

## **THE ITU TREATY NEGOTIATIONS: A CALL FOR OPENNESS AND PARTICIPATION**

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### ABSTRACT

*The International Telecommunication Union (ITU) is renegotiating its treaty with the 193 countries of the world, and it hopes to expand from the telecommunications arena into the Internet. However, there's one major problem with this shift in mandate: The ITU is a closed organization and has been for nearly 150 years. The ITU's rules and processes may have worked for the old state-run telecom monopolies, but they cannot work in regulating the Internet, where standards have been developed in an open manner since its inception. Thus, in order to gain legitimacy with the Internet community, the ITU will need to (1) open its processes for review and comment by civil society, academics, the private sector, and the public; (2) make its TIES database freely and publicly accessible for review and comment; and (3) allow multistakeholder participation in developing standards and protocols, particularly where other groups (like the IETF) are actively developing standards.*

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## INTRODUCTION

In this paper, we offer a high-level discussion of the attempts of the International Telecommunication Union (ITU) to broaden its mandate into matters related to the standards and protocols governing the Internet. Along those lines, we argue that the ITU is not well-suited to an expansion of its current telecommunications mandate. As we will show, the ITU is a closed institutional body that has not established its credibility in the open multistakeholder discourse that has marked Internet governance since its inception.

It won't come as a surprise to many that there is a perception around the world that governance of the Internet—the assignment of names and numbers, the rules of the road for the routing of packets, and the general policy-setting for Internet matters—is an American affair. The historical basis of this viewpoint isn't entirely inaccurate since the Internet began in the United States, and until the late '90s the U.S. government handled all Internet address assignments globally. In 1998, the Internet Corporation for the Assignment of Names and Numbers (ICANN) was formed in part as a way to internationalize Internet governance.<sup>1</sup> While largely independent from the U.S. government, ICANN is a California-based non-profit that nonetheless regulates certain Internet resources. However, the Internet Assigned Numbers Authority (a department of ICANN), operates under a contract awarded by the U.S. Department of Commerce—perpetuating the perception of continued U.S. influence.<sup>2</sup> Although ICANN's governance continues to become more international, many world powers such as the BRIC countries—Brazil, Russia, India, and China—and other countries such as Syria and Iran want to further distance the United States from Internet governance.<sup>3</sup> What's clear is that many countries would like to expand the role of the United Nations (UN) to encompass Internet regulation.

*A. What Is the ITU, and What Are Its Roots?*

Perhaps not coincidentally, a specialized body within the UN—the ITU—is tasked with expanding its powers this year, culminating in a treaty conference that will be held in Dubai in December 2012. Most people

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<sup>1</sup> See the ICANN website, available at <http://www.icann.org/en/about/welcome>.

<sup>2</sup> Kevin Murphy, *NITA says ICANN "does not meet the requirements" for IANA renewal*, DOMAIN INCITE, March 10, 2012, available at <http://goo.gl/jZ3EN>.

<sup>3</sup> See Bryan Holland, *Iran or China in Charge of the Net?* SOUTH ASIA MAIL BLOG, available at <http://southasiamail.com/blog/iran-or-china-in-charge-of-the-net>.

probably don't realize that the ITU was founded in 1865, making it one of the oldest continually functioning international organizations in the world.<sup>4</sup> In 2004, Booz Allen Hamilton called the ITU "a story of organizational resilience and institutional endurance against all odds,"<sup>5</sup> naming it one of the world's top ten most stable institutions.

Since 1865, the ITU has played a critical role in global standardization efforts. When the ITU started its work in telegraphy—the exchange of electrical pulses, long before voice telephony—it would have been impractical for two people to communicate with each other without some basic standardization process in place. Imagine, for example, if a German company built a system in the 1800s that relied on one specification for voltage and an American company built a system that relied on a different specification. Put simply, a lack of coordination in international standards for electronic pulses would have been dangerous, as interoperable systems would have caused electrical fires and shorts. We now take it for granted, but dialing the prefix +32 to route a phone call to Belgium is a major success story. Standards pervade our lives, and while it may seem unusual that American light bulbs don't fit in European sockets, it's thanks to standards that light bulbs are *not* internationally interoperable because of the electrical fires that could occur (particularly in the early days of light bulbs) if an unwitting consumer were to plug a 110 volt light bulb into a 220 volt socket.<sup>6</sup>

Fast forward to the present day, and it's perhaps unsurprising that the ITU is attempting to expand its regulatory authority from electrical pulses in telegraphy to the Internet. The ITU's current constitutional mandate is limited to *telecommunication* activity,<sup>7</sup> and modifications to the International Telecommunication Regulations (ITRs) are required before the ITU can become active in the *Internet* space.<sup>8</sup> To that end, the aforementioned treaty conference set for December of this year aims to redefine the ITU's mandate to include the Internet through revision of the

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<sup>4</sup> Fred H. Cate, *Global Information Policymaking and Domestic Law*, 1 IND. J. GLOBAL LEGAL STUD. 467, 469 (1994).

<sup>5</sup> Booz Allen Hamilton, *The World's Most Enduring Institutions*, available at <http://www.boozallen.com/media/file/143411.pdf> (tracking the ITU's history from 1865 to the present).

<sup>6</sup> The International Electrotechnical Commission (IEC) sets international standards for most appliances and other electrical and electronic technologies. The IEC works on compatibility with the International Standards Organization and the ITU, where appropriate. See *About the IEC*, available at <http://www.iec.ch/about>.

<sup>7</sup> Constitution of the International Telecommunication Union Ch. 1. Art. 1(1)(a), stating that its purpose is "to maintain and extend international cooperation among all its Member States for the improvement and rational use of telecommunications of all kinds." ITU documents are available at <http://www.itu.int/pub/S-CONF-PLEN-2011/en>.

<sup>8</sup> There are four (4) international treaties that comprise the international operating authority for the ITU: its Constitution, the Convention, the Radio Regulations, and the International Telecommunication Regulations. See Basic Texts of the ITU, available at <http://www.itu.int/net/about/basic-texts/index.aspx>.

ITRs.<sup>9</sup> On the surface, such revision may seem to make sense, but upon further examination it becomes clear that the ITU's closed telecommunications model is not ready to be adapted to the Internet. As Richard Whitt has pointed out, the Internet's "layered system" is regulated in vertical silos (*e.g.*, information services, telecommunications, and video), though it has been designed in horizontal layers (*e.g.*, link layer, Internet layer, transport layer, and application layer). The resulting inelegant matrix can be exploited by regulators. For example, the ITU has claimed that some technologies fall in the "telecommunication" stack and their resulting standards compete with those developed by other open standards-setting organizations (we'll discuss this topic in greater detail below).<sup>10</sup>

### *B. A Call for Openness*

This essay's primary claim is that the ITU is a closed organization and that it must make significant structural reforms (likely to take several years) before it can have any relevancy in the Internet. This essay will *not* assess the relative wisdom of the different proposals for ways in which the ITU's mandate could be expanded to cover the Internet. In fact, such assessments are impossible because the proposals themselves are wholly absent from public scrutiny. We instead will examine the ITU's institutional capacity to take on any regulatory authority over matters of Internet governance. As we will point out, the very fact that the treaty conference will take place largely without input from academics, civil society, and representatives from the private sector should raise red flags regarding the future of the Internet.

