Results of the 2010 Section 1377 Review of Telecommunications Trade Agreements

Introduction

USTR annually reviews the operation and effectiveness of U.S. telecommunications trade agreements and the presence or absence of other mutually advantageous market opportunities, pursuant to Section 1377 of the *Omnibus Trade and Competitiveness Act of 1988*. The Section 1377 Review ("Review") is based on public comments filed by interested parties and information developed from ongoing contact with industry, private sector, and foreign government representatives in various countries. This year USTR received comments from eight companies and trade associations and reply comments from two companies and one foreign government. All public comments are available at the following web-site: www.regulations.gov, docket number USTR-2009-0038.

Summary of Findings

This 2010 Review addresses several general themes: **fixed and mobile call termination rates** in El Salvador, Jamaica, Japan, Peru, and Tonga; **problems with major suppliers** in Australia, China, Germany, India, Mexico, and Singapore; **issues affecting the telecommunications equipment trade** in Brazil, China, European Union, India, Indonesia, Korea, Malaysia, Mexico, and Thailand and **other issues** including frequency allocation in Costa Rica and transparency in China.

Although several of the issues in the 2010 Review have been discussed in past Reviews, USTR considers it appropriate to continue to raise these issues and encourage our trading partners to implement appropriate solutions. The 2010 Review describes practices or measures of U.S. trading partners that USTR will actively monitor throughout the year and with respect to which, if warranted, USTR may take further action.

Discussion of Key Issues

1. Fixed and Mobile Call Termination Rates

In the 2009 Review, USTR noted a troubling trend whereby some foreign governments implemented measures that led to increased termination-rates. Termination rates are the rates a foreign telecommunications operator charges a U.S. telecommunications operator to deliver a U.S.-originated call to a consumer on the foreign operator's network. U.S. free trade agreements and the World Trade Organization's (WTO)

Reference Paper on pro-competitive regulatory principles include disciplines designed to ensure that the charge a major supplier (which in most countries is the largest or only fixed-line telecommunications supplier) charges to terminate a call on its network is cost-based. This ensures that a major supplier is not able to gain an unfair competitive advantage from terminating a foreign or competitive carrier's calls, and also helps to ensure that U.S. carriers can offer reasonable and competitive international rates to consumers located in the United States.

As noted again in this year's public comments and as discussed in detail below, certain countries have taken actions that have led to increases in the rates foreign operators charge U.S. carriers to terminate calls on their networks, such as mandating rate increases through regulation; imposing per-minute taxes on incoming international calls; and assessing per-minute fees that must be contributed to domestic universal service funds. In other cases, the government is not directly involved in setting charges, but through inaction may fail to ensure that commercially offered rates are cost-based.

El Salvador – Tax on Incoming International Calls

As reported in the 2009 Review, El Salvador promulgated a law in 2008 that imposes a $.04/minute tax on incoming international telephone calls. Salvadoran carriers have passed on the cost of this tax to foreign carriers in the form of higher termination rates. The imposition of this tax resulted in a 100 percent increase in call termination rates for calls from the United States to El Salvador. In August 2008, El Salvador modified the law to exempt calls from other Central American countries from payment of this tax. Last year, USTR asked the government of El Salvador how the exemption for traffic from other Central American countries is consistent with El Salvador's Most-Favored Nation (MFN) obligations under the WTO General Agreement on Trade in Services (GATS). USTR has received no formal or informal response from the government of El Salvador on this issue. In addition, the tax raises questions regarding El Salvador's adherence to its commitment in the GATS Annex on Telecommunications (GATS Annex) and the Dominican Republic – Central America – United States Free Trade Agreement (CAFTA-DR) to ensure reasonable access to and use of its public telecommunications network.

USTR has been trying to address these concerns with El Salvador and will continue to press this issue.

ITU Network Externalities Recommendation

In last year's Review, USTR expressed concern about International Telecommunications Union (ITU) recommendation, Recommendation D.156. That recommendation encourages developing countries to consider imposing a "network externality" fee on

telephone calls originating in developed countries and terminating on developing country networks, as a means to fund the extension of developing countries' telecommunications networks. Although the United States, together with 27 other ITU members, expressed a reservation against, the ITU adopted Recommendation D.156 in October 2008.

Recommendation D.156 is premised on the idea that operators in developing countries[1] should be compensated for building out networks and providing developed countries with greater calling opportunities in their markets. While network build-out in developing countries is a worthy goal, there are concerns that revenues generated by a "network externality fee" may not in fact be used to fund network expansion and instead may be used simply to impose additional costs on foreign operators in developed countries.

