions that each element of the EC claim is wrong. There is no financial contribution because NASA purchases R&D services from Boeing or provides goods and services for adequate remuneration not "grants," "direct payments," or free facilities, equipment, and employees. There is no benefit because NASA deals with Boeing on commercial terms. The EC's argument rests on the allegation that the transaction by NASA and Boeing are a "sham." However, the evidence shows that Boeing provides NASA valuable services that advance NASA's statutory mission. In any event, whatever the conclusion about those transactions, they were worth no more than a small fraction of the \$10.6 billion that the EC alleges.²⁰
- 34. Before moving into the legal elements of the EC case, it is useful to return to the undisputed facts about NASA and its mission. The agency's governing statute charges it with "the expansion of human knowledge" and the "improvement of the usefulness, performance, speed, safety, and efficiency of air and space vehicles," as well as the "preservation of the United States preeminent position in aeronautics and space through research and technology development related to associated manufacturing processes." To these ends, NASA maintains the world's largest collection of open scientific and technological information on aeronautics, through its on-line technological reports server and the hard-copy collections maintained at its research centers. NASA is not, however, just a passive collector of knowledge. Its scientists conduct research costing billions of dollars intended to make air travel safer, faster, more efficient, and more environmentally sound. They publish articles detailing the results, sponsor conferences, and make presentations to publicize the results of their work. NASA also contracts with universities, research centers, and enterprises to conduct additional research and make the results publicly available. No objective observer could question that NASA's work increases the world's

¹⁸ Materials Budgets, FY 1996, p. 2 (exhibit EC-420); Aerospace Flight Dynamics/Aerospace Vehicle Technologies Budgets, FY 1996, p. 1 (exhibit EC-421); and Aerospace Avionics/Aerospace Sensors Budgets, FY 1996, p. 1 (exhibit EC-423); *cited in* EC SWS, para. 498, note 209.

¹⁹ US FWS, para. 80; CRA Response Report, pp. 33-34 (Exhibit EC-1165).

²⁰ Exhibit EC-25, p. 2.

²¹ Space Act, § 102(d)(1), (2), and (8).

store of public aeronautics knowledge. Even Airbus engineers admit that NASA's published work has a "generic and academic value to Airbus."²²

- 35. NASA's contracts with Boeing and its other research activities are designed to advance NASA's broadest objectives through research and dissemination of the results. And NASA succeeds in doing this. We have shown that the Integrated Wing Design Program, which the EC characterizes as a gift to Boeing, produced a huge number of scientific articles and papers that other scientists including scientists in Europe valued enough to cite in their own published work.²³ Information submitted with today's presentation demonstrates that the programs challenged by the EC generated almost 300 contractor reports and articles that were also cited by more than 1000 authors, including 250 in Europe.²⁴ The EC argues that Airbus cannot use this information to build large civil aircraft. However, as Mike Bair and Branko Sahr of Boeing have explained, they cannot use contractor reports to build an aircraft, either. The industry view is that NASA performs its mission by developing and disseminating foundational research. Companies create their own competitive advantage by what they choose to build on that foundation.²⁵
- 36. In short, NASA generates knowledge and develops and maintains research infrastructure that pertains to a broad range of activities and users. These include its own space exploration and science activities, as well as the goals of other U.S. agencies. NASA's work also creates a foundation of aeronautics research knowledge that is widely disseminated and available. That is how it advances its overall set of objectives: "expansion of human knowledge," the "improvement of the usefulness, performance, speed, safety, and efficiency" of aeronautical . . . vehicles," as well as "preservation of the United States preeminent position in aeronautics and space through research and technology development related to associated manufacturing processes." It provides a base on which anyone may build. How a U.S. or other enterprise invests its own resources to draw on that base and become more competitive is that enterprise's concern.
- 37. This brief overview attempts to provide a full picture of NASA, all of its objectives, and how they fit together. When seen in this context, it is clear that NASA achieves its objectives in a way that does not result in subsidization of Boeing.
- 38. To avoid this evidence, the EC presents a one-sided picture of NASA and its activities. It

²² Statement by Patrick Gavin, Tim Sommer, Burkhard Domke, and Dominik Wacht, para. 72 (Exhibit EC-1175).

²³ Exhibit US-1140(revised).

²⁴ Reports and articles published by Boeing/McDonnell Douglas personnel pursuant to aeronautics research contracts (Exhibit US-1252).

²⁵ Statement of Mike Bair, para. 6 (Exhibit US-7); Affidavit of Branko Sarh, para. 9 (Exhibit US-1254).

focuses on a single element of NASA's authorizing statute and the one of 20 seats on the NASA Advisory Council that a Boeing employee *sometimes* fills. From there, it asks you to find that 80 percent of NASA's aeronautics activities are grants, facilities, or employees provided solely to Boeing to give it a competitive advantage over Airbus.²⁶

- 39. However, the full context of NASA's activities reveals the invalidity of the EC's argument. We have shown that Boeing's voice is only one of a large number of voices that the agency considers in setting its agenda. We have shown that NASA does much of its own research or contracts with entities other than Boeing, and puts the results into the public domain.
- 40. Finally, the time does not permit us to put each of the EC quotations in this larger context. However, one example will reveal the distortions inherent in attempting to understand the breadth of NASA's programs based on a few comments. The EC quotes former NASA Administrator Daniel Goldin as having stated that "{t}he things we have already done are into their products and we're now looking, what we can do now for a decade from now" and "{i}f you look to NASA to impact the sales of Boeing planes . . . in the next five-seven years, the die is cast. What we're talking about is a real partnership."
- 41. But the EC neglects to point out that Mr. Goldin also recognized that "{f} or NASA to go tell the Boeing Company that it's going to be the ultimate beneficiary, here's what you ought to do *is the wrong thing*."²⁸ His testimony further made clear that when he talked about developing technologies for "tomorrow," he meant technologies that would be generally applicable across aviation to the general advantage of the public, such as:
 - "advanced air traffic technologies" to dramatically increase system capacity and decrease delays;
 - "high fidelity modeling and simulation of the airspace system" to "increase the capacity of our nation's airports";
 - "aviation safety, quiet aircraft technology and ultra-efficient engine technology;" and
 - "sensors and actuators" that would allow vehicles to "monitor their own

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²⁶ Exhibit EC-18, p. 1.

²⁷ 2001 Senate Aeronautics Hearing, p. 13 (Exhibit EC-292), *quoted in* EC SWS, para.

²⁸ 2001 Senate Aeronautics Hearing, p. 18 (Exhibit EC-292), quoted in EC SWS, para.

performance, their environment and their human operators for improved safety."29

None of these is a Boeing-specific technology. In fact, at the same hearing, Dr. Creedon – who has had one comment repeatedly quoted by the EC – described how NASA developed a sensor for detecting dangerous wind shear conditions and how the "payoff" for NASA was that "{t} here are now 4,000 aircraft worldwide using this technology." Thus, the full context of the remarks quoted by the EC shows that NASA officials do not intend Boeing to be the "ultimate beneficiary" of their work, and in fact view success in terms of wide distribution of NASA technologies. NASA does not develop specific technologies to solve problems for Boeing. Rather, NASA researches general aeronautics problems for wide distribution. Thus, when Mr. Goldin refers to the "things we have already done" being put "into" Boeing products, he merely reflects NASA's perspective that its research goes "into" all aircraft. That is NASA's viewpoint, and readily explains the comments that the EC highlights.

- 42. The EC's ability to cull a few statements in support of its theory from hundreds of pages of documents spread over 17 years is not surprising. What is surprising is that it expects the Panel to accept these brief comments as evidence of the purpose of the programs and the activities conducted by NASA, and to disregard the hard evidence that the NASA programs challenged by the EC expand the global foundations of aeronautics science.
- 43. In sum, NASA is <u>not</u> the organization described to you by the EC. The assertion that approximately 80 percent of NASA's non-engine aeronautics budget³¹ is a subsidy to Boeing bears no relationship to the reality of NASA's statutory mission or its activities. NASA is an organization with a broad range of objectives, that has added more than any other institution to the global foundation of aeronautics and aerospace knowledge that forms a large portion of the basis of the world's aerospace education and on which producers around the world base their work.
- 44. Turning now to the specifics of the EC's subsidy allegations as they relate to NASA programs, the EC has made two claims that NASA's contracts with Boeing are "grants" or "direct payments" and that the agency provides facilities, equipment, and employees to Boeing. Both claims are wrong. We will begin with the R&D contracts.

NASA R&D contracts are not financial contributions

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²⁹ 2001 Senate Aeronautics Hearing, p. 8 (Exhibit EC-292), quoted in EC SWS, para.

³⁰ 2001 Senate Aeronautics Hearing, p. 9 (Exhibit EC-292), quoted in EC SWS, para.

³¹ Exhibit EC-18 p. 1 and Exhibit EC-25, pp. 10, 11, 12, 15, 16, 17, and 18.

- 45. The analysis with regard to the first element of the definition of a subsidy, the financial contribution, is straightforward. Under its R&D contracts, NASA pays Boeing to conduct research and development and to present the results to NASA. Research and development are services, a point that the EC does not dispute. We have shown that NASA paid money in exchange for the supply of those services, and that they had value to NASA, in the form of advancing its statutory objectives of "the expansion of human knowledge" and the "improvement of the usefulness, performance, speed, safety, and efficiency of air and space vehicles." In other words, these contracts were purchases of services and, as such, not financial contributions. Treating them as such does not create a "loophole." It implements the treatment provided under the terms of the SCM Agreement.
- 46. The EC has made several attempts to evade this conclusion. All have failed.
- 47. As with the DoD RDT&E contracts, the EC has argued that purchases of services are financial contributions, even though they are specifically omitted from the list of transactions that provide financial contributions. We have demonstrated earlier that the EC's reasoning is wrong.
- 48. The EC has also argued that NASA's contracts are not properly characterized as a purchase of services. As with DoD RDT&E contracts, it argues that Boeing is not *normally* a services supplier a contention that is both irrelevant and untrue.³² It also argues that NASA R&D contracts do not "exclusively affect trade in services." However, exclusivity is not part of the ordinary meaning of "services" or "purchase."
- 49. The EC also contends that NASA contracts do not further the agency's mission of disseminating information to the public because *some* of the contracts have *temporary* restrictions of the dissemination on *some* of the information.³³ These qualifiers (which the EC omits from its arguments) reveal the error of the EC contention. All of the contracts provide for immediate dissemination of much of the data.³⁴ Many of the contracts have *no* limitations, other than the protection of proprietary data, which the EC concedes is appropriate. And since the limitations are temporary, all of the data is subject to release. Indeed, the temporary limitation is typically critical to obtaining information for NASA's use that would otherwise remain in private hands. Thus, the contracts clearly advance NASA's knowledge dissemination objectives and accordingly have value to the agency.
- 50. The EC also argues that research performed under NASA aeronautics R&D contracts is really intended to benefit Boeing, based on its assertion that "NASA terminated the HSR Program

³² Para. 10 of this statement discusses this issue in more detail.

³³ EC Comm.1, para. 61.

³⁴ E.g., Contract NAS1-18889: Research and Development in Advance Technology Composite Aircraft Structures, section H.8(b)(1).

in FY 1999 because *Boeing* terminated its active participation."³⁵ This is another example of the hazards of selective citation. The EC cites a paragraph in a news article in support of this proposition, but the paragraph immediately following the cited paragraph explains that *NASA* tried to keep the program going even after Boeing withdrew.³⁶ Thus, the EC's own evidence demonstrates that its contention is untrue.

