LESSONS LEARNED FROM THE SPECTRUM WARS: VIEWS ON THE UNITED STATES’ EFFORT GOING INTO AND COMING OUT OF A WORLD RADIOCOMMUNICATION CONFERENCE

Donna Coleman Gregg†

I. INTRODUCTION

Every three to four years, nations assemble for the World Radiocommunication Conference ("WRC" or "Conference") to consider important measures that ensure the effective and orderly worldwide use of the radiofrequency spectrum needed for myriad forms of wireless communication. The WRC reviews and revises international administrative regulations, which contain detailed provisions governing the use of both the finite amount of available radiofrequency spectrum and the limited number of satellite orbital slots. The most recent gathering, known as WRC-07, took place in Geneva, Switzerland, from October 22, 2007 to November 16, 2007. There, under the auspices of the Int'l Telecomm. Union Const. art. 13, §§ 1-2, available at http://www.itu.int/net/about/basic-texts/constitution/chapterii.aspx.

† Donna Coleman Gregg served in the Office of Science and Technology Policy in the Executive Office of the President as the Senior Policy Advisor to the United States Ambassador to the 2007 World Radio Communication (WRC-07) and was a member of the U.S. Delegation to the Conference. Prior to her work on WRC-07, she was Chief of the FCC Media Bureau. Before entering public service, Ms. Gregg served as Vice President of Legal and Regulatory Affairs and General Counsel of the Corporation for Public Broadcasting and also as a communications attorney in private law practice. She currently is a Visiting Professor in the Institute for Communications Law Studies at the The Catholic University of America Columbus School of Law.

2 Id. § 1; see James G. Savage, The Politics of International Telecommunication Communications Regulation 16 (1989).
ternational Telecommunication Union ("ITU" or "Union"), a U.S. delegation of 157 engineers, technical experts, spectrum managers, diplomats, and lawyers joined counterparts from 161 other ITU Member States to consider the twenty-nine items on the conference agenda.4

By opening spectrum for deployment of advanced wireless broadband technologies—such as Worldwide Interoperability Microwave Access ("WiMAX")5—and promoting innovation and improvement of communications services for important purposes, WRC-07 affected the daily lives of people not only in the United States, but also around the world. Among the important purposes served by these communications services are aircraft and maritime operations, weather monitoring and forecasting, space research and exploration, national defense, and emergency and disaster response.6 Such matters, and the issues under consideration at other recent Conferences, have pitted the interests of developing nations against industrialized nations, emerging against incumbent technologies, terrestrial against space communications, active against passive services, and one region of the world against another.7 Thus, the WRC-07 agenda challenged delegates to strike a balance among competing needs for radiofrequency spectrum and satellite orbital slots.

With so much at stake, the events in Geneva generated worldwide interest throughout the halls of government, corporate boardrooms, and consumer households. As with previous Conferences, the deliberations that took place at

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5 See PHILIPPE LAINE, CHRISTOPHE BOSCHER, DIETRICH BOETTLE & LAURANCE FEIJT, WI-MAX: MAKING UBIQUITOUS HIGH-SPEED DATA SERVICES A REALITY 1 (2004), available at http://www1.alcatel-lucent.com/publications/abstract.jhtml?repositoryltem=tcm:172:44851635 ("Worldwide Interoperability for Microwave Access (WiMAX) is the common name associated to the IEEE 802.16a/REVd/e standards... WiMAX can offer very high data rates and extended coverage."); see also FED. TRADE COMM'N STAFF REPORT, MUNICIPAL PROVISION OF WIRELESS INTERNET 9 (2006), http://www.ftc.gov/os/2006/10/V060021municipalprovewirelessinternet.pdf (noting that WiMax's capabilities of wireless data rates of up to 75 Mpbs and coverage areas of over thirty miles make the standard superior to Wi-Fi technology).


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WRC-07—especially the outcome of a number of marquee agenda items—received wide coverage by both the international and U.S. press.8 While events taking place during the Conference in Geneva attracted a great deal of attention, far less notice was paid to what happened behind the scenes leading into and coming out of the WRC. For the United States, the largely unheralded efforts leading up to and following a WRC can determine whether the United States achieves its spectrum objectives and maintains its position as a world technology leader.

This Article examines ITU World Radiocommunication Conferences, which are the predominant mechanisms for formulating global standards governing highly technical and complex matters concerning the use of radiofrequency spectrum. With a focus on efforts leading up to a WRC, the Article explores how the United States’ objectives, proposals, and strategies are and should be developed. The Article also identifies opportunities for the U.S. private sector to provide input and participate in the work of this international forum. Parts II and III provide background on the ITU and WRC and introduce the process by which ITU Member States join together to assimilate information and update the ITU’s Radio Regulations. Part IV addresses pre-conference preparations that the United States undertakes on the international and domestic levels in the period leading up to a WRC and considers recommendations for improving several troublesome aspects of those processes.

In Part V the focus shifts to the period immediately following a WRC and the work of translating the Conference results into U.S. law. That post-conference task has long been a problem, causing treaties resulting from WRCs to languish without ratification by the United States for many years. Part V also appraises an important recent U.S. Senate action to move pending and future ITU treaties forward more expeditiously, benefiting not only federal government spectrum users, but also the U.S. telecommunications industry, citizens, and consumers.

II. BACKGROUND OF THE ITU AND WORLD RADIOTRADIOCOMMUNICATION CONFERENCES

A. The ITU

The ITU evolved from one of the world’s earliest attempts at forming an intergovernmental entity comparable to modern international organizations.9

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9 See generally ITU’s History, http://www.itu.int/net/about/history.aspx (last visited Jan. 30, 2009) [hereinafter ITU’s History] (detailing the genesis of the ITU); see also
During the 1830s, the invention of the electric telegraph made possible the instantaneous transmission of information between distant government outposts and commercial centers. Initially, however, the lack of technical standardization in neighboring countries impeded the quick and seamless transmission of telegraphic messages directly from one country to another across national borders. In 1849, the adoption of common standards by Austria and Prussia became a first step in removing the barriers to attainment of telegraphy’s full potential as a mode of international communication. Other European countries soon followed suit, signing the convention that established the International Telegraph Union at the Paris Telegraph Conference.

As new technologies emerged and expanded during the second half of the nineteenth century and into the early twentieth century, the International Telegraph Union engaged in international coordination of telephony and wireless telegraphy as well as ordinary telegraphy. During the first decade of the twentieth century, international meetings in Berlin, Germany resulted in the adoption of a Radiotelegraph Convention and the creation of an International Radiotelegraph Union—an informal body that met in periodic conferences to develop international regulations for use of the radiofrequency spectrum. The two merged following a 1932 Conference of the telegraph and radio unions in Madrid, becoming the International Telecommunication Union. The merger reflected the emergence of new technologies and the expansion of the groups’ focus and responsibilities. In 1947, the ITU became a specialized agency of the United Nations.

Since its creation, continuing advances in technology increased the ITU’s importance as a forum for facilitating international telecommunication. In the field of radiocommunication, rapid technological progress led to increased po-
tential for harmful interference among the many new services occupying the frequency spectrum and the growing number of nations using the spectrum.\textsuperscript{19} In addition, new developments in space science and satellite communications led to ITU involvement in the coordination of space communication systems and earth stations.\textsuperscript{20}

Today’s ITU is the pre-eminent global forum for telecommunications and the dominant international organization for spectrum coordination and regulation.\textsuperscript{21} The ITU is made up of three organizational sectors, including the Radiocommunications Sector.\textsuperscript{22} Each sector meets periodically to discuss issues affecting the particular sector, and appropriately review or revise any regulations affecting that sector.

B. World Radiocommunication Conferences

The ITU is a periodic international organization that carries out its essential functions through conferences. The Plenipotentiary Conference is the Union’s governing body; it also serves as the Union’s principal policy-making body.\textsuperscript{23} It convenes every four years to determine the Union’s general policy goals, elect its leadership, and establish strategic and financial plans.\textsuperscript{24}

In contrast with a Plenipotentiary Conference, a World Radiocommunication Conference (“WRC”) is convened within the ITU’s Radiocommunication Sector. The principal focus of a WRC is to review and revise the international radio regulations—the part of the ITU administrative regulations comprising the international table of frequency allocations as well as technical, procedural, and operating rules governing use of the spectrum and satellite orbital posi-

\textsuperscript{19} See CODDING \& RUTKOWSKI, supra note 9, at 46–47.
\textsuperscript{20} See RITA LAURIE WHITE \& HAROLD M. WHITE, JR., THE LAW AND REGULATION OF INTERNATIONAL SPACE COMMUNICATION 112–15 (1988); see also CODDING \& RUTKOWSKI, supra note 9, at 47.
\textsuperscript{22} INT’L TELECOMM. UNION CONST. art. 7. The other two sectors are Telecommunication Standardization (“ITU-T”) and Telecommunication Development (“ITU-D”). Id.
\textsuperscript{23} Id. at arts. 7, 8.
\textsuperscript{24} Id. at art. 8.
The radio regulations amplify the provisions of the ITU Constitution and the Convention. As stipulated by the ITU Constitution, the Constitution, Convention, and Radio Regulations all have treaty status.

After a series of international and regional conferences produced extensive regulations to keep pace with the progression of radio technology, a 1959 Administrative Radio Conference in Geneva completely revised the radio regulations that had accumulated during the preceding years. While WRCs that took place from the 1960s through the 1980s generally focused on specific services—such as space radiocommunication in 1963 and direct broadcast satellites in 1987—more recent Conferences have had more wide-ranging agendas. Continuing advances in radio technology and the increase in the number of emerging nations that have become ITU Member States also have contributed to the number and complexity of ITU radio regulations, which currently occupy four volumes totaling more than 2000 pages. The radio regulations are adopted pursuant to established procedures, but leadership and cooperation also have an impact on the regulations’ content and effectiveness.