Moreover, the ITU recommendation appears to encourage potentially WTO-inconsistent action. In particular, the recommendation appears to run counter to obligations set out in the GATS and various U.S. free trade agreements (FTAs) to afford MFN treatment to foreign services suppliers. Practically all ITU Members are also WTO Members, and a number of ITU Members are also parties to FTAs with the United States. Thus, if a WTO Member or U.S. FTA partner were to implement the ITU recommendation, it would raise serious concerns about whether the country was affording MFN treatment to foreign telecommunication suppliers.

USTR understands that Study Group 3 – a working group within the ITU – has developed an Annex to Recommendation D.156 to answer certain questions that ITU members raised concerning the practical implementation of the recommendation. This Annex[2] answers questions such as how countries can ensure that revenues from the externality fees will be used for network development; what entities should receive those revenues; what procedures should be put in place to collect and control the use of the externality fees; among others. It also asserts that the ITU members' implementation of Resolution D.156 would not violate the provisions of the WTO Agreements. USTR does not support the study group's assessment or its efforts to encourage members to implement Recommendation D.156. USTR urges the Study Group to consult telecommunications experts at the WTO prior to bringing the Annex to a vote within the ITU and stands ready to facilitate a meeting between telecommunications experts within the WTO secretariat and the appropriate individuals based at the ITU in Geneva to discuss this issue.

[1] The term "developing country" is undefined in this context.
[2] COM3-C29-E May 2009

USTR will also continue to work with its trading partners to urge them not to implement the ITU recommendation or similar policies.

Jamaica – Universal Service Surcharge

Jamaica continues to levy a surcharge on the termination rate paid by U.S. operators to send international telephone calls to Jamaica (a US$.02/minute and US$.03/minute surcharge for calls terminating on fixed and mobile networks, respectively). Jamaica explains that the purpose of the surcharge is to fund its universal service program administered by the Universal Access Fund Company (UAFC). This fund seeks to provide funding for domestic operators to provide telecommunications services to underserved areas that are not commercially viable. USTR has expressed concerns about this surcharge in several past years' Reviews and continues to encourage Jamaica to stop levying the surcharge until it more fully defines the services to be provided through its universal service program and until the UAFC has utilized the money collected thus far to fund Jamaica's universal service projects. Jamaica has taken neither action, yet continues to collect the surcharge.

USTR supports efforts to ensure universal telecommunications service; however, the cost of funding these programs should be borne by domestic telecommunications operators and consumers, and the domestic carriers should not be allowed to simply pass the surcharge through to foreign carriers. Levying a surcharge solely on international calls places an unfair burden on foreign operators and consumers, both of whom are at best only marginally able to benefit from the domestic universal service program through expanded network capacity in Jamaica. U.S. operators and consumers bear the bulk of the expense, given that 80 percent of Jamaica's incoming calls originate in the United States.

Jamaica's WTO Reference Paper obligations require it to ensure that universal service obligations are administered in a transparent, non-discriminatory manner, and that they be no more burdensome than necessary to achieve its universal service goals. Jamaica's Universal Access Fund continues to grow and the Jamaican government appears to be using the fund's reserves largely, or at least disproportionately, for non-telecommunications related items. Additionally, it is unclear whether Jamaica will determine that new universal service projects are needed that will require additional funding, and whether the stated project sums for existing projects include both up-front costs and on-going costs or only the former.

USTR will continue to encourage Jamaica to eliminate the surcharge on the termination rate paid by U.S. operators to terminate calls in Jamaica as soon as possible and to

restructure its Universal Service Fund to ensure that the cost of the program is borne by the domestic operators who benefit from it.

Japan – Review of Mobile Termination Rate Policy

Japan's regulator is continuing its policy review on whether and how to directly regulate mobile termination rates in Japan. New entrants in both the wireline and wireless markets have long been concerned about the high level of these rates, particularly given the regulator's historically passive role in this area. Although this review is not yet complete, it nonetheless appears to have encouraged Japan's mobile major supplier, NTT DoComo, to implement a substantial reduction in its mobile termination rates over the past two years. This year, NTT DoComo will reduce mobile termination rates by a minimum of 13.3 percent to a maximum of 15.5 percent, depending on place of interconnection. These reductions are notable compared to the negligible rate reductions NTT DoComo implemented leading up to the policy review initiated two years ago. This year's reduction will bring Japan's mobile termination market more in line with the more competitive mobile termination markets in other OECD countries. USTR considers this to be a positive development.

Peru – Review of Mobile Termination Rates

For several years, commenters have complained about mobile termination rates in Peru. Peru's telecommunications regulator, OSIPTEL, established these rates using 2004 cost information and required operators to implement them on a sliding scale over a five-year period. Last year, USTR reported that OSIPTEL had initiated a process to establish new mobile termination rates to replace the rates it had established in 2004. USTR noted this was a positive development. USTR is concerned, however, that the process for establishing the new rates has been delayed and that OSIPTEL has not yet established new rates. The delay appears to be due to extensions that OSIPTEL granted Peru's large operators to submit their cost information. OSIPTEL has defended these extensions, noting that it seeks a high level of transparency in this process, which sometimes leads to delays.

