

Publication forthcoming in:
I/S: A Journal of Law and Policy for the Information Society
10 ISJLP ____ (2014) (www.is-journal.org)
Draft version, subject to final edits

INTERNET GOVERNANCE IS OUR
SHARED RESPONSIBILITY

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INTRODUCTION

The Internet is a universal space that many expect to remain open, free, and borderless.¹ However, over the last several years more and more governments have been taking action to control the flow of information over the Internet. One way they have attempted to assert control is by claiming that two similar concepts—the Internet and cloud computing—are somehow different and that the Internet and the “cloud” can be regulated separately.² How best to dissect the Internet into distinct pieces and regulate them was one of the core policy issues debated last year in the context of the World Conference on International Telecommunications (WCIT-12), which many feared would lead to increasing fragmentation of the Internet’s global space.³

Unlike many other human inventions, the Internet is simultaneously a technology *and* a socioeconomic space. The Internet is not like a traditional commons with limited resources because its capacity is capable of growing at the will of those who use it and the entities that invest in its expansion. Even if it is not a traditional commons, the Internet is nonetheless a shared

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² Bertrand de La Chapelle, Multistakeholder Governance - Principles and Challenges of an Innovative Political Paradigm, in MIND #2: INTERNET POLICY MAKING, Wolfgang Kleinwächter (ed.), Berlin 2011, available at [http://www.collaboratory.de/w/MIND_2 - Internet Policy Making](http://www.collaboratory.de/w/MIND_2_-_Internet_Policy_Making) [hereinafter: “de La Chapelle, Multistakeholder Governance”].

³ Final Acts of the World Conference on International Telecommunications, Dubai, 2012, available at <http://www.itu.int/en/wcit-12/Documents/final-acts-wcit-12.pdf> [hereinafter: “WCIT-12 Final Acts”]

environment—bandwidth and server capacity are not unlimited, and their use implies tradeoffs, not unlike fishermen who share the wealth of the sea or ranchers who share the prairie for grazing their livestock.⁴ However, the Internet is not a space like a nation's territory—in other words, the unlimited territory of the Internet is not treated as a space governed by a sovereign, and the Internet itself is not a sovereign entity.⁵ The notion of sovereignty, an innovative concept introduced in the Treaty of Westphalia in 1648, enabled countries to draw boundaries between each other and establish ruling authority within certain borders.⁶

A. Governing in a Shared Environment

The Internet is a shared environment; as such, the decisions made on a sovereign basis in one geography may affect Internet users in other geographies—users in the rest of the world's Internet ecosystem.⁷ To borrow another environmental metaphor, pollution from a river that runs through one country could flow into other countries downstream. Thus, a territory's sovereign decision to pollute a river can have an impact on that territory's neighbors.⁸ The conundrum we face today is that we are all so connected that we have a shared responsibility to each other in ways never previously envisioned. So in our highly connected online environments, we have shared virtual commons, and we cannot evade accountability for our actions, even those actions considered or deemed sovereign.

Internet use should take into account the perspectives of all who have a stake, regardless whether they are part of the sovereign decision-maker's geographic territory. While the Internet is a physical artifact with components in many countries, the virtual space created by that artifact is defined by logical boundaries rather than geophysical borders. These boundaries are expressed in various ways: as the connectivity of the autonomous systems (i.e., networks) of the Internet, by the divisions

⁴ Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243, 1968. *See also* Garrett Hardin, *The Tragedy of the Unmanaged Commons: Population and the Disguises of Providence*, in *COMMONS WITHOUT TRAGEDY: PROTECTING THE ENVIRONMENT FROM OVERPOPULATION—A NEW APPROACH* 162, 168, Robert V. Andelson (ed.), 1991. *See also* Elinor Ostrom, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION*, Cambridge University Press, 1990.

⁵ Lawrence Lessig, *Code 2.0: Code and Other Laws of Cyberspace*, available at <http://codev2.cc/download+remix/Lessig-Codev2.pdf> (arguing that the Internet itself is not a sovereign entity).

⁶ *See* Dan Philpott, "Sovereignty," *THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY* (Summer 2010 Edition), Edward N. Zalta (ed.), available at <http://plato.stanford.edu/archives/sum2010/entries/sovereignty/> (recounting the history that led to the treaty).

⁷ *See* de La Chapelle, *Multistakeholder Governance*, cited *supra* at note 2.

⁸ *See* Patrick S. Ryan, *Application of the Public-Trust Doctrine and Principles of Natural Resource Management to Electromagnetic Spectrum*, 10 *MICHIGAN TELECOMMUNICATIONS AND TECHNOLOGY LAW REVIEW* 2 (2004), available at <http://ssrn.com/abstract=556673> (describing how environmental law principles and water-law principles are relevant to the technology sector).

expressed by the Domain Name System (DNS) space, and by applications such as Facebook, Evernote, Twitter, and iTunes.

With these thoughts in mind, it's clear that complications can ensue when sovereign nations decide to filter or block Internet content. It's also clear why many organizations embrace a "multi-stakeholder governance model" for the Internet, a model that solicits decision-making input from governments, the private sector, civil society, and the technical community. As the United Nations Working Group on Internet Governance articulated it in 2005, multi-stakeholder Internet governance "is the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet."⁹ Because borders are less relevant in the virtual world, the multi-stakeholder approach, provides a way to transcend geographic boundaries of physical space and focus instead on the users of the Internet's virtual spaces. To be fair, the multi-stakeholder approach can be frustrating and clumsy—as any democratic process is—but it provides the best mechanism for governing the Internet's space because of its inclusiveness.

B. The New Deal for Internet Governance

There is no single "one stop shop" for Internet governance; instead, Internet's rules have rapidly evolved in diverse organizations like the Internet Engineering Task Force (IETF) that have cooperated on the development of open standards; the Internet Corporation for the Assignment of Names and Numbers (ICANN) for naming and addressing; civil society gets engaged to provide independent perspective on behalf of users; and the private sector that invests in the infrastructure. Of course, governments are heavily involved in regulating the Internet through rules for things like privacy, fair use, libel, antitrust, various forms of licensing and the like. The technology community is spread across many sectors and its work creates implicit and sometimes explicit bounds on behavior.¹⁰ These are just a few examples, and amazingly, all these groups compete with each other to set collective rules for the advancement of the Internet ecosystem.

A fundamental challenge to governing conduct on the Internet is that the speed of innovation on this complex network is so high that traditional regulatory practices can't keep up. As a result, other stakeholders push and

⁹ Tunis Agenda for the Information Society, §35, WSIS-05/TUNIS/DOC/6(Rev. 1)-E (2005), available at <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html> [hereinafter: "Tunis Agenda"].

¹⁰ LARRY LESSIG, CODE: AND OTHER LAWS OF CYBERSPACE, BASIC BOOKS, 1999.

pull so as to seek consensus among the myriad technical, legal, political, and business arguments proffered. To complicate matters further, this global real-time medium has caused a paradigm shift in the aforementioned professional arenas. Unlike the regulators of telecommunications firms, for example, there is no longer a “one stop shop” that people can turn to as they once could to address the relatively simple set of issues that the telephone company once faced.

It’s become axiomatic that the Internet is the backbone or operating system of global markets, representing an increasing amount of Gross Domestic Product in most developed countries.¹¹ One by one, specialized organizations like the UN Human Rights Council have begun to engage in the Internet governance discourse—not by joining evolving Internet Governance policy forums, but by issuing reports and policies covering Internet practices from their specific perspectives.¹² Such involvement adds another major challenge for the development of Internet governance. The more stakeholders that join in the discourse, the more challenging it is for the larger body of participants to understand the concerns of each individual stakeholder.