To be clear, it's the mode of regulation—what has come to be known as the "multistakeholder" Internet governance model—that is objectionable to the ITU and many of its member nations. And in the past this governance disconnect has resulted in Internet community pushback against the ITU. Only after considerable diplomatic efforts were previous ITU takeover attempts of Internet governance thwarted. Indeed, the ITU has formally resolved to insert itself into the process with ICANN, IETF and others "in order to increase the role of ITU in Internet governance so as to ensure maximum benefits to the global community."<sup>11</sup> To quote from *The*

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<sup>9</sup> A *Plaything of Powerful Nations*, THE ECONOMIST, October 1, 2011, available at <http://www.economist.com/node/21530955> (providing a simple but accurate overview of the treaty conference).

<sup>10</sup> See Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Communications Public Policy Framework Based on the Network Layers Model*, 56 FEDERAL COMMUNICATIONS L.J. 587 (2004) (describing the layers of the Internet and proposing various models for regulating them).

<sup>11</sup> ITU Resolution 180 (Guadalajara, 2010) available at <http://goo.gl/FNATS>

*Terminator*, when Arnold Schwarzenegger was unable to gain entrance into a secure building, he famously declared, “I’ll be back.”<sup>12</sup>

So exactly how is the ITU attempting to expand its mandate? To begin, it’s known that various preparatory groups, called “Council Working Groups,” have been meeting for more than 18 months, but other than synopses and summaries, little, if any, primary-source information on these meetings or the substance of the proposals has been released. As described in a letter signed by more than 30 representatives from academia and civil society,

[T]here has been scant participation by civil society in the Council Working Group’s preparatory process for the WCIT so far, even as media reports indicate that some Member States have proposed amending the International Telecommunication Regulations to address issues that could impact the exercise of human rights in the digital age, including freedom of expression, access to information, and privacy rights. Under the current process, civil society participation is severely limited by restrictions on sharing of preparatory documents, high barriers for ITU membership (including cost), and lack of mechanisms for remote participation in preparatory meetings.<sup>13</sup>

This call to action is being picked up by others—for example, the public-interest group Access Now has launched a petition that asks for openness and transparency.<sup>14</sup> It’s not only the ITU’s treaty-making process that is closed. For many years, the ITU itself has established standards and set rules through a government-to-government process that has had limited involvement by the private sector (involvement is limited in practice, even if not by statute, to companies in the telecommunications’ value chain). Traditionally, the ITU has publicly shared its rule-making processes only with participating governments and “sector members.”

There’s a lot that we could write about the future of the Internet and Internet governance. However, in this paper we will limit ourselves to the

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<sup>12</sup> Many will remember the famous scene in *The Terminator* (1984) where Schwarzenegger was denied access to a secure building. He declared “I’ll be back,” then drove a car through the entrance. For a clip, see <http://www.youtube.com/watch?v=soYDuaurNKY>.

<sup>13</sup> Open letter to ITU Sec. Gen. Hamadoun Touré and CWG Chair Alexander Kushtuev dated May 17, 2012, available at [https://www.cdt.org/files/pdfs/Civil\\_Society\\_WCIT\\_Letter%20.pdf](https://www.cdt.org/files/pdfs/Civil_Society_WCIT_Letter%20.pdf).

<sup>14</sup> Access Now petition, available at <https://www.accessnow.org/page/s/itu> (16,079 signatures as of June 4, 2012).

following argument: The ITU is ill-suited to governing Internet standards. Its hierarchical, non-participatory structure is not consistent with the history of the Internet's development or the continuation of the open Internet. Because of the ITU's closed nature, the eventual expansion of the ITU's authority from telecommunications to the Internet could damage the future of Internet innovation, which historically has resulted from open processes. This paper will also suggest broad institutional reforms that would have to be undertaken at the ITU before it could manage such efforts effectively.

#### I. THE ITU AND THE INTERNET: WHY DOES THE ITU CARE?

Before attempting to analyze the ITU's suitability to wrest control of Internet governance, it first makes sense to answer the following question: Why does the ITU even want to regulate the Internet in the first place? Views posited by commentators over the years<sup>15</sup> can be summarized as follows:

1. ***The ITU wants to remain relevant.*** As telecommunication services have migrated from traditional networks to the public Internet, the ITU's range of influence has decreased. Domestic telecommunications regulators around the world are engaged in a similar existential struggle. Put plainly, when your job is to regulate phone networks and fewer and fewer people use traditional phones, you matter less.
2. ***Many UN member states dislike or mistrust the open Internet.*** Some countries support efforts that would bring the Internet more strongly under government control—in this case, under an international governmental body. The reason is simple. As has been well-documented, the open Internet has become a critical tool for the dissemination of information, including unauthorized news sources, citizen journalism, innovative culture, and free expression generally. Because the Internet is not as susceptible to direct censorship as state-sanctioned newspapers and television, it represents a threat to state control over communication platforms.
3. ***Some UN member states distrust the United States.*** Some member states resent the way the U.S. government continues to exercise oversight and control over certain Internet resources, like the

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<sup>15</sup> Many books and papers have been written on this subject. For a good reading list published as part of a course syllabus at the Oxford Internet Institute, see Malte Ziewitz, *Internet Governance & Regulation Reading List* (2008), available at <http://goo.gl/zdaJg>.

perception of control over the “root servers.”<sup>16</sup> Additionally, the U.S. government clearly sent an implication that it controls ICANN by holding hearings over the .xxx domain, even though the U.S. government didn’t actually act, it sent a message that was perceived by the world that it *could*.<sup>17</sup> And further, the U.S. government does itself no favors by flouting this power when it seizes the domain names of non-U.S. entities—sometimes even without due process of law—merely because the domains are registered with, or resolved by, U.S. companies.<sup>18</sup>

4. ***The Internet needs to be more secure.*** For the Internet to continue to thrive and remain a reliable backbone of commerce and innovation, it needs to be safe, stable, and secure. Some may argue that only a legitimate governmental body can provide sufficient oversight to ensure that safety, stability, and security. We disagree with this assertion and would instead argue that proposals for bolstering Internet security must take place through an open, participatory process rather than by government representatives without outside representation.
5. ***Some governments want a one-stop shop.*** Finally, many countries would prefer that a central authority address and resolve Internet issues, much in the way the ITU regulated telecoms. They consider the ITU to be among the stakeholders helping manage the Internet, playing a consultative role, and advising on policies, such as the host of advice available through the ITU’s program that advises developing countries, ITU-D.<sup>19</sup>

These are a few reasons why the ITU might be interested in regulating more aspects of Internet governance and standardization. As we will

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<sup>16</sup> See MILTON L. MULLER, *RULING THE ROOT*, MIT PRESS (2002). Also see Kim Davies, *There are not 13 root servers*, ICANN BLOG, Nov. 15, 2007 available at <http://blog.icann.org/2007/11/there-are-not-13-root-servers/>.