USTR agrees that transparency is extremely important but also believes it is imperative that OSIPTEL take steps to ensure that the process to establish new rates not be unnecessarily delayed. Allowing the 2009 rate to remain in force until the new rate is determined could provide incentives for the larger operators to seek to delay conclusion of the review.

Tonga – Termination Rate on Incoming International Calls

As noted in last year's Review, Tonga unexpectedly issued rules mandating a US$ 0.30/minute rate for terminating international long distance calls in the country

beginning in August 2008. U.S. carriers were previously paying a termination rate of approximately US$ 0.13/minute and were in the process of renewing their interconnection agreements with the country's major supplier, the fixed-line operator Tonga Communications Corporation (TCC).[3] When U.S. carriers refused to pay the new government-mandated rate, which they believed was unacceptably high, TCC cut off the circuits used to deliver their traffic. TCC has stated it is simply increasing the rate in order to comply with the government's rules. However, Tonga (which owns TCC) claims that the rate increase is justified as a means to cover TCC's costs.

Tonga's GATS commitments on basic telecommunications include the WTO Reference Paper, which contains a commitment to ensure cost-based interconnection with major suppliers. In February 2009, the Tongan government responded to a September 2008 letter from USTR by making the general assertion that Tonga's costs are higher than those in other countries because it lacks economies of scale and does not have access to submarine cable capacity. This letter, however, provided no information demonstrating that costs have increased such that a higher rate would be justified. Repeated attempts by USTR to obtain additional information since last year's Review had been unsuccessful until very recently, when an official from the Ministry of Communications informed USTR that Tonga has decided to repeal the US$ 0.30/minute rate and allow international termination rates to be set by the market.

USTR urges Tonga to follow through with this decision by formally repealing the $.30/minute rate as soon as possible, so that U.S. carriers may negotiate the reestablishment of circuits which have been interrupted since 2008. At the same time, USTR urges Tonga to ensure that its carriers comply with the country's WTO obligation to ensure cost-based interconnection.

2. Issues with Major Suppliers

U.S. companies can encounter significant challenges when seeking to utilize the networks of foreign incumbent operators to provide their services. They also face separate challenges when forced to provide their own services through an intermediary company that has been granted exclusive rights to provide a service. These challenges

[3] The lower termination rates previously in effect in Tonga resulted from competition that had developed between the incumbent TCC and a new international carrier, Digicel. This competition resulted in more normal market-based termination rates, below the FCC's benchmark rate for Tonga of 19 cents. By imposing a uniform termination rate of 30 cents, the Tongan government eliminated the price competition that had previously existed between TCC and Digicel. It raised the termination rate both well above the FCC's benchmark and far in excess of the rate that had prevailed in a competitive market.

can hamper or prevent U.S. companies from providing their services both cross-border and within foreign markets.

Australia – Timely and Reasonably Priced Access to Major Supplier's Network

Commenters continue to report persistent difficulties obtaining reasonable and timely access to certain wholesale services and related facilities from Australia's major supplier Telstra, particularly in the broadband sector. They note that these difficulties are particularly acute because, in addition to controlling the country's copper network and regional backhaul system, Telstra also owns much of the country's cable television infrastructure and therefore does not face the broad-based competition from independent cable providers that is seen in many other countries.

In order to address the difficulties faced by competitive carriers—those who compete with incumbent operators, yet need to rely on access to network elements controlled by the incumbents – the Australian government announced in mid 2009 that it wanted Telstra to separate its retail and wholesale arms, either voluntarily or, if necessary, through a legislative mandate. Legislation giving the government the authority to mandate such separation is currently before the Australian parliament. Separation of Telstra's retail and wholesale arms could help avoid conflicts of interest that inevitably arise when a supplier provides a service both at the retail level to end-users and at the wholesale level to its competitors. It is not yet clear if Telstra will agree to voluntarily complete the separation or if the government will need to compel Telstra to do it.

As reported in last year's 1377 Review, the Australian government is beginning to deploy an open-access National Broadband Network (NBN). Once completed, competitive carriers should be able to obtain access to wholesale products through the NBN, offering relief to competitive carriers that are currently struggling to obtain access to such products from Telstra. Much of the NBN infrastructure, however, will likely utilize many Telstra-controlled assets (e.g. ducts, poles, and switching centers), and the Australian government is currently negotiating with Telstra to determine the terms under which the NBN will utilize such parts of Telstra's network.