- 51. The EC's insistence that the goal of NASA aerospace research programs was solely "to provide support to the US LCA industry" is also inconsistent with the vast amount of information that NASA released to the public. The EC's strategy with regard to this obviously huge mass of knowledge is to contend that Airbus could not use it to advance the design of its own large civil aircraft. As we noted above, while NASA's research unquestionably advanced knowledge of what Airbus engineers call "generic and academic" value,³⁷ it did not help Boeing to develop particular aircraft, either. That was not the purpose of the research, or the purpose for purchase of R&D services from Boeing.
- 52. In short, the United States has presented concrete evidence that NASA's contracts with Boeing created a large volume of aeronautics research for public use, including improving air transport safety and expanding the capacity of the air traffic control system. These clearly advance NASA's objective of developing and disseminating aeronautics knowledge. Thus, there is no basis for the EC's contention that these contracts are a "sham" disguising a "grant" or "direct transfer" to Boeing.

NASA R&D contracts do not confer a benefit

53. The EC's argument regarding the benefit allegedly arising from NASA RDT&E contracts is limited to repeated contentions to the effect that "{i}t is difficult to see what value NASA derives from these contracts, as NASA is not in the business of manufacturing LCA or its parts." We have shown that NASA is in the business of researching aeronautics topics and disseminating the results of its efforts, and that the contracts with Boeing advance this objective. The EC has completely failed to show otherwise. Therefore, its only argument regarding benefit – that NASA receives nothing in return for the money it pays Boeing to conduct research – has no support in the evidence.

Facilities, equipment, and employees under NASA contracts are not a financial

³⁵ EC SWS, para. 342 (emphasis in original); EC RPQ1, para. 61.

³⁶ Bill Sweetman, "Make it Look Like an Accident," *Interavia Business & Technology* (Feb. 1, 1999) (Exhibit EC-348), *cited in* EC SWS, para. 342, note 582.

³⁷ Statement by Patrick Gavin, Tim Sommer, Burkhard Domke, and Dominik Wacht, para. 72 (Exhibit EC-1175).

³⁸ EC SWS, para. 376; EC RPQ1, paras. 61, 63, and 83.

contribution and do not confer a benefit.

- 54. The EC also challenges what it asserts is the provision of NASA facilities, equipment, and employees to Boeing under contracts and Space Act Agreements ("SAAs"). We will deal with each in turn.
- 55. First, the situation of NASA facilities, equipment, and employees related to NASA R&D contracts is the same as facilities, equipment, and employees related to DoD RDT&E contracts they are used to advance the agency's objectives, not for the contractor's own use. Thus, they are not a financial contribution. Even if they could be conceived of as a financial contribution, they cannot be severed from the overall transaction in which NASA defines the requirements and provides technical direction for the contractor's supply of R&D services. And, as we have shown, the EC has provided no basis to conclude that the transaction confers a benefit.

Facilities, equipment, and employees under SAAs are not a subsidy

- 56. We will now move on to discuss facilities, equipment, and employees under Space Act Agreements. As we discussed in the first written submission, these agreements come in two varieties reimbursable SAAs, under which NASA obtains "full cost recovery" from the private party for the assets provided, and non-reimbursable SAAs, used when the agency works with one or more partners "in a mutually beneficial activity that furthers the Agency's missions." (There are also "partially reimbursable" SAAs, in which the private firm pays part of the cost.)
- 57. Both reimbursable and nonreimbursable SAAs are a provision of services, one for money and the other for in-kind contribution in the form of facilities, equipment, employees, or data from one or more private parties. The United States submitted copies of many SAAs related to aeronautics research. The EC discovered a few more.
- 58. Of these SAAs, nine have reimbursable elements. The United States summarized these transaction in Exhibit US-74, and reported the amounts that Boeing paid to NASA for use of its facilities. The EC has never questioned these amounts, or provided any reason to conclude that they represented less than adequate remuneration for the facilities, equipment, or employees provided by NASA. Therefore, it has failed to present a *prima facie* case that the reimbursable SAAs confer a benefit.
- 59. As for the SAAs that are "non-reimbursable" that is, those in which NASA supplies services in exchange for a fair and reasonable in-kind contribution from the other party the EC asserts that the facilities, equipment, employees, and data provided by Boeing to NASA are "of no

³⁹ US FWS, paras. 233-34.

real value to NASA because NASA is not in the business of manufacturing LCA or its parts."⁴⁰ The sole support it provides for this assertion is a citation to earlier arguments regarding the NASA contracts (which have no bearing on the exchange under the SAAs) and a single reference to one of the SAAs submitted by the United States.⁴¹ Otherwise, the EC has nowhere disputed the demonstration in the U.S. first written submission⁴² of why NASA's non-reimbursable SAAs with Boeing provide just what NASA's rules require – that "the respective contributions of each Agreement Partner must be fair and reasonable compared to any NASA resources to be committed, NASA program risks, and corresponding benefits to NASA."⁴³ Nor has it disputed the descriptions in Exhibit US-74, taken from the agreements themselves, which detail the facilities, equipment, employees, data, and other resources that Boeing put forward in exchange for NASA's provision of facilities, equipment, or employees under SAAs. In short, the EC has provided no support for its contention that the provision of facilities, equipment, or employees under SAAs confers a benefit.

Magnitude of NASA R&D programs

- 60. And finally, we move to the question of the \$10.6 billion value the EC ascribes to its combined allegations of "grants" or "direct payments" and provisions of facilities, equipment, or employees. We have provided extensive evidence that the value of NASA's R&D contracts with Boeing are worth less than \$750 million. In contrast, the EC has provided only one basis for its huge estimated figure its own calculations. We have demonstrated numerous flaws with those calculations. At this point, I will briefly discuss three. First, all of the EC's estimates rely on the proposition that NASA provides research contracts and facilities, equipment, and employees to Boeing in proportion to Boeing's share of U.S. civil aircraft production. It provides absolutely no support for this assumption. In fact, *all* of the evidence before the Panel indicates otherwise. To further demonstrate the error of this point, NASA has prepared an exhibit showing how it spends its funds under two recent programs: Vehicle Systems Programs, a broad research program, and Quiet Aircraft Technology, a more focused program. This exhibit shows that money paid to Boeing represents a tiny fraction of the agency's spending related to those programs, and vastly less than the EC asserts. The state of the provision of the agency's spending related to those programs, and vastly less than the EC asserts.
- 61. Second, the EC has done nothing to adjust its calculations in response to the evidence

⁴⁰ EC SWS, para. 403.

⁴¹ EC SWS, para. 368, *quoting* SAA 2-B0001.3, art. 1.2 (Exhibit US-512).

⁴² US FWS, paras. 246-249 and 260.

⁴³ NPD 1050.H1, p. 1(b) (Exhibit US-108), *quoted in* US SWS, para. 234, note 345.

⁴⁴ Exhibit EC-25, p. 2.

⁴⁵ U.S. Comm.1, para. 4.

⁴⁶ U.S. Comm.1, para. 4.

⁴⁷ NASA Spending Under VSP and QAT Programs (Exhibit-1255).

presented by the United States on how much NASA actually spent, and on what the contracts actually provided. As with CRA's estimates of DoD RDT&E spending, the EC's position is apparently that when the facts conflict with an EC assumption, the facts must be discarded. That might be a profitable approach for a party seeking to generate the highest possible estimate of alleged subsidy values, but it is certainly not one for a panel charged with making an objective assessment of the facts.

- 62. Third, the EC estimates include the value of research that even the EC concedes should be left out. For example, the EC admits that its estimate of research benefit to Boeing should exclude air traffic management, and it points to its exclusion of 1/13th of the value of the Advanced Subsonic Transport research as achieving this objective. Yet, the EC counts the entirety of the Aviation Safety and Security Program as a benefit to Boeing, even though that program included topics such as "information technology . . . to share data on the safety of aviation operations worldwide," methods to foster "System-Wide Accident Prevention," systems "to reduce the rate of fatal weather-related accidents," and technology to "increase the human survival rate in survivable accidents." As noted at the first panel meeting, these programs have paid off in a lower accident rate for Boeing *and* Airbus aircraft⁴⁹ which is the objective of NASA's work in this area.
- 63. Finally, we have a word on the magnitude of alleged provision of facilities, equipment, and employees. In response to the EC's latest assertions regarding SAAs, NASA has been seeking additional information on valuation of the agreements. That process is still under way. At this time, NASA has reviewed its electronic records, and determined estimated values for many of the NASA facilities, equipment, and employees provided under the non-reimbursable or partially reimbursable SAAs for which such information was unavailable in hard copy. These data indicate that the value of such SAAs was approximately \$83 million. This review also revealed that some of the SAAs listed in Exhibit US-74 were not funded under any of the nine programs challenged by the EC.
- 64. The United States, in contrast to what the EC has done, has provided an estimate based on facts, not methodologies that are demonstrably inconsistent with the facts. The EC alleges that the United States omitted some relevant contracts and SAAs between NASA and Boeing. We are reviewing these assertions. At least one of them was actually included, but under a different number. However, the critical point is that the amount involved is small compared to the value of contracts that the United States provided to the Panel, and should not change the evaluation of the magnitude of the alleged subsidies.

⁴⁸ EC FWS, paras. 598, 599, 601, and 602.

⁴⁹ US FWS, para. 273.

⁵⁰ Value of NASA Facilities, Equipment, and Employees Under Selected Space Act Agreements (Exhibit US-1256).

65. In sum, like the rest of the EC allegations, the EC's estimate of the value of NASA contracts and the alleged provisions of facilities, equipment, and employees is contrary to the evidence. In particular, it captured billions of dollars of NASA's own costs, its direct spending on its own research, and its payments to other contractors and universities.

Independent Research and Development ("IR&D") and Bid and Proposal ("B&P") Reimbursements

- 66. The third set of EC claims we will address today are those related to reimbursements of IR&D and B&P costs. Before discussing the EC's errors, a little background is helpful.
- 67. It is a basic principle of economics that an enterprise's revenues must cover its costs for the enterprise to be commercially viable. That includes both the direct costs of creating the goods or services that it sells, as well as any indirect costs (or "overheads"). These are expenses such as salaries for upper management, maintenance of the facilities, and salaries for the sales force that are not a direct part of preparing the good or service, but are necessary for getting it to the customer. The EC does not, as a general matter, dispute that inclusion of indirect costs in the price that a government agency pays for goods and services is consistent with commercial practices. Indeed, if the prices paid by an agency did not cover the costs of the goods and services that it purchased, basic economic logic indicates that commercial enterprises would not sell to that agency.
- 68. This is the logic behind DoD's cost reimbursement contracts, and the inclusion of IR&D and B&P costs among the costs that it reimburses. However, the EC insists that, when it comes to indirect *research* or *bid and proposal* expenses, the commercial imperative of covering indirect costs does not apply. The EC cites no support for the assertion that commercial companies do not cover indirect research costs (or the costs of preparing bids and proposals) in their prices. To the contrary, balance sheets reflect the fact that R&D expenditures are costs, albeit not direct costs of any particular good or service, that must be balanced against revenues.