The Internet is driving convergence of traditionally independent media. Today more and more movies, television, radio, telephony, and print media are either born-digital or are digitized and subsequently use the flexible infrastructure of the Internet. Each of these media has well-established and mandated governance institutions and has created a body of national and international policies for its specific technology. As the “new deal” on Internet governance evolves, however, it will have to resolve issues associated with overlapping mandates between media policy institutions and emerging Internet governance institutions. More to the point, many of the policies governing traditional media are not necessarily transferable to the Internet ecosystem or even advisable in the Internet-enabled version of the service. In fact, Internet-based technology convergence may necessitate changes in or the elimination of technology-specific governance practices.

In this paper, we will address the following questions: How can we best define the respective roles of stakeholders to address rapidly evolving issues

¹¹ A compilation of many economic studies that show the value of the Internet in the world’s economies can be found at www.valueoftheweb.com.

¹² United Nations General Assembly, Human Rights Council, *Resolution regarding the promotion, protection and enjoyment of human rights on the Internet*, A/HRC/20/L.13, Jun 29, 2013; Also see Jillian C. York, *UN Human Rights Council Resolution on Internet and Human Rights a Step in the Right Direction*, EFF DEEPLINKS, Jul. 26, 2012, available at <https://www.eff.org/deeplinks/2012/07/un-human-rights-council-resolution-Internet-and-human-rights-step-right-direction>.

associated with Internet governance, and how can we frame a process of “enhanced collaboration” to ensure international policymaking reflects the shared nature of the global socioeconomic online space? Given the critical nature of the systemic challenges we have identified above, we will propose an open, productive multi-stakeholder governance model as the answer to these questions.

I. MAPPING THE MANDATES GENERALLY

The Internet is a complicated regime that in many ways mirrors the social, political, and business contentions of the world in which we live. David Clark (with others) once summarized the governance challenges nicely by stating that “as the Internet becomes mainstream it inevitably moves from being an engineering curiosity to being a mirror of the societies in which it operates.”¹³ Indeed, Internet governance has always been what Clark called a “tussle” between different stakeholder groups (e.g., telecommunication firms, online service providers, users, law enforcement agencies, and regulators)—not to mention tussles among members of the same stakeholder group. But given that the Internet’s complexity is growing rapidly because of the challenges of globalization (and inapplicable arguments for sovereignty), the following advice Clark *et al.* advanced in 2002 hits the nail on the head:

Design for variation in outcome, so that the outcome can be different in different places, and the tussle takes place within the design, not by distorting or violating it. Do not design so as to dictate the outcome. Rigid designs will be broken; designs that permit variation will flex under pressure and survive.¹⁴

Said another way, we should find ways to experiment with governance policies and allow for alignment to occur naturally on all levels (local, national, and regional), rather than having one centralized international treaty on Internet governance. Rick Whitt also makes a convincing case for adaptive policymaking.¹⁵ This is one way that some try to resolve the “tussle” (*i.e.*, the inevitable tensions) that will always exist between the

¹³ D. D. Clark, J. Wroclawski, K. Sollins, and R. Braden, “Tussle in Cyberspace: Defining Tomorrow’s Internet,” in Proc. ACM SIGCOMM, August 2002, available at <http://groups.csail.mit.edu/ana/Publications/PubPDFs/Tussle2002.pdf> [hereinafter: “Tussle in Cyberspace”].

¹⁴ *Id.*

¹⁵ See Richard S. Whitt, *Adaptive Policy-Making: Evolving and Applying Emergent Solutions for U.S. Communications Policy*, 61 FED. COMM. L.J. 483 (2009) (the author advances a proposal for “adaptive policy making” by governments to make adaptive changes with technology based on the premise of “enabling without dictating.” Many of the ideas in this paper are built on the inspiration from this piece.)

Internet's diverse stakeholders. Although it's theoretically possible for a top-down approach to Internet governance to work, while it's impossible to predict the future, we believe strongly that a top-down approach is far more likely to hinder innovation (this is, in essence, Vint's oft-repeated refrain of "permissionless innovation"). Unlike the multi-stakeholder groups that foster the Internet's development, top-down approaches rarely seek consensus among different groups, and so not only does it hinder innovation, their effectiveness is short lived.

We can't survey all the multi-stakeholder institutions in this paper, however one of the areas that we propose to continue to strengthen is the role of the Internet Governance Forum (IGF). The IGF was set up in 2005 by heads of state as a venue for airing policy positions of various kinds without the negotiations that take place when there is a treaty conference or position statement. Indeed, the IGF has been positioned as a deliberation body (not decision-making body) for all stakeholders to (i) raise emergent Internet governance challenges and report on progress and solutions to existing governance issues, (ii) discuss the best approach to address governance issues and appropriate parties to address those issues, and (iii) build voluntary enhanced cooperation groups made up of institutions with mandates to address identified challenges.¹⁶ We'll use the IGF as an example throughout this paper and will address it again in Section III, below.

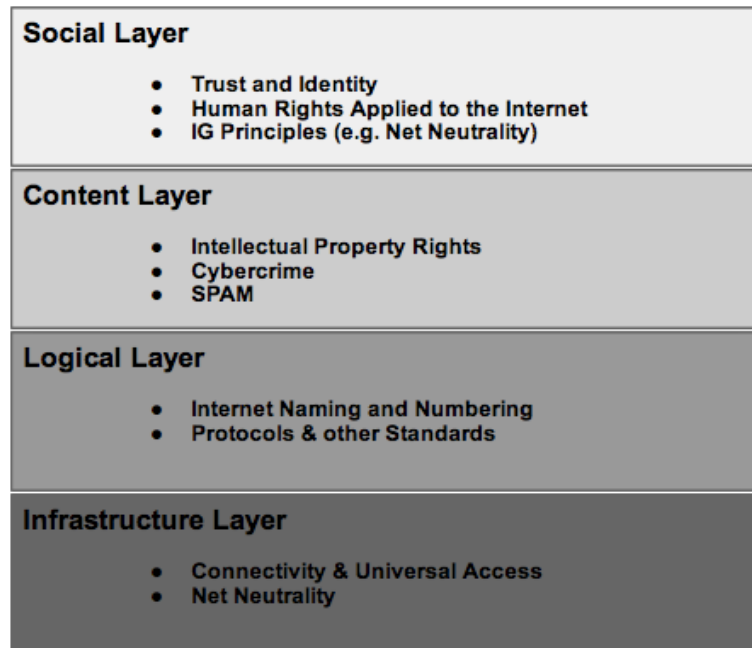
Returning to the discussion of how to experiment with policies: the multi-stakeholder approach is one way to put into focus another one of Clark's observations, that "Functions that are within a tussle space should be logically separated from functions outside of that space, even if there is no compelling technical reason to do so. Doing this allows a tussle to be played out with minimal distortion of other aspects of the system's function."¹⁷ In other words, we should endeavor to separate policy issues for analysis as we would any experiment in the technical or scientific sense. This is why it's important for all the stakeholders to have equal voices, because these stakeholders each present unique perspectives on important topics like privacy and security, surveillance, copyright, and the like. Even

¹⁶ This our paraphrasing of the Tunis Agenda, cited *supra* at 9. (Note that point (iii) is covered by the mandate as it states: "Help to find solutions to the issues arising from the use and misuse of the Internet, of particular concern to everyday users; Facilitate discourse between bodies dealing with different cross-cutting international public policies regarding the Internet and discuss issues that do not fall within the scope of any existing body; Interface with appropriate inter-governmental organizations and other institutions on matters under their purview; Strengthen and enhance the engagement of stakeholders in existing and/or future Internet governance mechanisms, particularly those from developing countries; - importantly the stakeholders form the enhanced collaboration groups voluntarily and then they perform all decision making / policy making, not the IGF.")

¹⁷ Tussle in Cyberspace, cited *supra* at note 13.

if their voices aren't internally unified, we can make broad assumptions about what the government's views are on surveillance (generally: governments say more surveillance is better, it helps catch the bad guys); or civil society's view (generally: a view that all surveillance must be checked by due process); and even the technical community (generally: a view that agrees with civil society but develops encryption and other tools to provide choices to all stakeholders). Once we understand the issues—as separated and isolated problems and the groups that care the most about them—we can then introduce and integrate it with the rest of the ecosystem. This enables groups that are truly experts in their field to opine in a meaningful way.