USTR will monitor the development of the NBN, particularly with respect to whether (with or without Telstra structural separation) competitors are able to obtain reasonable access to wholesale services and facilities to provide services that compete with Telstra's current retail offerings. Given the many years it will be before the NBN is complete, USTR urges Australia's regulator to remain vigilant in ensuring that in the near term, Telstra offers reasonable access to facilities and wholesale services (e.g. collocation-based unbundled loops, and if warranted, resale of similar services) based on current regulations.

Germany – Access to Wholesale Transmission Services

Competitive carriers continue to claim that there are market access barriers in Germany because of restrictions on access to incumbent operator Deutsche Telekom AG (DTAG)'s network

Commenters continue to assert that there are problems with access to two wholesale products, namely, IP-Bitstream and ATM-Bitstream. However, the German government states that DTAG continues to be under an obligation to make both products available, and DTAG asserts that competitors make widespread use of the IP-Bitstream, and that there is less demand for its ATM-Bitstream product. USTR encourages Germany to continue to ensure that DTAG makes wholesale access to these products available.

Commenters also point to problems in obtaining a form of leased lines called Private Partial Circuits (PPC). The German telecommunications regulatory agency (BNetzA) indicates that while PPC is not a regulated product in Germany, competitors can obtain indirect access to a PPC by bundling several network elements that are regulated (partial segments, collocation at DTAG facilities, etc.) together with some of their own transmission facilities. However, as PPC is a common, regulated product in many markets, including the United States, USTR believes Germany should consider studying whether competitors should have direct, regulated access to this product, rather than having to piece it together using other regulated offerings.

Finally, commenters in this year's Review also claim that they require access to wholesale service optimized for video distribution (IP-Multicast), which would enable them to provide Internet Protocol television (IPTV) to compete with DTAG's IPTV service. The German government has told USTR that it is not aware of any carriers that have requested access to IP-Multicast and further noted that it would not be able to compel DTAG to provide a service that it does not include within its own service offerings. DTAG noted that it holds only a small share of the market for IPTV, which competes with IPTV services provided by cable television platforms, and does not currently have a standard multicast platform that it could offer to competitors. However, DTAG indicated that it is currently considering the development of a standardized platform.

USTR will continue to engage with the German government, as necessary, to address concerns that commenters have raised with respect to access to DTAG's wholesale products.

India – Access to Submarine Cable Systems

In last year's Review, commenters expressed concern about the Reference Interconnection Offers (RIOs) (approved by TRAI, India's independent telecommunications regulator) that establish the terms and conditions pursuant to which competitive carriers can access the cable landing stations owned and controlled by incumbent operators in India. USTR emphasized to India last year the importance of competitive access to these essential facilities and urged India to commence public consultations to allow competitive carriers that are interested in obtaining access to cable landing station facilities to voice their specific concerns.

This year, commenters have again raised this issue, noting that TRAI has not taken adequate steps to address this issue. USTR again urges TRAI to allow for a full vetting of issues through public consultations so that TRAI is able to determine whether or not the RIOs need to be updated or amended. Such a process will help ensure the important gains India achieved when it decided to mandate non-discriminatory and reasonable access to these network facilities.

China, India and Mexico – Problems with Providing Satellite Capacity

Commenters in this year's Review note problems regarding U.S. operators' ability to offer satellite capacity to customers in China and India. China and India both generally require that foreign satellite capacity be sold through an intermediary—ChinaDBSat or the Indian Space Research Organization (ISRO), respectively. A lack of transparency in the rules governing the provision of satellite capacity in these countries is also a concern.

With respect to Mexico, commenters question the local presence requirement that Mexico imposes on foreign satellite service suppliers. They note that Mexico's GATS commitments include no such requirement for cross-border telecommunications services.

Additionally, with respect to both India and Mexico, commenters express concern that these countries require mobile satellite operators to install a gateway in India or Mexico, respectively, as a condition for providing satellite services into their territories. Commenters consider these requirements burdensome and unnecessary from a technical standpoint to address the security concerns these countries have raised. USTR will continue to raise the commenters' concerns with China, India and Mexico regarding these issues.

Mexico – Lack of Dominant Carrier Regulation

Commenters again raise concerns about the ability of Mexico's regulators and competition authorities to impose meaningful dominant carrier regulation on Mexico's two, affiliated major suppliers, Telmex (fixed services) and Telcel (mobile services). Telmex and Telcel have successfully challenged several findings of the competition commission, COFECO, over the past decade. As a result, Telmex and Telcel are subject to minimal regulatory oversight, despite each having market shares of over 70 percent in many market segments. Absent a formal finding of dominance by COFECO, the telecommunications regulator, COFETEL, has weakened authority to impose network access obligations. Thus, for example, unique among OECD countries, Mexico still has no local loop unbundling regime and, compared to OECD countries with a "calling party pays" system, no regulated mobile termination rates. COFECO did issue a finding of dominance with respect to Telcel in January 2010, one consequence of which could be price regulation of its mobile termination rates. Such an action could greatly help reduce the burdens these rates now create for U.S. consumers that make billions of minutes of calls into Mexico every year.

