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The Future of Internet Governance: ***Can the Current Model Support the New Economics of the Internet?***

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Executive Summary

Each year, AFCEA's Cyber Committee selects five or six themes to research and report out on. Our "Future of Internet Governance" Subcommittee interviewed ten high-profile subject matter experts on the Internet, as well as on the current Internet governance model under the domain of the Internet Corporation for Assigned Names and Numbers (ICANN). During the interview process, which lasted from July to December 2013, we discovered several important findings and significant trends. The first, and probably most insightful, finding is that the very issue of Internet governance (as traditionally understood) is probably not the central issue we should be focusing on. Undoubtedly, the current model needs to evolve due to the many forces that represent change in this highly dynamic area. However, the high emotions ascribed to the efforts to "take over" the Internet appear to be vastly overstated. Many of the interviewees warned that the recent drama surrounding actions by the United Nations (UN) International Telecommunication Union (ITU) allegedly attempting to take over the governance of the Internet is, in itself, a drama. There appears to be serious efforts to cast the current set of events as being an effort to play ICANN off of the ITU. Repeated efforts to cast the ITU as attempting to commandeer Internet governance have caused the ITU to generate various public statements refuting these claims. The ITU, formed in 1865 (years before the formation of the UN), has an important mission facilitating international agreements between its 193 member countries and communications providers. The traditional bilateral agreements that assured an equitable revenue/cost sharing for many decades have largely been abandoned, leaving host nations with virtually little predictable revenue that was once dictated by these forgone bilateral agreements.

The Subcommittee found the existing governance model simply not the central issue of controversy. Interviewees focused on both domestic and international aspects; most expressed satisfaction with the current model with all of its known shortcomings. The real controversy is that countries have been continuously expanding their respective fiber and power infrastructure to assure service levels in/out of country with little, if any, compensation for these investments. None of the revenue-sharing models of the past has

survived. What is happening is that certain countries are attempting to limit access to their countries' users in an effort to create some business leverage. What is being sought is a new model that will level the playing field and result in the sharing of economic value of the Internet.¹ The inherent telecom fairness model that was in existence from the beginning of the telecom industry was abruptly abandoned. The reality seems to be that the ITU intends to represent the interests of its members and is pressing for this issue to be addressed. Naturally, high profile US brands that came to this market after the divestiture of AT&T and the turmoil of the late 1980s are new, and to some degree ambivalent, to this issue. The current business models are seen as uneven and need to represent the larger good. Though this issue may touch certain elements of the current Internet governance model, the central issue is one of "follow the money." The call for a new, fairer model is what is being challenged, not who assigns addresses and domain names.

The recent revelations of the extent of Internet-based spying by agencies of the United States Federal government has led to a change in the tenor and the content of Internet governance discourse. The change has affected both the political and technical discussion, the combination of which is likely to lead to impact on USA businesses, especially in the cloud services arena.² For example, the European Parliament is considering a measure that would require American-based companies, such as Google, Amazon, and Yahoo to work with European authorities before providing information, based on US warrants, to US government agencies.³ The problem here is that large-scale systems of Cloud and Cloud-based services (*e.g.*, E-Mail, etc.) are not generally limited to geographic boundaries.

If a European Union citizen or company is using an Amazon service in Europe, in general, the information will stay in that Amazon region. However, if a US agency knows that the information is backed up by the User in another region outside of the European Union (or especially in the USA), then does the potential European law have any restraining power on a US warrant? Although indignation and protection of privacy of their citizenry may be a primary concern, there is also an economic strategy, which is to use these items to force companies to invest in specific regions. The current, and potentially growing, economic problem is that the use of services from Amazon, Google, Microsoft, and others sends money outside of a country and does not cause (or at least it is not perceived to cause) domestic infrastructure growth or technological advancement.