III. MECHANICS OF THE ITU PROCESS FOR FORMULATING RADIO REGULATIONS AT A WRC

The ITU Rules of Procedure for Conferences, Assemblies, and Meetings of the Union ("General Rules") contain procedures describing how each Conference carries out its responsibilities. Each WRC opens and concludes with a

25 See id. at art. 13, § 1. A WRC also has authority to deal with questions of a worldwide character "within its competence and related to its agenda" and to carry out other duties specified in the ITU Constitution. Id.
26 Id. at art. 4.
27 Id. ("[T]his Constitution and the Convention are further complemented by those of the Administrative Regulations, enumerated below, which regulate the use of telecommunications and shall be binding on all Member States . . . ").
28 See CODDING & RUTKOWSKI, supra note 9, at 33–34.
29 See WHITE & WHITE, supra 20, at 116–19, 192–94.
30 This change came about as a decision of the 1989 Nice Additional Plenipotentiary Conference in order to make the ITU better able to respond to rapid changes in technology. Note also that prior to the 1992 ITU reforms, World Radiocommunication Conferences were known as "World Administrative Radio Conferences." See Audrey L. Allison, Meeting the Challenges of Change: The Reform of the International Telecommunication Union, 45 FED. COMM. L.J. 491, 510–13, 524–25 (1993) (discussing the former World Administrative Radio Conferences and the 1992 reforms leading to the present structure and function of the WRC).
31 In the past two decades, twenty-eight nations have joined the ITU as Member States. ITU States Membership List, http://www.itu.int/cgi-bin/htsh/mm/scripts/mm.list?_search=ITUstates&_languageid=1 (last visited Apr. 18, 2009).
32 Int’l Telecomm. Union, Rules of Procedure of Conferences, Assemblies and Meet-
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plenary meeting at which all accredited delegates to the Conference assemble; additional plenary meetings take place throughout the month-long Conference where final resolutions and recommendations on the various agenda items are adopted. Three unique characteristics of a WRC—the conference agenda, conference structure and leadership, and the role of consensus—have a major influence on the Conference outcome.

A. The Conference Agenda

The ITU Convention provides for the general scope of a WRC agenda to be established four to six years in advance of the WRC and for the final agenda to be approved by the ITU Council with concurrence of the Membership, preferably two years before the Conference. In keeping with this schedule, each WRC makes preliminary recommendations for the subsequent Conference. To a great extent, these recommendations are based on proposed future agenda items submitted to the WRC as country or regional proposals.

Agenda setting for Conferences is a very sensitive and time-consuming procedure. Thus, while the ITU’s General Rules for Conferences permit addition of items to an agenda at any time prior to or even during the WRC, such last minute additions—especially additions that are neither urgent nor constructive—generally should be avoided. Not only do late additions allow insufficient time for thorough preparation, but they also tend to upset sensitive compromises reached on other agenda items, and may ultimately cause an already long and complicated conference agenda to become unmanageable. Moreover, adding an item to the pre-established agenda can be difficult; the submitting delegation must have the support of at least one other delegation. Even if the agenda is certain and the issues to be resolved are clear, the success of each Conference depends on its structure and leadership.


Id. §§ 10, 15.

Id. at art. 7 § 4.

See ITU Rules of Procedure, supra note 32, at arts. 8, 16–18.

See id. at art. 18 § 1.
B. Conference Structure and Leadership

Selection of the Conference leadership and establishment of the Conference structure can be some of the most important actions a WRC takes. The Conference Chairman has authority to schedule and adjourn meetings and to rule on procedural motions that can shape the deliberations; consequently he or she wields considerable influence over the conduct and potentially the outcome of the Conference.\(^{39}\) While major actions and decisions occur in the plenary meetings, most of the work of the Conference—including both administrative tasks and preliminary deliberation on present and future agenda items—takes place in Conference committees and their subsidiary bodies.\(^{40}\) Thus, the issues of Conference leadership and committee structure typically are debated and agreed upon well before the Conference begins to ensure speedy approval at the Conference's opening plenary session.\(^{41}\)

The host country of a WRC normally supplies the Chairman; however, when a Conference takes place in Switzerland—as it has for the last two WRCs as well as for previous Conferences—the Chairman is selected from the ITU's world regions on a rotating basis.\(^{42}\) When the rotation system applies and the Chairman must be chosen from a world region, the power and prestige of the office can attract a number of candidates. The result can be a lengthy and hotly contested selection process that can consume valuable conference time, generate discord among the delegations, and ultimately doom the Conference to failure.\(^{43}\) Conversely, timely selection of a fair-minded, capable Chairman helps ensure the Conference’s success.\(^{44}\)

Each WRC establishes a structure that divides responsibility for the entire slate of items on the Conference agenda among several committees and their respective subsidiary bodies.\(^{45}\) Typically, a great deal of negotiation and effort at the committee and working group levels takes place in order to bring final proposals to the plenary meeting for adoption. Thus, an effective pre-

\(^{39}\) See id. at art. 11. The initial plenary meeting also approves the vice chairman of the Conference. Id. at art. 10 § 4(a).

\(^{40}\) See id. at art. 12 § 2.

\(^{41}\) See id. at art. 10.

\(^{42}\) See id.; see also WRC-07 DELEGATION REPORT, supra note 4, at 18.

\(^{43}\) See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at 18 (describing the difficulty in establishing Conference leadership for WRC-07, ultimately resulting in the Chairman being chosen the day before the Conference began).

\(^{44}\) See, e.g., U.S. DEP’T OF STATE, UNITED STATES DELEGATION REPORT, WORLD RADIO-COMMUNICATION CONFERENCE 2003 12, 27–28 (2003), available at http://www.fcc.gov/ib/docs/WRC03DelReport final [hereinafter WRC-03 DELEGATION REPORT] (describing how, despite a "densely packed agenda" for WRC-2003, the Chairman lead the Conference to a resolution of all agenda items).

\(^{45}\) See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at app. K (listing committees from WRC-07).
conference effort to achieve equitable division of agenda items among the committees contributes significantly to a successful Conference outcome.

Committee and Conference leadership also play a major role in guiding this work to a productive conclusion. If a working group has difficulty reaching consensus on a proposal, the working group chairman may appoint a small group of its members to find a path forward. If the working group is still unable to devise a proposed course of action, the chairman of the committee of which the working group is a part may remove the matter from the group and attempt to resolve open issues at the committee level. When prospects for completing work on an agenda item at the committee level appear particularly bleak, the Conference Chairman sometimes removes the matter from the committee and convenes delegation heads and Conference leadership to reach a consensus. Whatever approach is taken, the resulting recommended action moves on to the Editorial Committee, which ensures that the final drafting and translation into five languages has not substantively altered the intended outcome. After several readings of the action at a plenary meeting, the Conference takes final action. Final action, however, may never occur without individual committees reaching consensus on the terms of the agreement.

C. The Role of Consensus

Under the ITU Constitution’s voting provisions, each Member State normally is entitled to a single vote. The voting process can be time-consuming and extremely divisive; therefore, Conference leaders generally seek to avoid taking a vote at all costs and instead pursue consensus at every level from working group to final adoption by the plenary. In light of the ITU’s lack of active enforcement authority, achieving consensus also is important because

46 ITU Rules of Procedure, supra note 32, arts. 11–12.
47 See id. art. 12(3).
48 Id. art. 27.
49 INT’L TELECOMM. UNION CONST. art. 3 § 2(b). Countries that are not current in payments to the Union or that have not deposited an instrument of acceptance to the ITU Constitution lose the right to vote. A Member State also can obtain a second vote by holding another country’s proxy. Id. art. 28, § 9; art. 52 § 2.
50 In his opening remarks at WRC-07, ITU Secretary General Hamadoun Touré accurately predicted, “We will make this conference succeed with the art of compromise. This art of compromise is not new in this organization. I have no doubt that, together, despite the very high issues that are at stake for this conference, we will succeed.” Hamadoun I. Touré, Sec’y Gen., Int’l Telecomm. Union, Opening Remarks at the 2007 ITU World Radiocommunication Conference (Oct. 22, 2007), available at http://www.itu.int/net/ITU-SG/speeches/2007/oct.22.aspx; see also MANNER, supra note 7, at 85 (noting that “most allocations are determined based on compromises among the member states”).
it can increase the likelihood of Member States’ voluntary compliance with measures adopted by the Conference. The technical complexity of many proposals and the frequent presence of strongly conflicting views make crafting successful compromises difficult and can lead to round-the-clock negotiating and drafting sessions. For particularly high-stakes or contentious agenda items, the pursuit of consensus often extends into the final days, and in some cases, the final hours of the Conference.52 If consensus on a particular agenda item eludes the Conference altogether, postponing the matter for further study and consideration at a future Conference may provide the best option.

The Conference makes decisions on individual agenda items in periodic plenary sessions throughout the month.53 These measures, which are recorded in the Conference’s Final Acts, revise the Radio Regulations, make new spectrum allocations, and adopt related regulatory provisions, resolutions, and recommendations.54 Even if the Conference generally achieves consensus on a measure, the ITU Convention permits delegations to make declarations and reservations at the end of the Conference regarding anything in a Conference decision that would prevent their respective governments from agreeing to be bound unconditionally by a given measure.55 These unique WRC characteristics that influence Conference outcomes are necessarily a major focus for U.S. participation in WRCs both during the period of preparation leading up to a WRC and at the Conference itself.

IV. U.S. PARTICIPATION IN THE WRC’S FORMULATION OF NEW AND REVISED INTERNATIONAL RADIO REGULATIONS

Effective U.S. participation at WRCs requires thorough knowledge of the issues raised in each agenda item, an understanding of the various proposals under consideration, and well-conceived negotiating strategies for attaining U.S. objectives. U.S. WRC participants and those who observe and evaluate their


53 See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at 24, 48, 49, 50, 56 (describing different agenda items approved by the plenary).