One particular problem that directly affects U.S. consumers and operators is the inability of Mexico's regulators to consolidate regional calling areas. Such consolidation would facilitate the ability of competitive carriers to send and receive calls under standard interconnection rates to numerous remote regions. Currently, Telmex is not required to offer competitive interconnection to 199 calling areas covering approximately 25 percent of Mexico's population and customers in such areas cannot choose a competitive long-distance provider (i.e., Telmex has a monopoly on providing telecommunications services to these customers). Telmex charges rates up to ten times the regulated interconnection rate to terminate calls in one of those calling areas. In 2008, COFETEL ordered Telmex to offer competitive interconnection in 70 of such areas, which would require Telmex to deliver competitors' calls to customers in those areas. Telmex, however, obtained a court injunction blocking the order thereby extending its monopoly in such areas. USTR urges COFETEL to continue to work through all necessary means to find a solution to this issue as soon as possible.

Singapore – Access to Leased Lines

For the past several years, USTR has expressed concern about the refusal of Singapore's major supplier, SingTel, to offer competitors access to leased lines at efficient aggregation points (called tandem exchanges), which competitors can use to provide services to their customers. In this year's Review, industry commenters continue to express concern about access to SingTel's tandem exchanges; however, they also note that SingTel has become more responsive to service requests from competitive carriers. Additionally, the government of Singapore is planning to complete construction of a

new open access broadband network next year, which should provide an alternative to SingTel's network and alleviate some of the problems faced by competitive carriers. USTR looks forward with keen interest to progress in Singapore's deployment of this new network.

3. Issues Affecting Telecommunications Equipment Trade

Equipment standards and conformity assessment requirements (including testing requirements) that help ensure safety and interoperability and avoid interference are integral to the telecommunications industry. Unfortunately, governments can also use these measures as a barrier to entry for foreign suppliers. Recognizing the dual nature of these tools, the WTO Agreement on Technical Barriers to Trade (TBT) and the WTO Agreement on Government Procurement seek to ensure that equipment standards and conformity assessment requirements do not create unnecessary barriers to international trade.

China – Information Technology Security Certification Rules

In August 2007, China notified to the TBT Committee 13 proposed technical regulations relating to information technology security for various IT products, including routers, smart cards, secure databases, and operating systems. Subsequently, in March 2008, China's Certification and Accreditation Administration (CNCA) issued an announcement indicating that the final regulations would be published on May 1, 2008, and would become mandatory on May 1, 2009.

In part because of past actions that China has taken in this area, including mandatory encryption standards for Wi-Fi technologies that China issued in 2003 and rules requiring the registration of a wide range of hardware and software products containing encryption technology that China issued in 1999, these proposed regulations generated immediate concerns from U.S. and other foreign governments and industry. In particular, the proposed regulations went substantially beyond the approach commonly taken by other countries to ensure national security and protect sensitive information by mandating testing and certification of security functions for non-sensitive, commercial users of information technology products. In other countries, mandatory testing and certification for such functions is only required for products used in sensitive government and national security applications.

The United States expressed serious concerns to China about these proposed regulations throughout 2008. At the September 2008 United States-China Joint Commission on Commerce and Trade (JCCT) meeting, China announced that it would delay publication of final regulations while Chinese and foreign experts continued to

discuss the best ways to ensure information security in China. In April 2009, CNCA, AQSIQ and the Ministry of Finance announced that China would delay implementation of compulsory certification for the thirteen types of information security products until May 2010, and would only apply the requirements to products that are sold to the government. This represented a significant reduction in the scope of the requirements as compared to the regulations China originally proposed. In September 2009, during the run-up to the October 2009 JCCT meeting, China confirmed that the mandatory testing and certification requirements only apply to products that are sold to government agencies, and not to state-owned enterprises or other sectors of China's economy. At the October 2009 JCCT meeting, China also agreed to a dialogue with the United States regarding global best practices for trade in information security products. The United States looks forward to inaugurating this dialogue and will continue to urge China in 2010 to refrain from adopting measures that mandate information security testing and certification for commercial products.

China – Requirement to Use WAPI Technology in Mobile Handsets

In 2010, as China continues to roll out 3G networks nationwide, U.S. companies remain concerned about China's policies regarding the approval of mobile phones with Internet (also called WLAN or wireless local area network) capability. U.S. companies' concerns focus on China's treatment of Internet-enabled mobile phones that use a technology based on ISO/IEC standard 802.11 (also known as "Wi-Fi").