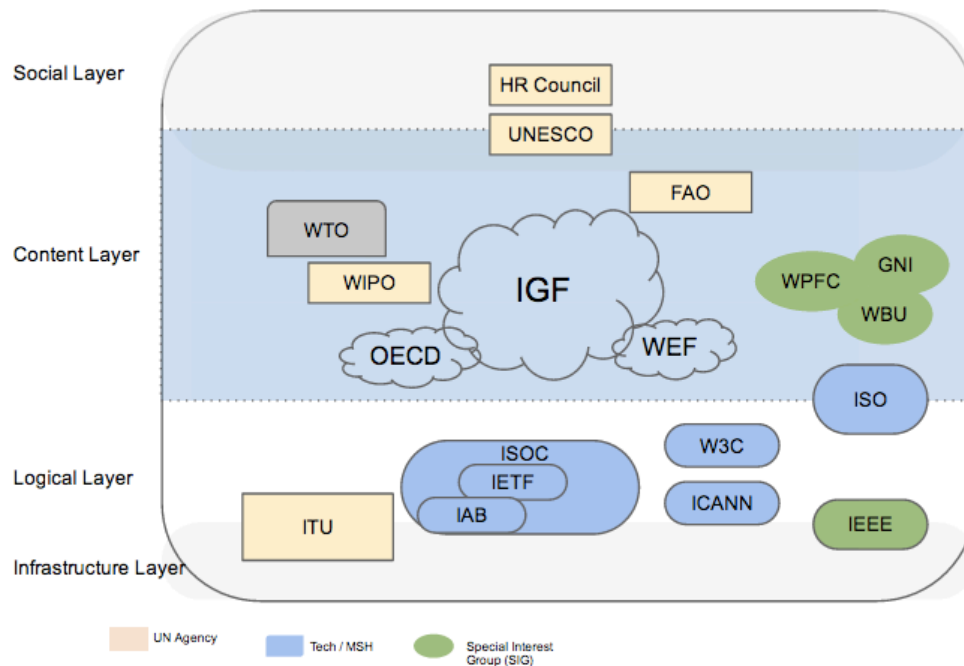
Accordingly, we propose the addition of a new Social Layer to the established layered model of broad Internet governance. This Social Layer provides an additional lens for us to identify and stratify the relevant institutions that have a mandate to deal with the ongoing steering of practices and continuous assessment and handling of emerging policy issues. As shown in Illustration 1, this new layer would deal with practices that define paramount rights and principles associated with “social conduct” online.¹⁸



¹⁸ See Yochai Benkler, “From Consumers to Users: Shifting the Deeper Structures of Regulation Towards Sustainable Commons and User Access,” 52 *FED. COMM. L.J.* 561, (2000).

Illustration 1 - Social Layer Added to the Established Layered Model of Internet Governance

We provide this conceptualization in order to trigger discussion about which institutions and stakeholder groups should legitimately be involved in which Internet policy issues. Put differently, we believe that it will be beneficial to the operation of the whole online ecosystem if the mandates of institutions are mapped and clarified with regard to their relevance in steering Internet governance practices and policymaking. Hence, Illustration 2 shows a schematic example of mapping of institutions with relevant mandates overlaid on the layers of Internet governance.¹⁹ Here we show the IGF is positioned in the center as it has no decision-making mandate itself but is instead, it is positioned to facilitate and moderate said decision-making to take place *elsewhere*. In Clark's terminology, at the IGF, we're separating the "tussles" in a forum where they can be analyzed in workshops and discussion sessions and then brought back to the various other forums for decisions.



¹⁹ The illustration by no means covers all relevant institutions. Instead, it is meant to provide a visual perspective of the approach in general.

Illustration 2 - Internet Governance Ecosystem²⁰

Under the current multi-stakeholder Internet governance ecosystem, governments do not play a dominant role in governance but instead participate on equal footing as representatives of their respective constituents, either through local rules or through participation in government-focused bodies like the International Telecommunication Union (ITU), which is described in more detail in the next section. Governments maintain a uniquely important role in Internet governance, of course, as they ultimately issue rules in the public interest and develop mandates to law enforcement, competition, consumer protection agencies, data protection authorities, and other governmental and intergovernmental agencies. However, given that each government is itself a stakeholder group, we have refrained from explicitly including individual governments in the illustration. Because Internet policy challenges are, as we pointed out, global commons challenges in almost all cases rather than challenges for sovereign nations to address, we assess the international governance sphere to be most important.

II. MAPPING TO THE EXISTING ECOSYSTEM

A. The Experience at WCIT in Dubai

The multi-stakeholder Internet governance ecosystem may seem foreign to those who aren't involved in it in a meaningful way. We believe that this lack of familiarity is one of the main drivers that led to a conflict at WCIT-12, held in Dubai, United Arab Emirates. At this conference, the United Nations, through the International Telecommunications Union (ITU), convened the world's powers, ostensibly to update the International Telecommunication Regulations (ITR) a decades-old telecommunications treaty. Instead, revisions were proposed to the treaty that would have had a chilling effect on both the availability and accessibility of Internet content. In this section, we will look at some aspects of the proposed treaty and outline some of the issues that arose in terms of the institutions that govern the Internet.

²⁰ Full Names of the abbreviated Institutions as well as the core of their Mandates can be found in the Appendix.

The ITR negotiations showed starkly that there are two broad divisions in the world. On the one side are Europe, Canada and the USA, essentially the countries largely responsible for the development of the Internet and many of its applications. On the other side are Russia, China, and the group of countries designated by the ITU as the “Arab States”—countries that want to exercise much more control over the flow of information on the Internet. Latin Americans remain somewhat undecided (with four voting against the treaty) and African countries (with the exception of Kenya) joined the Arab States, Russia, China, and others. This divide is what we referred to in a previous paper as a “Titanic Moment,” a virtual collision between the promise of new technologies developed by the Western world and the desire to impose new regulations on those technologies by the others who either felt left out of the Internet governance process or, in the case of authoritarian regimes, see the Internet as a threat to their power.²¹

The resulting treaty from WCIT-12 represented a collision between two ideologies. In total, 89 countries approved the treaty, including Russia, China, Arab States, and many others in Asia, Africa, and Latin America (referred to here as the “Dubai-89”). The 55 countries that did not sign the treaty include all of the European Union, the United States, Canada, and a few others (the “Dubai-55”). Many countries entered “reservations” which adds contours and limitations to what the countries ultimately approve.²² In the remaining section, we’ll look at some examples of how these two groups view the tussle. As we’ll see below, some the starkest philosophical divisions between the Dubai-89 and the Dubai-55 can be observed in these groups’ conflation of the infrastructure and logical layers with the content and social layers.

B. The Infrastructure Layer

The Internet’s naming and numbering system form the core of its infrastructure. The Internet Corporation for the Assignment of Names and Numbers (ICANN) is a multi-stakeholder group that has been tasked with the responsibility of providing the world’s Internet community with a top-down (in the sense of having one single system), and distributed (by leaving responsibilities to regional registries). This is a common framework for the administration of top-level domains like .net, .com, .edu, .xxx, .fr, .de, .br

²¹ See Patrick S. Ryan, “The ITU and the Internet’s Titanic Moment,” *STANFORD TECHNOLOGY LAW REVIEW*, Vol. 2012, No. 8, July 13, 2012, available at <http://ssrn.com/abstract=2110509>.

²² See Gerry Oberst, *Regulatory Review: ITU Rules and Reservations*, VIA SATELLITE, December 1, 2002, available at

<http://www.satellitetoday.com/via/32244.html> (providing a good overview of how the reservations work in the ITU treaty making process).

and numeric Internet Protocol addresses.²³ A single coherent mechanism for naming and numbering forestalls chaos and confusion. For example, imagine if typing www.pepsi.com in one country brought you to the Pepsi website, but typing the same address elsewhere brought you to a different destination. ICANN helps set the rules of the road for hundreds of thousands or more of interconnected servers—the Domain Name System, or DNS—to act in concert to make sure that websites around the world can be accessed under one singular naming and numbering plan.