¹ Sam Schechner, "France Turns Screw On Google Data Use," *The Wall Street Journal* (September 28-29, 2013): "France's case against Google is the latest front in a broader war, as European authorities worry about the power a group of largely American companies have gained over the continent's Internet economy." <http://technohubmatric.blogspot.com/2013/09/french-privacy-agency-moves-to-sanction.html>.

² Stephanie Overby, "NSA Spying will Impact Cloud Providers and Customers" (November 15, 2013) http://www.cio.com/article/743276/NSA_Spying_Will_Impact_Cloud_Providers_and_Customers.

³ James Kanter, "Europe Moves to Shield Citizens' Data," *The New York Times* (October 17, 2013) http://www.nytimes.com/2013/10/18/technology/europe-moves-to-put-online-data-beyond-us-reach.html?_r=1&#

Furthermore, “[t]echnology giants like Google, Inc. and Facebook Inc. are expanding efforts to control more of the world’s Internet backbone, raising tensions with telecom companies over who runs the Web.”⁴

An August 2013 report by the Information Technology & Innovation Foundation found that 10% of those outside the US had cancelled a project with a US-based Cloud provider, 56% were “less likely” to use such a provider and 36% believed that it would make it more difficult to do business outside the US.⁵

Any previous technical and moral grounds the US may have enjoyed to thwart efforts by the United Nations and other traditional less “open” societies to place controls on the Internet are gone. ICANN and the W3C are now calling for changes.⁶ It is clear that the “the future evolution of Internet name and number governance, at the very least, is no longer up to them [US]”.⁷

Methodology:

From the beginning of this effort, it was apparent that there was a wide divergence of opinions around the facts surrounding this inquiry as well as the motives that drove some of the opinions and related actions. The Subcommittee had a unique opportunity to interview many high-profile subject matter experts. The discussions allowed the Subcommittee to conduct a thorough research of the current model, as well as take into consideration different ideas to develop an outlook for the Future of Internet Governance. The choice of interviewees was key to the process. It was the objective of this Subcommittee to achieve a balanced perspective; therefore, we consciously sought input from US as well as international subject matter experts. We further wanted to make certain that the viewpoints of ICANN and well as UN ITU were represented.

The list of persons interviewed by the Subcommittee is as follows:

- **Vint Cerf**, VP & Chief Internet Evangelist, Google (July 9, 2013)
- **Mark Hughes**, Group Security Director, BT (July 22, 2013)
- **John Negroponte**, Vice Chairman, McLarty Associates (July 29, 2013)
- **Chris Soghoian**, Principal Technologist and Senior Policy Analyst, ACLU (August 9, 2013)

4 Drew Fitzgerald and Spenser E. Ante, “Grabbing Hold of Internet’s Pipes,” *The Wall Street Journal* (December 17, 2013)

<http://online.wsj.com/news/articles/SB40001424052702304173704579262361885883936>

⁵ Daniel Castro, “How Much Will PRISM Cost the U.S. Cloud Computing Industry?” (August 5, 2013)

<http://www.itif.org/publications/how-much-will-prism-cost-us-cloud-computing-industry>.

⁶ Alex Wilhelm, “ICANN, W3C Call for End of US Internet Ascendancy Following NSA Revelations (October 11, 2013)

<http://techcrunch.com/2013/10/11/icann-w3c-call-for-end-of-us-internet-ascendancy-following-nsa-revelations/#!>

⁷ “The Core Internet Institutions Abandon the US Government” (October 11, 2013)

(<http://www.internetgovernance.org/2013/10/11/the-core-internet-institutions-abandon-the-us-government/>).

- **Melissa Hathaway**, President, Hathaway Global Strategies, LLC (August 15, 2013)
- **David Gross**, Partner, Wiley Rein LLP (August 16, 2013)
- **Jody Westby**, CEO, Global Cyber Risk (August 19, 2013)
- **Andy Purdy**, Chief Security Officer, Huawei Technologies USA (August 19, 2013)
- **Marco Obiso**, Cybersecurity Coordinator, ITU (September 4, 2013)
- **Laura DeNardis**,⁸ Professor, School of Communications, American University (December 20, 2013)

Is Governance the Real Issue?