China's Ministry of Industry and Information Technology (MIIT) in 2009 established a process for approving hand-held wireless devices such as cell phones and smart phones that are Internet-enabled. During bilateral discussions in September 2009, MIIT officials indicated to U.S. government officials that MIIT would approve Wi-Fi-enabled devices only if those devices were also enabled with a Chinese-developed technology known as WAPI. MIIT officials acknowledged that there is no published or written measure setting out this requirement, and that China has not notified this requirement to the WTO. At the October 2009 JCCT, the United States expressed serious concerns about MIIT's WAPI mandate for Internet-enabled mobile handsets as well as the lack of transparency in the regulatory process associated with MIIT's development of this policy. At a March 2010 meeting, MIIT officials stated that, pending ongoing tests aimed at evaluating the benefits of WAPI, Wi-Fi-only functionality would continue to be prohibited in handsets. MIIT declined to provide a timeframe for completion of such tests, the results of which are also not publicly available. Although no resolution of this issue was reached at the JCCT or subsequent meetings, the United States will continue to vigorously pursue resolution of this issue in 2010.

European Union –Potential Restrictions on Innovative Communications Technologies

In 2006, the EU standardizing body CENELEC adopted the revised CISPR-22 standard (2005) as EN 55022: 2006. According to one commenter, if the European Union (EU) implements this standard for purposes of its EMC directive, this would create a significant barrier to U.S. exports to the EU of certain "Broadband over Powerline" (BPL) equipment. The commenter explains that the revised standard establishes emission limits that no BPL equipment can reasonably meet. BPL, also known as "Powerline Communication" (PLC) in the EU, can be used for both stand-alone broadband services and monitoring electrical power for "smart grid" applications. This technology has been deployed in numerous countries, including the United States. According to U.S. regulatory authorities, BPL/PLC equipment can be deployed in a manner that does not cause harmful interference to other users of the spectrum.

Although the CENELEC standard is technically "voluntary", under the EU's so-called "new approach" to standards, products that comply with the CENELEC standard enjoy a "presumption of compliance" with the "essential requirements" of the mandatory EU directive on EMC. As the United States has often noted in meetings of the WTO Committee on Technical Barriers to Trade, compliance with these "voluntary" standards can be effectively mandatory, given the cost and uncertainty of demonstrating that other standards meet "essential requirements."

To date, the impact of CENELEC's adoption of EN 55022:2006 has been muted because products complying with the previous version of the standard—EN 55022:1998 and its amendments—enjoy a presumption of compliance under the EU EMC directive until October 1, 2011. However, if the European Commission was to establish EN 55022: 2006 as the sole applicable standard to enjoy a presumption of conformity under the directive, then BPL/PLC equipment would be unable to comply with this standard.

Given the value the United States places on promoting innovative communications technologies such as BPL/PLC, the United States has declined to require that BPL/PLC equipment comply with the revised CISPR-22 standard and instead has adopted technical requirements specifically for BPL/PLC equipment that permit more flexible requirements that permit the legal deployment of the equipment at issue. EU officials, recognizing the potentially negative impact of requiring that equipment comply with the revised standard, extended the validity of the previous standard (which would otherwise have been superseded by the 2006 standard) until 2011, to see if an industry consensus standard specifically for BPL/PLC equipment would emerge. At this point, it appears unlikely that such a consensus will emerge before 2011, and the EU has not indicated what it will do if a consensus is not reached. The United States will continue

to press the EU on this issue, in particular to ensure the BPL/PLC equipment that does not present a risk of harmful interference can continue to be sold in Europe.

This same issue has also been identified as a potential problem in Australia, but full information on the regulatory situation there is not yet available.

India – Restrictions on Encryption

India is currently exploring how it will implement the 2008 Amendments to the Information Act of 2000. U.S. companies are concerned that India will develop policies to implement the 2008 Amendments that will impose stringent and burdensome encryption requirements, including for equipment sold for solely commercial use, or even ban the use of certain encryption technologies. While India's goal of effectively managing its national security concerns is important, India should ensure that its policies do not deviate from commonly-accepted or best practices. To date, the United States and U.S. industry have engaged in a constructive dialogue with India focused on best practices for managing security concerns while not unduly restricting industries' ability to utilize encryption technology. USTR will continue to engage India to seek ways to ensure U.S. telecommunication companies can effectively protect information, while also respecting security concerns of the Indian government.