Reimbursement of IR&D and B&P costs is not a separate financial contribution

69. With these overarching considerations in mind, we will move to an analysis of the three criteria for an actionable subsidy. We have shown that the inclusion of indirect costs in the price of a good or service is standard.⁵¹ The United States recalls in this regard that U.S. government procurement regulations define IR&D expenses as R&D and systems and other concept formulation studies not "sponsored by a grant or required in the performance of a contract." B&P expenses are "costs incurred in preparing, submitting, and supporting bids and proposals (whether or not solicited) on potential Government or non-Government contracts" that are not

⁵¹ US FWS, para. 108.

covered by a grant or cooperative agreement, or required in the performance of a contract.⁵² These expenses, so defined, bear no relationship to particular contracts. Instead, they arise from and relate generally to a company's ability to do business with government and non-government customers. In short, they are not independent transactions between the U.S. government and its contractors. They are *part* of the price that an agency pays for goods or services that it purchases from private enterprises. They can no more be plucked out of the price and treated as a separate payment than can the cost of utilities or the cost of managing the company. And, such costs must be covered by a company's prices for its goods and services sold to all customers, including the government, if the company is to remain viable.

70. The EC's sole response to this commercial reality is to assert – again without any factual support – that the commercial practice of recovering all costs, including indirect costs, through the price charged for goods and services is a "fiction" created by the US Government "to defend its practice." We have shown that if the government were to buy a civil aircraft from Airbus or Boeing, the company would treat that revenue as covering expenses like IR&D and B&P costs. Therefore, the inclusion of such expenses in prices paid by the government is not a separate financial contribution, but must be analyzed as part of the broader transaction. As the EC has not challenged DoD or NASA purchases in general, it has provided *no* basis for a conclusion that the coverage of IR&D and B&P costs in the prices charged for those transactions is a subsidy.

IR&D and B&P reimbursements do not confer a benefit

- 71. On the question of benefit, we understand the EC to have limited its claim to the "civil" portion of "dual use" IR&D reimbursed by DoD. We further understand that the EC does not consider a benefit to exist when DoD reimburses IR&D or B&P expenses related to technologies that are exclusively military.
- 72. We have shown that DoD regulations actually prohibit the conduct that the EC alleges to be a subsidy. Namely, where IR&D or B&P expenses relate to both military and civil transactions, DoD will reimburse only a share of those expenses proportionate to the military transactions. Moreover, where an IR&D or B&P expense relates exclusively to civil transactions, DoD will not reimburse that expense.
- 73. The EC's IR&D expert, Mr. Keevan, agrees with this assessment. In particular, he agrees that if a known civil application exists at the time an IR&D expense for military technology is incurred, DoD regulations require allocation of a proportionate share of that expense to Boeing's civil transactions. The only situation in which such allocation would not occur is if civil uses are unknown at the time the research is conducted, but "are determined in a later year to have

⁵² 48 CFR § 31,205-18 (Exhibit EC-597), *quoted in US FWS*, para. 279.

⁵³ EC Comm.1, para. 58.

produced information or results useful to its commercial aircraft business."⁵⁴ (We will refer to this as an "unexpected use" situation.)

- The United States has demonstrated that any known non-military share of IR&D is 74. allocated to non-military transactions, and not reimbursed by DoD. However, Mr. Keevan speculates that unexpected use situations would arise for a significant number of military IR&D projects. His stated source for this concern is that Boeing might adopt as its accounting methodology the supposed United States position in this dispute that "military IR&D projects are not beneficial to Boeing Commercial's operations."55 His concern is misplaced. First, the information before the Panel on Boeing's accounting methodology shows that this is not the company's approach. Moreover, Mr. Keevan misunderstood the U.S. position. He based his views on a single clause in the U.S. first written submission stating that "the EC mistakenly contends" based on CRA's analysis that military IR&D projects were directly beneficial to Boeing large civil aircraft operations.⁵⁶ However, the United States was clear elsewhere that DoD has interest in some dual-use technologies.⁵⁷ In fact, we have shown that Boeing maintains an IR&D account, allocated proportionately between military and civil contracts, to cover just that possibility. By doing so, they account for dual use IR&D and allocate a proportionate share of it away from military sales, as Mr. Keevan recognizes they must. Thus, the evidence shows that neither Boeing nor DoD rejects the possibility of research having dual uses, so that mischaracterizations of "dual use" technologies at the outset of a project will not lead to an unexpected use situation.
- 75. That is not to say that surprises never occur in research. Another error with Mr. Keevan's concern is that research by BCA into topics of exclusively civil interest may also create an unexpected use situation with regard to a military application. If Boeing's commercial division conducts IR&D that it does not expect to have military application, the regulations would prohibit DoD reimbursement of those expenses. If a military application became apparent in a subsequent year, Boeing would still be unable to obtain reimbursement from DoD. This has two important implications. First, it shows that commercial enterprises do not expect retroactive payment when a project they funded has unexpected synergies in another business area. Second, it shows that the benefits of unexpected use situations accrue to DoD, too. In some situations, it gets to be a free rider on Boeing's civil research.
- 76. Finally, the EC cites the decision at the lowest level of federal court in the *ATK Thiokol* case as supporting its view that even when a product has already been sold under contract to a customer, the cost of developing that product may be still be treated as an IR&D expense. DoD

⁵⁴ Keevan Statement, p. 5 (Exhibit EC-1179).

⁵⁵ Keevan Statement, p. 6 (Exhibit EC-1179).

⁵⁶ Keevan Statement, p. 6, *citing* US FWS, para. 296 (Exhibit EC-1179).

⁵⁷ US FWS, paras. 124-126 and 131-138.

strongly opposed that position before the court. Once the decision becomes final, the government will be entitled to appeal the court's treatment of IR&D reimbursements, an option that is not available at this time because the court has not issued a final order.

77. Thus, it is clear that DoD regulations require the outcome that the EC identifies as conferring no benefit to large civil aircraft – proportionate sharing of any "dual use" IR&D between the company's civil and military operations.

IR&D and B&P reimbursements are not specific

78. We have also shown that IR&D and B&P reimbursements are not specific, as they are available on *all* government contracts. The only rebuttal that the EC puts forth is that reimbursement of these expenses are specific because NASA and DoD each administer them for their own contracts. We showed in our second written submission that this approach is inconsistent with Article 2.⁵⁸ Thus, the EC's specificity analysis, which deals only with these two agencies, is irrelevant to the Panel's analysis.

Magnitude

79. With regard to the value of total IR&D and B&P payments to Boeing, the United States is willing to accept the CRA's estimate for purposes of this proceeding. However, the EC makes a serious error in assuming that all of Boeing's IR&D expenses related to dual-use technology and, therefore, should be split proportionately between civil and military transactions.⁵⁹ The only support it provides for this assumption is an assertion that "{t} he IR&D/B&P amounts reimbursed to Boeing/MD related to the company as a whole." The evidence demonstrates that this is a wholly unrealistic assumption. In fact, even by the EC's inflated estimates, dual-use technology accounted for less than ten percent of DoD's total RDT&E activity for the 1991 to 2006 period. The EC provides no basis for the assertion that the dual-use share of IR&D expenses would be ten times higher. In any event, DoD IR&D regulations and Boeing's own practices require that civil transactions cover a proportionate share of any dual use IR&D expenses, so that the magnitude of the alleged subsidy would be zero.

Treatment of intellectual property rights under government contracts

⁵⁸ US SWS, paras. 16-19.

⁵⁹ Exhibit EC-24.

⁶⁰ Exhibit EC-24, note 1.

⁶¹ The EC estimates that contracts for RDT&E into dual-use technologies were worth \$4.3 billion from 1991 to 2006, and estimates the total value of DoD's RDT&E contracts with Boeing during that period as \$45.3 billion. Exhibit EC-25, p. 20, Exhibit EC-29, p.2.

80. The fourth set of EC claims we will address today are those related to the treatment of intellectual property rights under government contracts.

There is no financial contribution

- 81. The United States has demonstrated in its submissions that under U.S. law, patent rights to any invention accrue in the first instance to the inventor. If the invention is made while the inventor is working on behalf of his or her employer, those rights are usually assigned to the employer. If the employer has a contract with another enterprise, that contract may assign rights to the other enterprise. Thus, it is clear that there is a chain of provision of those rights *from* the inventor to the employer and, potentially, from the employer to other parties.
- 82. The EC would have the Panel believe that, when it is the government that has a contract with the inventor's employer, intellectual property rights flow in the other direction.
- 83. To support this contention with regard to DoD contracts, the EC asserts that the inventor and its employer do not have the default right to patent because DoD may decide "whether to even allow the contractor to have the option of electing to take title." This is not true. In the first place, the contractor can always decide to do the work itself, without a DoD contract, in which case it keeps any rights to patent. Moreover, in most circumstances, U.S. law *requires* DoD to leave the right to take title with the contractor. In the limited circumstances in which DoD has the option to take full title, it can do so only if the contractor agrees to accept the insertion into the contract of a clause giving DoD full rights. It is not an issue of a DoD contract "providing" rights to the contractor, but of the contractor giving up rights it would otherwise have if it performed research outside of a contract.
- 84. With regard to NASA contracts, the EC relies on section 305 of the Space Act, under which any invention made under a NASA contract "shall be the exclusive property of the United States." What the EC fails to recognize is that this treatment is an *exception* to the general rule, put in law specifically because the agency would not otherwise take title to such patents. Section 305 of the Space Act did not reverse the flow of the rights, but simply allowed NASA to take the rights away from the inventor or the inventor's employer. Moreover, Section 305 has always given NASA the authority to waive the exception and leave the right to patent with the original holder. Thus, when the agency "waives" its statutory authority to take title to inventions made under contracts, it is not "providing" the patent to the contractor. It is waiving its right to take from the contractor patent rights that the contractor would otherwise own. Since 1983,

⁶² US FWS, para. 317, note 419.

⁶³ EC SWS, para. 540.

⁶⁴ Space Act, § 305(a) (2) (Exhibit EC-286), quoted in EC SWS, para. 539.

⁶⁵ US SWS, para. 104.

NASA, operating under the Presidential Memorandum of 1983 and Executive Order 12591, has used its waiver authority so that contractors retain their patent rights to the same extent as they would under contracts with other agencies.⁶⁶

85. Thus, there is no "provision" of patent rights from the government to the contractor and, accordingly, no financial contribution.

There is no benefit

- 86. Even if there were a financial contribution flowing from the intellectual property rights clauses in government contracts, there is no benefit because any treatment of intellectual property rights is an integrated term of a contractual bargain between the agency and Boeing that is negotiated at arm's length, typically after competitive bidding. The EC disputes that the result of the negotiation is on market terms based on a "benchmark" consisting of unsupported assertions to the effect that "when private corporations fund other entities to carry out research on their behalf, they retain full rights to any intellectual property created," assertions as to Airbus' practices, and a single Boeing contract with Wichita State University.
- 87. We have shown that the EC's view of the situation is incorrect. First of all, the U.S. government does not allow the researcher to retain "full rights" to the intellectual property created. The contracts *require* the contractor to provide a free "government use" license to the United States, which allows any agency to use the patented invention for government uses free of charge. Second, the United States has provided evidence that commercial companies *do* enter into contracts under which they pay other entities to perform research, and those entities retain rights to the intellectual property created. The Foley & Lardner presentation cited by the United States shows that firms that seek *use* rather than *control* of patents, which is the position of NASA and DoD, may have commercial reason to enter into contracts under which the researcher retains patent rights. And, the Boeing contracts with research universities submitted by the United States provide concrete examples of such transactions.

⁶⁶ Presidential Memorandum of February 18, 1983 (Exhibit EC-560); Executive Order 12591 (Exhibit EC-561). Paragraphs 319 through 323 of the U.S. first written submission provide the historical background of this rule.

⁶⁷ EC SWS, para. 553.

⁶⁸ EC SWS, para. 555.

⁶⁹ EC SWS, para. 556.

⁷⁰ US FWS, paras. 320-323.

⁷¹ US RPQ1, para. 63, note 68.