The central theme of our Subcommittee’s research was and remains the issue of the existing and future evolution of the much-debated current Internet governance model. The current construct is often described as the ICANN (<http://www.icann.org>) model after the organization that has its roots in the earliest history of the Internet and has indeed evolved to represent global needs. It is easy to find alternative models, along with advocates for each. We present some of them and offer pros/cons for each.

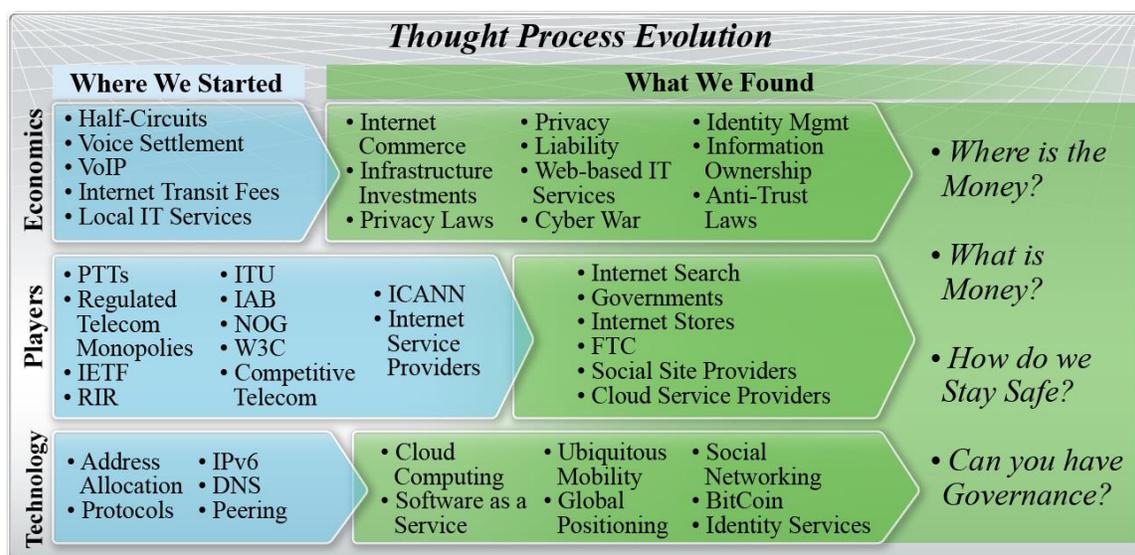
Another central and compelling issue that emerged during our extensive interview process that could not be ignored was: “Is Internet governance the real issue?” In other words, are public actions cast as efforts to change the current governance model really about governance? Our research, which was completed in September 2013, showed a surprising number of interviewees, domestic and international, very comfortable with the current governance model, openly described as US-centric. We anticipated far more debate but found a decided approval of the current approach, including in the interviews with UN ITU Leadership. What was foremost on the minds of most interviewees was not Internet governance, as defined by the current model, but the lack of vision and practicality around the basic economics of the Internet.

Since completion of the formal research, important developments have influenced the debate, particularly the meeting in Montevideo in October 2013. An Internet Governance meeting planned for April 2014 in Brazil “aim[s] to produce universal internet (*sic*) principles and an institutional framework for multistakeholder internet (*sic*) governance. The framework will include a roadmap to evolve and globalize current institutions, and new mechanisms to address the emerging internet (*sic*) governance topics.”⁹ ICANN President and CEO Fadi Chehade put the debate in context at a recent ICANN meeting in Buenos Aires:

⁸ Author of *The Global War for Internet Governance*, Yale University Press (January 14, 2014).

⁹ Booting up Brazil (November 19, 2013) <http://www.internetgovernance.org>.