<sup>17</sup> The exchange of letters between Neelie Kroes (European Commission) and the Dept. of Commerce/NTIA is instructive and often cited by civil society outside the U.S. The letter exchange shows two things: (1) there’s an implication from Europe that NTIA can change or influence the ICANN decision, and (2) Strickling’s response showed governmental restraint: “we respect the multi-stakeholder Internet governance process and do not think that it is in the long-term best interest of the United States or the global Internet community for us unilaterally to reverse the decision.” However, the implication in the international community is that the U.S. government could take action on ICANN to reverse the decision (Strickling did not say that the U.S. couldn’t do what was asked, only that it’s not in the long-term interest to do so). This is not something that sits well internationally. See *Kroes letter to Locke*, .NXT, available at <http://goo.gl/D6fGg>; Also see *Strickling letter to Kroes*, .NXT, April 20, 2011, available at <http://goo.gl/fakkw>.

<sup>18</sup> The *Rojadirecta* case that Mark Lemley has been discussing publicly (Lemley represents Rojadirecta) is one example. See Mike Masnick, *Feds Tie Themselves in Legal Knots Arguing For Domain Fofeiture in Rojadirecta Case*, TECHDIRT, May 16, 2012, available at <http://goo.gl/PtSH4>.

<sup>19</sup> See ITU-D Mission, available at <http://www.itu.int/ITU-D/information/aboutbdt.html>.

describe further, however, there are significant institutional reasons why the ITU is not well-situated to take on regulation of the Internet.

*A. The ITU Is Mostly Made Up of Governments—and the Internet Is Made Up of Much More Than That*

Even though the ITU isn't officially in the business of Internet standards management, it has nonetheless taken advantage of the inefficiencies of traditional regulatory silos and its current mandate in telecommunications to develop some competing standards with other organizations. As a result, the ITU is increasingly under attack by the press and civil society because it is so closed. For example, in a recent article in *Vanity Fair*, Michael Gross concluded that one of the top areas of interest for the ITU will be privacy and cybsersecurity, because "Authoritarian governments want to tie people's real names and identities to online activity, and they want international law to permit national encryption standards to allow government surveillance."<sup>20</sup> There are more than a few reasons to be concerned about the ITU's work in this arena, and it may be valuable to assess whether the ITU has a structure fit for Internet governance. Let's take a moment to examine what the ITU currently does and how it invites participation from the community.

The ITU's website, [www.itu.int](http://www.itu.int), contains a considerable amount of information. As stated on the site, "more than 1,100 [documents are] freely available,"<sup>21</sup> and "[c]urrently the general public can take advantage of unlimited free PDF downloads of most 'in-force' ITU-T [standards-setting] Recommendations and all ITU-R [radiocommunications and wireless] Recommendations."<sup>22</sup> Open access to these Recommendations (the ITU's word for "standards") is a positive change from even a decade ago, when interested persons and organizations first needed to purchase ITU publications in order to view them. Even well-funded satellite providers that depend on the ITU for orbital placement and spectrum policy were known to complain about this requirement.<sup>23</sup>

However, the availability of information on the ITU's website is somewhat deceiving, as the ITU is still a relatively closed club. Although the Internet Society (ISOC) and groups like the International Engineering Task Force (IETF) have a voice at the ITU, the ITU's rules prohibit ISOC

<sup>20</sup> Michael J. Gross, *World War 3.0*, VANITY FAIR, May 2012, available at <http://goo.gl/MldR8>.

<sup>21</sup> ITU-T website, available at <http://www.itu.int/en/ITU-T/publications/Pages/recs.aspx>.

<sup>22</sup> ITU website, available at <http://www.itu.int/en/publications/Pages/default.aspx>.

<sup>23</sup> Gerry Oberst, *Satellites in the Internet Governance Arena*, VIA SATELLITE, November 1, 2004, available at [http://www.satellitetoday.com/via/globalreg/Satellites-In-The-Internet-Governance-Arena\\_301.html](http://www.satellitetoday.com/via/globalreg/Satellites-In-The-Internet-Governance-Arena_301.html).



or any other organization from sharing publicly, posting, or inviting outside comment on the ITU documents exchanged through any working group. While the ITU's *completed* standards are now often freely available, what really matters is the ability to be heard and to be effective in setting policies *before* they are published. As it stands, only government representatives or paying sector members can provide input, influence, or even track the standards-setting processes while they are underway.<sup>24</sup> For all intents and purposes, civil society, the public, academics, and others are shut out. Key stakeholders thus have to wait until the processes are complete before they can learn about them. Said another way, by the time a standard has been adopted by the ITU, it's *fait accompli*.

The ITU does, however, permit membership by paying companies. As such, the right to participate in ITU standards setting is limited to governments and paying corporate members. As things stand today, these members are primarily telecommunication infrastructure providers and the equipment manufacturers that provide the devices, wires, and other media that transmit signals. In Internet jargon, these are the organizations that operate in the “lower stack” (physical layer) of the Internet.<sup>25</sup>

That said, companies providing services at the applications layer are not represented. These are the companies many users think of first when they think about the Internet—Google, Twitter, Tumblr, Facebook, Yahoo!, Apple, Amazon, Dailymotion, Blizzard, Netflix, and so on. These companies have historically participated in open, participatory processes like those at the IETF, W3C, ICANN, and national standards-setting groups. While these companies are not excluded *de jure* from the ITU, to require them to participate now at the ITU would necessarily imply a shift of resources from the open standards-setting groups that led to the promotion of open standards (most notably, the IETF).

To be fair, it's not that these Internet companies couldn't adapt. After all, the Internet is increasingly regulated by many agencies, and participation in the ITU may seem like a logical next step. However, it doesn't seem reasonable to *demand* that Internet companies “pay up” as the only means of gaining access to and influencing the processes of this international body. Moreover, even without considering users, academics,

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<sup>24</sup> ITU website, available at <http://www.itu.int/en/Pages/copyright.aspx>. As stated on the website, “ITU holds copyright in the information available on this Web site, unless otherwise stated. Copyright in any third-party materials found on this Web site must also be respected. Request for permission to reproduce the ITU materials available on this website should be sent to [jur@itu.int](mailto:jur@itu.int).”