Anybody that has spent time looking at ICANN can testify that the organization is complicated, acronym-ridden, and hard to follow. While the ICANN decision-making process is no model for simplicity, its arcane processes are designed to ensure that the voices of many different stakeholders in the Internet are heard, while at the same time isolating groups within specific constituencies to assure that perspectives from different groups are clear. As a consequence, this also means governments have an equal voice with others in the community, like businesses, academics, and civil society.²⁴ This has been the long-standing complaint of Brazil, for example, and it partially explains why this democratic country would align on this issue with Russia, China and others. After the ITU hosted the World Telecommunications/ICT Policy Forum in Geneva in May 2013, a representative from the Brazilian government explained their frustration with the limited role that governments have:

The fact is that governments so far have only had a limited advisory role in international Internet Governance, and no actual involvement in the decision making process. Recent events have indicated that even long standing advice provided by governments on certain issues has had little impact on the actual decisions relating to matters of their direct interest. Regretfully, attempts to deal with this fact have suffered from the low level of participation of the majority of governments in existing international Internet Governance fora.²⁵

²³ See Jay P Kesan and Rajiv C. Shah, “Fool Us Once Shame on You - Fool Us Twice Shame on Us: What We Can Learn from the Privatizations of the Internet Backbone Network and the Domain Name System,” 79 WASHINGTON UNIVERSITY LAW QUARTERLY, 89, 2001 at 171, available at <http://ssrn.com/abstract=260834> (providing a historical overview of the creation of ICANN and other institutions).

²⁴ Tunis Agenda, cited *supra* at note 9. (Recognizing that Internet governance requires collaboration of all parties: “Furthermore, we commit ourselves to the stability and security of the Internet as a global facility and to ensuring the requisite legitimacy of its governance, based on the full participation of all stakeholders, from both developed and developing countries, within their respective roles and responsibilities.”)

²⁵ Daniel Cavalanti, *Operationalizing the Role of Governments in Internet Governance*, ITU BLOG, Jun 5, 2013, available at <http://itu4u.wordpress.com/2013/06/05/operationalizing-the-role-of-governments-in-Internet-governance/>

In spite of the statement above, we believe that it's not fair to say that governments don't have involvement in the decision-making process. The aforementioned excerpt is a reference to the work of ICANN, which is, in fact, required by its bylaws to take into consideration the views of governments and other stakeholders.²⁶ However, here's the rub: no party—including governments—have a veto authority, and that's essentially what Brazil asking for here. Recall that the work that ICANN does is fundamental in setting up a universal naming and numbering system, including .NET and .COM and applications currently underway for new domains like .GAY, .AMAZON and .PATAGONIA.²⁷ What governments want isn't "actual involvement" in the decision making process—what they want is a veto right. In essence, governments want the ability to override decisions that ICANN may make that would offend the interests of the region.²⁸ To many Latin American countries, for example, the Amazon River and the Patagonia region must be protected in the Internet's domain system, and the rule for that kind of protection isn't so clear in ICANN's practices. So, as things stand now, if ICANN and the set of applicants aren't able to work out a compromise with these governments, then these governments will feel fueled more than ever to insert their power, one way or another, and to demand the veto that they desire.

This tension between a desire for increased power by governments may never be fully resolved, and that standoff, is itself, perhaps an acceptable compromise. But the Internet community will need to remain vigilant in order to assure that the ecosystem continues to innovate while keeping a close eye on deliberate moves by some countries to dramatically change the rules. This is exactly what happened at WCIT-12, which saw countries and regions wanting to use the ITRs as a wholesale opportunity to divest ICANN of its authority and bring domain-name administration within the scope of a government-only agency like the ITU. Specifically, one proposal introduced in Dubai by Russia, UAE, China, Saudi Arabia, Algeria, Sudan and Egypt would have required the following:

²⁶ See, e.g., Article XI, Section 2.1 of the Bylaws for Internet Corporation for Assigned Names and Numbers as amended Apr 11, 2013, available at <http://www.icann.org/en/about/governance/bylaws#XI> (permitting the Governmental Advisory Committee to "put issues to the Board directly, either by way of comment or prior advice, or by way of specifically recommending action or new policy development or revision to existing policies.")

²⁷ Eli Sugarman, *Who Should Own 'Patagonia?'*, THE ATLANTIC, Apr. 23, 2013, available at <http://www.theatlantic.com/international/archive/2013/04/who-should-own-patagonia/275214/>.

²⁸ *Perú y Brasil se enfrentan a Amazon en defensa de la Amazonía*, EL COMERCIO, May 4, 2013, available at <http://elcomercio.pe/actualidad/1572165/noticia-peru-brasil-se-enfrentan-amazon-defensa-amazonia>

Member States shall have equal rights to manage the Internet, including in regard to the allotment, assignment and reclamation of Internet numbering, naming, addressing and identification resources to support for the operation and development of basic Internet infrastructure.²⁹

The idea that “States shall have equal rights to manage the Internet” is key because it’s an affirmation of the supremacy of governments (“states”) and there is no mention of the other stakeholders—civil society, the technical community, or the private sector—that currently participate in Internet governance. The proposal above was not totally unilateral, however: it was accompanied by a perfunctory recital that calls for the need for the multi-stakeholder development of “shared principles, norms, rules, decision-making procedures and programs.”³⁰ However, the recitals made in this sentence are an empty vessel and would be impossible to reconcile with the clear statement that “*States shall . . . manage the Internet.*”

So, if shifting the functionality of ICANN to a government-only mechanism was important to at least some members of the Dubai-89, why was it not adopted in the final treaty? There’s no single answer, but in a surprise to many, the ITU itself played a mediating role. The ITU’s Secretary General Hamadoun Touré invited Fadi Chehadé, the new CEO of ICANN, to deliver comments on WCIT-12’s opening day.³¹ Chehadé’s appearance was itself somewhat controversial within the ICANN community, which had witnessed a series of multiple, public face-offs between ICANN and the ITU. In one such confrontation, the ITU publicly snubbed the request from ICANN’s previous CEO Rod Beckstrom to attend one of their Council meetings.³² Because of this history, Chehadé’s keynote at the opening of WCIT-12 sent a clear message to the world that ICANN is willing to engage with the ITU and to put its fights in the past.³³

²⁹ Document DT-X, Proposal by Russia, UAE, China, Saudi Arabia, Algeria, Sudan and Egypt, December 5, 2012, at §3A.2, available at <http://files.wcitleaks.org/public/Merged%20UAE%20081212.pdf>. This provision also appears in Document 47-E, Proposal by Algeria, Saudi Arabia, Bahrain, China, UAE, Russia, Iraq and Sudan, at §3A.2, December 11, 2012, available at <http://files.wcitleaks.org/public/S12-WCIT12-C-0047!!MSW-E.pdf> [hereinafter: “Document 47-E”].

³⁰ See Document 47-E, §3A.1, cited *supra* (“Internet governance shall be effected through the development and application by governments, the private sector and civil society of shared principles, norms, rules, decision-making procedures and programs that shape the evolution and use of the Internet”).

³¹ See Kieren McCarthy, The highlights and low points of WCIT, dot-nxt.com, December 15, 2012, available at <http://news.dot-nxt.com/2012/12/14/highlights-and-low-points-wcit>.

³² Kevin Murphy, *ITU chief snubs ICANN’s Beckstrom*, DOMAIN INCITE, Aug 24, 2010, available at <http://domainincite.com/1857-itu-chief-snubs-icanns-beckstrom>.

³³ Kieren McCarthy, *ICANN CEO and Chair to attend WCIT opening*, DOT-NXT, Nov 30, 2012, available at <http://news.dot-nxt.com/2012/11/29/icann-ceo-and-chair-attend-wci>.