“There is a global realization that the Internet is at the center of the world economy . . . It is also a driver of social life, a driver of political life, a driver of value to many people. The Internet is no longer just a communication means. It’s the nervous system of the world.”¹⁰ (EMPHASIS ADDED)



The issue then is not simply a debate of ICANN and the ITU being in an international struggle to dilute the authority of ICANN. The ostensible politically motivated “grab for power” is actually a more nuanced debate seeking a reasonable solution to what can be seen as the unfair economics of the existing model influenced now by a global desire to also address surveillance and privacy concerns. A new “Panel on the Future of Global Internet Cooperation” will meet in London in December 2013.¹¹

While not specifically addressed in any depth during the interview process, it is helpful to look at the global context within which Internet governance happens. As a domain, cyberspace, and therefore, the Internet, does not lend itself to easy definitions regarding jurisdiction. There are no traditional geographical borders and, more importantly, there is no global legal infrastructure within which governance can easily happen. The unique nature of the Internet has been the source of its success, as well as its vulnerability. It has

¹⁰ Grant Gross, “ICANN leaders push for broad-based Internet governance” (November 20, 2013)

<http://www.peworld.com/article/2065440/icann-leaders-push-for-broadbased-internet-governance.html>.

¹¹ John Ribeiro, “ICANN ‘coalition’ created to tackle concerns about the future of the Internet” (November 18, 2013)

<http://www.peworld.com/article/2064380/icann-sets-up-coalition-to-address-new-internet-governance-challenges.html>.

enabled unprecedented amounts of crime¹² and espionage, while at the same time enabled whole countries to improve their GDP.¹³

The Post-Snowden fallout has even resulted in several countries taking concrete steps to minimize access of US-based technology companies as well as the US Government by creating new E-Mail service providers (Germany)¹⁴ or even laying their own fiber optic cables (Brazil).¹⁵ Brazilian President Dilma Rousseff called on the UN General Assembly, during her September 24th Address, “to create a framework of Internet regulation to halt the US and other nations from using it as the ‘new battlefield’ of espionage.”¹⁶

Governance Models

We asked our interviewees to consider various models in the context of a variety of issues such as Access to the Internet (*e.g.*, is it a fundamental human right); Privacy; and Technical Issues. We did not limit any of our discussions and actively encouraged them to delve into areas we had not considered such as the economics, whether regarding the Internet writ large, or the economics of creating a secure Internet environment.

Following are several models for consideration:

1. United States Council on Foreign Relations Four Pillars¹⁷:
 - a. shared leadership with like-minded actors;
 - b. future trade agreements ensuring free flow while protecting IP/privacy;
 - c. governance involving emerging Internet powers including private industry/civil society; and
 - d. US Industry-led approach to counter cyberattacks.
2. WSIS Internet Governance Forum Multistakeholder Policy Dialogue (<http://www.intgovforum.org/cms/aboutigf>).

12 See Misha Glenny’s *Dark Market: How Hackers Became the New Mafia* (2011) <http://amzn.to/15qqGPe>.

13 Laura Pappano, “The Boy Genius of Ulan Bator,” *The New York Times* (September 13, 2013) <http://nyti.ms/1eu1NqV>.

14 Elizabeth Dvoskin and Frances Robinson, “Creating Havens For Web Privacy,” *The Wall Street Journal* (September 28-29, 2013): “Three of Germany’s largest email providers, including partly state-owned Deutsche Telekom AG, teamed up to offer a new service, Email Made in Germany. . . . More than a hundred thousand Germans have flocked to the service since it was rolled out in August.” <http://on.wsj.com/1avzPFe>.

15 Brazil Speech at UN Lashes out at US Spy Program, Lara Jakes (September 24, 2013) (AP): “The Brazilian government recently announced it was making a strong push to protect itself from NSA spying by walling itself off from the U.S.-centric Internet. Some measures include laying fiber optic cables directly to Europe and neighboring South American nations, building new Internet exchanges in Brazil to route traffic away from the U.S., and creating a government-run and encrypted email system.” <http://abcn.ws/18nTpSE>.