⁷² US RPQ1, paras. 64-66; Contract A, Contract B, Contract C, and Contract D (Exhibits US-1208 - US-1211).

88. The EC's fall-back argument is that "normal" or "typical" practice is the only acceptable benchmark.⁷³ This is also incorrect. Even when a practice in the market is "exceptional" – which the EC has not established with regard to shared patent rights under research contracts – it may still serve as a benchmark. As the panel in *Korea – Commercial Vessels* explained:

the exceptional nature of any market [advance payment refund guarantee ("APRG")] (be it domestic or foreign) should not preclude its use as an appropriate market benchmark for the purpose of determining the existence of "benefit". Provided it is negotiated on a commercial basis by a market operator, and is comparable in terms of duration etc., any APRG should be admissible as a market benchmark.⁷⁴

Thus, recognizing that research contracts providing for shared patent rights do exist, the EC as the complainant bears the burden of identifying *comparable* contracts to serve as a benchmark and demonstrating by comparison that the government practice is more beneficial. As it has not done so, it has failed to meet its burden of proof.

- 89. The EC's second fall-back position is that the contracts with universities are not valid benchmarks because universities are not-for-profit entities with objectives different from the companies that purchase their services.⁷⁵ In the first place, the EC fails to explain why a Boeing contract with a university (Wichita State) is a valid benchmark in support of the EC position, while contracts with four other universities would not be valid benchmarks in support of the United States. But, more importantly, the not-for-profit status of an institution does not prevent it from negotiating hard when it is seeking to provide a service. And while Boeing does periodically make donations including patents to universities, its contracts reflect different commercial situations in which it is paying the university to conduct research on its behalf. The contracts demonstrate that, regardless of its benevolent purposes in making donations to universities, when Boeing *buys* services from universities, it strives to protect its commercial interests, including by reserving licenses to use the data and inventions generated by the purchased research services.⁷⁶
- 90. Thus, the EC has failed entirely to meet its burden of proof to establish the existence of a benefit.

Treatment of intellectual property rights under government contracts is not specific

⁷³ EC Comm.1, para. 84.

⁷⁴ Korea – Commercial Vessels, para. 7.155.

⁷⁵ EC Comm.1, paras. 86 and 88.

⁷⁶ E.g., Contract A, arts. 4.1, 5.1, and 5.5; Contract B, arts. 5.1, 8.4, and 8.5.

91. We have also shown that the treatment of intellectual property rights under U.S. government contracts is not specific, as this treatment is available on *all* government contracts. The only rebuttal that the EC puts forth is that the treatment is specific because DoD and NASA each afford that treatment under their own contracts. We have shown in our second written submission that this approach is inconsistent with Article 2.⁷⁷ Thus, the EC's specificity analysis, which deals only with these two agencies, is irrelevant to the Panel's analysis.

Advanced Technology Program

92. Funding provided pursuant to the Department of Commerce's Advanced Technology Program ("ATP") is not an actionable subsidy because it is not specific. The EC claims that ATP is specific because the program funds "high risk, high pay-off emerging and enabling technologies." But, this "group" that the EC attempts to fabricate is artificial and has no basis in logic. Contrary to the EC's contention, ATP is broadly available throughout the U.S. economy; there is no limitation on the industries that can participate. And in fact, an extremely wide range of enterprises and industries have participated in ATP, ranging from those involved in energy conversion, marine biology, automobile manufacturing, and semiconductors – to name just a few. Article 2.1 is intended to place limits on those subsidies that are considered actionable. Accepting the EC's interpretation of the broad range of enterprises and industries that receive ATP funding as a "group" would eviscerate the disciplines of Article 2.

Washington State Tax Measures

- 93. Turning to the EC's challenge to the Washington State Business & Occupation ("B&O") tax adjustment, the key issue here is whether the adjustment in HB 2294 results in revenue foregone that is otherwise due and therefore a financial contribution. The EC has failed to establish that there is a financial contribution by virtue of the B&O tax adjustment. Because there is no financial contribution, there can be no subsidy under the SCM Agreement. The United States respectfully refers the Panel to the U.S. submissions in this dispute for a detailed rebuttal of the EC's arguments with respect to the B&O tax adjustment. Today, I would like to focus on the main flaws in the EC's arguments.
- 94. First, the EC's claim that the B&O tax adjustment results in revenue foregone is based on the contention that the adjustment constitutes an exception to a general rule of taxation in Washington State i.e., the 0.484 percent rate. However, in order to arrive at this conclusion, the EC considers the B&O tax adjustment for aerospace in isolation and ignores the taxation regime in which the adjustment operates. This approach is inconsistent with the Appellate Body's guidance for analyzing revenue foregone under the SCM Agreement and thus fails.

⁷⁷ US SWS, paras. 16-19.

- 95. As the Appellate Body has stated, the analysis of revenue foregone should "depend on the rules of taxation" that the State of Washington "establishes for itself." Washington State has established a multi-rate taxation system in which the State assesses individual B&O tax rates to different categories of business activities there is, therefore, no uniform rate. At the inception of the B&O tax regime in 1935, the State established six categories of business activities. Since that time, the State has identified numerous new business activities, such that there are now over 40 such categories of which aerospace manufacturing is one. Each activity is assigned its own rate and these rates can be and are adjusted independently of each other.
- 96. The Appellate Body has also clarified that in determining whether revenue foregone is otherwise due, panels should compare "the fiscal treatment of legitimately comparable income" and "there must be a rational basis for comparing the fiscal treatment of the income subject to the contested measure and the fiscal treatment of certain other income." The EC argues that the B&O tax rate for aerospace should be compared with the 0.484 percent rate for manufacturing. However, as the 0.484 percent rate is just one rate in a multi-rate system, there is no rational basis for using it as the benchmark. Washington State has multiple rates for taxing comparable income. It is the range of B&O tax rates applied to all business activities in the State that serves as the appropriate normative benchmark.
- 97. Washington State is not required to tax aerospace at a higher rate than other business activities. Because the adjustment moves the B&O tax rate for aerospace within the range of the B&O tax rates for all business activities in the State, Washington State is not foregoing revenue that is otherwise due.
- 98. The EC asks the Panel to ignore the range of rates because the B&O tax system does not compel the State to adjust sectoral rates or to establish a range of rates. The question though, is not whether the system compels the adjustment the question is whether the State in fact has a system of individual rates for different business activities, and if so, whether the adjustment for aerospace can be considered revenue foregone within the context of that system. The EC cannot contest that Washington State in fact has such a system, and it can point to no rule or norm that requires the State to apply the 0.484 percent B&O tax rate to aerospace.
- 99. In fact, Washington State's own actions belie the EC's contentions. The State has provided sectoral rate adjustments to many sectors, some of which involve manufacturing. Thus, there is no rule or norm in the Washington State system that <u>requires</u> the State to apply the 0.484 percent rate to aerospace. Indeed, under the EC's theory of revenue foregone, a Member with a

⁷⁸ *US-FSC 21.5 (AB)*, para. 87, citing *US-FSC (AB)*, para. 90.

 $^{^{79}}$ US – FSC 21.5 (AB), para. 91.

 $^{^{80}}$ US – FSC 21.5 (AB), para. 90.

⁸¹ EC Comm. 1, paras. 118-19, 124.

multi-rate taxation system would effectively be precluded from adjusting any of the individual rates within its tax regime (except, arguably upwards) even if doing so were consistent with the treatment of legitimately comparable income under the Member's tax regime. This would be an untenable result.

- 100. We have further pointed to the fact that the effective tax burden on aerospace manufacturing and sales is not out of line with other sectors. Indeed, aerospace had been subject to one of the highest effective tax burdens for any business activity in the State prior to the adjustment. The adjustment is consistent with the State's goal of minimizing the discriminatory effects of pyramiding on complex, multi-step business activities. Because of pyramiding, whereby goods and services that are inputs into higher stages of production are effectively taxed multiple times as they move through the production chain, complex business activities are subject to much higher effective B&O tax rates than other sectors. The Washington State Tax Structure Study, prepared for and mandated by the Washington State legislature, specifically raised concerns about the effects of pyramiding as it relates to the B&O tax generally, and as it relates to the aerospace industry specifically. Moreover, the Study identified "tax neutrality" as a goal of the tax system; tax adjustments to alleviate the discriminatory effects of pyramiding are consistent with this goal.
- 101. In its latest submission, the EC suggests that HB 2294 might "fall squarely within the class of tax measures that Members may enact to circumvent a 'but for' test focused on comparison with an 'alternative measure." First, the Appellate Body's statement on which the EC relies was discussed in the context of the Appellate Body's reluctance to embrace for all situations a "but for" test the very test that the EC is seeking to have the Panel adopt here. Second, the EC provides no support and none exists for this assertion that Washington State is attempting to circumvent any rules. The progression in Washington State's tax policy over many years, not circumvention, is the basis for the existing regime.
- 102. The EC also asserts that B&O tax adjustments for Washington aerospace component manufacturers can somehow be attributed to Boeing, even though those companies are independent and unrelated to Boeing. The EC asserts that adjustments have been and will continue to be passed-through to Boeing on the basis of a highly theoretical report from Professors Paul Wachtel and John Asker. As the United States and its expert Dr. Gary Dorman an economist with particular experience on competition issues and the civil aircraft industry pointed out, the EC experts failed to take into account the factual specifics of Boeing's market position and relationships to its suppliers, the large civil aircraft business, the aerospace industry generally, or any real-world supplier relationships. Additionally, they provided no empirical tests nor even suggested methods to determine whether any of the theoretical assumptions of the reports apply to real-world industry. In fact, as Dr. Dorman pointed out, the assumptions

⁸² Washington State Tax Structure Study (Exhibits US-180 and 183).

⁸³ EC Comm. 1, para. 122.

underlying the Wachtel/Asker reports differ dramatically from the reality of aerospace procurement.

- 103. Asker's reply, now submitted by the EC, fails to adequately address any of these concerns. Let me refer you to one statement by the EC expert in particular. The Dorman report points out the importance of the competitive relationship between suppliers and their relationship to Boeing in terms of "market power" in understanding whether a subsidy might be passed-through to a downstream purchaser. Market power on the part of suppliers gives them a stronger bargaining position towards Boeing. Yet in his reply, Asker asserts several times that "less competition increases pass-through." "The limited number of suppliers," he says, "and the resulting magnitude of market power that they enjoy, is what makes the benefit Boeing derives from any supplier subsidy likely to be greater than 100%." Leaving aside Asker's point that the benefit could be greater than 100 percent, it is of course completely at odds with competitive reality that a supplier with more market power would be more willing to pass-through a subsidy to his customer (i.e., settle for a lower price) than a supplier with less market power.
- 104. There are multiple other flaws in Asker's report. Let me highlight a few in particular. Asker nowhere responds to the core U.S. criticism that the model "takes no account of competitive conditions in individual product markets." Instead, he just adds more theory. For example, the Dorman report noted that non-price elements play a critical role in many of Boeing's supplier relationships. Asker's assumption that the contract is always awarded to the supplier with the lowest per-unit price is simply not in line with the reality in the market. Asker responds that non-price elements can be treated as a 'score' and then integrated into his basic model. But he then rests his case without ever attempting to do so and to show whether 100 percent pass-through would still occur.
- 105. The Dorman report also pointed out that the Asker model is premised on all suppliers receiving the same Washington State subsidy. In reality, non-Washington State suppliers compete with Washington State companies to supply Boeing. Asker assures us his model can handle this, stating that, "{i}f the competitive position of Washington State suppliers is affected, then the pass through may theoretically be reduced below 100%."86 But he then concludes, without any substantiation, that he does not consider this likely to be the case here.
- 106. In short, Asker's reply in no way responds to the criticism Dr. Dorman expressed. Asker simply tells us not to worry about the realities of the large civil aircraft market that Dr. Dorman

⁸⁴ Professor John Asker, Reply to Report of Dr. Gary Dorman and to Related Aspects of Report of Drs. Stephen D. Smith & Lorrie Brown (October 2007) (Exhibit EC-1174) at 8.