So far, things are moving well in that regard. The unspecified collaboration with the ITU has been billed as part of Chehadé's "new season at ICANN," a phrase that has been picked up and cited now in thousands of articles and web entries.³⁴ In the end, since the WCIT proceedings happen only partially in the open, we may never know exactly *why or how* the vehement proposals to take over ICANN's work disappeared in spite of the proposals by Russia, UAE, China, Saudi Arabia, Algeria, Sudan and Egypt. But we know that these proposals existed and were hotly discussed prior to WCIT-12, and then they quietly disappeared into the fog of the WCIT negotiations without any public debate. It is therefore reasonable to conclude—even without direct evidence—that ICANN's pro-active engagement helped with that process. This particular standoff will continue, but it will be fought on another day.

Significant unresolved issues about the naming and numbering system will continue, then, perhaps indefinitely. In our view, one of the most important actions in future years in order to reduce the need for further standoffs in naming & numbering will be determined by how ICANN proceeds in the coming years. ICANN needs to continue to reach out to countries and regions that currently feel they don't have a voice in Internet governance. ICANN will also need to continue to take steps to help governments feel a stronger sense of engagement in the ICANN processes and feel that their voices are heard, and to show that disputes like .AMAZON and .PATAGONIA can be resolved within the system. The new leadership at ICANN is already achieving this goal, in part, by announcing its intention to move and replicate responsibilities outside the United States, with offices announced to be opened in Istanbul, Singapore and Beijing.³⁵ This is a step in the right direction.

C. Broadband Connectivity: Bringing the Internet to Everybody

In rough numbers, we are approaching 3 billion Internet users today, and another 4 billion citizens that don't have access to the Internet — although they may well be affected by it. Most governments want to increase broadband rollout and connectivity for their citizens, but at the same time they struggle to identify the best economic model to pay for such connectivity. Should broadband be considered a public good like roads or

³⁴ A search conducted on Jun 11, 2013 for the search terms "chehadé 'new season' icann" produces 6,200 results. See <http://goo.gl/wxqLU>.

³⁵ Ryan Huang, *ICANN picks Beijing to open first engagement center*, ZDNET, April 8, 2013, available at <http://www.zdnet.com/cn/icann-picks-beijing-to-open-first-engagement-center-7000013656/>. Also see Mikael Ricknas, *ICANN announces opening of Istanbul office as part of globalization effort*, PC WORLD, Apr. 25, 2013, available at <http://www.pcworld.com/article/2036366/icann-announces-opening-of-istanbul-office-as-part-of-globalization-effort.html>

sewer systems, or should governments abstain from involvement in order to promote competition?³⁶ These policy questions find their home squarely in the infrastructure layer.

A grand experiment is underway to address these questions, and it will be interesting to observe in the next few years. Australia and Uruguay, for example, are moving to embrace a version of a relatively nationalized model, viewing the Internet as a taxpayer-funded commons—like roads or sewer systems—while countries like the United States and Bulgaria are taking a more market-oriented approach.³⁷ These different models are high-level manifestations of two very different social philosophies. Internet users in Uruguay's *de facto* single-provider system seem to enjoy the lowest prices for broadband of all their peers in Latin America.³⁸ Further, in 2010 Uruguay had the highest broadband penetration in Latin America.³⁹ By contrast, Bulgaria is also making a great case for the free market, where anecdotes from colleagues report that there are more than 800 (some say as many as 2,000) service providers and consumers have broad choice.⁴⁰ It's too early to opine which model is best—the models are still being vetted—and consumers will ultimately win in the long run. While there may perhaps be no single correct model, we believe one thing is certain: mandating one kind of economic model through an international treaty would be a mistake.

Turning back to the WCIT, a mandated economic model is precisely what several actors had hoped to accomplish in Dubai. The debate was initiated by the European Telecommunications Network Operators' Association (ETNO), a group of European telecommunication providers led

³⁶ See SUSAN P. CRAWFORD, *CAPTIVE AUDIENCE: THE TELECOM INDUSTRY AND MONOPOLY POWER IN THE NEW GILDED AGE*, YALE UNIVERSITY PRESS (2013) (making the case that broadband access in the United States is becoming a monopoly affair and more government intervention is required).

³⁷ See Hendrik Rood, "Very High Looming Cable Monopoly," 29 *YALE L. & POLICY REV. INTER ALIA* 34 (2010), available at http://yalelawandpolicy.org/sites/default/files/YLPRIA29_Crawford.pdf (arguing that the lack of regulation in the U.S. is leading to consolidation and unchecked monopolies in the broadband market, decreasing competition). See also "Speed Broadband Deployment in Europe: The Netherlands and Bulgaria Compared," TPRC 2010, available at <http://ssrn.com/abstract=1989172> (showing how competition is intense in Bulgaria, with 670 official ISPs and as many as 2,000 unregistered ISPs). See also Susan P. Crawford, "The Looming Cable Monopoly," 29 *YALE L. & POL'Y REV. INTER ALIA* 34 (2010), available at http://yalelawandpolicy.org/sites/default/files/YLPRIA29_Crawford.pdf (arguing that the lack of regulation in the U.S. is leading to consolidation and unchecked monopolies in the broadband market, decreasing competition).

³⁸ *Banda ancha uruguaya es la más barata de América latina*, EL PAIS, Jun 16, 2012, available at <http://genteynegocios.elpais.com.uy/banda-ancha-uruguaya-es-la-mas-barata-de-america-latina>

³⁹ See "Cisco Broadband Barometer, Uruguay Leads Broadband Penetration in Latin America," November 16, 2011, available at <http://newsroom.cisco.com/uk/press-release-content?articleId=554136&type=webcontent>.

⁴⁰ Tanya Todorva, *Broadband Internet access is not a problem for Bulgaria*, STROITELSTVO, Jan 21, 2013, available at <http://stroitelstvo.info/show.php?storyid=1987738>

by Telecom Italia, Telefonica, France Telecom, and Deutsche Telekom.⁴¹ The ETNO proposal called for a “sending party pays” system that would have been mandated by law through the treaty.⁴² In essence, this would have meant that any content provider on the Internet would need to pay to have their information delivered to the recipient—this would be *in addition* to the fees the service provider already pays to connect to the Internet and *in addition* to the fees that the user pays for their access. Recall, however, that the ITU’s treaty-making process requires proposals to be introduced and adopted by countries, not by individuals or groups. However, ETNO was successful in finding a country to make the proposal on its behalf—Cameroon—and their proposal was then adopted by most of the African countries in a common proposal.⁴³ Specifically, the proposal asked for the following provision in the International Telecommunications Regulations (ITRs):

Operating Agencies shall endeavor to provide sufficient telecommunications facilities to meet requirements of and demand for international telecommunication services. For this purpose, and to ensure an adequate return on investment in high bandwidth infrastructures, operating agencies shall negotiate commercial agreements to achieve a sustainable system of fair compensation for telecommunications services and, where appropriate, respecting the principle of sending party network pays.⁴⁴

The ETNO proposal received some of the most fervent attention in the lead-up to Dubai. If adopted, the proposal would have completely undermined the economic model of the Internet (wherein users pay for their Internet access) by imposing an additional cost on “senders” of information. Such a model would have devastated the openness of the Internet because

⁴¹ See Mark Page, Luca Rossi, and Colin Rand, “A Viable Future Model for the Internet”, A.T.

⁴¹ Kearney Report (2010), available at <http://www.atkearney.com/index.php/Publications/a-viablefuture-model-for-the-Internet.html> (sponsored by Deutsche Telekom, France Telecom, Telefonica, and Telecom Italia). See also J. Scott Marcus and Alessandro Monti, “Network Operators and Content Providers: Who Bears the Cost?” WIK Consult, September 13, 2011, available at SSRN: <http://ssrn.com/abstract=1926768> (making the counterargument to the Kearney report).