<sup>25</sup> See Whitt, A Horizontal Leap Forward, *supra* at 8.

and civil society groups, it's apparent that the ITU currently does not solicit decision-making input from many critical Internet players.

So what exactly do private companies need to pay to join the ITU? ITU sector membership costs about 63,000 CHF (approximately \$68,167 USD).<sup>26</sup> Even at that cost, membership fees account for only about 13% of the ITU's overall budget—the remaining budget is covered by payments from member states.<sup>27</sup> While state governments sometimes open their delegations to private-sector members, for the most part only government actors and companies in the telecommunications sector (telco providers, equipment providers, and other suppliers) play an active role in ITU decision-making. Furthermore, while it's theoretically possible for many large Internet companies to join the ITU by paying the sector membership fee, that fee does not reflect the true cost of ITU membership.

In fact, annual dues are only a small part of the overall overhead required, particularly when taking into consideration the internal resources required to staff ITU events and travel internationally to attend those events. Without question, large companies like Google and Facebook would have little difficulty finding the financial resources to participate in the ITU. However, engineers and members of the technical-academic community would certainly have a harder time participating in the standards-setting process at the ITU in the same way they participate openly in Internet standards setting at organizations like the IETF, IEEE, and even ICANN.<sup>28</sup> (The open, participatory Internet standards-setting model of the IETF is well-documented and stands in juxtaposition to the ITU processes.) Individuals can, of course, participate indirectly through ISOC, which is a member of the ITU and represents the IETF, but this workaround seems unnecessarily convoluted to replicate further. Moreover, the ITU hasn't yet established a track record for standards development in the "upper stack" where applications and software are developed.

As it turns out, *almost all* international telecommunications companies have representation at the ITU and are active as sector members.<sup>29</sup> This isn't meant in any way as a criticism of

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<sup>26</sup> In 2012, sector membership is 63,000 CHF per year (approximately \$68,167 USD). See ITU website, Financial Contribution for Membership, available at <http://www.itu.int/en/ITU-T/membership/Pages/cost.aspx> (last visited March 27, 2012). Fractional membership rates are apparently available to some extent as well.

<sup>27</sup> Don MacLean, *The Quest for Inclusive Governance of Global ICTs: Lessons from the ITU in the Limits of National Sovereignty*, 1 INFORMATION TECHNOLOGIES AND INTERNATIONAL DEVELOPMENT 1, at 15, FN 23 (2003), available at <http://goo.gl/D5PjS>.

<sup>28</sup> ICANN has a robust place in its institutional structure for a panoply of stakeholders: governments, corporations, civil society groups, IP-rights holders, and others.

<sup>29</sup> As of March 26, 2012, the ITU had 544 sector members, 168 associate members, and 38 members from

telecommunications sector participation in the ITU's processes—after all, many of the telephone companies of the world are responsible for building the infrastructure that the Internet uses. There are two very good reasons for the telecommunication sector's continued influence at the ITU: (i) it's a matter of tradition, because until the 1990s most telecommunications companies worldwide were state-run and joined the ITU through their state delegations, and (ii) the standards set by the ITU have a profound impact on their businesses, and they want to have a voice.

Still, it stands to reason that no true system of governance can claim to represent the Internet ecosystem if the voting community consists almost entirely of infrastructure owners. The lack of representation by civil society, however, is just as problematic, if not more so, than the lack of representation by key “upper stack” stakeholders. Of course no one will cry a river of tears for the big Internet companies, particularly in the wake of the monster valuations that they command (*e.g.*, the recent Facebook IPO brought more than \$100B from investors). Large Internet companies like Google certainly have the personnel and the budgets to cover the ITU's direct and indirect membership costs. However, the Internet's growth has been largely shepherded by small, innovative startups and by “civil society,” groups of non-governmental actors that represent the broader public interest and act as an important counterbalance to private-sector interests. As just one example, the Electronic Frontier Foundation (EFF) has mounted dozens of cases that protect Netizens' civil rights on the Internet.<sup>30</sup>

Civil society understandably wants a voice in ITU rule-making processes. Currently, ISOC is one of the most vocal civil society participants. A relatively well-funded organization, ISOC was established to help educate a broad base of constituents on the importance of the Internet and to foster collaboration among standards-setting organizations.<sup>31</sup> As we write this paper, ISOC is tracking and reporting on the status of ITU processes to the extent such efforts are possible.<sup>32</sup> While it's perhaps not cost-prohibitive for an impressive organization like ISOC to maintain a consistent ITU presence, ISOC still can't protect the rights of global civil society on its own. Indeed, civil society is a complex, ever-expanding group of the Internet ecosystem, and their voices differ widely around the

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academia. See <http://www.itu.int/en/membership/Pages/sector-members.aspx>.

<sup>30</sup> See Wikipedia, List of Litigation Involving the Electronic Frontier Foundation, available at [http://en.wikipedia.org/wiki/List\\_of\\_litigation\\_involving\\_the\\_Electronic\\_Frontier\\_Foundation](http://en.wikipedia.org/wiki/List_of_litigation_involving_the_Electronic_Frontier_Foundation).

<sup>31</sup> See Vint Cerf, *et. al.*, *Announcing the Internet Society*, ISOC, 1992, available at <http://goo.gl/3q2Jw> (describing the charter of ISOC, which is, in part, “[t]o provide a forum for exploration of new Internet applications and to foster collaboration among organizations in their operation and use of the Internet”).

<sup>32</sup> See generally the ISOC website, section on the ITU, available at <http://goo.gl/VLYJy>.

world. These other members deserve a voice in Internet governance just as much as ISOC does, and it's unfair to saddle groups that don't have such funding (such as groups in India, Latin America, and Africa) with the cost and bureaucracy of the ITU just so they can join the conversation.

That's why other branches of civil society are starting to make their voices heard. As Cynthia Wong of the Center for Democracy and Technology states, "A crucial first step is to ensure that the negotiation process is transparent - starting with publication of treaty proposals and working documents. Civil society should also petition their governments to create a process at the national level to collect public input."<sup>33</sup> As described in greater detail below, civil society has quite a task ahead of it, as the ITU's treaty-making process is closed, largely based on the ITU's long-standing system for setting standards in telecommunications.