55 ITU CONVENTION, supra note 34, art. 32B § 3. Delegations also can make declarations or statements, which, together with reservations, are collectively known as protocol statements. See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 313 (1986). At WRC-07, the United States submitted five declarations and reservations. WRC-07 DELEGATION REPORT, supra note 4, at app L.
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performance generally agree that good preparation is the key to a successful Conference. Accordingly, effective preparation demands and deserves several years of intense effort during the period leading up to a Conference. For the United States, advance preparation for a WRC involves a complex multi-agency, multi-party effort involving both government officials and experts from the private sector. Throughout the preparatory phase of the WRC cycle, the United States simultaneously engages in preparations on both international and national levels, with developments in international and domestic preparations inextricably intertwined. Each will be dealt with separately and in turn.

A. U.S. Participation in Pre-conference International Preparation

Effective preparation for WRCs on the international level always has been important for the United States. While the United States traditionally has the largest delegation at WRCs, the possibility that the ITU's one-vote-per-country voting process might be invoked has required the United States to cultivate allies and build coalitions in order to achieve its WRC objectives. As a result, U.S. international preparation for WRCs has become even more significant in recent years, as the size and influence of delegations of emerging tech-


59 See supra text accompanying note 49.
nology powers such as China and India increase and regional voting blocs assume greater strategic importance in WRC deliberations.\(^6\)

Prior to each WRC, the ITU sponsors a two-session Conference Preparatory Meeting ("CPM") open to all ITU Member States and Sector Members.\(^5\) The first of the two sessions normally takes place immediately following the previous WRC, and is devoted to organizing and coordinating the technical studies that will provide the basis for action on various agenda items at the next Conference.\(^6\) The second CPM session, which usually occurs during the twelve-month period immediately preceding an upcoming WRC, produces a report on the studies for consideration at the upcoming Conference.\(^6\) The United States plays an active role in both CPM sessions as well as in numerous meetings and working sessions that take place during the years between the two CPM sessions.

Representatives of U.S. companies and non-governmental industrial or scientific organizations join experts from the various federal agencies at the CPM and in the work of ITU-R study groups through the Radiocommunication Subcommittee of the United States International Telecommunication Advisory Committee ("ITAC").\(^4\) The ITAC is an advisory body chartered to the Department of State by the U.S. General Services Administration in accordance with the Federal Advisory Committee Act ("FACA").\(^6\) Membership in the Inter-American Telecommunications Commission ("CITEL")—the regional

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\(^6\) See WRC-07 DELEGATION REPORT, supra note 4, at 1–2.


\(^6\) The Federal Advisory Committee Act was enacted in 1972 to ensure that advice the federal government receives from various outside advisory groups is rendered in an objective and transparent manner. U.S. Gen. Serv. Admin, Federal Advisory Committee Act, Management Overview, http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&contentId=9673 (last visited Apr. 05, 2009); see Steven P. Croley & William F. Funk, The Federal Advisory Committee Act and Good Government, 14 YALE J. ON REG. 451, 459–63 (1997).
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organization for the Americas—also provides avenues for U.S. involvement in international WRC preparations of a multi-national scope. First, the United States can become a party to Inter-American Proposals ("IAPs") that CITEL develops during regional preparatory meetings prior to the Conference. The United States can either initiate this process by attempting to have one or more U.S. proposals become an IAP or join onto proposals initiated by other CITEL members. Second, U.S. experts can attend preparatory meetings of other regions by serving as CITEL observers. At the last two WRCs, the U.S. partnership with CITEL has been an important element in attaining important U.S. objectives.

Direct U.S. pre-conference outreach to individual ITU Member States is an additional component of international WRC preparation. For past WRCs, this effort has been carried out by the U.S. Head of the Delegation and a small group of federal officials who are likely to hold leadership positions on the delegation. During the year preceding a WRC, the outreach team embarks on a tour of capitals and major cities around the world for bi-lateral and multi-lateral discussions with other ITU Member States. The team also conducts discussions with foreign spectrum officials visiting the United States from abroad. The Department of State is instrumental in planning the outreach itinerary, arranging the meetings, and funding the travel expenses of the Head of Delegation and any State Department personnel on the trips. Other agencies with a significant stake in international spectrum matters also have borne the travel costs of their officials and have defrayed delegation costs for meeting rooms, meals, receptions, protocol gifts, and other items customarily associated with such diplomatic trips.

The United States has reaped substantial benefits from participating in these

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66 See International Telecommunications, supra note 64.
68 In order to become an Inter-American Proposal for submission to an ITU World Radiocommunication Conference, a draft Inter-American Proposal must have the support of at least six CITEL member countries and must not be opposed by more than 50% of the number of supports obtained. See id.
70 See WRC-07 DELEGATION REPORT, supra note 4, at 16–17; WRC-03 DELEGATION REPORT, supra note 44, at 21.
71 WRC-07 DELEGATION REPORT, supra note 4, at 14–15.
72 Id. at 2, app. B.
73 See id.
74 Id. at 14–15.
75 Id. at 15. NASA and the Department of Defense have been especially helpful in providing such support. Id.
international pre-conference activities. Involvement in the ITU-sponsored technical study groups not only gives the United States a voice in how the studies are conducted, but also provides data useful in crafting U.S. proposals. In addition, the study group setting enables U.S. officials to establish relationships with their counterparts from other countries—a valuable asset in negotiating and building international coalitions at the conference. U.S. participation in such preparatory sessions facilitates the incorporation of U.S. views and proposals in IAPs. This enhances the chances that U.S. proposals will reach the WRC agenda and receive a more favorable reception at the Conference than single-country proposals.\(^6\) Finally, regional preparatory meetings provide an efficient and economical way for U.S. officials to meet with their counterparts from many of the countries attending those conferences.\(^7\) Of course, all international preparation is done in accord with significant domestic preparation.

B. U.S. Domestic Preparation

1. Development of Positions and Proposals

At the same time that U.S. experts are participating in international preparations through the ITU study group process, the United States is engaged in developing its own positions and proposals for the Conference. This task initially proceeds along two separate tracks. One track focuses on the spectrum needs of the federal government and is led by the National Telecommunications and Information Administration ("NTIA").\(^8\) The FCC leads the other track, which focuses on spectrum needs of the private sector and other non-federal entities.\(^9\) As the federal agency with ultimate responsibility for U.S. international telecommunications policy, the Department of State plays a key leadership role in the overall preparatory process by advising on the general direction of the proposals, monitoring their development, and convening or participating in meetings involving proposal preparation.\(^10\)

In its role as coordinator of federal spectrum use, the NTIA must ensure that

\(^6\) Id. at 58–59. The multi-country nature of an IAP eliminates the need for a second and thus ensures that the U.S. proposal included in the IAP will have a place on the agenda for consideration by the Conference. See id. at 16–17.

\(^7\) Id. at 60.

\(^8\) See id. at 12–13.

\(^9\) Id.

U.S. positions and proposals to WRCs reflect the needs and concerns of Executive Branch agencies. For input in carrying out this function, the NTIA relies on the Interdepartmental Radiocommunication Advisory Committee ("IRAC"), an advisory body chaired by the NTIA and comprised of representatives of various federal agencies. The IRAC’s Radio Conference Subcommittee ("RCS") directs the effort, meeting monthly to develop recommended WRC positions and proposals. The IRAC does not have private sector or other non-federal members, principally because it is usually dealing with only those portions of the spectrum allocated for federal use. In addition, IRAC members’ interests in WRC agenda items sometimes can have implications for national security or involve classified information. Nevertheless, interested parties from the private sector or other non-federal entities can present their views to the NTIA through the FCC, or can provide input directly to the NTIA on an ad hoc basis. When its task is completed, the RCS provides its recommendations to NTIA for review, revision, and sharing with the FCC.

The FCC relies extensively on input from an official outside advisory group in accordance with the FACA. Unlike the NTIA’s IRAC—which consists exclusively of representatives of federal departments and agencies—membership of FCC WRC Advisory Committees ("WACs") is open and includes many individuals from outside the federal government in addition to FCC staff and observers from the NTIA. As required by the FACA, the membership of the WAC must “be fairly balanced in terms of points of view

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See U.S. DEP’T OF COMMERCE, NAT’L TELECOMM. AND INFO. ADMIN., MANUAL OF REGULATIONS AND PROCEDURES FOR FEDERAL RADIO FREQUENCY MANAGEMENT 1-6, 1-7 (2008) [hereinafter NTIA MANUAL]; Nat’l Telecomm. and Info. Admin., IRAC Functions and Responsibilities, http://www.ntia.doc.gov/osmhome/iracdefn.html (last visited Feb. 1, 2009). The IRAC fills the principal function of assisting the Assistant Secretary of Commerce for Communications and Information “in assigning frequencies to U.S. Government radio stations and in developing and executing policies, programs, procedures, and technical criteria pertaining to the allocation, management, and use of the spectrum.” Id. Its members are representatives of Executive Branch agencies such as the Departments of Energy, Homeland Security, Justice, and Transportation; branches of the U.S. military; NASA; the Federal Aviation Administration; and the National Science Foundation ("NSF"). Representatives of the FCC attend IRAC meetings as observers. NTIA MANUAL, supra, at 1-6 to 1-8.

2005 NTIA RECOMMENDATION, supra note 57, at 8.

See id. at 11.

Id. at 16.

Id. at 11 (“[T]he FCC voices non-federal views as a liaison representative in the RCS.”).

Id. at 14.


represented and the functions to be performed by the advisory committee.”

In addition, WAC proceedings must be transparent and must allow for input from the public. Specifically, the WAC must give timely advance notice of its meetings, which must be open to the public, and it must allow for public participation. The WAC must keep minutes of its meetings, which also must be open to public inspection. The FCC also publishes all WAC proposals, affords the public an opportunity to provide written comments, and considers such input in its further deliberations. The WAC’s charter requires it to meet at least four times per year on a quarterly basis, or at such other intervals as the FCC decides. The WAC presents its recommendations to the FCC, which in most cases shares draft proposals produced through its process with NTIA.