⁴² See Cynthia Wong, et. al., “ETNO Proposal Threatens to Impair Access to Open, Global Internet,” CDT White Paper, June 21, 2012, available at https://www.cdt.org/files/pdfs/CDT_Analysis_ETNO_Proposal.pdf.

⁴³ World Conference on International Telecommunications, Document 19-E, African Common Proposals for the Work of the Conference, Document 19-E, November 2, 2012, available at <http://files.wcitleaks.org/public/S12-WCIT12-C-0019!!MSW-E.pdf>. (Article 6 contains the provisions of the ETNO proposal.) See also World Conference on International Telecommunications, Document 15-E, Submission by Republic of Cameroon, October 2, 2012 available at <http://files.wcitleaks.org/public/S12-WCIT12-C-0015!!MSW-E.pdf>. (In addition to the changes in Article 6 that the African countries proposed together, the Cameroon proposal includes a definition for “hubbing” that requires “full payment due to the hub.” *Id.*, at §2.15.)

⁴⁴ Council Working Group Contribution 109, CWT WCIT12/C-109, June 6, 2012, available at <http://files.wcitleaks.org/public/ETNO%20C109.pdf>.

providers of free content would have had to pay additional fees, effectively increasing the digital divide by forcing economic choices that would benefit only the telecommunications service providers.⁴⁵ (To build on an example of how this would work: Free online courseware like those available at MIT, Stanford, or the Khan Academy might no longer be offered if these non-profit organizations had to pay an additional fee to deliver their content to the developing world.⁴⁶)

After months of debate on this point prior to Dubai, the conference Chair moved these provisions out of the core text and into a relatively toothless resolution annexed to the ITRs, mandating that the ITU create a “study group” to recommend further action.⁴⁷ On the one hand, the Chair’s decision to move the debate into a non-binding study group may have been a good political compromise. However, the ITU is divided into three sections, one for standards (the “ITU-T” sector), another for spectrum (the “ITU-R” sector) and a third for development (the “ITU-D” sector). The study group was formed within ITU-T and we remain quite concerned because ITU-T—as the division in the ITU that a group that designs telecommunications standards—is not an appropriate place to evaluate economic business models for the Internet. If such a policy were to be analyzed, the OECD would be a better place because of its competence in economic analysis—and in fact, the OECD has weighed in on this very matter and has concluded that the market is doing fine.⁴⁸

Before we move on to the next point, let’s take this question one step further and tie it the mandate-mapping exercise that we described earlier. Recall that we endorsed Clark’s model of isolating problems for analysis within the groups that are experts on topics and care the most about them. So on the surface, one might conclude that the system is working right by taking a topic like “sending party pays” and its progeny over to a study group to analyze it. However, sending this economic discussion to a government-only or government-dominated standard-setting process is the wrong place to go. By analogy, it would be the equivalent of taking one’s tax questions to an architect rather than a certified public accountant or

⁴⁵ Rohan Samarajiva, “A Giant Step Backward or the Way Forward,” LIRNEasia, September 2012, available at http://lirneasia.net/wp-content/uploads/2012/09/Samarajiva-WCIT-Final_9.12.pdf [hereinafter: “Samarajiva, Giant Step Backward”]. (Describing the problem as follows: “Even if content providers stop short of total cutoff, they will be forced to pass along the added costs incurred through sending party pays. For the schoolgirl in Ghana, this may mean that video lessons from Khan Academy are no longer free.”)

⁴⁶ *Id.* (making the point that the sending-party-pays model would disincentivize creators of free educational content used in the developing world).

⁴⁷ WCIT-12 Final Acts, Resolution PLEN/5, cited *supra* at note _____.

⁴⁸ See Rudolf Van der Berg, *Internet traffic exchange: 2 billion users and it’s done on a handshake*, OECD INSIGHTS, Oct. 22, 2012, available at <http://oecdinsights.org/2012/10/22/Internet-traffic-exchange-2-billion-users-and-its-done-on-a-handshake/>.

other tax expert. To be sure, an architect is educated, licensed, and may even have a personal opinion about taxes and money—and even how certain construction techniques might be cheaper or result in tax rebates. However, to state the obvious: architects build and design things, while accountants deal with taxes and money. Taking an issue like taxes and attempting to isolate it in a group that deals with architecture is a misfit and risks producing an outcome that can mislead policymakers. That’s the case with sending the economic modeling of the Internet over to ITU-T. They’ll issue an expert opinion and may even hire economists to support them, but economic modeling is not their core competence. It’s not to say that the ITU shouldn’t become involved in other areas of interest in some way, but it should do so gingerly and respectfully, and create a sharp line when legislating (e.g., through ITRs) in areas where they are outside of their competence.

D. The Content and Social Layers

Much of the information that matters to people on the Internet like email, blogs, videos and communications flow through the Internet’s content and social layers, and this is another key source tension in governance. This becomes particularly problematic when governments conflate the content layer with the infrastructure or logical layers. Two specific examples show how misplaced regulation at the infrastructure or logical layers can really affect free expression issues: spam and cybersecurity. To be sure, these examples are not as easily categorized in any one or two layers. Nevertheless, analyzing spam and cybersecurity through the lens of the layer model can be instructive to policymakers.

1. Spam

Unsolicited bulk communications are clearly a matter that pertains to the content layer: a message is determined to be both “unsolicited” and a “communication” through some inspection of its content. Unsolicited bulk communications also occur in the social layer, where the speech *and* the speaker must be similarly reviewed, and which gives the readers signals as to the identities of the senders and the trust that’s implicit in those identities. Intuitively, we know that an email that we receive from a known business (e.g., pepsi.com, united.com or deloitte.com) is likely to be more trustworthy than the same email sent from a consumer address (e.g., hotmail.com, gmail.com or gmx.net.) Still, it’s not possible to determine whether a communication is “unsolicited” or not without analyzing or reading the content of the message in some way. Context counts, and in

some cases it may be impossible to tell automatically if a message was “unsolicited” based purely on its content or based purely on its origin. To complicate matters further, in many countries certain kinds of speech are protected even if they are not “solicited” *per se*.

Many technical solutions are available to address spam. For example, automated detection of suspicious activities (e.g., recognizing the “bulk” in “bulk communications”) can occur on the logical layer. Thus, if a botnet takes over a set of computers in a region and starts sending messages of roughly the same size and origin, one might conclude that a cyberattack is occurring.⁴⁹ Automated systems are able to recognize patterns, and computer systems can presumptively tag bulk messages of similar size and scope as a botnet, a cyberattack, or even just spam. Here’s the rub: Even if bulk communications could be presumptively signaled at the logical layer, it’s impossible to permanently separate the “bulk” from the rest of the stack without overreaching. Automated spam folders do a fair job but in most all cases, the spam goes to a separate folder that the user can still review on their own.

The sending of any given message—singular or bulk—is a matter of individual choice and implicates civil liberties and is not a matter for governments to decide. For example, political campaigning is protected speech in the United States, and in many countries emergency communications are “pushed” through systems (email, text, and phone). Even if not solicited, *per se*, such communications are deemed valuable to the public and considered protected speech.⁵⁰ Supporters of the ITR’s anti-spam provisions often point to the first section in the ITRs, which state that the regulations “do not address the content-related aspects of telecommunications.”⁵¹ However, in order for this argument to have merit, one would have to believe that spam can be controlled at the logical layer only without regard for the content. As noted above, we don’t think that’s possible.

⁴⁹ See David Décary-Héту and Benoit Dupont, “The Social Network of Hackers,” GLOBAL CRIME, July 28, 2012, available at <http://ssrn.com/abstract=2119235> (describing botnets and the complications of identifying their source and tracking the criminals).

⁵⁰ Mark Sweet, “Political E-Mail: Protected Speech or Unwelcome Spam?” 1 DUKE LAW & TECHNOLOGY REVIEW 1-9 (2003), available at <http://scholarship.law.duke.edu/dltr/vol1/iss1/71> (analyzing the various forms of political spam and their protections under the First Amendment).