### *B. Control of TIES*

In order to gain greater insight into the nature of the ITU's closed system, a further analysis of its document-exchange system is in order. Ongoing ITU procedures and processes are tracked through a system called the Telecommunication Information Exchange Service (TIES). To access TIES, an interested party must either be accredited as a state representative (i.e., a member of government), a sector member (typically part of the telecommunications supply chain), or an academic (through separate application and approval on an individual basis for designated academic purposes). At present, it's unclear how or if the application process for academics works. As a matter of anecdote, author Patrick Ryan unsuccessfully attempted to obtain ITU access on three occasions: (i) in 2003, while a full-time PhD researcher at the University of Leuven, (ii) again in 2005, while at the University of Colorado in a role as Faculty Director of the Interdisciplinary Telecommunications Program, and (iii) more recently in a role as an adjunct professor. On all three occasions, the author's inquiries did not result in any grant of access from the ITU. Theoretically, limited-access TIES "guest accounts" can also be created. However, as the ITU explains, "guest accounts have access only to public resources (for example, newsletter subscriptions)."<sup>34</sup> Guest accounts provide little access to information and thus little value.

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<sup>33</sup> Cynthia Wong and Emma Llanso, *ITU Move to Expand Powers Threatens the Internet: Civil Society Should Have Voice in ITU Internet Debate*, CDT Blog, March 12, 2012, available at [https://www.cdt.org/files/pdfs/CDT-ITU\\_WCIT12\\_background.pdf](https://www.cdt.org/files/pdfs/CDT-ITU_WCIT12_background.pdf). See also Cynthia Wong, *As ITU Eyes the Internet, Where Is Civil Society?* CDT Blog, March 16, 2012, available at <https://www.cdt.org/blogs/cdt/1603itu-eyes-Internet-where-civil-society>.

<sup>34</sup> "What Are TIES and Guest Accounts?" ITU website, available at <http://www.itu.int/net/itu->

### C. The ITU Has a Long History of Embracing Closed Models

The telecommunication companies of today are very different than the telecommunications companies of yesteryear, which were steeped in a vastly different tradition. However, it's valuable to compare the functioning of past and present telecommunications companies with that of the ITU. As a historical matter, for the first 150 years of the ITU the telecom industry developed mostly through state-run Postal Telephone & Telegraph (PTT) businesses.<sup>35</sup> In other words, the telecom industry inherited a closed tradition because in most countries they were state-sanctioned monopolies operating "essential facilities" for the citizens. In the old world of the PTTs, all of the telephone networks were proprietary, so it didn't matter much that the standards-development process was closed to outsiders. In fact, the ITU was initially set up to manage interconnection among the PTTs, and it wasn't uncommon for PTTs to run a different protocol inside their own "walled garden."<sup>36</sup> As seen by the examples of work done at Bell Labs or Xerox Parc, until the 1990s it was common for all kinds of development to be "closed" rather than "open," and the ITU was simply a reflection of that model—common in that period of time.<sup>37</sup>

In order to appreciate the history of the outmoded, closed model at the ITU, it's helpful to understand how the telcos were *forced* open in spite of their desire to remain closed. Similarly, the ITU might need to be forced open today. As an illustration of how this change happened in the United States it may be useful to look back to the 1956 U.S. case of *Hush-A-Phone v. United States*.<sup>38</sup> Here, an independent company produced a non-electrical attachment that could be mounted to a telephone receiver to help shield outside noise. In today's world, this device would have constituted an "over-the-top" product augmenting the underlying telephony product. At the time, AT&T was extremely concerned about any innovation that might compete with the devices it marketed and initially blocked the sale of the

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[t/info/answers.aspx?Fp=Default.aspx&Qn=62](http://info/answers.aspx?Fp=Default.aspx&Qn=62).

<sup>35</sup> ELI NOAM, TELECOMMUNICATIONS IN EUROPE, 3 (Oxford Press, 1992).

<sup>36</sup> The "walled garden" is often used in technological contexts to describe a closed network that is tightly controlled by its operator. One of the original examples is America Online, which was both an Internet Service Provider (ISP) and a closed network that attempted to provide a full suite of offerings (e.g., news, email, chat, and games) within its virtual "walls." See *America Online, Pricks and Kicks*, THE ECONOMIST, Aug 12, 1999 available at <http://www.economist.com/node/231992> (describing AOL's strategy, quite successful in 1999, since "Almost three-quarters of AOL members' time, and nearly 40% of the time that all Americans spend on the web, is spent within AOL's walled garden of content and services").

<sup>37</sup> See Jon Gertner, *True Innovation*, NEW YORK TIMES, February 25, 2012, available at <http://goo.gl/NxtvR> (describing the virtues of the previous closed model at places like Bell Labs and comparing it with today's Internet approach to innovation).

<sup>38</sup> *Hush-A-Phone v. United States*, 238 F.2d 266 (D.C. Cir. 1956).

device. The Federal Communications Commission agreed with AT&T that the Hush-A-Phone device was a “foreign attachment,” making it illegal for the device to be marketed and sold on the proprietary, closed telephone system.

Happily, however, the Washington D.C. Circuit Court of Appeals took a different view, noting that the attachment “does not physically impair any of the facilities of the telephone companies.”<sup>39</sup> So, what is the point and relevance to the ITU? *Hush-A-Phone* shows how hard traditional telcos fought to protect their networks from any invasion—even the innocuous product in *Hush-A-Phone*, a plastic cup mounted to a receiver. The same kind of fight is taking place at the ITU. To put things into perspective, *Hush-A-Phone* was decided more than 90 years after the founding of the ITU, meaning that the closed paradigm of telephony was entrenched in a closed model. It took a court of law to break into that system in the United States, and it required another thirty years in Europe before the PTTs were privatized in the ‘80s.

While change has certainly occurred in the United States and Europe, many state-run telcos are struggling with the previous model. Many of today’s modern telecommunications companies are very different than those that existed 60 years ago at the time *Hush-A-Phone* was decided. In many ways, the ITU is the protectorate of the *status quo*. If we look now to the proponents of ITU regulations—countries such as China, Russia, India, Syria, and Iran—we can reasonably infer that telecommunications companies from these countries probably lack open, participatory cultures. Said another way, the telecommunications companies that operate in these economies are often heavily influenced by and connected to state efforts, just as AT&T was in the 1950s.<sup>40</sup>

## II. OPEN VS. CLOSED PROCESSES

Many of the standards and protocols on which the Internet operates are set by the IETF, an open, volunteer-based standards-setting environment without any formal corporate “personality,” where engineers have developed the core functionality that enables packets to transfer throughout

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<sup>39</sup> *Id.*, at 267.