Within the FCC-led process, the various companies, industry associations, state and local governmental entities, and FCC officials inevitably have different and sometimes conflicting objectives and interests. The governmental entities proceeding down the NTIA preparation track have differences of opinion as well. Even though IRAC bylaws require members of the interagency group—when in Committee—to function “in the interest of the United States as a whole,” their differences sometimes may cause them to view United States’ interest in dissimilar ways. Once the FCC and the NTIA have resolved the internal differences in their respective proposal tracks and developed their final positions and proposals for each WRC agenda item, the two agencies begin to work in tandem to arrive at unified national positions and proposals.

Melding all federal and non-federal positions and proposals into unified U.S. proposals can prove challenging. While common ground is readily apparent on some agenda items, other issues may require compromise in order to satisfy the concerns of as many interested parties as possible. Occasionally the FCC and the NTIA may be unable to reach agreement on a particular proposal. If such an impasse occurs, a Principals Group consisting of high-level officials from each key agency—along with the State Department—can intervene to bring about a resolution.

90 § 10(a)(1)–(3).
91 § 10(b).
93 2007 WAC CHARTER, supra note 87, at 3. Various WAC Informal Working Groups meet in addition to meetings of the full WAC.
94 See WRC-07 DELEGATION REPORT, supra note 4, at 14.
95 NTIA MANUAL, supra note 81, at 1–6.
96 WRC-07 DELEGATION REPORT, supra note 4, at 12–14.
97 See id. The Principals Group for WRC-07, which consisted of the Deputy Assistant Secretary of State for International Communications and Information Policy, the Assistant
The Department of State typically submits proposals, which the FCC and the NTIA have agreed upon, to the ITAC’s National Committee for review. Based on its review, the National Committee provides comments to the ITAC membership, including the Department of State. The Head of Delegation, in consultation with the State Department, then makes the final call on whether each proposal constitutes a “final proposal” that can be submitted either to CITEL for possible inclusion in a regional InterAmerican Proposal (“IAP”) for the WRC, or directly to the ITU as a single-country proposal. In cases where a proposal lacks consensus or the Head of Delegation and the Department of State otherwise deem it unsatisfactory, further efforts may be required before the proposal can be sent forward to CITEL or the ITU.

As U.S. proposals approach finality, attention shifts to the formulation of strategies for promoting U.S. objectives at the Conference. The leadership and members of the U.S. delegation will bear responsibility for advocating U.S. positions and proposals and for negotiating the inevitable compromises that must be struck at the Conference.

2. Formation and Preparation of the U.S. Delegation

Success in achieving outcomes favorable to the United States requires strong delegation leadership, capable and well-prepared delegates, and sufficient administrative support. Ironically, the critical task of transforming a confederation of federal officials and private sector advisors into a unified and smoothly functioning delegation is often one of the last major steps to be completed. It typically occurs during the final twelve months of the WRC cycle, often only a

Secretary of Commerce for Communications and Information, the Chairman of the FCC, the Assistant Secretary of Defense for Networks and Information Integration, and the Deputy Administrator of NASA, assisted in resolving differences and achieving a unified U.S. position on several proposals. Id. at 13.


99 Id.


101 WRC-07 DELEGATION REPORT, supra note 4, at 21 (discussing proposals the United States submitted as a single-country proposal to the ITU).

102 See id. at 58 (discussing factors relevant to the United States’ success at WRC-07 including effective negotiation and effective teamwork).

103 Id.
3. Leadership of the U.S. Delegation

It is customary for each delegation to a WRC to designate one individual to serve as its head.\textsuperscript{105} While it is common practice in many countries for the position to be filled by an incumbent senior official of a government telecommunications agency,\textsuperscript{106} the United States typically appoints a new head of delegation for each WRC.\textsuperscript{107} Furthermore, the individual heading the U.S. delegation is a political appointee who frequently comes from outside either the federal government or the telecommunication sector.\textsuperscript{108} The head of the U.S. delegation—who also serves as the official United States Representative to the Conference and has the personal rank of United States Ambassador—typically does not join the preparatory effort until the final year of a WRC cycle.\textsuperscript{109} In order to dispense with the typically lengthy Senate confirmation process for ambassadors, the U.S. WRC ambassadors are appointed pursuant to a statutory provision that allows an individual to hold the rank of ambassador for a temporary period of no more than six months in connection with a special mission.\textsuperscript{110} This provision eliminates the need for Senate confirmation and requires only that the President submit a written report to the Senate Foreign Relations Committee.\textsuperscript{111}

4. Formation and Administration of the U.S. Delegation

Recent U.S. WRC delegations were made up of more than 150 experts from both the federal government and the private sector.\textsuperscript{112} During the twelve-month

\textsuperscript{104} See 2005 NTIA RECOMMENDATION, supra note 57, at 25. During the initial years following a WRC, preparations for the next conference are led by international spectrum experts at the key federal agencies. See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at 14–15; WRC-03 DELEGATION REPORT, supra note 44, at 18–19.

\textsuperscript{105} See, e.g., WRC-07 Participants List, supra note 58 (identifying a head of delegation for each Member State delegation accredited to attend the Conference).

\textsuperscript{106} U.S. GEN. ACCOUNTING OFFICE, TELECOMMUNICATIONS: BETTER COORDINATION AND ENHANCED ACCOUNTABILITY NEEDED TO IMPROVE SPECTRUM MANAGEMENT 22–23 (2002) [hereinafter 2002 GAO REPORT].

\textsuperscript{107} See 2005 NTIA RECOMMENDATION, supra note 57, at 26–29.

\textsuperscript{108} See id. at 28.

\textsuperscript{109} See id.

\textsuperscript{110} See 22 U.S.C. § 3942 (2006); see also 2005 NTIA RECOMMENDATION, supra note 57 at 31.


\textsuperscript{112} See, e.g., WRC-2000 DELEGATION REPORT, supra note 58, at 7, 14 (reporting a delegation of 162); WRC-03 DELEGATION REPORT, supra note 44, at iii (reporting a delegation of 167); WRC-07 DELEGATION REPORT, supra note 4, at 1 (reporting a delegation of 157).
period before the Conference, the State Department publishes a notice in the Federal Register requesting interested parties to apply for inclusion on the delegation.\footnote{See, e.g., Formation of the United States Delegation to the World Radiocommunication Conference: Request for Expressions of Interest in Being on the United States Delegation, 72 Fed. Reg. 13,549, 13,549–50 (Mar. 22, 2007).} As a practical matter, many applicants are already actively engaged in the conference preparations by participating in ITU-sponsored technical studies, serving as observers at preparatory meetings of other world regions, and participating on U.S. committees and working groups involved in formulating positions and proposals.\footnote{Of the 157 registered U.S. delegates to WRC-07, over half had participated in one or more of the recently preceding WRCs. Compare WRC-07 DELEGATION REPORT, supra note 4, at app. C, with WRC-03 DELEGATION REPORT, supra note 44, at app. C, and WRC-2000 DELEGATION REPORT, supra note 58, at app. B.} While many members of a U.S. WRC delegation have previous international spectrum experience, the process remains open to new participants as well.\footnote{See Formation of the United States Delegation to the World Radiocommunication Conference: Request for Expressions of Interest in Being on the United States Delegation, 72 Fed. Reg., at 13,550 (listing U.S. citizenship as the only requirement to submit an expression of interest).} Following review of the submitted expressions of interest by a panel of senior officials of the FCC, NTIA, and Department of State, the State Department submits a list of prospective delegates to the Ambassador for approval, and forwards it to the White House for accreditation.\footnote{See WRC-07 DELEGATION REPORT, supra note 4, at 16.} The Department of State then submits the list of accredited delegates to the ITU for registration for the Conference.\footnote{See JOHN W. MCDONALD, JR., HOW TO BE A DELEGATE 7 (1984).}

As the Conference approaches, many delegates continue to serve on committees and working groups, and the delegation begins meeting periodically in its entirety as a delegation.\footnote{See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at app. E (establishing an agenda for a U.S. delegation education and training session).} The Department of State has principal responsibility for delegation administration, which includes the following responsibilities: (1) obtaining and organizing meeting and workspace for the delegation at the conference location; (2) setting up, provisioning, and staffing a delegation office as well as private space and facilities for the Ambassador; (3) interfacing with ITU and Conference officials; (4) arranging for communications between the delegation at the conference and senior officials in Washington; (5) managing press relations and arranging press conferences; (6) ensuring adherence to ITU and WRC procedures and requirements; and (7) advising on matters of diplomacy and international relations.\footnote{Testimony of David Gross, supra note 80.} Key federal agencies often contribute by making personnel available to serve as staff for the Ambassador and sharing certain administrative costs with the State Department.
C. Issues and Recommendations Regarding U.S. Preparation for Participation in WRCs

The United States’ position as a world leader in the field of telecommunications, as well as the superior governmental and private sector resources it marshals for WRC participation allows it consistently to achieve considerable success in the international competition for radiofrequency spectrum.\(^\text{120}\) As telecommunications markets around the world continue to develop and global demand and competition for a diminishing amount of radiofrequency spectrum intensifies, a question arises: Can the Conference preparatory process and practices that have served the United States well in the past continue to be effective in protecting U.S. interests today and in the future?

The increasing importance of telecommunications to the U.S. economy and other vital national interests over the last three decades prompted Congress to initiate several reviews of the WRC preparatory process and encouraged the NTIA, FCC, and recent U.S. WRC delegations to undertake such assessments as well.\(^\text{121}\) Summaries of the conclusions and recommendations of these reviews follow, with the added perspective of personal experience at the most recent Conference, WRC-07.