16 *Ibid.*

17 Independent Task Force Report No. 70 “Defending an Open, Global, Secure, and Resilient Internet” John D. Negroponte and Samuel J. Palmisano, Chairs; Adam Segal, Project Director (June 2013) <http://on.cfr.org/13byIWY>.

3. ITU WTPF 6 Debate Issues:
- broadband connectivity;
 - Internet Exchange Points;
 - capacity building to deploy IPv6;
 - transition from IPv4
 - multistakeholderism in Internet governance; and
 - operationalizing enhanced cooperation process.

4. India's "The Centre for Internet & Society" 4 Models:

Model 1: Oversight by an Intergovernmental Organization	
Pros:	Cons:
<ul style="list-style-type: none"> • Democratizing the oversight mechanism • Giving nation-States power to enforce policy • Curtailing the power of non-State actors to make policy decisions • Making use of international law to produce accountability 	<ul style="list-style-type: none"> • Erosion of bottom-up processes • International Law is not carved in citizens' interest • Intergovernmental oversight will slow down tech processes • Promotion of traditional communications behest of internet industry • Fragmentation of global internet into national internet
Model 2: Oversight by a Hierarchical Multistakeholder Organization	
Pros:	Cons:
<ul style="list-style-type: none"> • Strengthening bottom-up processes • Control on unlimited power of nation-States • Optimum model for internet governance • Making use of international law to produce accountability 	<ul style="list-style-type: none"> • Problems in recognition of stakeholders • Failure to provide a check upon Statist power
Model 3: Oversight by an Equal-Footing Multistakeholder Organization	
Pros:	Cons:
<ul style="list-style-type: none"> • True multi-stakeholder participation • Effective checks on nation-State power 	<ul style="list-style-type: none"> • Use of unelected representatives in decision making • Allocation of votes • Failure of consensual decision-making
Model 4: Replacement of Oversight by Participatory Accountability Mechanisms	
Pros:	Cons:
<ul style="list-style-type: none"> • Don't Fix What is Not Broken Argument • Hand-in-Hand Technical & Policy Decision - Making • Need for Principles over Redistribution of Power • Best Option in Absence of Globally Agreed Principles 	<ul style="list-style-type: none"> • Influence of Jurisdiction of incorporation • Inadequacy of an Affirmation of Commitments structure • Excessive power to the technical community

Source: An Introduction to the Issues in Internet Governance, by Smarika Kumar (September 26, 2012)
<http://cis-india.org/internet-governance/issues-in-internet-governance>

The Role of the United States: What are we protecting?

The term “role of the US” encompasses not only *government* interests but also those of the *private sector* and “*civil society*” (*i.e.*, non-government organizations), which together form the “US Team.”

What the US federal government seeks

The US federal government has several goals, comprising what is often labeled “national and economic security.” The former interest typically includes international stability (“predictability”) and extends to protection of the US homeland and of US nationals (individual and corporate) abroad, while the latter involves commercial norms and, of course, revenue from business activity. “Security-related” issues, such as those discussed in connection with the Internet, tend to blur the distinction between governmental and private sector goals, which requires coordination and cooperation in identifying issues, positions and agendas.

The United States Government has articulated norms¹⁸ guiding state behavior that apply in cyberspace:

- **Global Interoperability:** States should act within their authorities to help ensure the end-to-end interoperability of an Internet accessible to all.
- **Network Stability:** States should respect the free flow of information in national network configurations, ensuring they do not arbitrarily interfere with internationally interconnected infrastructure.
- **Reliable Access:** States should not arbitrarily deprive or disrupt individuals’ access to the Internet or other networked technologies.
- **Multi-stakeholder Governance:** Internet governance efforts must not be limited to governments, but should include all appropriate stakeholders.
- **Cybersecurity Due Diligence:** States should recognize and act on their responsibility to protect information infrastructures and secure national systems from damage or misuse.