<sup>40</sup> There are still several large state-owned telecommunication networks. For example, state-owned China Telecom is state-owned and is the largest fixed-line provider in the People’s Republic of China. See [http://en.wikipedia.org/wiki/China\\_Telecom](http://en.wikipedia.org/wiki/China_Telecom). The telecommunications companies in many developing states in Africa continue to be government controlled as well (or at least the government remains a large shareholder). A UN report from 2000 discusses privatization efforts that are still fraught with controversy. See Ernest Harsch, *Privatization Shifts Gears in Africa*, AFRICA RENEWAL, April 2000, available at <http://goo.gl/D1nma>.

the Internet. All IETF designs are freely accessible, and all IETF processes are published in their entirety on the Internet.<sup>41</sup> If anything, reading the IETF website can be a bit onerous, if only because it might feel like there's *too much* information available. Notably, the publications are all available and readable in any format, and anyone, anywhere, can participate in the IETF process. As Harald Alvestrand describes, the IETF depends on an entirely open process, which means that

any interested person can participate in the work, know what is being decided, and make his or her voice heard on the issue. Part of this principle is our commitment to making our documents, our [working group] mailing lists, our attendance lists, and our meeting minutes publicly available on the Internet.<sup>42</sup>

If members of the IETF community determine that an engineer's ideas have value, those ideas are adopted and incorporated into the Internet's suite of standards. Ideas that are dated or counterproductive, on the other hand, fester and fail. By contrast, the ITU relies entirely on appointments by governments and formal committees, following the worldwide development of standards under the PTT model.

#### *A. Examples of Closed Processes*

Closed models of standards development are problematic, both not at the ITU and elsewhere in the Internet's ecosystem. In this section, we'll review a few examples of closed standard developments that also have policy implications.

##### 1. The MPLS Dispute

At present, there is a debate afoot in the standards-setting space that pits the ITU against the IETF in the area of packet labeling—essentially, the Internet's version of putting an address and identifier on something that is being sent through the web. For a mechanism as fundamental as Multiprotocol Label Switching (MPLS), which handles packet labeling on the Internet's backbone, multiple systems could create multiple Internets. The IETF has traditionally driven the standards-setting work in this space, but about a decade ago the ITU announced its intention to compete with the

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<sup>41</sup> Harald Alvestrand, *A Mission Statement for the IETF*, RFC 3935, available at <http://www.ietf.org/rfc/rfc3935.txt>.

<sup>42</sup> *Id.*

IETF's efforts. In 2002, a little more than twenty years after MPLS was first proposed, the ITU *informed* the IETF that the ITU would be undertaking further development of the MPLS standard.<sup>43</sup> After some fits and starts, this missive led to announcements from 2006 through 2009 of various conflicts between the ITU and IETF in MPLS standardization efforts.<sup>44</sup>

Ultimately, the ITU justified its development of a new standard because of what it declared to be a “lack of progress” in standards evolution at the IETF.<sup>45</sup> The ITU did not clarify or explain any further than that, and the Internet community has been left scratching their head on the ITU's rationale. In discussing the competing proposals by the IETF and the ITU, the IETF explained the conundrum as follows:

If both technologies are deployed, it is likely that there will be confusion; if only one is deployed, the existence of the alternative is irrelevant. In this instance, there are believed to be commercial products in development for both proposals, so confusion appears inevitable.<sup>46</sup>

While no one has studied the impact of this particular deployment (it may be too soon for data), it's clear that vendors are at least grappling with the idea that there are two different standards, and it is not clear that interoperability between the two standards is assured.<sup>47</sup> The future of MPLS has not yet been written (nor has its epitaph); so for purposes of this paper—and our focus in this section on different approaches of the IETF and the ITU—it's important to note that the Netizens of the world can freely see the IETF's MPLS standard proposals at any time. The same isn't true at the ITU for work that's in progress. Looking at the websites for the IETF and the ITU in this case is instructive:

- **IETF.** The IETF has published an openly available charter on its MPLS work and proposals<sup>48</sup> and has a freely accessible wiki that contains detailed meeting notes, a history of its interaction with the ITU, and other useful documents.<sup>49</sup>

<sup>43</sup> See SG13 work on interworking with MPLS, Q.5/13, July 8, 2002, available at <http://goo.gl/IUIPf>.

<sup>44</sup> Stuart Corner, *ITU Refutes ISOC Claims That Split Over MPLS OAM Will Harm the Net*, ITWIRE.COM, March 3, 2011, available at <http://goo.gl/fEXZZ>.

<sup>45</sup> *Id.*

<sup>46</sup> *IETF and Internet Society Statement Relating to Today's ITU-T SG15 Decision That Will Lead to Non-Interoperability in MPLS Development*, February 25, 2011, available at <http://goo.gl/DL8Nr>.

<sup>47</sup> Stuart Corner, *Internet interoperability in doubt as ITU & IETF split over MPLS standards*, ITWIRE.COM, March 1, 2011, available at <http://goo.gl/suj67>.

<sup>48</sup> IETF Multiprotocol Label Switching Working Group, available at <http://datatracker.ietf.org/wg/mpls/charter/>.

<sup>49</sup> IETF MPLS-TP Standard Wiki, available at <http://wiki.tools.ietf.org/misc/mpls-tp/>.



- **ITU.** The ITU's website for the MPLS-TP [transfer protocol] Ad Hoc group indicates that work is being done in Geneva on the topic.<sup>50</sup> However, it's impossible to download any of the documents on that site (*e.g.*, through the downloads page) without an ITU-issued login and password.<sup>51</sup> Similarly, all of the documents from critical MPLS meetings seem available on the website, but none can be downloaded without ITU-issued credentials.<sup>52</sup>

In sum, it's easy to see what's happening and what's happened on the IETF. At the ITU, one can see what's happened, but there's no ability to weigh in on the work in progress.

## 2. Modem Standards

It's not unusual for the ITU to step in to resolve international conflicts between two proprietary standards. For a period of several years, Internet users did not migrate from 28k modems to 56k modems because competing proprietary standards were advanced by 3Com, X2, and Rockwell. Thus, consumers were reluctant to purchase 56k modems until the ITU resolved the dispute. In this particular instance, the ITU weighed in on the competing standards and helped set an internationally recognized standard for 56k modems. However, there was a catch—by the time the ITU resolved the matter, consumers were no longer interested in modems, as they had moved to broadband (DSL and cable). In the end, the ITU's efforts to bring closure on this issue were outpaced by the market forces.<sup>53</sup> With the development of products at “Internet speed,” where products are developed and launched in a matter of weeks, one could imagine the impact

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<sup>50</sup> ITU Ad Hoc group on MPLS-TP, available at <http://www.itu.int/en/ITU-T/studygroups/com15/Pages/ahmpls-tp.aspx>.

<sup>51</sup> Ad Hoc Group on MPLS-TP Downloads, available at <http://www.itu.int/en/ITU-T/studygroups/com15/Pages/ahmpls-tp.aspx>.

<sup>52</sup> ITU-T SG 15 Meeting Documents, available at <http://www.itu.int/md/T09-SG15/new/en>.