In the course of an examination of international space activity in 1985, the Office of Technology Assessment (“OTA”)—a former Congressional advisory body—noticed a growing interrelationship between U.S. and international spectrum developments\(^\text{122}\) and made international spectrum matters, including the U.S. preparatory process for WRCs, a focus of subsequent reviews.\(^\text{123}\) While the OTA found that U.S. preparations generally were effective, it deemed the existing preparatory process reactive, lacking in long-range strategic planning, and of dubious long-term value.\(^\text{124}\) Three specific factors stand


\(^{121}\) See, e.g., id.


\(^{124}\) See 1992 OTA REPORT, supra note 120, at 3; 1993 OTA REPORT, supra note 123, at
out among the weaknesses that the OTA identified: (1) a fragmented international spectrum policy structure; (2) lack of continuity resulting from the absence of a permanent Head of Delegation; and (3) late selection of a Head of Delegation and formation of the delegation, resulting in inadequate time for effective preparation.\textsuperscript{125}

A Government Accounting Office ("GAO") review of U.S. spectrum management a decade later reported the continued existence of some of the very same concerns.\textsuperscript{126} Like the OTA, the GAO cited the adverse impact of the divided U.S. spectrum policy structure on preparation for WRCs.

Under the current structure, FCC and NTIA develop positions on agenda items through separate processes that involve the users of the spectrum they manage. With the assistance of the Department of State, the positions are then merged into a unified U.S. position. According to the GAO:

Timely preparation for these conferences is important to give the United States an opportunity to build support with other countries for its position on conference agenda items. In the past, however, the U.S. position on some items has remained unresolved until the eve of the conference, leaving the United States with little time to build pre-conference support.\textsuperscript{127}

The GAO also expressed concern over the lack of continuity in the top leadership of U.S. delegations and the typically short tenure of each U.S. WRC Ambassador, which leaves inadequate time for pre-conference preparation.\textsuperscript{128} Subsequent assessments by the NTIA and the U.S. WRC delegations echoed these concerns.\textsuperscript{129}

1. Fragmented U.S. Structure for International Spectrum Policy

The OTA saw fragmentation of the U.S. governmental structure for international spectrum policy as a problem for WRC preparation. In OTA's view, a division of responsibility among three federal agencies—without single government agency having a clear leadership role—was the principal cause of the problem.\textsuperscript{130} Furthermore, OTA found that the division of responsibility resulted in a lack of clearly defined functions and roles and depended more on the

\textsuperscript{157} See 1993 OTA REPORT, supra note 123, at 157–165.


\textsuperscript{127} 2002 GAO REPORT, supra note 106, at 4.

\textsuperscript{128} Id. at 22–23 (noting also that the leadership of other countries' delegations serve longer terms and "may represent their nations at multiple conferences").

\textsuperscript{129} See 2005 NTIA RECOMMENDATION, supra note 57, at 24–31; GAIL S. SCHOETTLER, RECOMMENDATION TO IMPROVE UNITED STATES PREPARATION IN WORLD RADIOCOMMUNICATION CONFERENCES § 7.1.3 (2000).

\textsuperscript{130} See 1992 OTA REPORT, supra note 120, at 4, 102.
skills, experience, and personal relationships of particular individuals than on formal institutional arrangements. The absence of focused leadership and sufficient engagement by top officials of each agency exacerbated the problem.

Even with these structural flaws, U.S. preparations for recent WRCs have demonstrated exemplary inter-agency and public-private sector cooperation. Notwithstanding their different constituencies and spectrum objectives, the key federal agencies involved in WRC preparation typically have displayed remarkable professionalism, good nature, and mutual respect while hammering out creative solutions and making a remarkable effort to reach consensus. Participating agencies and private sector stakeholders alike generously contribute time and resources to advance the U.S. effort. Nevertheless, it is unclear whether a multifaceted, loosely-configured structure that depends to a great extent upon voluntary cooperation and informal arrangements can continue to function effectively as global competition for spectrum escalates, the stakes become higher, the issues become more complex, and the U.S. stakeholders’ interests become more divergent.

U.S. spectrum stakeholders and independent reviewers of the preparatory process have offered a variety of proposals to address the lack of strong central coordination in the current divided structure. Proposed solutions range from incremental changes in the existing mechanism to major restructuring of both the WRC preparation process and the federal government spectrum management structure. Modest adjustments—such as efforts to increase top level agency involvement in WRC preparations—brought about some improvement in the process but generally failed to eradicate the most significant shortcomings of the divided structure. On the other hand, internal restructuring of ex-

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131 See id. at 13, 102–04.
132 See id. at 103.
133 See, e.g., WRC-07 DELEGATION REPORT, supra note 4, at 59 (“Without question, the successful performance of the 2007 U.S. Delegation exemplifies the very best in interagency cooperation and demonstrates how successfully the public and private sector can work together.”).
134 See, e.g., id. at 15 (explaining the role of agency officials and private sector representatives in preparation for WRC-07); SCHOETTLER, supra note 129, §§ 1.2.9, 4.1 (discussing the time and monetary resources expended by agency officials and private sector representatives).
135 See, e.g., 2002 GAO REPORT, supra note 106, at app. IV (Comments of Nancy J. Victory, Assistant Secretary for Communications and Information, U.S. Department of Commerce).
136 In 2003, for example, the FCC and the NTIA entered into a Memorandum of Understanding and Agreement relating to increased coordination to promote the efficient use of the spectrum. The Agreement provided various measures including regular periodic meetings of the respective agency heads and staffs. Memorandum of Understanding Between the Federal Communications Commission and the National Telecommunications and Information Administration 1–3 (Jan. 31, 2003), available at
Lessons Learned from the Spectrum Wars

Existing agencies or creation of a separate new agency for international spectrum matters does not seem practical while federal government attention and resources are focused on the troubled world economy and other significant national priorities.

Still, the United States cannot afford to put off the needed improvements to the preparatory process until a more auspicious time when the necessary resources are more readily available. Fortunately, certain vulnerabilities of the current preparatory structure can be eliminated and other vulnerabilities can be reduced significantly in the short term.

For example, the functions and roles of the principal agencies can be reexamined and more clearly defined. Their roles and relationships can be institutionalized and formalized by reducing them to writing. Clearly articulated written procedures and guidelines can reduce over-dependence on institutional knowledge and accumulated experiences of specific individuals.

In its 2005 Report, the NTIA observed that many international spectrum veterans on whom the U.S. preparatory effort currently relies are approaching retirement. The documents used to formalize and institutionalize all of these arrangements can bolster the corps of experienced federal government professionals by training a new generation of international spectrum experts. Further, while the international spectrum veterans consistently participate in preparation and representation at WRCs, a new Head of Delegation almost always leads the U.S. delegation.

2. Lack of Continuity in WRC Leadership

Critics of U.S. participation in WRCs often place the lack of a permanent Head of Delegation high on the list of problems. For instance, a 2003 Center for Strategic and International Studies report raised concern over permitting an international spectrum negotiation as important as the WRC to be led by a temporary U.S. ambassador with only a few months to prepare for the Conference. Other critics argue that having a different individual head the U.S. delegation to each WRC deprives the U.S. delegation of necessary continu-


137 2005 NTIA RECOMMENDATION, supra note 57, at 37; see 1992 OTA REPORT, supra note 120, at 102 ("The cadre of spectrum policymakers in this country is small, and many of the most experienced U.S. international radiocommunication experts will retire in the next 5 to 10 years.").


139 CSIS COMMISSION ON SPECTRUM MANAGEMENT, SPECTRUM MANAGEMENT IN THE 21ST CENTURY 18 (2003) ("The nation has been fortunate in its choice of ambassadors to the WRC, but an appointment late in the WRC cycle means they often must play catch-up with their foreign counterparts.").
Moreover, critics point out that the existing process of having a U.S. ambassador serve as Head of Delegation fails to put a leader in place until just months before the Conference begins. Critics argue that the United States should follow the approach commonly used by other nations and fill the position with an incumbent senior civil servant.

The career civil servant model has some drawbacks. Although it creates the possibility of having an experienced individual head the U.S. delegation to repeated WRCs, it provides no guarantee. Thus, the practice within the current model of having experienced WRC veterans from the federal government in key leadership positions at every level of the delegation may be nearly as effective in ensuring continuity from conference to conference. Furthermore, for all their potential benefits, long incumbencies also have some disadvantages.

Sometimes the close relationships that develop among delegation heads over many years can breed too much familiarity, discouraging exploration and formation of beneficial new alliances. A new leader can bring fresh perspective to the process and may be more willing to forego familiar but unpromising courses of action for more effective, bold new approaches. The success of emerging coalitions among the nations of the Americas, Africa, and Asia in overcoming traditional European dominance in the quest for globally harmonized spectrum for International Mobile Telecommunication at WRC-07 demonstrates that receptivity to new alliances and innovative approaches may prove more successful in achieving spectrum goals at WRCs than will strict adherence to longstanding alliances and familiar strategies. Moreover, the predictability that brings comfort to U.S. allies and adversaries also might eliminate the element of surprise that can be advantageous in negotiations. Finally, presidential selection of the Head of Delegation also helps to ensure that

141 See id. at 24–25; CSIS COMMISSION ON SPECTRUM MANAGEMENT, supra note 139, at 18; 22 U.S.C. § 3942(a)(2)(B)(i) (2006). The President may only appoint the U.S. WRC Ambassador to serve for six months including the WRC. See id. Because the timeframe is so short, some critics argue that the Ambassador—who is always a political appointee—lacks opportunities to become sufficiently educated and form crucial relationships, potentially hindering the negotiating power of the United States. See id. at 18.
142 See, e.g., 2002 GAO REPORT, supra note 106, at 22–23 (noting that some believe that the Heads of Delegations of other countries are better able to form relationships with counterparts from other nations).
143 See 2005 NTIA RECOMMENDATION, supra note 57, at 26. NASA advocated that the designated senior civil servant’s term “should be for as long as he or she serves in that capacity . . . [but] this person may be a political appointee and therefore, long-term leadership continuity may not be guaranteed.” Id.
144 See WRC-07 DELEGATION REPORT, supra note 4, at 31; Scott Billquist, Americas Unite on Frequencies for IMT; Tough Talks Ahead, COMMUNICATIONS DAILY, Nov. 9, 2007, at 9 (referencing CITEL’s “first unified proposal”).
WRC outcomes support and advance the administration’s telecommunication and technology goals.145

3. Inadequate Time for Preparation

Lack of adequate time for preparation is potentially the most serious flaw in the current U.S. practice for selecting heads of WRC delegations. Reviews of the current process agree that involving the individual who will serve as principal U.S. WRC negotiator in formulating proposals, positions, and strategy as early as possible is imperative for effective U.S. preparation.146 In addition, the Head of Delegation must have adequate time for pre-conference interaction with key ITU officials and counterparts from other countries’ delegations.