Indonesia – Local Content Requirements in the Telecommunications Sector

Indonesia has been working on implementing domestic content requirements for licensed telecommunications service suppliers since at least 2006. In January 2009, Indonesia introduced a regulation specific to the deployment of wireless broadband services (e.g. WiMax). That regulation states that telecommunications providers applying for spectrum to supply wireless broadband services must adhere to local content requirements of 30-50 percent. In addition, in October 2009, the Ministry of Communications and Informatics issued a decree requiring all telecommunications operators to expend a minimum percentage of their total capital expenditures for network development on locally sourced components or services. The decree cross-references "relevant regulations" for the actual percentage; neither commenters nor USTR have been able to locate these "relevant regulations"). Another decree that would purportedly require telecommunications operators to expend a minimum percentage of their total operating expenditures on locally sourced products and services is currently in development.

Finally, a 2006 regulation on the use of domestic products, aimed at government agencies but also applicable to state-owned enterprises, requires entities to give preference to products that contain at least 40 percent domestic content. This regulation

appears to apply to the dominant fixed-line and wireless operators in Indonesia, both of which are state-owned.

These requirements seriously disadvantage U.S. equipment and service suppliers, who depend on globally-sourced manufacturing to meet their needs. Since Indonesia does not have the manufacturing capacity for many types of sophisticated telecommunications equipment, this also puts the entire sector at a disadvantage in introducing innovative products and services, hurting Indonesian consumers and commercial users of information and telecommunications services.

The United States and other WTO members have raised questions about the consistency of such measures with the WTO Agreement Trade Related Investment Measures (TRIMs Agreement), both bilaterally and in meetings of the WTO Committee on Trade-Related Investment Measures in May 2009 and October 2009. In a bilateral meeting in February 2010, Indonesian officials confirmed the policy intent of the measures – to compel telecommunications providers to source locally – and indicated little willingness to alter the decrees. USTR remains deeply concerned that Indonesia has not revoked or amended these measures, which appear to raise serious concerns under the TRIMs Agreement. USTR again calls on Indonesia to enter into good-faith discussions on this issue with a view to resolving the U.S. and other trading partners' concerns.

Korea – Encryption Technology for Public Procurement of VoIP Equipment

In December 2008, the Korean government announced long term plans to switch its government wireline telephone systems from a standard circuit-switched system to an Internet protocol based system (Voice over Internet Protocol, or VoIP). As part of its VoIP plan, the Korean government considered mandating that government agencies purchase equipment that contains encryption technology based on a Korean encryption standard called "ARIA," despite the availability and wide use of international standards for encryption of VoIP. Given the considerable time and expense it would require for U.S. suppliers to comply with the proposed ARIA mandate, since their equipment and software are built to international standards and Korea is the only country to use ARIA for such systems, the U.S. Government raised concerns over the proposed mandate with the Korean government.

The Korean government subsequently announced in May 2009 that it would limit mandatory use of ARIA to ten Korean government agencies responsible for foreign and national security affairs and would allow other public entities to use other encryption algorithms. Nevertheless, U.S. equipment suppliers continue to face difficulties in selling VoIP equipment to Korean public sector entities, due in part to a continued widespread perception among procuring offices that ARIA is required. We will

continue to work with Korea to ensure U.S. suppliers have fair, transparent access to this public sector market.

Korea – Encrypted Network Equipment Certification

In July 2009, Korea implemented a new regulation stipulating that encrypted network equipment procured by public sector agencies must be submitted to Korea's National Intelligence Service (NIS) for "Security Eligibility Testing." Further, the regulation stipulates that NIS will only test equipment utilizing encryption based on ARIA and SEED encryption algorithms. This means that encrypted network equipment based on the AES algorithm will not be eligible for procurement by public sector agencies in Korea. The AES algorithm is one of the most commonly used encryption algorithms worldwide. Some U.S. companies have raised concerns that they have been unable to sell virtual private network and firewall systems to public sector entities in Korea due to the Korean regulation. USTR will continue to urge Korea to ensure that U.S. equipment that is in wide international use has full access to Korea's public sector market.

General Concerns with Conformity Assessment Requirements

U.S. industry continues to identify conformity assessment procedures relating to information and communications technology (ICT) equipment as a significant barrier to trade, focusing in particular on certain electromagnetic compatibility (EMC) testing and certification requirements. Mandatory certification requirements maintained by China, India, Mexico, and Brazil (especially for EMC), as well as requirements maintained by China, Thailand, and Malaysia that equipment be tested domestically, are areas of concern. Requirements that telecommunications and information technology equipment be tested domestically can lead to redundant testing, particularly where a product is required to undergo testing to the same standard in both the exporting and importing country (e.g., for EMC).