The US federal government’s actions internationally seek to balance these national and economic security interests, with various US federal agencies’ goals having focused on differentiated missions. The extent to which these agencies achieve a balance is open to discussion.

US State governments have a more parochial goal—business opportunity for companies and workers in their state and again business revenue.

18 International Strategy for Cyberspace, May 2011, at pp. 9-10
www.whitehouse.gov/sites/default/files/rss_viewer/international_strategy_for_cyberspace.pdf

What U.S. Companies Want

It is easy to posit the goals and motivations of US private sector participants in the international market space, particularly with respect to telecommunications and the Internet:

- Access to overseas markets and suppliers
- Sufficient market share to dictate standards
- Favorable regulatory environment
- Sufficient return on investment to finance R&D and new products/services
- **Maximization of profit for shareholders¹⁹**

The Role of Civil Society

Civil society often performs in the gaps where governments and companies cannot or do not want to go. For example, governments and their representatives internationally are often constrained in what they can say and to whom they can speak. Similarly, companies may not want the visibility in speaking out on issues. Non-Governmental Organizations (“NGOs”) frequently say what the others want to say, but do not, for one reason or another. Often times, the NGOs serve as a stalking horse or windsock on issues in the manner of a leading indicator. These organizations also provide an anodyne vehicle in circumstances where plain speaking would be disruptive.

Domestically, NGOs can act in an advocacy role for issues that include technology development, social consciousness, tax policy, etc. One area where NGOs might do more relates to encouraging better awareness and discussion of national priorities—because they could moderate the necessary give and take between government agencies and the business sector.

¹⁹ Beginning in the 1970s, the last item has been generally regarded as first among equals and held supremacy over the others, based on an understanding or interpretation of “fiduciary duty.” Corporate actions, *e.g.*, hiring and firing of executives, remuneration plans, stock prices, and proxy battles over control have come to support this view.

However, a *Washington Post* article on September 8, 2013, (p. G1), states: “The myth that corporations must maximize profit for shareholders badly distorts business behavior and undermines the economy.” The article continues: “this supposed imperative has no foundation in history or in law.”

The article analyzes how this “myth” has evolved and concludes that corporate control goals and conservative management approaches based on legal counsel have all combined to focus attention on short-term metrics and perspectives. The article examines other historical approaches, including a “customers first” approach. Not addressed is the corporate school of thought known as the “the Frederick Taylor” model, which gave priority to employees’ interests during the early 20th century.

The overall impact of the article, though, is to provide support for the notion of a strategic approach to corporate goals or motivations, one in which actions that might not appear to maximize profit in the near-term would in fact lead to corporate success in the long term. One such item might involve exercising leadership internationally in order to negotiate some better terms for countries and companies therein to receive some financial benefit from the Internet activities occurring within their countries. Such long-term perspective would be consistent with the generally accepted belief that “a rising tide lifts all boats.”

The overall leadership role for the “US Team” may be summarized as one of facilitating international norms and predictability, creating and maintaining opportunities for US companies to operate and expand, and working for improvements in issues affecting mankind. This latter goal directly relates to improvements in communications and the Internet, *e.g.*, technological advances, security enhancements, and greater fairness and balance in the way that business opportunities associated with the Internet are shared more broadly around the world.

The Road Ahead

The importance of the future of Internet governance cannot be overstated. It is unquestionable that the Subcommittee interviews were held at the *beginning* of a wave that none could imagine would crest so high. The topic has gone from being of interest to select specialized groups to one dominating headlines on a continuous basis worldwide.

At the fourth annual meeting on international cybersecurity cooperation held by the East-West Institute in November 2013, there was the acknowledgement that the United States has lost “ ‘leverage internationally’ to China, Russia and other countries that want to give more authority to the United Nations and governments.”²⁰ The challenge will be how to work together given the shifts in actual or perceived power.