Given the month-long duration of WRCs, the current practice of having a six-month temporary ambassadorship for the U.S. Head of Delegation limits his or her availability for preparation to only five months. In addition, because the Head of Delegation has a role in selecting members of the delegation, the current process also delays formation of the delegation until dangerously late in the process.147 Although key federal officials can participate actively in WRC preparation before they officially become delegates, the role of prospective private sector participants is limited until they are accredited.148 In addition, late formation of a delegation deprives the United States of the necessary time for the entire delegation to learn to work effectively as a unit.

Even with these procedural complications and delays, having an ambassador as Head of Delegation has advantages worth preserving. An ambassador lends considerable prestige to the delegation, commands a great degree of respect from other delegations, and affords the United States access to the highest-level officials from other ITU Member States, both before and during the Conference.149 From time to time, reviews of the U.S. preparatory process suggest an alternative process that offers a possible solution to this problem.

First, the President can designate an individual to serve initially as the offi-

146 See, e.g., id. (“The current six-month tenure of the Ambassador does not allow enough time for the Ambassadors to develop sound working relationships with other country representatives or complete the necessary delegation activities for which they are responsible.”); SCHÖTTLER, supra note 129, § 7.4 (“If possible, a position should be found for that person even earlier [than six months before a WRC] that enables her or him to learn about spectrum management and to establish relationships with the domestic and international spectrum players in government and industry.”).
148 See id. at 29–30.
149 See 2002 GAO REPORT, supra note 106, at 22; see also 2005 NTIA RECOMMENDATION, supra note 57, at 29.
cial U.S. Representative and Head of Delegation without the rank of ambassador. In that way, the individual can take on leadership duties well before the six-month ambassadorship begins. As a second step, the rank of ambassador can be conferred on the U.S. Representative and Head of Delegation effective six months before the conclusion of the conference. The additional funds needed to support the Head of Delegation's longer tenure seem warranted by the benefits this approach would bring to the U.S. preparatory process.

The White House currently holds the key to ensuring that WRC preparations have effective leadership starting early in the process. Given the importance of the Conference's outcome, the process should start with early selection of a person having appropriate skills and experience. A telecommunication or technology background, familiarity with spectrum and other wireless telecommunication issues, experience coordinating a multi-agency federal initiative, and previous exposure to international forums are extremely beneficial characteristics of an ideal Head of Delegation. A Head of Delegation with those attributes will need less training and can assume a leadership role more rapidly. Senior officials of U.S. stakeholder agencies can assist with this process by conveying the needs and timing of the process to the President's technology and telecommunication advisors early in the planning stages. Finally, a timeline based generally on the process used for forming recent WRC delegations—with some additional time built in at the front end—should be formalized, memorialized, and followed for future WRCs.

V. INCORPORATION OF ITU RADIO REGULATIONS INTO DOMESTIC LAW: THE STEP OF TREATY RATIFICATION IN THE UNITED STATES

Due to the treaty status of the Radio Regulations, ITU Member States must comply with certain formalities in order to be bound by the new and re-

150 See 2002 GAO REPORT, supra note 106, at 23.
151 See 2005 NTIA RECOMMENDATION, supra note 57, at 24–25. In order for the designated individual to fully engage in the duties of a head of delegation, he or she might be required to be a federal employee in advance of receiving the ambassadorship. Bringing in an individual from outside government, although possible, requires a much earlier start and therefore would be more difficult.
153 INT'L TELECOMM. UNION CONST. art. 4.
Lessons Learned from the Spectrum Wars

vised Radio Regulation adopted by a WRC.\textsuperscript{154} ITU Conference procedures establish that the Final Acts of the Conference must be signed by a duly authorized member of each delegation participating in the WRC, which customarily occurs during the WRC closing ceremony.\textsuperscript{155} For formal agreements, the act of signing imposes at most an obligation to "refrain from acts that would defeat the object and purpose of the agreement."\textsuperscript{156}

Under international law, each ITU Member State participating in the Conference can be bound by the revised Radio Regulations by taking such additional steps as are required by its own domestic law.\textsuperscript{157} Thus, for the United States and many other countries, signing the Final Acts serves mainly as an indication that the negotiations have concluded and that absent the submission of any declaration, understanding, or reservation to the contrary, the delegation from the signing state generally approves the measures adopted.\textsuperscript{158} Just as the United States must have measures in place that facilitate effective pre-conference preparation for its participation in the international spectrum rule-making process at WRCs, it also must adopt policies that ensure timely compliance with U.S. legal requirements to incorporate WRC treaty provisions into domestic law and regulation after a WRC concludes.

A. Background of the U.S. Treaty Ratification Process


Article II, section 2 of the U.S. Constitution (the "Treaty Clause") vests authority for treaty-making in the President, but gives the Senate an important role in the process: "[T]he President shall have Power, by and with the advice and consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur."\textsuperscript{159} While the President has authority to negotiate, conclude, and ultimately ratify treaties, the Treaty Clause requires that a treaty go

\textsuperscript{154} Id. art. 6.

\textsuperscript{155} ITU Rules of Procedure, supra note 32, art. 28. For the United States, authority to sign customarily rests with the U. S. Ambassador to the WRC who serves as the official U.S. Representative to the Conference. This authorization must be specifically requested in writing in accordance with the Department of State's Foreign Affairs Manual. 11 U.S. Dep't of State Foreign Affairs Manual §§ 722, 724.3 (2006), available at http://www.state.gov/documents/organization/88317.pdf.

\textsuperscript{156} RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 312 cmt. i (1986).


\textsuperscript{158} See id. at 335-35; see also ITU Rules of Procedure, supra note 32, art. 27-28 (stating final approval and signature requirements).

\textsuperscript{159} U.S. CONST. art. II, § 2.
through several additional steps before final ratification; obtaining the Senate’s advice and consent to Presidential ratification is foremost among them.¹⁶⁰ Historians attribute the Treaty Clause in part to the political environment at the time of the drafting of the Constitution.¹⁶¹ Like other provisions of the Constitution, the Treaty Clause reflects the Framers’ concern over unchecked Presidential power.¹⁶² In fact, the Drafters initially placed authority over foreign relations exclusively in the legislative branch, with a prominent role for the President arising only later in the drafting process.¹⁶³ Providing a role for both the executive and legislative branches also may have resulted from attempts to ensure U.S. compliance with its international agreements, improve the young nation’s reputation for reliability in international affairs, and encourage U.S. treaty partners’ adherence to agreements.¹⁶⁴ The requirement of treaty approval by a two-thirds majority of the Senate—rather than by both houses of Congress—reflects historical concern with protecting less populous southern states’ influence over free trade and immigration.¹⁶⁵

The Treaty Clause also reflects the very different conditions prevailing in administration of the U.S. government during the founding era. In 1791, the nation’s population was just over four million,¹⁶⁶ and the federal government’s entire expenditures for the three-year period from 1789 to 1791 totaled only $4.3 million.¹⁶⁷ As a young nation, the United States typically entered into a total of only around twenty to thirty international agreements per year.¹⁶⁸ Be-

¹⁶⁰ Unlike consent, which is mandatory, obtaining Senate advice regarding a treaty is viewed as somewhat discretionary. In practice, presidents seldom have formally sought the Senate’s advice prior to negotiation and conclusion of a treaty. Moreover, to the extent that the Senate provides advice, it rarely does so in advance. See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 303 n.3.


¹⁶² See generally Arthur Bestor, “Advice” From the Very Beginning, “Consent” When the End Is Achieved, 83 AM. J. INT’L L. 718, 724–25 (1989) (explaining the process of creating the Treaty Clause at the Constitutional Convention, and that while the president has a role in the treaty process, he or she does not replace the Senate).

¹⁶³ Id. at 721–24.

¹⁶⁴ Hathaway, supra note 161, at 1276–77.

¹⁶⁵ Id. at 1281–82.


¹⁶⁸ Hathaway, supra note 161, at 1356.
cause conducting international affairs was not considered especially demanding, early U.S. Secretaries of State also had responsibility for keeping the archives of all federal government documents. Moreover, the State Department’s initial budget contemplated that it could carry out all of its responsibilities with only a Secretary, Under Secretary, two clerks, a French interpreter, a doorkeeper, and a messenger. As a smaller and less populous nation, the U.S. Senate had only thirty members, and its responsibilities also comprised but a fraction of the business that it conducts today. With only thirty members of the Senate, obtaining the Senate’s advice and consent to treaty ratification would not have been a major burden. The same, however, is not true today.

2. Traditional Steps in the U.S. Treaty Ratification Process

Senate advice and consent remains a mandatory component of the current ratification process under the Treaty Clause. After treaty negotiations are concluded, in its role as the principal foreign relations agency of the Executive Branch, the Department of State prepares a package for the Secretary of State to use in formally submitting the treaty to the President. This package contains three documents: (1) a certified copy of the treaty text; (2) a detailed summary and analysis of the treaty; and (3) a proposed treaty message from the President requesting the Senate’s advice and consent to ratification. After reviewing and approving these documents, the President transmits a package to the Senate that consists of a letter of transmittal containing the treaty message, a certified copy of the treaty text, and usually, a copy of a separate document containing the Secretary of State’s treaty summary and analysis.