In the case of China, U.S. industry identifies several specific redundant testing requirements that China imposes with respect to mobile phones, as well as a lack of transparency with respect to the testing and certification procedures China maintains for mobile phones. China's three main approval processes for mobile phones—the Network Access License (NAL), the Radio Type Approval (RTA), and the China Compulsory Certification (CCC) mark—often overlap. For example, the NAL and RTA processes both require electromagnetic interference tests. The NAL and the CCC both require EMC testing and product safety tests. In addition to redundancy, China does not consistently or comprehensively publish its requirements for mobile phones. For example, the requirement that mobile phones be WAPI-enabled, described elsewhere in this report, represents a clear example of an unpublished requirement. Those

requirements that are published are often unclear and subject to change without written notification and adequate time for companies to adjust. In some cases, testing requirements for products can change on an almost monthly basis. The United States and China discussed these issues bilaterally in 2009, including working group meetings held under the auspices of the JCCT, and the United States will continue to pursue these discussions in 2010.

Mexico, Israel, Chile, Brazil and China have indicated a willingness to consider mutual recognition agreements (MRAs) for ICT and other telecommunications equipment. MRAs could help address restrictions these countries maintain on equipment testing outside their territories, and eventually could lead to these countries permitting equipment sold in their markets to be certified in the United States. USTR will continue to seek timely implementation of such agreements.

4. Other Issues

China—Transparency

Lack of transparency is a serious concern in China's telecommunications regulatory regime, affecting U.S. suppliers of both services and equipment. This lack of transparency feeds a widespread perception amongst foreign industry and governments that MITT—China's telecommunications regulator which also has significant policy functions—may not be impartial with respect to all market participants.

Chinese authorities have often introduced new regulations or requirements with little or no notice, and without providing interested parties an opportunity to comment on the proposals. Although China is not alone in having inadequate notice and comment procedures, the importance of the market and the apparent scope of governmental influence on market-place decisions in China's IT and telecommunications sector (a priority area for Chinese industrial policy) make this an issue of particular importance.

Examples of actions raising concerns include a measure issued by MIIT in 2009 requiring manufacturers to install an unproven Internet filtering program on all computers sold in or exported to China with less than two months notice. This action caused significant worldwide concern before MIIT suspended the measure indefinitely. Similarly, Chinese regulatory authorities failed to apply a reasonable notice and comment process for criteria that were announced in late 2009 for determining whether products qualify as "indigenous innovation products" and thus eligible for certain preferences.

Another example of China's actions that raise concerns about transparency is MIIT's practice of advising mobile handset manufacturers that they should not apply for type approval of mobile handsets with wireless Local Area Network (WLAN) functionality based on Wi-Fi technology unless the handsets also include the indigenous technology WAPI. China's authorities have not published a measure mandating this requirement and in bilateral discussions with U.S. officials have rejected requests, based on the need for transparency, to publish the measure.

Similarly, criteria that Chinese authorities require foreign firms to meet to be eligible to offer certain services in China are often extremely vague, and not specified in any publicly available rules. USTR has pressed MIIT to improve the transparency of its regulatory regime for both goods and services. In this regard, USTR has recommended that China include mandatory notice and comment procedures in its pending telecommunications law that ensure that all market participants have an opportunity to participate in the development of new requirements affecting the telecommunications sector. In 2010, the United States will continue to seek improvements in the transparency of China's regulatory decisions in the telecommunications sector, including implementation of transparency rules in the WTO, including provisions in the WTO Agreement on Technical Barriers to Trade. Similar requirements in the U.S. bilateral agreement with China done in the context of the Strategic Economic Dialogue, i.e., that each country will adopt measures only after providing for public notice and an opportunity to comment, also affirms this important principle.

Costa Rica – Delay in Awarding Frequencies for Competitive Mobile Operators

Under the CAFTA-DR, Costa Rica agreed to allocate sufficient, commercially relevant mobile telephony frequencies to introduce competition into its mobile telephony market. While Costa Rica—and in particular its independent telecommunications regulatory body SUTEL—has made great strides in establishing auction procedures to allocate such frequencies to new entrants, Costa Rica has delayed commencement of the auction process, which was to begin on February 5, 2010.

The government of Costa Rica provided two reasons to explain the delay. First, it cited a potential conflict of interest raised by some Costa Rican legislators with respect to a local law firm that helped elaborate bid documents and who in the past had done work for one company potentially seeking to participate in the auction. Costa Rican trade officials have informed USTR that this issue has now been resolved, after an investigation concluded that no such conflict of interest existed.

Second, Costa Rica has explained that to utilize the new mobile telephony frequencies successful bidders will require access to microwave frequencies to connect their base stations to cell towers thorough the country. However, available microwave frequencies in Costa Rica are currently allocated to a mix of operators (including private operators, government entities, and telecom incumbent ICE). Thus, Costa Rica maintains that before the auction can proceed, it must first implement a regime to ensure that these operators share access to their microwave frequencies with the companies that Costa Rica awards the new mobile telephony frequencies.

USTR urges Costa Rica to resolve the microwave frequency issue and complete the mobile telephony frequency auction so that it can fulfill its CAFTA-DR commitment to introduce much needed competition into the mobile telephony market.