⁸⁵ Gary J. Dorman, "Reply to Reports of Professors Wachtel and Asker," (July 2, 2007) (Exhibit US-186) ("Dorman Report").

⁸⁶ Asker Reply Report (Exhibit EC-1174) at 10.

introduces into the analysis. And, nowhere does Asker account for the complex realities of the large civil aircraft supplier market that clearly indicate that the pass through relied upon by the EC would be unlikely, to say the least. In any event, the EC has not provided the positive evidence that it concedes it must for the Panel to find pass through.

Washington State Infrastructure

107. The EC has failed to satisfy its burden of establishing that any of the infrastructure measures it challenges is "other than general" under the SCM Agreement. In particular, the EC sets forth a couple of facts out of context for each challenged infrastructure measure and contends that these are sufficient to show that the infrastructure is "other than general". Although it recognizes that the totality of facts and circumstances must be assessed, the EC conveniently selects the facts and circumstances that are conducive to its preferred legal conclusion and arbitrarily determines that other facts are "secondary." At the same time, the EC sets forth an evidentiary standard that is not based on the actual language of the Agreement and that, if accepted, would inappropriately lower the complaining party's burden, while raising the evidentiary standard that a responding party must meet to rebut a *prima facie* case. In short, the EC considers that all it needs to do is demonstrate that infrastructure is "partial" or "particular" in "some way." or "particular" in "some way."

108. With respect to the improvements to two major public roads in Washington State, I-5 and SR-527, the EC cautions the Panel not to be misled by the <u>fact</u> that the roads are available to the public without limitation. The EC makes a few remarkable assertions in this regard. The EC claims that the improvements were "designed to benefit Boeing and only Boeing." There is no basis for this assertion. As the United States has set forth in detail, these roads are major public roads used by countless businesses, tourists, and citizens. The traffic congestion on both of these roads had been identified by the State as one of many infrastructure-related problems facing the State well before the Project Olympus Master Site Agreement ("MSA") on which the EC relies. The improvements to I-5 and SR-527 indeed were undertaken as part of a statewide effort to improve infrastructure. They were not undertaken solely for Boeing's benefit and indeed no evidence exists to support such an assertion.

109. The EC then contends that "the fact that there are other users that may use the improvement is entirely secondary in this specific case." It is not clear why "in this specific case" the public nature of the roads would be a "secondary" fact. The EC goes on to assert that the fact that other users may use these roads is more of a "coincidence since the entire rationale

⁸⁷ EC Comm. 1, para. 141.

⁸⁸ US Comm. 1, paras. 119-122.

⁸⁹ EC Comm. 1, para. 141.

⁹⁰ EC Comm. 1, para. 141.

behind the measure challenged by the European Communities is to diffuse the other users of the underlying roads over the improved roads in such a way that Boeing's performance requirements are at all times satisfied." But, the EC provides no support for the assertion about the supposed "rationale" behind the road improvements and indeed no support exists for this assertion; in any event, even if the EC's assertion of the rationale behind the improvements were correct, that would not establish that the improvements are "other than general." These roads are available to all or nearly all users or potential users of these roads without limitation, and are therefore general.

110. Furthermore, none of the other infrastructure measures challenged by the EC are "other than general," because they are available to any user without limitation. Despite its assertions to the contrary, the EC has not assessed the totality of the facts at all; the EC's analysis of general infrastructure relies on assertions that support the EC's pre-ordained legal conclusion. Finally, as I will discuss next, the EC's claim that these infrastructure improvements are guaranteed to Boeing through Article 10.4.1 of the MSA is wholly without merit.

Article 10.4.1 of the MSA

- 111. The EC asserts as an alternative argument that the Washington infrastructure just discussed, as well as other elements of the MSA, are subsidies because of Article 10.4.1 of the MSA which, according to the EC, represents a "guarantee" to Boeing. The EC continues to misconstrue this provision and its legal effect.
- 112. That provision states that, in case a change in law or other event impedes the ability of the Public Parties to fulfil their obligations under the MSA, those Public Parties will "exercise their best efforts to, and to the extent permitted by law" shall provide Boeing with an exemption from the law or an alternative having equivalent economic effect. As the United States has set forth in detail and as the plain language of the provision indicates, this commitment is subject to the "best efforts" and "to the extent permitted by law" conditions. Moreover, the Public Parties to the agreement cannot, on their own, bring about a change in law or a "transfer of funds" to Boeing. The Public Parties would have no basis for and did not promise to do more.
- 113. Finally, it is entirely speculative what, if anything, a Public Party could provide under the provision or what, if any, remedy a court might impose. This does not amount to a potential transfer of funds.

State of Kansas

114. Turning now to the EC's claims with respect to Industrial Revenue Bonds ("IRB) issued

⁹¹ EC Comm 1, para. 141.

by the City of Wichita, the EC has failed to establish that these measures constitute specific subsidies.

- 115. As the United States has demonstrated, the IRB tax incentive is a generally available program, provided for in Kansas law, that the State of Kansas and its subdivisions (including the City of Wichita) have been administering and applying to companies from a broad range of industries based on objective criteria for more than 40 years. Indeed, the City has issued hundreds of IRBs with respect to more than 100 companies and other entities, from industries ranging from aircraft, automotive, energy, building equipment, food products, etc. The EC seems to concede this pointing only to a single instance of a health club being rejected for IRBs as a sign that IRBs are not generally available.
- 116. In light of these numerous indicia that the IRBs are not specific, the EC seeks to find specificity in the following: that 61 percent of all IRBs and 69 percent of all IRB-related property tax abatements have been to Boeing and Spirit. The EC contends that these percentages are disproportionate to Boeing's share of the local economy and thus establish specificity.
- 117. The United States has noted that Boeing was the single largest company in Wichita and indeed, the entire State of Kansas before the sale to Spirit, and so these numbers are unsurprising. Indeed, the SCM Agreement requires that a *de facto* specificity analysis take into account the "extent of diversification of economic activities within the jurisdiction of the granting authority."
- 118. The EC responds to this by seeking a mathematical correspondence between usage and employment numbers that is irrelevant and does not establish *de facto* specificity. The EC never explains why it is reasonable to expect a company's share of IRBs to be the same as its share of employment there are a variety of reasons that some businesses may use IRBs more than others, including that IRBs are more useful to companies with extensive machinery and property usage, and that some transaction costs are involved in applying for IRBs that smaller businesses may be less inclined to assume. The lack of direct mathematical correspondence between share of local employment and IRB usage does not establish *de facto* specificity here.
- 119. The EC also argues that the benefits from IRBs and KDFA bonds that have been or may be issued in the future to Spirit Aerosystems "passed-through" to Boeing despite the fact that Spirit is an independent and unrelated entity which contracts at arms-length with Boeing (and with Airbus too). The EC grounds its pass-through allegation on an analysis from an economist stating that as a generic matter any future income stream expected as part of an asset purchase will be fully reflected in the purchase price. ⁹² This does not make sense as a theoretical matter and does

⁹² Paul Wachtel, *Economic Analysis: Subsidy Pass-Through and Asset Pricing Issues Relevant to Subsidies to U.S. LCA Industry* (Dec. 2006) (Exhibit EC-16).

not amount to the positive evidence that must be adduced to establish pass-through of a subsidy between unrelated parties.

- 120. However, even if the Panel were to accept the EC's consultant's analysis, the premise of the analysis does not reflect the facts here. As the United States has shown, when the price for the sale of Spirit was set and agreed in February 2005, there was no assurance that Spirit would receive IRBs or KDFA bonds, or knowledge of the amount of the IRBs. The EC's speculative theory of pass-through fails on its own terms, therefore.
- 121. In its most recently filed comments, the EC does not contest that pricing for the sale of Spirit was contractually agreed in February 2005, but argues that the terms of the deal were subject to amendment, and were amended once, before the transaction closed in June 2005. 93
- 122. However, the amendment that the EC cites does not salvage its argument. First, nothing in that amendment relates to pricing or the bonds in any way, and the EC does not allege otherwise. The EC provides no evidence that the parties altered the terms to ensure that the benefit of future bonds were captured in the terms. Second, if the price agreed by the parties in February 2005 were contingent on Spirit obtaining approval for the IRBs and KDFA bonds, it would be reasonable to expect that to be reflected as a condition precedent to the closing of the deal. They were not.
- 123. The EC also continues to suggest that it would find evidence of a pass-through, if only it could have access to additional documents. The EC had made much of its supposed lack of access to long-term supply contracts between Boeing and Spirit, through which the EC alleges that the future IRB and KDFA bond benefits passed-through. The United States pointed out in its answers to panel questions that the contracts were publicly available. Finding no evidence of pass-through therein, the EC now complains that it lacks information on how pricing for supplies in the supply agreements was derived, and that particular numbers and sensitive business information have been redacted from those contracts. It is the EC's burden to establish pass through and the EC has failed to do so.

Export Contingency

124. The EC continues to advance the remarkable claim – without evidentiary support and based on an inaccurate construction of the SCM Agreement – that the tax treatment in HB 2294 is a subsidy and that provision of this alleged subsidy is *de facto* contingent upon export performance and thus a prohibited export subsidy under Article 3 of the SCM Agreement.

⁹³ EC Comm. 1, paras. 160-162.

⁹⁴ US RPO1, para. 127. See also, Exhibit US-1213.

⁹⁵ EC Comm 1, para. 158.

Despite all the time and energy devoted to this claim by the EC, the fact remains that the EC has failed to establish what is required by the SCM Agreement. Specifically, the EC has failed to establish that the State of Washington tied the granting of the tax treatment in HB 2294 - which, in any event, does not constitute a subsidy – to actual or anticipated exportation or export earnings.

- 125. While the EC makes cryptic assertions that mis-characterize the U.S. arguments with respect to export contingency, ⁹⁶ the U.S. argument rebutting the EC claim is in fact straightforward. The EC's claim is that an alleged subsidy contingent upon the establishment of production capacity equates to an alleged subsidy contingent upon actual production, which equates to an alleged subsidy contingent upon export performance. The U.S. response is, first, that the EC has provided no evidence to substantiate the leap from production capacity to production and from production to actual or anticipated exportation or export earnings; and, second, that the EC has put forward no evidence of a "tie" between the provision of the tax treatment in HB 2294 and any alleged actual or anticipated exportation or export earnings.
- With regard to the first point, in order for HB 2294 to take effect, a company must establish a facility with the capacity to produce 36 superefficient airplanes annually. The EC appears to read into this fact a requirement that to be eligible a company has to export. The EC's leap relies on several unsupported and confused assertions. For example, the EC equates production capacity with production. To support this assertion, the EC then suggests that "the facts regarding the structure of the industry have been duly evidenced."97 But, in fact, the EC has provided no evidence. And, in any event, generalizations about what the EC believes to be "the structure of the industry" in general are no substitute for evidence regarding Boeing and the particular facility at issue. The EC goes on to argue that "it is in fact the United States that is asking the Panel to 'assume' that such vast expense would not be incurred by Boeing and the United States without any expectation that the capacity thereby created will be used."98 This argument in effect would dramatically alter the respective burdens of the disputing parties. The EC would purport to establish its *prima facie* case by assertion and generalization, while requiring the United States to rebut that case with specific evidence. And, contrary to the EC's suggestion, the United States is not asking anyone to assume anything. The United States argues that one cannot assume, as the EC would like, that production capacity equals actual or anticipated exportation or export earnings.
- 127. The second point is even more critical. Even if one were to accept in some way the leap that the EC makes between production capacity and actual or anticipated exportation or export earnings, the EC has not shown a "tie" between any actual or anticipated exportation or export

⁹⁶ EC Comm 1, paras. 193-94.