For a non-controversial treaty that presents no extraordinary circumstances,
the Senate proceeds essentially in accordance with the following steps: (1) the
Presiding Officer of the Senate refers the matter to the Committee on Foreign
Relations after one reading; (2) the Committee conducts a public hearing and
produces a written report; (3) the Committee conducts a mark-up of the treaty;
and (4) the Committee reports the treaty favorably for consideration on the
Senate floor.176 Following a final vote on the resolution with two-thirds of the
Senate approving, the Senate returns the signed resolution of ratification to the
White House, which in turn sends it on to the Department of State to prepare
an appropriate instrument of ratification for the President’s signature.177

After signing the instrument of acceptance indicating the formal declaration
of U.S. consent to be bound by the treaty, the President directs the Secretary of
State to take such additional action as needed for the treaty to enter into force
internationally.178 For a WRC treaty, this next step entails depositing the signed
document with the ITU Secretary General.179 The process concludes with a
Presidential proclamation that the treaty has entered into force, which “serves
as legal notice for domestic purposes and publicizes the text.”180 While the
process seems straightforward, the variety of steps combined with the growing
number of treaties considered annually—as described below—requires modifi-
cation for the modern world.

3. Treaty Ratification in a Changing World

Over the years, U.S. involvement in international affairs has greatly ex-
panded, producing a corresponding increase in the number of treaties to which
the United States has become a party.181 As of January 29, 2008, the United

176 See Senate Treaty Study, supra note 173, at 119–24. At times, certain steps are
foregone in order to speed final approval. However, the process can become considerably
more complex when the substance of a treaty is inherently controversial, when there is a
disagreement within the Senate, when the President and the Senate do not agree, or when
circumstances change between signing and ratification. The Senate Treaty Study outlines
additional procedural measures that apply in circumstances such as when the Senate de-
clines to give its consent, agrees to do so only with certain conditions, fails to act on a treaty
before the end of the session, or when a new President who does not support a particular
treaty takes office after the Senate gives its consent but before the preceding President has
ratified the treaty. Id. at 123–24.
177 Id. at 143.
178 Restatement (Third) of Foreign Relations Law of the United States § 312 n.4
(1986).
179 Int’l Telecomm. Union Const. art. 54.
180 Senate Treaty Study, supra note 173, at 12.
181 See Senate Treaty Study, supra note 173, at 124; Kevin C. Kennedy, Conditional
Approval of Treaties By the U.S. Senate, 19 Loy. L.A. Int’l & Comp. L.J. 89, 91 (1996)
(explaining that relatively few treaties actually are entered into under the advice and consent
process).
Lessons Learned from the Spectrum Wars

States had diplomatic relations with 190 of the world's independent states. The Senate gave advice and consent to twenty-three treaties during the 110th Congress alone, and twenty-six additional treaties remained pending in the Senate Foreign Relations Committee as of September 26, 2008.

Further, the State Department's general workload has expanded and become more complex. In addition to managing U.S. relations with each of the 190 independent states with which the United States has diplomatic relations, the Department of State also participates in the multinational affairs of each of the various international organizations to which the United States belongs. Thus, the Treaty Clause method of treaty ratification has become much more burdensome and time-consuming.

As a result of the numerous treaties that come before it for advice and consent, the Senate adopted special procedural measures to expedite the process. This prompted the following characterization from the Congressional Research Service in the 2001:

Contrary to past characterizations of the Senate as the "graveyard of treaties," the overwhelming majority of treaties receive favorable Senate action within a reasonable period of time. Few treaties languish indefinitely or are returned to the President without approval, and even fewer are defeated outright by vote of the Senate. In most cases, the process of Senate consideration is expedited, without using the full procedures available under the Senate rules, and Senate approval frequently is unanimous.

While these procedures may expedite the approval process for many treaties, ITU treaties face special impediments.

B. Unique Issues Pertaining to ITU Treaties

1. Impediments to Timely Ratification

It is easy to see how each stage of the treaty ratification process leading to the Senate proceedings might contribute to the delay. The package that the

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186 See Kennedy, supra note 181, at 91; Senate Treaty Study, supra note 173, at 117–18.
State Department prepares for the President's submission to the Senate requires careful preparation and several levels of review. The submission is reviewed by the State Department's Office of the Legal Advisor for Treaty Affairs, the NTIA, FCC, and other major stakeholders in the federal government. The reviewers must determine whether the government should continue to support any reservations, understandings, or declarations made by the WRC Delegation at the time of signing the Final Acts of the Conference, and whether any additional reservations should be added prior to Senate consideration. After the package reaches the White House, it must compete with other pressing matters of national importance for the attention of top advisors and eventually the President.

After reaching the Senate, telecommunication treaties often move slowly, even if they are relatively uncontroversial. At the beginning of each session of Congress, the Senate Foreign Relations Committee requests the State Department to provide a ranking of priority of all the treaties pending before the Senate. Telecommunication treaties do not always fare well when in competition for priority with other treaties covering such matters as arms control, commerce, environment, extradition, intellectual property, investment, taxation, and terrorism. Telecommunication treaties that result from revision of the ITU Radio Regulations may be at an additional disadvantage in obtaining a high priority from the State Department or prompt attention from the Senate relative to other pressing issues.

As a practical matter, the United States can benefit from new international spectrum allocations and other measures before a WRC treaty enters into force simply by taking regulatory action to implement new policies and practices. Thus, the United States has avoided the traditional lag time between the conclusion of WRCs and U.S. ratification of treaties by proceeding with implementation of WRC measures before—sometimes years before—official treaty ratification occurs.

188 See supra notes 172–76 and accompanying text.
189 Testimony of David Gross, supra note 80.
190 Id.
191 See Senate Treaty Study, supra note 173, at 118.
192 See id. at 123 (noting that some treaties may “languish on the committee’s calendar” due to lack of importance or “want of interested advocates with the time to do justice to them”).
193 Id. at 122.
196 See, e.g., Testimony of David Gross, supra note 80.
Another potential level of delay can occur once a treaty reaches the Senate floor. Given the highly politicized atmosphere that has existed in Washington in recent times, it is conceivable that obtaining Senate consent to treaty ratification could be used as a tactical bargaining chip in the same way obtaining Senate confirmation for federal judges and other presidential appointments has been employed. Moreover, with the super-majority required for approval, a relatively small group of Senators whose views may not reflect those of the majority of their colleagues—or the country at large—can block or indefinitely delay approval of a treaty.

Further delay can occur during the final steps of ratification, after the Senate has given its advice and consent. Although the State Department had over 34,000 employees as of the end of 2007, only a limited number of lawyers, treaty analysts, protocol specialists and subject matter experts are involved in preparing instruments of ratification for the President’s signature. Even after an instrument of ratification reaches the White House, other pressing matters may prevent the President from signing it immediately. While telecommunications treaties do not rise to the same level of political concern as treaties governing other issues, there are significant consequences to failing to ratify telecommunications treaties.

2. Consequences of Failure to Ratify

Even though the United States technically need not wait for a WRC treaty to be ratified in order to implement revised Radio Regulations, there are disadvantages to allowing the treaty embodying those revisions to remain unratified. First, if the United States is not bound by the particular Radio Regulation provision, it may not be afforded the protection from harmful interference from radiocommunication emanating from other nations granted by the particular Radio Regulation. Despite the ITU’s lack of authority to enforce treaty provisions, parties to a dispute have recourse to an arbitration procedure out-

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198 SENATE TREATY STUDY, supra note 173, at 19.
201 See supra note 195 and accompanying text.
lined in the ITU Convention, and the ITU can also use its offices informally to assist in resolving cases of interference among parties to WRC treaties.²⁰² It is not clear that these measures would be available to a Member State that is not bound by the provision it seeks to invoke. Furthermore, because other nations look to the United States for leadership in telecommunications and technology, U.S. behavior indicating a lack of regard for international order could encourage other countries to become outliers, to the detriment of interference-free radiocommunication everywhere.²⁰³

Failure to ratify treaty obligations that the United States has actively promoted and to which it has agreed, may also prove politically embarrassing. This situation arose in 1998 on the eve of an important ITU Plenipotentiary Conference that the United States was to host in Minneapolis.²⁰⁴ Under the ITU Constitution, a country is denied the right to vote in the ITU if it has not ratified the treaty constituting the organization’s basic acts.²⁰⁵ In this case, such a treaty was pending, and the United States found itself in the awkward position of hosting a major world convention at which it could not vote.²⁰⁶ The United States avoided an extremely awkward situation only by taking extraordinary action to ratify the treaty at the eleventh hour.²⁰⁷ Thus far, the United States has escaped any serious harm from the potential threats described above, but there is no assurance that its good fortune will continue.

3. Delays Becoming a Habit

The problem of untimely ratification has arisen not so much from objections to specific new or revised Radio Regulations as from administrative delay during the ratification process.²⁰⁸ Nevertheless, ITU telecommunication treaties in

²⁰² Id. at art. 56.
²⁰³ See Aldo Forgione, Weaving the Continental Web: Exploring Free Trade, Taxation, and the Internet, 9 LAW & BUS. REV. OF AM. 513, 558 (2003) (“The United States is recognized as the world leader in electronic commerce, telecommunications, and information technologies.”).
²⁰⁴ See Govt. and Industry Push Senate Approval of ITU Treaty to Regain U.S. Vote, COMMUNICATIONS DAILY, Sept. 18, 1997 (explaining that the Senate had to act quickly on ratifying a 1992 treaty in order to give the United States the right to vote at the upcoming 1998 Plenipotentiary meeting).
²⁰⁵ INT’L TELECOMM. UNION CONST. arts. 3(2)(b), 52.
²⁰⁶ Govt. and Industry Push Senate Approval of ITU Treaty to Regain U.S. Vote, supra note 204.
²⁰⁷ See id.
general—and WRC treaties in particular—have remained unratified by the United States for years, with some pending for over a decade following the conclusion of a Conference. Specifically, telecommunication treaties dating from 1992, 1998, and 2002 were not approved by the Senate Foreign Relations Committee until September 2008. Moreover, additional WRC treaties concluded in 1997, 2000, 2003, and 2007 had not yet been transmitted to the Senate for approval.