Bruce Schneier believes “[w]e’re at the beginning of some critical debates about the future of the Internet: the proper role of law enforcement, the character of ubiquitous surveillance, the collection and retention of our entire life’s history, how automatic algorithms should judge us, government control over the Internet, cyberwar rules of engagement, national sovereignty on the Internet, limitations on the power of corporations over our data, the ramifications of information consumerism, and so on.” He further acknowledges that such complicated issues “require meaningful debate, international cooperation, and innovative solutions.”²¹

Dr. Laura DeNardis warns in *The Global War for Internet Governance* that there is a vulnerability associated with Internet governance as real as physical attacks. The often spoken of “Internet Pearl Harbor” may, in fact, not be a specific attack on the

²⁰ Joseph Menn, “U.S. power to shape global Web seen undermined by NSA spying” (November 5, 2013) <http://news.yahoo.com/u-power-shape-global-seen-undermined-nsa-spying-012457993--sector.html>: “The conference at Stanford University drew senior officials, academics and corporate officers from more than 40 countries who are working through the EastWest Institute on systems for improving collaboration on Internet security issues. But on some of the biggest issues, including the appropriate role for international bodies and privacy rights, U.S. officials were on the defensive even from their European counterparts and American company representatives, who said the loss of trust by Internet users and possible Balkanization of the Internet’s technological rules could erode economic growth.”

²¹ Bruce Schneier, “The Battle for Power on the Internet,” *The Atlantic* (October 24, 2013) <http://www.theatlantic.com/technology/archive/2013/10/the-battle-for-power-on-the-internet/280824/>

infrastructure but rather the rapid evolution of the Internet model that migrates away from free/open access and common controls to regionalized “balkanized” network that varies greatly from today’s model.

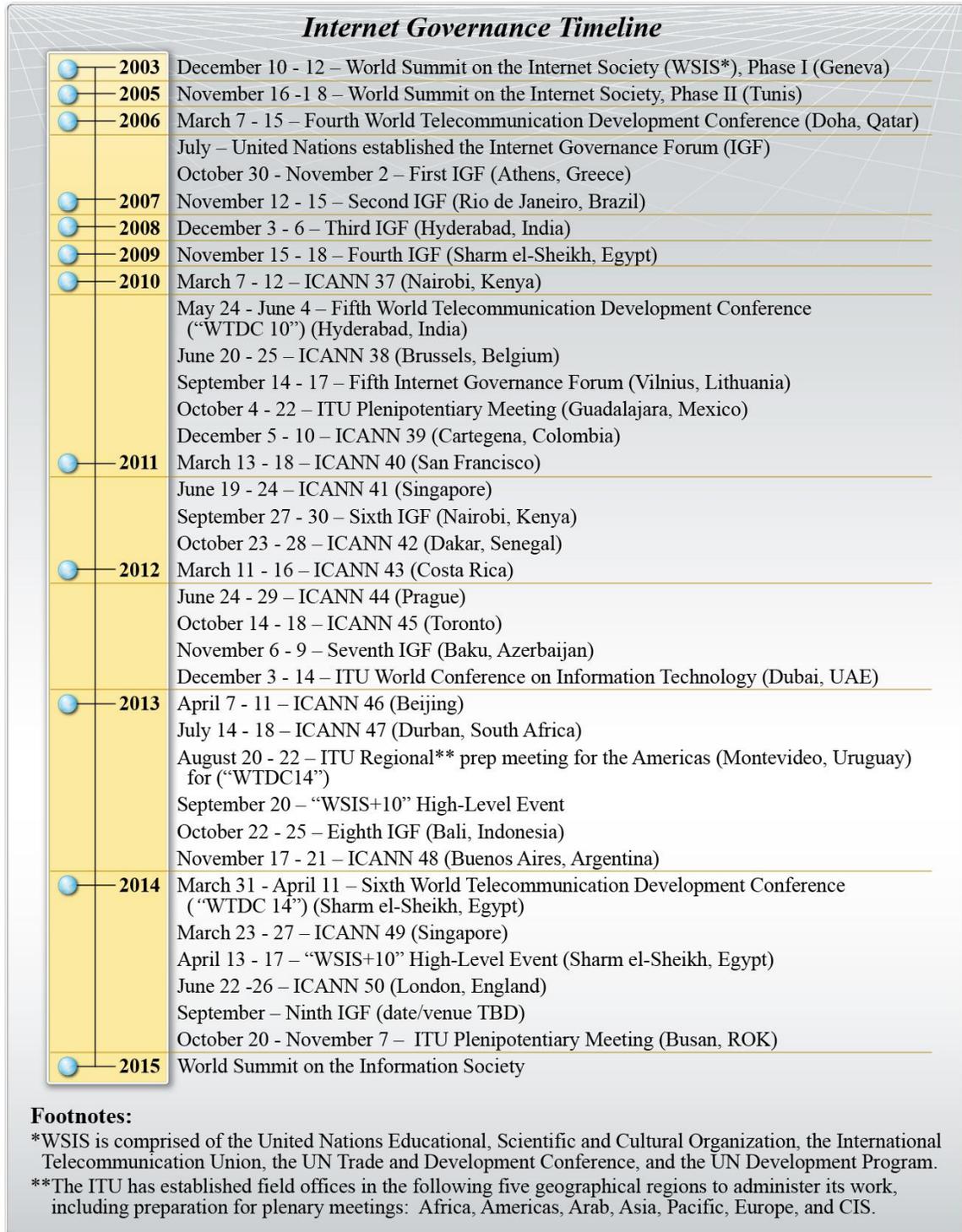
AFCEA’s Cyber Committee stands ready to support “Team USA” to address these complicated issues and be a leader in the debate, international cooperation and innovative solutions.