⁹⁷ EC Comm 1, para. 190.

⁹⁸ EC Comm 1, para. 190.

earnings and the granting of the tax treatment in HB 2294. In its Comments on the U.S. responses to the Panel's Questions, the EC suggests that the U.S. position is based on the proposition that the term "tied-to" changes the legal standard. That is incorrect. All the United States says is that footnote 4 of the SCM Agreement prescribes that the standard for a finding of *de facto* export contingency is that "the facts demonstrate that the granting of a subsidy is in fact tied to actual or anticipated exportation or export earnings." Surely repeating the text of the SCM Agreement itself does not amount to *changing* the legal standard.

128. Based on the standard provided in Article 3.1(a) and footnote 4, the EC must establish, based on evidence - not assertion and abstraction about the large civil aircraft industry in general – that the State of Washington tied the tax treatment accorded by HB 2294 to actual or anticipated exportation or export earnings. It is this "tie" between the granting of the alleged subsidy and any actual or anticipated exportation or export earnings that the EC simply has not shown. Instead, the EC's entire case is built on an unsupported leap from production capacity to actual or anticipated exportation or export earnings. However, the only contingency the EC has shown, is a contingency on the establishment of production capacity. Thus, the EC has failed to satisfy its burden to demonstrate *de facto* contingency upon export performance under Article 3.1(a) of the SCM Agreement.

Adverse Effects

129. In its second written submission, the United States noted that the EC claim as to adverse effects rests on four pillars:

- *First*, that the U.S. government has allegedly subsidized Boeing "to the tune of almost \$24 billion" over the 30 year period from 1989 to 2025;
- Second, that the magnitude of the alleged subsidies is, in and of itself sufficient to prove the causal link between them and Boeing's prices during the reference period;
- *Third*, that these alleged subsidies are the equivalent of "free" cash to Boeing, and that BCA, Boeing's commercial aircraft division, used this "free cash" to "price down" its 737, 777, and 787 aircraft in a way that it otherwise could not have done; and
- Fourth, that the R&D services that Boeing provided to DoD and NASA gave it the "knowledge, experience, and confidence" necessary for the company to bring

⁹⁹ EC Comm 1, para. 194.

the 787 to market when it did. 100

In that submission and subsequent submissions, we demonstrated that each of these assertions is itself either unsupported by the evidence or contrary to the evidence. They do not support the conclusion the EC seeks to advance: that the alleged subsidies caused serious prejudice to Airbus.

- 130. In the interim, the EC has made a number of efforts to prop up its conclusion. It has failed.
- 131. Before we address each of these central elements of the EC's argument, it is useful to discuss a few overarching analytical issues.

Reference Period

- 132. The reference period for the Panel's review frames the evidence relevant to the Panel's analysis of the EC's adverse effects claims. The EC has pressed for a 2004-2006 reference period, arguing that only the data from that period are relevant to the Panel's assessment of "present" serious prejudice. The United States has countered that several conditions make it impossible to understand present conditions in the large civil aircraft market without a perspective that goes back at least to 2001-2003. These include the cyclical nature of the large civil aircraft market, the very long product development cycles, the long-term nature of sales contracts and the influence of prices in a key sales campaign on pricing over a multiple-year period. Therefore, a longer period, stretching back to 2001, is necessary for an objective assessment of the EC claims.
- 133. The EC has tried a number of arguments to exclude pre-2004 data from the Panel's review. The latest is the contention that the Boeing and Airbus "product portfolios" saw a "dramatic" change in the 2004-2006 period. 103
- 134. This latest argument has no more merit that the EC's previous arguments on this issue. In the first place, there was a basic consistency in the product offerings of both Boeing and Airbus from 2001 through 2006. The EC tries to prove otherwise by noting that as of 2006, Boeing had ceased offering four specific types of aircraft that it offered for sale in 2001, and had introduced a few new models that were not available in 2001. We have reproduced the chart the EC uses to make this point as Exhibit US-1259. However, the introduction and winding down of models is

¹⁰⁰ US SWS, para. 163.

¹⁰¹ EC FWS, para. 1076.

¹⁰² US RPQ1, para. 203-204.

¹⁰³ EC Comm.1, para. 237.

¹⁰⁴ EC Comm.1, para. 237.

only part of the story. We have also submitted Exhibit US-1260, which shows *all the models* available for sale in the periods 2001-2003 and 2004-2006. This chart shows that product offerings overlapped extensively between the two periods.

- In the EC's "100-200 seat market," competition over the entire 2001-2006 period was almost exclusively between Boeing's 737 NG and Airbus A320 family. Although Boeing phased out the 757 and 717 in, respectively, 2003 and 2004, sales of both aircraft were minor compared to 737 and A320 family sales.
- In the EC's "300-400 seat market," the Boeing 777 and the A340 were in competition over the entire 2001-2006 period. To be sure, Boeing's 777-300ER has become the largest selling 777 variant, but Boeing continued to place the older 777-200ER with major customers, such as British Airways, through 2007.
- In the EC's "200-300 seat market," the Airbus A330 was sold throughout the 2001-2006 period, as was the Boeing 767. Boeing has continued to receive orders for passenger and freight versions of the 767 through 2007. Boeing launched the 787 in 2004, and Airbus launched its A350 XWB-800 in 2006, but neither of these aircraft has yet been delivered. And, while the introduction of new aircraft does change the landscape, it does not change the critical condition that competition between Boeing and Airbus is intense.
- 135. Thus, there is no "dramatic" change. In fact, the periodic introduction of new models (and even more frequently, new versions of existing models) is one of the conditions of competition that characterizes the large civil aircraft market. That has remained unchanged since 2001 in the same way that other key conditions of competition held constant, such as the length of the business cycle, the multi-year product development cycles, the ways in which airlines weigh the NPVs of Boeing and Airbus offers, and the long-term nature of contracts. Thus, the introduction of new models and winding down of old models is not a change in the conditions of competition.
- 136. In short, the EC's arguments do not provide a credible basis for the Panel to limit its analysis to the 2004-2006 period. They certainly do not justify disregarding several important developments in the 2001-2003 period that help to put the 2004-2006 period in context. For example, Airbus' 2001-2003 pricing for its A320 family aircraft was a key to its capture of substantial market share, and shaped the prices that Airbus (and Boeing) could command in the years that followed. Similarly, Airbus' pre-2004 decision to focus its resources on the A380 instead of a viable 787 competitor are reasons for any problems that Airbus may have encountered

¹⁰⁵ US Comm.1, para. 248.

¹⁰⁶ US FWS, paras. 1031-1038, 1066-1070.

in the "market" for large civil aircraft with 200-300 seats. ¹⁰⁷ The EC does not deny that Airbus undercut Boeing's prices in key 2002-2004 sales campaigns, and Airbus has publicly stated that its focus on the A380 came at the expense of developing a viable version of the A350. ¹⁰⁸ Therefore, the EC's determination to marginalize 2001-2003 data is understandable. But for that very reason, the EC cannot credibly argue that the 2001-2003 data are irrelevant to the Panel's analysis.

Aggregation

- 137. The extent to which the Panel can aggregate the effects of different subsidies for purposes of its adverse effects analysis is another "framing" issue over which the United States and EC disagree. There is no disagreement regarding the rule that governs the aggregation of the effects of different subsidy programs; both parties recognize that where programs "share a sufficient nexus" with the subsidized product and a particular effects-related variable, the effects of these programs may be aggregated.¹⁰⁹ There is, however, a significant difference of view regarding what is meant by "sharing a sufficient nexus" to a subsidized product and sharing an "effects-related variable."
- 138. The EC's argument is, in essence, that as long as alleged subsidies allegedly benefit a product, and as long as all of those alleged subsidies have an alleged effect on the pricing of that product, their effects may be aggregated even if the nature of the different subsidies, the way in which they are related to the product in question, and the way in which they allegedly affect price, are all very different.¹¹⁰
- 139. The United States, by contrast, maintains that "sharing a sufficient nexus" with a product requires that the alleged subsidies relate to the product in question in a substantially similar way. Thus, subsidies that are tied to the production or sale of a particular product do not "share a sufficient nexus" with subsidies that may provide general funds to the beneficiary, but that are not tied to the production or sale of the same product
- 140. In the context of this proceeding, this means that, at the very least, the subsidies that the EC alleges "lower the marginal unit costs" of specific Boeing large civil aircraft do not "share a sufficient nexus" with R&D programs that the EC alleges to have subsidized Boeing's R&D.

Magnitude of the alleged subsidy

¹⁰⁷ US FWS, paras. 920-928; US SWS, HSBI Appendix, paras. 10-18.

¹⁰⁸ US Comm.1, para. 304.

¹⁰⁹ US FWS, para. 763; EC SWS, para. 668.

¹¹⁰ EC SWS, paras. 669-674.

- 141. With these considerations in mind, we move back to the four pillars of the EC argument. The first of these is the magnitude of the alleged subsidies. At the last meeting, you heard the EC refer again and again to the \$24 billion in subsidies. That is because that number is critical to the EC claims of adverse effects. The \$24 billion (and most particularly the \$19 billion of that amount that the EC attributes to the 1989-2006 period) drives the Cabral analysis, it drives the per-aircraft subsidy figures, and it drives the EC's new analysis with regard to Boeing's resources.
- 142. That number is a fiction. As we discussed earlier, the \$24 billion and \$19 billion figures are based in large part on EC analyses that are entirely contradictory to the evidence. Even if every program challenged by the EC were a subsidy and they are not the real value associated with the programs is far lower than the EC asserts. It is also far lower than any level that can be conceived as having an effect on Boeing's prices or technology.

The magnitude of the subsidies is not sufficient by itself to establish a causal link

- 143. The second pillar of the EC argument is that the \$19 billion magnitude of the alleged subsidies over the 1989-2006 period is sufficiently large, in and of itself, to establish the existence of a causal link. In its second written submission, the EC defended this proposition by arguing that "but for" this volume of alleged government funding, Boeing's pricing and product development strategies would have driven it into bankruptcy. In its recent comments on the U.S. answers to Panel questions, the EC explains its contention as being "that the U.S. subsidies enable Boeing to act on the economic incentive it has to lower its prices to an extent that otherwise would be uneconomical for the company"112
- 144. Boeing's financial data disprove the EC's claim. As the United States has shown, during the 2004-2006 period on which the EC's adverse effects claim focuses, the funds Boeing spent on stock repurchases were close to twice the amount of the alleged subsidies. Moreover, Boeing's most recent financials show a sharp rise in the operating income and cash flow for Boeing's commercial aircraft division ("BCA") as well as for Boeing as a company. These data show very clearly that the economics of Boeing's 2004-2006 large civil aircraft pricing decisions have been sound by any measure. Thus, with or without the alleged subsidies, Boeing would still have acted as it did.
- 145. The EC further argues that even if Boeing could have priced as it did between 2004 and 2006, over the longer 1989-2006 period, BCA's operations would have been uneconomic "but

¹¹¹ EC OS1, paras. 1 and 119.