When four of these long-pending treaties finally came before the Senate Foreign Relations Committee at a hearing on July 10, 2008, Senator Richard Lugar, the Committee’s ranking member, noted that over a decade had passed since two of those treaties were concluded. In response, the senior official testifying for the State Department acknowledged the State Department’s awareness of the time lapse and stated that the delay in bringing the treaties to the Senate was attributable in part to competing priorities within the Department. The official also reported that the State Department was seeking ways to expedite the process internally as well as through discussions with the Senate Foreign Relations Committee staff. Ultimately, telecommunications treaties as a whole did receive some attention from the Senate, which took action to expedite ratification of telecommunications treaties.

C. The 2008 Senate Response

In light of the importance of the Radio Regulations to the United States and the considerable investment in the process of obtaining favorable worldwide conditions for radiocommunication, the Senate Foreign Relations Committee reassessed the customary process for WRC treaties and announced a new ap-
The new approach replaces the Treaty Clause method—and its requirement of advice and consent of the Senate—with future ratification by executive agreement:

In the course of reviewing the 1992 Revision and the 1995 Revision, the committee has given consideration to whether future revisions to the Radio Regulations will require the advice and consent of the Senate. Revisions to the Radio Regulations are technical implementing instruments anticipated in the ITU Constitution, which are expected to regulate the international use of telecommunications and are subject to the provisions of the Constitution and Convention. Given the nature of these instruments, the committee believes that in the future, revisions to the Radio Regulations will not, in the normal course, require the advice and consent of the Senate. Thus, in the future, the committee does not expect the Executive to submit for advice and consent revisions to the Radio Regulations.

As an additional safeguard, the Committee established the following condition:

If there is any question, however, as to whether a revision goes beyond the current mandate of the Radio Regulations as anticipated in the ITU Constitution, the committee expects the executive branch to consult with the committee in a timely manner in order to determine whether advice and consent is necessary.

Due to the delay and other disadvantages inherent in the Treaty Clause method of ratification, a number of commentators over the years have supported elimination of Senate advice and consent for all but a small number of treaties. One authority refers to the Senate's constitutional role under the Treaty Clause as irrelevant and simply a product of historical concerns of slaveholding states. Still others find the process overly cumbersome and unworkable given the modern day workloads of the State Department, the President, and the Senate. Dispensing with the process of obtaining Senate advice and consent seems to be the surest alternative for expediting and improving the ratification process.

The United States has used executive agreements as an alternative to treaties under the Treaty Clause in certain circumstances in the past. As a result, U.S. reliance on executive agreements has been used for international agreements in

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216 Id. at 8 (emphasis added). Note that the Committee did not propose the new approach for amendments to the ITU Constitution and Convention resulting from Plenipotentiary Conferences. Id.
217 Id. at 9.
218 See, e.g., Hathaway, supra note 161, at 1241–42 (advocating for most treaties to be approved through congressional-executive agreements).
219 Id. at 1239–40 (“Rooted in now-irrelevant (and discredited) concerns of slaveholding states, overtaken by actual political practice almost from the Constitution's beginning, the Treaty Clause was the product of circumstances that have little continuing relevance.”).
221 Senate Treaty Study, supra note 173, at 5 (discussing congressional-executive agreements and Presidential or sole executive agreements).
Lessons Learned from the Spectrum Wars

This Article supports the use of executive agreements as a superior approach for bringing new and revised Radio Regulations into force. Depending on the circumstances, each of the following three types of executive agreements can serve as an alternative to the traditional Treaty Clause ratification method. First, congressional-executive agreements based on authority explicitly or implicitly conferred by statute, or that obtain separate approval by a majority of both houses of Congress, can replace the formal advice and consent process. Second, and perhaps more efficient, sole executive agreements that can be executed by the President under independent authority granted by Article II of the Constitution can replace the advice and consent process. Finally, the President can issue executive agreements pursuant to treaty, which derive legitimacy from the text—or reasonable inference from the text—of an existing treaty.

The Committee’s new approach provides a welcome improvement for ratifying revised Radio Regulations adopted by a WRC. Using an executive agreement promises to eliminate many of the problems inherent in the existing post-WRC process. Dispensing with the requirement of obtaining advice and consent of the Senate in most cases has the significant practical advantage of removing opportunities for delay that can arise at various points in the Treaty Clause ratification process. Departing from a strict requirement for Senate advice and consent also forecloses a minority of Senators from blocking ratification of measures that have wide support in Congress, and throughout the country. Given a highly charged partisan atmosphere of modern politics, using an executive agreement also insulates international telecommunications agreements from use as bargaining chips in the confirmation process for Presidential appointees or in legislative fights over measures unrelated to the WRC. Finally, removing WRC agreements from the long queue of treaties awaiting Senate advice and consent in the usual case would permit the Senate to focus on significant treaties resulting from ITU Plenipotentiary Conferences as well as important treaties in other areas of international endeavor.

At this point, it is not clear with which type of executive agreement the Foreign Relations Committee intends to replace the advice and consent process. The congressional-executive agreement, which requires approval in both hous-

222 Hathaway, supra note 161, at 1298.
224 The treaty amendments adopted at ITU Plenipotentiary Conferences typically affect important provisions of the organic documents containing the Union’s mission and the rights and responsibilities of its Member States. Int’l Telecomm. Union Const. art. 8(2)(a)(i).
225 See Senate Treaty Study, supra note 173, at 26 (discussing the Senate’s concern that the “most important international commitments” be made as treaties).
es of Congress, certainly can be ruled out in light of the Committee’s concern with eliminating delay. Either of the remaining two forms of executive agreement—the sole executive agreement or the executive agreement pursuant to treaty—seem appropriate and well-suited to bringing WRC actions into force for the United States. However, such executive agreements may engender opposition because they lack direct legislative involvement as a counterbalance to the President’s power. While extensive use of such alternatives may not be advisable for all types of international agreements, their use for ratifying revised ITU Radio Regulations should not raise serious concern.

Any individual WRC often results in certain adjustments and updates to the tables, operating standards, and procedural measures that the ITU Radio Regulations contain. Because Radio Regulations are similar to federal regulations that administrative agencies and regulatory commissions are authorized to promulgate in order to implement statutes, direct congressional involvement in their ratification does not seem necessary. Either of these two forms of executive agreement should be suitable to bind the United States to WRC measures in the circumstances the Foreign Relations Committee cited, so long as the revised Radio Regulations are consistent with provisions of the organic documents of the ITU that the United States previously has ratified.

Other aspects of U.S. participation in WRCs provide additional assurance of the appropriateness of the new approach of forgoing formal Senate advice and consent. Measures built into the U.S. preparation process ensure that agreements resulting from U.S. participation in WRCs are free of the abuses that the Treaty Clause was intended to prevent. The three U.S. government agencies with principal responsibility for formulating WRC positions and proposals have formal mechanisms in place for obtaining public input. The presence of 150 public officials and private sector representatives on U.S. WRC delegations, and the process used to select them, provides additional assurance of openness. In the past, members of Congress and senior staff of House and Senate committees also have attended WRCs and observed both U.S. delegation meetings and Conference deliberations. Finally, the U.S. Head of Delegation keeps federal officials and the American public informed of progress.

226 See supra Part V.B.3; Lugar & Beaird Colloquy, supra note 208.
227 See supra Part II.B.
229 See id. at 9 (explaining that if revision “goes beyond the current mandate of the Radio Regulations” the executive should consult with the Committee).
230 See supra Part IV.B.
231 See supra Part IV.B.1.
232 See supra Part IV.B.4.
233 See WRC-03 DELEGATION REPORT, supra note 44, app. C (listing Congressional staff and advisers).
during the Conference by providing regular briefings, holding press conferences, and issuing a detailed post-conference report on the measures adopted and how they met U.S. objectives.234

The Senate’s new approach should eliminate U.S. vulnerability during lengthy periods when revised Radio Regulations remain unratified. In addition, the safeguard of requiring consultation in the event of doubt as to whether revisions to the Radio Regulations are inconsistent with the ITU Constitution and Convention will ensure that the powers of the executive and legislative branches remain in balance. Under the new approach, the executive branch will have greater responsibility for ensuring that revised Radio Regulation revisions are brought into force promptly. Forgoing the Senate advice and consent process will eliminate multiple reviews and minimize substantial post-conference paperwork, allowing the NTIA and the FCC to focus on domestic implementation of new international spectrum measures and preparations for the next Conference.

VI. CONCLUSION

International cooperation remains indispensable to communication in the twenty-first century. In 1982, ITU historian George Codding observed, “[t]he work of the ITU is more than merely desirable, it is mandatory. The continued existence of the ITU or its equivalent is no doubt assured as long as there are nation-states.”235 Without question, Codding’s observation remains both accurate and relevant in the information age, with telecommunication at the heart of the global economy.

In order to remain a force within the ITU and at future World Radiocommunication Conferences, the United States cannot limit its effort to the Conference itself, but must continue to make improvements in how it carries out the important tasks leading up to and coming out of each WRC. U.S. preparation for a WRC must begin on both the international and domestic levels as early as possible and should make effective use of all available governmental and private sector expertise, talent, and resources. Following each WRC, the United States also must be conscientious in seeing that new and revised Radio Regulations that are beneficial to U.S. spectrum stakeholders are promptly incorporated into domestic law and regulation. U.S. spectrum stakeholders—whether in government or the private sector—should constantly look for opportunities to contribute to those efforts and to ensure that U.S. international spectrum policy and structure continues to be updated and adjusted as necessary to achieve the best results.

235 CODDING & RUTKOWSKI, supra note 9, at 55.