Conclusion: Lead, Follow or Get Out of the Way

It is apparent that a cascading series of international summits, plenipotentiary and fora events that start in 2014 through 2015 are intended to refine Internet governance as we know it. The global balance of Internet power and leadership is the central focus for these highly public events. Both developed and less developed countries alike have begun building negotiation teams up to 50+ persons strong to prepare for these seminal discussions that could well lead to binding recommendations. The leadership void that appears to have been created without direct U.S. engagement opens the opportunity for less altruistic nations to fill this void using their geopolitical agendas. Considerable preparation and continuity are required to build the important policy positions that need to be advanced in these meetings plus a strategy for “selling” these concepts across a base of supporting countries. Countries such as France and Canada have mobilized their teams and have started to build consensus and voting blocks to ensure the results they seek.

Perhaps it is due to our present highly diffused model for US Internet governance, public policy and regulations but there appears to be little organized efforts by and on behalf of the United States to participate in these public events to constructively manage the evolution of the Internet governance model. Nations globally have an expectation of an evolved business model where the economic gains that currently favor US brands will move to a model that shares the financial advantages of the Internet more equitably. Many would describe the need for a fairer business model. It should be a “given” that the current model will have to change with the probable outcome that some would say will disadvantage the US. For this reason it is imperative that a US team and appropriate strategy emerge to prepare and promote the US position. Yet there appears to be no effort or leadership in this area within the present Administration. The debate that started as early as 2003, with allegations of foreign attempts to commandeer the Internet governance seems, upon closer scrutiny, to be a story of the US vacating its natural leadership role. US delegations have neither presented a consistently solid case for leadership nor have they offered an inspirational, maturing model that delivers benefits to a broad set of countries and participants. The US is perceived as perpetuating the current uneven model and therefore has created reasonable doubt whether it is capable of taking the larger leadership role that up to now has been de facto granted to us. There is a

decided call to evolve the international model and the US has to decide *to lead, follow or get out of the way.*



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