¹¹² EC Comm.1, para. 314.

¹¹³ US RPQ1, para. 217.

¹¹⁴ Comparison of selected Boeing and BCA financial data and alleged subsidies: 1986-2006 (Exhibit US-1226).

for" the subsidies. Our response to Panel questions and our comments on the EC's responses to Panel questions show, based on the financial data, that Boeing had enough of its own free cash flow to fund its pricing and development decisions. And, since the EC concedes that Boeing would face the same incentives absent the alleged subsidies, the only possible conclusion is that the alleged subsidies had no bearing on the company's "ability" to price its existing aircraft or develop the 787.

146. In its analysis, the United States noted that the EC's comparison between Boeing's available financial resources, particularly the more than \$16 billion it spent repurchasing shares, and the \$19 billion alleged by the EC was misleading because the EC compared the pre-tax dollars associated with the alleged subsidies to the post-tax value of the stock buy-backs. In its comments on the U.S. responses to the Panel's questions, the EC states:

When looking at the entire period 1989-2006, the United States resorts to alleging the ITR relied on the wrong basis for its calculations of Boeing's counterfactual debt-to-equity ratio because the subsidies to Boeing were pre-tax, while stock repurchases were post-tax. The United States errs. The United States has not shown that any of the subsidies at issue are taxable. 119

The EC misses the point, which is not that the alleged subsidies are taxable, but that if they had been replaced by Boeing's own funds, Boeing's costs would have risen and its profits would have been lower. That development would lower its taxable income and, therefore, the taxes it paid. In other words, the effective cost to Boeing of the \$19 billion that the EC claims it would have had to spend to replace the alleged subsidies would be less than the full amount because of the tax implications of the EC's "but for" hypothesis. To repeat, when the tax implications are factored into the analysis, the data suggest that the dollars Boeing spent on share buybacks from 1989-2006 are greater, not less, than the alleged subsidies. 120

147. Another point worth emphasizing is that the EC's new causation claim, like the one it based on the Cabral Report, depends entirely on the accuracy of its magnitude-of-the-alleged subsidies calculation. As we have shown, the argument fails even at the full \$19 billion figure alleged by the EC. Obviously, the argument becomes more and more implausible the smaller that number gets.

¹¹⁵ EC Comm.1, para. 276.

¹¹⁶ US RPQ1, paras. 217-218; US Comm.1, para. 268.

¹¹⁷ EC Comm.1, para. 271.

¹¹⁸ US RPQ1, para. 218.

¹¹⁹ EC Comm.1, HSBI Appendix, para. 277.

¹²⁰ US RPQ1, para. 218.

The EC has failed to establish that Boeing's pricing strategy would have changed in the absence of the alleged subsidies

- 148. The third pillar of the EC argument is that "but for" the alleged subsidies, Boeing could not have priced its 737, 777 and 787 aircraft as it did. It then argues that Boeing's allegedly "subsidy-fueled" pricing suppressed Airbus prices or was the decisive factor in sales campaigns that Airbus lost to Boeing.
- 149. In an effort to support this contention, the EC has subdivided the subsidies allegedly given Boeing into two broad categories. The first is composed of subsidies that allegedly reduce Boeing's marginal costs of production. These, the EC claims, lower Boeing's prices on a "dollar-for-dollar" basis and the lower Boeing prices have, in their turn, a dollar-for-dollar impact on the prices that Airbus can command. According to the EC's calculations, the amount of these allegedly marginal cost reducing subsidies is \$2.2 billion between 1989-2006 or, on average, \$122 million per year. Because of their alleged nature, the EC argues that 100 percent of the alleged value of these subsidies flow through to lower Boeing prices and, thus, lower Airbus prices.
- 150. Second, the EC argues that between 1989 and 2006 Boeing has received \$16.9 billion in R&D subsidies which are the functional equivalent of free non-operating cash flow to Boeing. The EC has provided a model developed by Professor Cabral, which purports to show with precision the portion of this "free cash flow" which Boeing "invests" in aggressive pricing. Alternatively, the EC agues that "but for" this free cash, Boeing's commercial aircraft business would have failed and, therefore, Boeing could not have priced as it did. 125
- 151. **Alleged subsidies related to sale or production.** The EC alleges that four alleged subsidy programs¹²⁶ reduce Boeing's marginal unit costs of large civil aircraft production, and that the company passes that advantage to customers on a "dollar-for-dollar" basis in the form of lower prices. To repeat a point made in our second written submission, the primary evidence the EC has offered to substantiate this dollar-for-dollar pass through claim is a single page from a textbook which provides an example that does not support the proposition for which it is cited.¹²⁷ The textbook example relates to the extent to which a reduction in tax rate on motel rooms would

¹²¹ EC FWS, paras. 1306-1308.

¹²² Exhibit EC-17, p. 2.

¹²³ Exhibit EC-17, p. 2.

¹²⁴ Cabral Report (Exhibit EC-4).

¹²⁵ EC SWS, paras. 712-732.

¹²⁶ The Washington State and City of Everett B&O tax rate reductions, the Snohomish County 747 LCF landing fee waivers, and the FSC/ETI tax breaks.

¹²⁷ US SWS, para. 183.

be passed on to customers. It concludes that, depending on market conditions, the tax rate reduction would be passed through either in whole, in part, or barely at all. 128

152. To date, the EC has not offered any other evidence to support its "dollar-for-dollar" assertion. Instead, it has cited to general statements by Boeing executives that cost savings are "shared" with customers. In its most recent submission, it also seeks to find support in the U.S. response to Panel Question 90, which stated:

Similarly, subsidies that are linked directly to the pricing or production of specific products are far more likely to have an impact on the pricing or production of those products that subsidies that do not have such a link. 129

In the EC view, this response "admits" that subsidies "contingent on production ... have price effects." However, the EC misreads the U.S. statement.

- 153. To be clear, the U.S. response states, accurately, that the nature of alleged subsidies matters for purposes of adverse effects analysis. It adds that subsidies tied to the production or sale of a specific product are far *more* likely to affect the pricing of that production than subsidies with no such link. Given the U.S. view that other subsidies have no effect at all in the context of the large civil aircraft market, even an insignificant effect would fall into the category of "more likely." And that is exactly how the United States views the likely impact of alleged subsidies tied to production or sale insignificant. In this case, the EC has failed completely to identify credible evidence to support its assertion of the "dollar-for-dollar" price effects of such alleged subsidies. In fact, the evidence shows that Airbus not Boeing regularly initiated price reductions in the sales campaigns referenced by the EC. ¹³¹ In the vast majority of the campaigns cited by the EC, Boeing's position was defensive. ¹³² Therefore, Boeing did not use any alleged production- or sale-related subsidy to fund its market-driven pricing.
- 154. **Alleged subsidies related to R&D.** With regard to the second group of subsidies, those allegedly provided in the form of R&D programs, the EC asserts that a part of the budget of each program is the functional equivalent of "free cash" that Boeing uses to "price aggressively." The characterization of program budgets as "free cash" to *Boeing* has no support in the evidence. Nevertheless, in its first written submission, the EC claimed that the effects of this "free cash" can

¹²⁸ Steven Landsburg, *Price Theory and Application*, p. 227 (Exhibit EC-725), *cited in* EC FWS, para. 1308, note 2075.

¹²⁹ US RPQ1, para. 225.

¹³⁰ EC Comm.1, para. 296.

¹³¹ US Comm.1, para. 277.

¹³² US Comm.1, paras. 350-352.

¹³³ EC FWS, paras. 1309-1312 and 1321.

be reliably traced through to Boeing's large civil aircraft pricing using Professor Cabral's model of Boeing's behavior.¹³⁴

- 155. The United States has commented at length on the problems with Professor Cabral's modeling exercise and his accompanying report (the "Cabral Report"). Among the flaws that invalidate the Cabral Report are:
 - its dependence on the EC's grossly exaggerated calculation of the amount of the alleged subsidies;
 - its basic assumption that Boeing's investment decisions vary with incremental non-operating cash, even though Boeing has unfettered access to capital markets;
 - its assumption that Boeing uses its free cash for very limited purposes i.e., to invest in "aggressive pricing" and in product R&D, and for payments to shareholders and its further assumption that those limited uses of free cash are always in fixed proportions; and
 - its assumption that a significant portion of Boeing's 2000-2006 sales involved significant switching cost and learning cost incentives to lower price.
- 156. In its second written submission, the EC responded to some (but not all) of U.S. criticism of the Cabral Report. The EC response is singularly unconvincing. Most critically, neither the EC nor Professor Cabral directly addresses the U.S. contention that for a large established company like Boeing, investment decisions do not depend on the availability of additional cash received independently of its basic operations. A company like Boeing is constantly evaluating investment opportunities. It pursues investments worth pursuing, and does not pursue those not worth pursuing. The availability of additional cash does not change the analysis. (This is one the reasons why Boeing returned so much of its cash to shareholders in the form of share repurchases.) An investment not worth pursuing does not become attractive because additional cash becomes available. And there is nothing in the thousands of pages submitted by the EC that proves otherwise.
- 157. Beyond this most basic point, the EC's and Professor Cabral's response to the U.S. critique of the Cabral Report:
 - Fails to explain why Professor Cabral's model reasonably reflects Boeing's (or any company's) actual decision-making, as it assumes that additional free cash is always used in fixed ratios for investment in aggressive pricing and R&D, on the

¹³⁴ EC FWS, paras. 1309-1332.

one hand, and payments to shareholders, on the other, regardless of other available investment opportunities.

- Fails to justify the assumption that Boeing uses its discretionary funds only for payments to shareholders, investment in "aggressive pricing," and product development. In particular, even in his rebuttal report Professor Cabral fails to account for Boeing's discretionary uses of its cash flow for, among other things, acquisitions, unscheduled debt repayment, investment in affiliates, prepayment of pension expenses, etc.
- Fails to justify his "learning curve" and "switching cost" hypotheses by reference to the 2001-2006 sales sample he selected for analysis.

In short, the EC's new arguments fail to rehabilitate the Cabral analysis.

- 158. Lastly, it is worth recalling the importance of the nature of the alleged subsidies to the Panel's causation analysis. The Defense Department and NASA R&D programs at issue in this case have been in existence for decades. These R&D programs involve military aerospace and/or basic aeronautic research and development projects that are not tied to the production or sale of any aircraft model and are otherwise not specific to large civil aircraft in nature. U.S. aerospace companies provide services under these programs to, and/or work with, the agencies to support, U.S. government military and other research objectives.
- 159. Significantly, Lockheed and McDonnell Douglas participated in these same R&D programs, but their nature was such that they provided no significant benefit to either company's commercial aircraft operations. Indeed, both exited the large civil aircraft market after Airbus entered the market. Moreover, by the EC's own admission, these same alleged subsidy programs, even as applied to Boeing, were not consequential prior to 2004 despite the fact that the magnitude of the alleged subsidies was higher in 2001-2003 (when Boeing was losing significant market share) than during the period 2004-2006.
- 160. Against these facts, the EC's claims that, between 2004 and 2006, a lower level of alleged R&D subsidies shaped Boeing's LCA pricing in a way that suddenly caused adverse effects to the EC is, to say the least, implausible.

The EC has failed to establish that the timing or technological advancement of the 787 would have changed in the absence of the alleged subsidies

161. Our submissions have shown that Boeing would have developed the 787 when it did, and how it did, in the absence of the alleged subsidies. As our oral presentation on this issue involves confidential information, it will be part of tomorrow's statement.