⁵¹ WCIT-12 Final Acts §1.1, cited *supra* at note **Error! Bookmark not defined.**. See also Eric Pfanner, “Message, If Murky, from U.S. to the World,” THE NEW YORK TIMES, December 14, 2012, available at http://www.nytimes.com/2012/12/15/technology/in-a-huff-a-telling-us-walkout.html?pagewanted=all&_r=0 (describing how confusing these provisions can be).

Russia contributed one proposal regarding spam at WCIT-12 that illustrates one influential—but dangerous—view on spam. In the proposal, the Russians defined spam as

information transmitted in bulk over telecommunication networks as *text, sound, image*, tangible data used in a man-machine interface bearing indiscriminate advertising nature *or having no meaningful message*, simultaneously or during a short period of time, to a large number of particular addresses without prior consent of the addressee (recipient) to receive this information or information of this nature. (emphasis added)⁵²

The choice of words here is important, as the proposal would have defined spam as “information” that does not have a “meaningful message.” Leaving such determinations to governments (as the Russian proposal would have done) would make those determinations a clear-cut case of censorship.

In the end, the Russian provision was not included in the treaty. Arguably the provision for “unsolicited bulk electronic communications” does not have much effect because there is no requirement for countries to act—the provision merely states that “Member States should endeavor to take necessary measures to prevent the propagation of unsolicited bulk electronic communications.”⁵³ Even so, as we argue at the outset of this section, failed provisions like these are certainly indications of what is to come in the future of Internet policy. While the Russians failed to convince the rest of the world that their definition of spam should become a matter of international law, it is likely that autocratic governments will continue to enforce this view on a national basis.

It’s not the actual enforceability (or lack thereof) of the spam provision that matters here. Indeed, very little—if anything—in the provision is directly enforceable. However, inclusion of a spam provision in the ITRs signals to the world that national governments are permitted to impose content-related “anti-spam” measures of their choosing.

Many have claimed that such concerns are irrelevant because countries can cite “reservations” to any particular provision, essentially refusing to accept its application into their national system. This thinking is dangerous. Remember, the spam provision (as adopted) is relatively toothless, so

⁵² Document 47-E, §2.13, cited *supra* at note 29.

⁵³ WCIT-12 Final Acts §5B, cited *supra* at note **Error! Bookmark not defined.**

creating a reservation for it is unlikely to make any legal difference. This issue is really a matter of philosophy: The world either agrees or disagrees that government inspection of messages is acceptable. The way we see it, this is a binary matter.

2. Cybersecurity

Delegates in Dubai debated cybersecurity just as fervently as they debated the spam provision. Many proposals that fall within the broad ambit of security did not end up in the treaty, but many days and nights were spent discussing requests from many countries for more safety, security—and control—over the Internet. For example, Russia and the Arab States insisted that regulators should know how all Internet traffic is routed.⁵⁴ Theoretically, knowledge of routing patterns could lead to more control over cybercrime and to improved cybersecurity measures.⁵⁵ However, detail on how traffic is routed is incompatible with the Internet’s design because packets of information on the Internet operate on dynamic route selection that can change in matters of milliseconds depending on factors like network congestion.⁵⁶

Even though none of the proposed cybersecurity provisions in the ITRs would have obligated the ITU to do anything (the obligations would have been on member states rather than on the ITU as an institution), there was much discussion about whether or not the ITU itself is the appropriate forum for addressing cybersecurity matters.⁵⁷ Hamadoun Touré, for one, published an OpEd declaring summarily that the proposed ITRs regulations would not affect free speech.⁵⁸ In any case, as with the spam provision, the message from Russia and its allies the cybersecurity provision was clear: They do not feel that existing multi-stakeholder groups are addressing their concerns.

Here, the Dubai-89 might have a point. Key multi-stakeholder groups that handle cybersecurity and spam issues are essentially absent in many

⁵⁴ Document 47-E, §3.3, cited *supra* at note 29. (Proposing that “Operating agencies shall determine by mutual agreement which international routes are to be used. A Member State has the right to know the international route of its traffic, where technically feasible.”)

⁵⁵ See Alex Fitzpatrick, “Why Internet Advocates Hate Russia’s Proposal to Change the Web,” MASHABLE, December 5, 2012, available at <http://mashable.com/2012/12/05/russia-Internet-proposal>.

⁵⁶ See THE RAND CORP., PAUL BARAN AND THE ORIGINS OF THE INTERNET, available at <http://www.rand.org/about/history/baran.html>.

⁵⁷ See Mike Masnick, “Do We Really Want the UN in Charge of Cybersecurity Standards?” TECHDIRT, September 12, 2012, available at <http://www.techdirt.com/articles/20120910/02004020322/do-we-really-want-un-charge-cybersecurity-standards.shtml>.

⁵⁸ Hamadoun Touré, “ITU meeting no threat to free speech,” CNN OpEd, December 5, 2012, available at <http://edition.cnn.com/2012/12/05/business/toure-itu-wcit-Internet-connectivity>.

regions, including in the developing world. Groups like the Messaging Anti-Abuse Working Group (MAAWG), the Anti-Phishing Working Group (APG), and the Coalition Against Unsolicited Commercial Email (CAUCE) are much more active in the United States and Europe but not well known in Africa, Latin America, and Southeast Asia. This makes for good headlines of multi-stakeholder solutions for malware in Europe and elsewhere, but that's not the case elsewhere.⁵⁹ In addition, the private sector has not done an effective job of engaging policymakers, regulators, entrepreneurs and civil society in these regions about best practices in spam and cybersecurity—let alone any discussion of the consequences of adjusting regulation “up the stack” to the content and social layers. In the end, we believe that if the Dubai-55 wants to persuade the Dubai-89 that the current multi-stakeholder system addresses these concerns, then dedicated cybersecurity organizations like the ones mentioned above need to conduct more active outreach, training, and capacity-building efforts.

III. ALIGNING THEORY AND PRACTICE

In this final section, we propose an approach that will facilitate the governance of this immensely complex space. We believe a solid shared understanding of best practices for enhanced cooperation will facilitate the efficacy of Internet governance. Kleinwächter *et. al.* have proposed three levels of cooperative group involvement and participation.⁶⁰ The first level is *enhanced communication*, which proposes that “all stakeholders have the possibility to make their arguments to all other stakeholders.” Openness of communication in terms of mailing lists and publicly accessible meetings satisfy this condition. The second level, *enhanced coordination*, would involve partners engaging more closely to produce a “conglomerate of solutions,” meaning that “stakeholders seek to divide challenges into ‘thematic work packages’ which are assigned to the appropriate institution. Each institution then follows its logic to negotiate mutually agreeable compromises/solutions.” The third level of cooperation, *enhanced collaboration*, would involve a set of stakeholders developing a joint solution that necessitates the installment of a new practice (and possibly a new institution) supported by the cooperative group in question.

⁵⁹ See Mark Bowden, “The Enemy Within,” THE ATLANTIC, June 2010, *available at* <http://www.theatlantic.com/magazine/archive/2010/06/the-enemy-within/308098/> (describing the story of the Conficker worm and efforts to control it).

⁶⁰ WOLFGANG KLEINWÄCHTER, MULTISTAKEHOLDER INTERNET GOVERNANCE: THE ROLE OF GOVERNMENTS, IN BENEDEK, BAUER, KETTEMANN, INTERNET GOVERNANCE AND THE INFORMATION SOCIETY: GLOBAL PERSPECTIVES AND EUROPEAN DIMENSIONS, ELEVEN INTERNATIONAL PUBLISHING (2008).

A. Strengthening the Internet Governance Forum

Internet governance challenges are debated in several forums. In the current institutional ecosystem, we assert that the IGF is best positioned to host deliberations about which actors should collaborate in voluntary enhanced cooperation mode. The IGF is also well suited to help identify which institutions in the applicable layers of the Internet could address the issues relevant to those layers. Only the IGF's mandate is broad enough and specific to Internet governance. As previously stated, the IGF is not a decision-making body, and the fact that it has no power by itself makes it the best institution for gathering all relevant stakeholders. Stakeholder groups from every part of the globe (government, industry, users, NGOs, and academia) attend workshops, bi-laterals, coalitions and other events and play an active role in the IGF. It's an environment where controversial issues can be addressed in a constructive manner with all parties at the table, and without the posturing and negotiations that can happen when there is a decision at stake, such as in a regulatory proceeding.