<sup>53</sup> Frederick Rose, *Modem Makers Reach Accord on Standards*, WALL ST. J., December 8, 1997, at B6. The article describes the long-lasting modem battle between 3Com, X2, and Rockwell:

Everybody is a net winner in this one,' said Ernest Raper, senior market analyst at VisionQuest 2000 Inc., a modem market tracking concern based in Moorpark, Calif. Mr. Raper estimates that world-wide sales of silicon chipsets that are the core of modems will total between 28 million and 30 million next year-double this year's sales. Emergence of a standard, moreover, likely will slow the descent of modem prices, which have plummeted as modem makers struggled to convince wary consumers to choose between competing, incompatible equipment. With the new standard, it is expected that most 56K modems made this year can be upgraded relatively simply through the insertion of new software.

Ultimately, this all happened too late. The ITU-brokered 56K modem standard took too long to finalize, and consumers moved on to DSL and cable modems in 1998 and 1999. See *The Battle for the Last Mile*, THE ECONOMIST, April 29, 1999, available at <http://www.economist.com/node/321433>.

on innovation if standards need to be stamped and approved by the ITU first.

### 3. Market Confusion

If we review the v.90 modem standardization case together with the MPLS case, we can see that an open standard already *exists* for MPLS and that the ITU is attempting to provide its own competing standard, thereby *injecting uncertainty* into the process rather than resolving it.<sup>54</sup> With regard to the MPLS discussion, the ITU has talked a great deal about the work of its standards-setting “experts,” but Stuart Corner notes that the “ITU does not identify these ‘experts’ and acknowledges that [standards] interoperability may be compromised.”<sup>55</sup> Some of this uncertainty and confusion could surely be alleviated if the ITU’s work was open and available for review and comment from the engineering community before the final details are released.

Indeed, the possibility of divergent standards is particularly worrisome in light of recent state proposals to the UN to develop standards in the name of “information security.” For example, a recent proposal to the UN made jointly by Russia, China, Tajikistan, and Uzbekistan calls for a “code of conduct” that would require countries to cooperate in “curbing the dissemination of information that incites terrorism, secessionism or extremism, or that undermines other countries’ political, economic and social stability.”<sup>56</sup> As ICT Ambassador Phillip Verveer has pointed out in recent Congressional testimony, “information security” in Russia and China is a hybrid of what Western countries might call “cybersecurity” plus additional monitoring of content.<sup>57</sup> In simple terms, these countries are seeking to validate the right to censor information in order to maintain regime stability.

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<sup>54</sup> Ultimately, delays in reaching consensus meant that the new 56k modem standard had to compete with cable modems and DSL. In reality, there were probably more losers than winners: manufacturers lost out on years’ worth of new equipment sales because of the battle. Frederick Rose, *Modem Makers Reach Accord on Standards*, WALL ST. J, December 8, 1997: B6.

<sup>55</sup> Stuart Corner, *ITU Refutes ISOC Claims That Split Over MPLS OAM Will Harm the Net*, ITWIRE.COM, March 3, 2011, available at <http://www.itwire.com/business-it-news/technology/45564-itu-refutes-isoc-claims-that-split-over-mpls-oam-will-harm-the-net>.

<sup>56</sup> Letter dated September 12, 2011, from the Permanent Representatives of China, the Russian Federation, Tajikistan, and Uzbekistan to the United Nations addressed to the Secretary-General, United Nations Document A/66/359, September 14, 2011, available at <http://blog.Internetgovernance.org/pdf/UN-infosec-code.pdf>.

<sup>57</sup> This distinction on how different cultures view the term “information security” came up during the question and answer portion of the testimony. For the written testimony, see Testimony of Ambassador Philip Verveer at the Hearing on International Proposals to Regulate the Internet at the Subcommittee on Communications and Technology, Committee, May 31, 2012, available at <http://goo.gl/e8HoV>.

#### 4. Russia's Web 3.0 Proposal

A final example illustrates the concerns related to government development of Internet standards in a closed model. The Russians have recently started marketing their proposal for a closed system they call Web 3.0, stating that Web 3.0 offers a secure next-generation version of the Internet. According to one document presented by the Russian delegation at an international trade conference held in February 2012, “Web 3.0 is a trusted environment in the Internet, characterized by compatible technological standards, harmonized legal norms and unified regulations ....”<sup>58</sup> From the description, Web 3.0 certainly sounds innocuous and beneficial to society.

And frankly, it's possible that the Russian proposal has merit—it might be worth pursuing. However, we can't assess the merit because the proposal is being made without public or stakeholder input. Such closed-door proceedings would not be so objectionable if they were limited to Russia, but the Russian government is seeking endorsement of Web 3.0 from other countries.<sup>59</sup> To that end, the Russians could—and should—open their proposals to viewing and feedback from others in the private sector, academia, and civil society. Doing so would go a long way toward showing Russia's commitment to reforming its structure from the previous PTT model to one that embraces criticism, comment, and reform. Further, it would help the Netizens of the world build trust in the Russians' so-called “trusted environment.”<sup>60</sup> Finally, making the Web 3.0 proposal public would help with the negative public-relations in the context of Vladimir Putin's statement, at an interview with the ITU's Secretary General, that he “think[s] a critical sphere is information exchange *and global control over such exchange*” (emphasis added).<sup>61</sup> Exercising “control” over the exchange of information are tantamount to fighting words for many democracies.

To be fair, the Russians' motives may indeed be altruistic. After all, the core of their proposition—more Internet security—isn't bad, particularly

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<sup>58</sup> Submission by Russia on *Proposals on Cross-Border Interoperability Standards Towards a Trusted Internet (Web 3.0)*, APEC 2012/SOM1/CTI/036, February 2012.

<sup>59</sup> See Asia-Pacific Economic Cooperation Draft Annotated Agenda, Second Committee on Trade and Investments, Singapore, 2012/CTI2/001, April 2-3 2012, available at <http://goo.gl/QYBfIp>, and slides, available at <http://goo.gl/voLqD>.

<sup>60</sup> For a slide show overview by Russia on Web 3.0, see *Proposals on Cross-Border Interoperability Standards Toward a Trusted Internet (Web 3.0)*, APEC 2012/SOM1/ECSG/008, February 3, 2012, available at [http://aimp.apec.org/Documents/2012/ECSG/ECSG1/12\\_ecsg1\\_008.pdf](http://aimp.apec.org/Documents/2012/ECSG/ECSG1/12_ecsg1_008.pdf).

<sup>61</sup> Prime Minister Vladimir Putin reaffirms the Russian Federation's support for ITU, ITU NEWS, June 2011, available at <http://www.itu.int/net/itunews/issues/2011/05/05.aspx>.

if its use is *voluntary* (e.g., I choose to use a domain name like .safe, .secure, or the like for financial transactions, and the operation of the rest of the Internet remains undisturbed). But the point here is that we're currently debating what the proposal *might be*, not what it *is*. Happily, at a recent panel on Internet freedom in St. Petersburg, a Russian representative made a verbal commitment to share the details of their proposal with the private sector and civil society.<sup>62</sup> We hope that the Russian Federation will release information about its Web 3.0 proposal, as well as invite public comment from industry and civil society.