162. In sum, none of the four pillars of the EC argument holds up against the evidence.

The EC has not established the existence of any of the types of serious prejudice

- 163. The EC's core arguments go to the question of how the alleged subsidies affect Boeing's behavior and the marketplace. We have shown that the EC has not made a *prima facie* case that such effects occur. Even if it had, the SCM Agreement has a further requirement that the effects constitute one of the types of serious prejudice enumerated in Article 6.3. However, the evidence does not demonstrate the occurrence of of the types of serious prejudice alleged by the EC significant price suppression, significant lost sales, or displacement or impedance.
- 164. As a general matter, the historical situation is crystal clear. From 2001-2006, Airbus gained substantial market share, displaced Boeing as the incumbent supplier at several major accounts like easyJet, Air Berlin and Air Asia, booked record orders, delivered large civil aircraft in record numbers and, until the well-publicized A380 production problems in 2006, was reporting record profits and operating margins with regard to its civil aircraft.
- 165. With this background, it is little wonder that the EC cannot point to credible evidence in support of its displacement or impedance claims, its claims that Airbus could have reasonably expected significantly higher prices for its A320, A330, A340 and A350 families of aircraft, or its claims of significant lost sales.

No displacement or impedance

- 166. We will begin with the EC claims of displacement and impedance. The EC continues to argue that it can make these claims based on data on aircraft orders, as opposed to deliveries. As the Panel knows, the United States disagrees based on the text of the SCM Agreement, which casts displacement and impedance in terms of exports and imports. The U.S. and the EC positions on the orders versus delivery issue have been fully argued and there is, in our view, nothing more to be said on this particular issue.
- 167. If the Panel agrees that the text of the SCM Agreement requires analysis of displacement and impedance based on deliveries, then, the EC has failed to make a valid displacement or impedance claim. The aggregate delivery data, less leasing company deliveries, that it recently submitted for the country "markets" it has identified do not show any clear trends during the 2001-2006 period, much less trends unfavorable to Airbus. Therefore, Article 6.4 precludes a finding of displacement or impedance.

¹³⁵ US RPQ1, paras. 188-190.

Delivery Market Share Data for the Country and Product Markets Covered by the EC Claim (Exhibit EC-1312).

- 168. That should be the end of the inquiry. However, the EC also attempts to use lost sales to create the displacement or impedance claim that the aggregate data do not support. Here, the EC's problem is that, consistent with the approach of the panel in *Indonesia Autos*, displacement and impedance requires a showing that the complaining Member's like product exports *as a whole* have been displaced or impeded in a particular market, not just that particular sales were lost. ¹³⁷
- 169. Therefore, the EC has failed to make a *prima facie* case of displacement or impedance because its arguments are inconsistent with the text of the agreement.

No significant price suppression

- 170. The EC has also failed to support its claims of significant price suppression. At the outset, it is important to recall that price suppression requires a comparison of actual prices with prices that might otherwise have prevailed. Unlike price depression and price undercutting, which can be evaluated by examining actual pricing data, price suppression is an exercise in reasonable counterfactual extrapolation.
- 171. The EC cannot, and does not, make a pricing claim capable of testing by reference to hard pricing data. It does not argue that Boeing undercut Airbus' pricing or that the effects of the alleged subsidies were to depress Airbus' prices. Rather, the EC's pricing claim is that "but for" the alleged subsidies, Airbus' prices would have been "significantly" higher than they were. As we demonstrated earlier, the evidence contradicts the EC's assertion that the alleged subsidies had any impact on Boeing's pricing, much less a price suppressing impact on Airbus. But leaving this question aside for the moment, there is no persuasive evidence to support the EC's claim that Airbus' prices were suppressed, whatever the reason, in the sense that they were lower than could have reasonably been expected.
- 172. Airbus itself put a ceiling on its A320 family prices when it used price reductions to capture easyJet, Air Berlin and Air Asia from Boeing between 2002 and 2004. As one aircraft valuation expert put it when asked to explain why the 737 is routinely assigned higher value than the A320, "Airbus keeps the {production} tap open wider than Boeing and cuts prices to move airplanes. In my opinion, cutting on new prices hurts long-term values. Having lowered the prices for aircraft in the 737/A320 size range at these accounts, Airbus could not have reasonably expected present prices for its single aisle aircraft to be higher than they are. The inescapable fact of the matter is that other airlines were not about to ignore the discounts Airbus had given to their

 $^{^{137}}$ US Comm.1, paras. 233-234) *citing Indonesia – Autos*, paras. 14.215-14.216 and 14.221.

¹³⁸ Airbus Targets Appraisers on Value," *Jetrade*, p. 12 (June 2007) (Exhibit US-277).

competitors. 139

- 173. In the EC's 300-400 seat market, design and technical problems have limited the pricing Airbus can command for its A340. Aircraft investors and operators have ranked various versions of that aircraft at the very bottom of the available aircraft in terms of performance, as evidenced by the Airfinance Journal 2005 ranking of large civil aircraft.¹⁴⁰
- 174. And the A340's problems have only grown worse as fuel costs have risen, making its four-engine design an increasingly difficult sell. Airbus' parent company, EADS, acknowledged as much in its 2006 annual report, stating that "{t}he A340 suffered from its lack of fuel efficiency as a four engine aircraft." In order to find significant suppression of Airbus' A340 prices, the Panel must conclude that under present market conditions, airlines would be willing to pay "significantly" more for a poorly performing, fuel inefficient aircraft than they are now prepared to pay. The EC has offered no evidence to show that this is, in fact, the case.
- 175. And insofar as Airbus 200-300 seat aircraft (the A330, A350 Original, and A350 XWB) are concerned, the EC's price suppression claim does not even address the relevant statistic prices for the product as a whole. In its comments on the U.S. answer to Panel Question 94, the EC concedes that it has not presented aggregate pricing data for the Original A350 and the A350 XWB. The EC instead argues that price suppression for the EC's 200-300 seat product market as a whole can be inferred from anecdotal campaign-specific pricing information for the A350 Original, while providing no pricing data whatsoever for the A350 XWB. However, the absence of pricing data for either version of the A350 necessarily means that the EC cannot point to any evidence that the prices for Airbus' 200-300 seat aircraft as a whole have been suppressed.

No significant lost sales

176. In contrast to the EC's price suppression claims, the EC can of course point to evidence that Airbus "lost" sales in the colloquial sense in its competition with Boeing. In a duopoly market, every sale is at least notionally "lost" by one of the two producers. However, as the United States demonstrated in its first written submission, a "lost sale" for purposes of Article 6.3(c) requires more – that there was a competition in which the losing producer had a chance of getting the sale. Moreover, such "lost sales" must be significant. In a situation like the large civil aircraft market, in which Airbus' market share has increased, it is difficult to see how lost sales the size of most of the transactions challenged by the EC could be considered significant. Given these data, the EC cannot legitimately argue that lost sales about which it

¹³⁹ US FWS, HSBI Appendix, paras. 57-58.

¹⁴⁰ "The Real Battleground," Airfinance Journal, p. 28 (Sept. 2005).

¹⁴¹ EADS Annual Report 2006, p. 36 (Exhibit US-1182).

¹⁴² US FWS, para. 892.

complains are "significant" or, for the reasons explained below, even begin to make a credible case that they have been caused by the alleged subsidies.

177. In several of the campaigns identified by the EC, there is no evidence that Airbus had such a chance. How Moreover, such "lost sales" must be significant within the context of the EC large civil aircraft industry. How As noted earlier, the EC has failed to show that the alleged subsidies caused any of the "lost sales" it identifies, much less that lost sales resulting from the subsidies would be "significant" to Airbus' large civil aircraft operations.

Information gathering

- 178. The EC has asserted this morning that it does not know how the contracts submitted by the United States relate to its claims in this dispute. This assertion is completely at odds with the evidence.
- 179. First of all, the EC asserted in Exhibit EC-28 that it needed access to contracts but could not obtain them. The EC also asserted that it had "experts" on U.S. procurement practices who minutely examined all the available evidence. Yet they chose not to refer to the NASA and DoD contracts directly available to them. The United States made numerous references to contracts in its submissions. The EC has yet to address these.
- 180. Even while the EC has claimed that it cannot understand the relevance of these materials, it has cited them in its own submissions, most particularly in footnotes 607 and 812 of the EC second written submission. It has even submitted documents from the DS317 Annex V process as its own exhibits in this dispute. At the same time, it insists that it has been harmed by the alleged U.S. failure to cooperate with an Annex V process.
- 181. In fact, what the EC has been doing is ignoring the very evidence that it has itself identified as most relevant. Thus, if there is any adverse inference to be made in this dispute, it is that the EC's refusal to address this large body of evidence is a recognition that the terms of these transactions disprove the EC's claims.

Conclusion

182. Thank you for your attention today. You have devoted a substantial amount of time to reading our arguments in the U.S. first written submission and subsequent submissions. Rather than subject you to an extended summary of everything you already have read, we would like to leave as much time as possible for us to address your questions and concerns. We would,

¹⁴³ US SWS, HSBI Appendix, paras. 26.

¹⁴⁴ US RPQ1, para. 259.

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however, like to emphasize that this statement has addressed only those issues that we thought would most benefit from an oral explication. We do not mean to imply that any other issue is of lesser importance. We will be pleased to address any of the issues in this dispute in our discussion with you during the remainder of this meeting.

TABLE OF ABBREVIATIONS

Short Form	Full Citation	
EC Comm.1	Comments by the European Communities on the US Responses to Questions of the Panel Following the Panel's First Substantive Meeting with the Parties (Dec. 31, 2007)	
EC FWS	First Written Submission of the European Communities (Feb. 9, 2007)	
EC OS1	First Non-Confidential Oral Statement by the European Communities (Sept. 28, 2007)	
EC RPQ1	Answers by the European Communities to Questions of the Panel Following the Panel's First Substantive Meeting with the Parties (Dec. 5, 2007)	
EC SWS	Second Written Submission of the European Communities (Nov. 19, 2007)	
Space Act	The National Aeronautics and Space Act, Pub.L. 85-568 (Exhibit EC-268)	
US Comm.1	Comments of the United States on the Responses of the European Communities to the First Set of Questions from the Panel to the Parties (Dec. 31, 2007)	
US FWS	First Written Submission by the United States (July 6, 2007)	
US OS1	Oral Statement of the United States at the First Substantive Meeting of the Panel with the Parties (Sept. 26, 2007)	
US RPQ1	Response of the United States to the First Set of Questions from the Panel to the Parties (Dec. 5, 2007)	
US SWS	Second Written Submission of the United States (Feb. 9, 2007)	

TABLE OF EXHIBITS

Exhibit	Title	Confidentiality
US-1250	48 CFR § 6.101(a) and (b)	Non-BCI
US-1251	Materials Soliciting Bids for DoD RDT&E Contracts	Non-BCI
US-1252	EC overestimate of DoD General Aviation RDT&E funding to Boeing (per CRA)	Non-BCI
US-1253	Reports and articles published by Boeing/McDonnell personnel pursuant to aeronautics research contracts	Non-BCI
US-1254	Affidavit of Branko Sarh	Non-BCI
US-1255	NASA Spending Under VSP and QAT Programs	Non-BCI
US-1256	Value of NASA Facilities, Equipment, and Employees Under Selected Space Act Agreements	Non-BCI
US-1257	Affidavit of Douglas Ball	Non-BCI
US-1258	Affidavit of Alan Miller	Non-BCI
US-1259	EC chart on changes in available civil aircraft	Non-BCI
US-1260	Airbus and Boeing Large Civil Aircraft Offerings (2001-2006)	Non-BCI