### B. *The Cathedral and the Bazaar*

The development of Internet policies depends in no small part on one's philosophical view of how ideas should be vetted. In 1997, computer programmer Eric Raymond penned the now-famous essay *The Cathedral and the Bazaar*, which describes different software engineering approaches.<sup>63</sup> In the essay, Raymond describes the "cathedral model" of software development, where viewing of the software code is restricted to a hierarchical group of software developers. He contrasted the cathedral model to the "bazaar model," where code is shared openly over the Internet and with the public and is subject to comment by all. Raymond cites the development of the Linux operating system as an example.

According to Raymond, the bazaar model is synonymous with the philosophy of the Internet's development as compared to older closed models of development industries (e.g., the research and development work that took place at Bell Labs or Xerox Parc). Put another way, the bazaar model for software writing is not unlike how Wikipedia works: the software is open and subject to comment by anyone.<sup>64</sup> Raymond's central claim—a point often repeated by software engineers—is that "given enough eyeballs, all bugs are shallow," which essentially means that broad dissemination and discussion of coding lead to better products.<sup>65</sup>

Taking this analogy to its organizational equivalent in the multistakeholder system, the IETF might be seen as a proponent of the bazaar model: it's messy, democratic, and public. By contrast, the ITU

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<sup>62</sup> This topic was discussed at a St. Petersburg International Legal Forum Round Table, "Legal Regime of the Internet: Freedom or Security?" May 27, 2012. See the Forum's website, <http://goo.gl/xoS0D>.

<sup>63</sup> Eric S. Raymond, *The Cathedral and the Bazaar*, v. 3.0, CATB.ORG, available at <http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/>.

<sup>64</sup> The Free-Knowledge Fundamentalist, *The Economist*, Jun 5, 2008, available at <http://www.economist.com/node/11484062> (describing the Wikipedia philosophy and describing the influence Raymond's essay had on it).

<sup>65</sup> *Id.*, at 8.

operates under the cathedral model because its work takes place in a much more closed fashion. While there may be a place for both kinds of systems in policymaking, governments should be very careful about any move that would place Internet standards-setting within the cathedral context. Although the cathedral worked extremely well for the technology development that happened in the last century, the bazaar model is the current model of the Internet and is likely the model for the future.

### *C. When Under Attack, the Best Defense Is an Open Defense*

There's no question that the ITU's closed system has been under attack this year, and several prominent figures have spoken and written publicly about their concerns regarding the ITU's encroachment into the Internet standardization arena. For example, Federal Communications Commissioner Robert McDowell recently described the ITU's foray into the Internet as "[a] top-down, centralized, international regulatory overlay [that] is antithetical to the architecture of the Net."<sup>66</sup> Google's executive chairman, Eric Schmidt, similarly argued that regulation of the Internet by the ITU "would be a disaster ... To some, the openness and interoperability is one of the greatest achievements of mankind in our lifetime. Do not give that up easily. You will regret it. You will hate it, because all of a sudden all that freedom, all that flexibility, you'll find it shipped away for one good reason after another."<sup>67</sup> As both McDowell and Schmidt warn, the ITU's moves should be watched carefully, since standardization changes made ostensibly in the name of "trust" and "security" may ultimately create and legitimize censorship—and maybe even an Internet kill switch.<sup>68</sup>

## CONCLUSION

In order to gain legitimacy with the Internet community at this December's treaty conference (or at some later date), the ITU should open its standardization processes to the greater Internet ecosystem.

Let's face it: the ITU has been involved in telecom regulation for nearly 150 years, and it is clearly *already* engaging in standards-setting work that affects the Internet. Though we're hesitant to support

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<sup>66</sup> Robert M. McDowell, *The U.N. Threat to Internet Freedom*, WALL ST. J., February 21, 2012, available at <http://goo.gl/SSyFa>.

<sup>67</sup> Ben Woods, Schmidt: *UN Treaty a 'Disaster' for the Internet*, ZDNET, February 29, 2012, available at <http://goo.gl/RT01A>.

<sup>68</sup> The idea of an Internet "kill switch" has been discussed in various contexts since the Egyptian government shut down almost all of the country's servers during the "Arab Spring." See Amar Toor, *The Internet 'Kill Switch' Bill: What It Is, and Why It Won't Die*, SWITCHED, Feb 1, 2011, available at <http://goo.gl/dh16O>.

international, government-only regulation of the Internet, we will nonetheless offer a pragmatic three-step plan to openness and participation that would go a long way toward helping the ITU gain legitimacy in the work that it is already doing:

1. ***Share treaty conference proposals.*** The ITRs are being amended without any visibility or input from the outside. The ITU should publish specific proposals for changes to the ITRs on the ITU's public website for review and comment by civil society, the private sector, academics, and other interested persons and organizations. Doing so would help to establish the ITU's interest in inclusiveness and could have positive effects on its future efforts to influence the Internet.
2. ***Open the TIES database for review and comment.*** The ITU's development of standards is relatively closed off to others for review and comment. As part of a reform package, the ITU should open the TIES database so that it can be accessed, reviewed, and commented upon in a multistakeholder process. This should apply to all standards development in progress at ITU-T, as well as any proposals related to radio spectrum in ITU-R.
3. ***Implement a model for multistakeholder participation and representation.*** The government representatives that attend the ITU treaty conferences are appointed by their governments. In order to gain relevancy in the Internet's rulemaking process, the ITU will need to develop a way for Netizens of the world to have direct participation in, representation in, and impact on its process. This, itself, is something that will need input from world governments since it would, in effect, require a fundamental shift in the way that the ITU sets its rules and shares what it does publicly.

In sum, in order to gain credibility for the work that it already does in telecommunications, the ITU must *first* establish a track record of democratic openness, participation, and trust—not only with the private sector, but also with civil society, academia, and the general public. Such a track record must be built over time, and the ITU may require several years and fundamental changes in its own institutional architecture before it gets there.

Thus, undertaking efforts like those described above would take several years to implement, making it unlikely that they'll be accomplished

before the 2012 treaty conference in Dubai. Regardless, given the spotlight that is currently on the ITU—with greater intensity than perhaps ever before in its history—the ITU should address these criticisms so that it can remain relevant in its future standardization efforts.

As we've seen, the ITU has shown extreme resilience over the past 150 years as it has moved from telegraphy to telephony to radio spectrum allocation. Since the ITU is already engaged in regulatory activities for telecommunications networks, let's hope that the ITU will recognize the need to fundamentally change its approach in order to bring its current processes in line with the governance processes that have made the Internet a global engine for jobs, growth, freedom, and innovation.