Importantly, open discussions between diverse experts results in an atmosphere of listening and learning. The IGF is built for everyone who cares about the Internet; there's no limitation on who can join and take the microphone, including executives of leading companies to civil rights activists, and even youth that use the Internet for learning and entertainment. Possibly the strongest case for the IGF is that it allows all stakeholders (including those from developing countries) to confer and build relationships with peers in other countries and actively participate in working groups and projects that extend beyond the IGF itself.

We don't mean to oversell the IGF, but it's undeniable the only truly multi-stakeholder forum that convenes so many diverse influencers on a regular basis. Many stakeholders don't want the IGF to become a decision-making body, and a change of the IGF's mission to convert it to a decision-making body would be inconsistent with the mandate set forth at WSIS. However, the IGF need not remain static. One way to improve the IGF would be to identify which other forums and institutions can be used to resolve various issues raised at the IGF. This could be seen as a kind of "intellectual tech transfer" or "policy tech transfer". Workshops could be designated for developing non-binding suggestions to address certain Internet governance issues. For example, security issues of a technical nature might be recommended for action at the IETF or even organizations like FIRST or the IEEE. As an outcome of each of the workshops, the

panelists and participants record their recommendations for next steps to address each particular issue in their country or region.

Additionally, the IGF needs financial resources so that it can work more effectively as a platform for other groups. The IGF works on a shoestring budget of less than \$1m per year and has only one full-time employee.⁶¹ When compared to the budget of the ITU—which is more than \$150m per year—it’s clear that there are opportunities for participants to increase their financial contributions to the IGF so as to set it up for a stronger future.⁶²

The emergence of many “regional” IGFs is also a very positive thing where many policy issues are discussed prior to the IGF itself. Future work on the IGF’s website, for example, could take these regional IGFs into account, and, if possible, provide a central repository for reports, videos, and other information. This shared database would serve regional IGFs, and it could also feed in to the main IGF each year. This doesn’t mean that the regional IGFs need to follow the same themes as the IGF, but the IGF website could be used to create better opportunities for sharing information with the IGF’s wider global audience. We’re hopeful that a working group will be established within the IGF to develop ideas like this and execute on them.

B. More on IGF Funding

As we’ve stated above, the IGF is one of the best forums for Internet governance deliberations, so strengthening it in the ways suggested above will only increase its ability to function as an organization that truly acknowledges and addresses the needs of all stakeholder groups. The multi-stakeholder system enables the free flow of information and facilitates free discussion among stakeholders—but these activities are not cost free and the community will need to find a way to fund the IGF and similar activities in ways that can enable them to engage on equal footing with well-funded organizations like the ITU. Although we are not advocating any sort of a “de-funding” campaign for the ITU, it is noteworthy that the ITU’s two top funders are the United States and Japan, each of which contributes nearly \$11 million annually.⁶³ By contrast, as of the date of this writing, these two countries have not contributed any funding whatsoever to the IGF.⁶⁴ This

⁶¹ *IGF Funding*, IGF WEBSITE, available at <http://www.intgovforum.org/cms/funding>

⁶² *Financial Plan for the years 2012-2015*, ITU NEWS, No. 9, 2010, available at <https://itunews.itu.int/En/985-Financial-Plan-for-the-years-20122015-note.aspx>.

⁶³ *Battle lines being drawn for the next ITU conference*, INFO SECURITY, Jan 17, 2013, available at <http://www.infosecurity-magazine.com/view/30283/battle-lines-being-drawn-for-the-next-itu-conference/>

⁶⁴ See IGF Website, *supra*.

needs to change—not just for the United States and Japan, but for for many countries—particularly if the Dubai-55 countries truly hope to defend the benefits of a multi-stakeholder system.

C. Next steps for the IGF

Internet governance must become a transnational and multi-stakeholder effort. We assess and promote the IGF as the deliberation forum best situated to enable all stakeholders to add topics to the agenda, deliberate on those topics, and identify the best way to resolve issues. Internet enabled innovation will continue to develop at a very fast pace and all stakeholders and institutions must be both adaptive and willing to engage in order to seek the balance between interests.

The case for government participation in Internet governance is clear: governments have been regulating operations within their borders for centuries. The harder case is to convince the private sector and civil society that it's important to actively and persistently engage in governance matters. If the Internet users of the world wish to rely solely on their governments to set the rules, we're likely to see increased efforts to control the Internet through blunt instruments like the international treaty effort in Dubai.

Finally, governance through any institution, and particularly the IGF, needs well-defined processes. These processes need not be static or inflexible, but they should be predictable. While the non-decision making nature should stay at the heart of its mission, the IGF can complement its role as core deliberation platform, by establishing solid methods to document and archive the development of Internet policy and governance themes, as well as by allowing voluntary enhanced cooperation to form and tackle the challenges identified. In many respects, the IGF has the potential to develop into an institution that can do much more than it does today.

CONCLUSION

The Internet is a global resource, and policies that are implemented to manage the Internet on a global basis affect its utility for all. Nations are continuously attempting to seize control of the Internet by grafting their domestic policies onto the global resource. This temptation continues the bankrupt theory that the Westphalian system in the physical world can also apply across the global Internet. However, in today's highly connected global environment, it is increasingly impossible to impose local or regional rules on the Internet. For these reasons, there is a compelling case to constantly seek agreement on transnational principles for governance, even

if permanent solutions are never reached. As innovation occurs so rapidly, there is considerable value in discussing and embracing the “tussle” so that stakeholders can understand each others’ perspectives and work towards compromises. In some ways, it’s the tussle that matters the most—and the willingness of the stakeholders to engage with each other and attempt to work out the policy equivalent of “running code and rough consensus.” The process itself and the diversity of actors within it may be more important than the outcomes, communiqués, positions and other efforts to resolve disputes.

As the globe looks toward governance systems for the Internet in the next phase, we should avoid the temptation to enshrine arcane rules in international treaties. Although treaties that relate to Internet governance can set norms across international boundaries, in the process of setting such norms, there is a risk of enacting rules that increase censorship and providing more opportunities for centralized control of the Internet. Doing so has great risk of slowing the innovation and benefits that the Internet has brought so far.

Instead of seeking “control” of the Internet through treaties, it follows from the analysis put forward in this paper that countries should focus on improving the existing institutions that have developed the policies for the Internet so far and to encourage these organizations to continue to develop and deepen their competencies in their respective domains. Improving the existing institutions and organizations is really hard work, and it might be tempting to throw it all away and start anew, but there is no evidence that new, untested approaches could bring the same kind of enormous value that the current institutions have brought so far. Moreover, since the same players would be debating the form of new institutions, the results might be similar.

The list is long of things to be improved, and it includes working with the IETF for areas like the Internet’s technical standards, ICANN for naming and, with the Regional Internet Registries, for addressing policies and to continue to increase global inclusion in that decision making, and the ITU as a place for access infrastructure that’s so critical, particularly in emerging markets that do not yet have it. For the inevitable tussle that will always exist between regions, stakeholders and values, the IGF is an umbrella that can bring together stakeholders from all communities to debate the policies for the future. All of these organizations need to be nimble and ongoing reform is required as the Internet evolves. However, we should turn to these organizations and push them to improve their

effectiveness in their respective roles rather than creating new overarching treaties or mandates.

The experience at the WCIT in Dubai demonstrated the folly of regulation by treaty. In Dubai, representatives from around the globe attempted to lock down rules in a two-week period that saw some really unfortunate alignments: who would have imagined that Arab States, Russia, Africa and Latin America would unite to sign the treaty (the Dubai-89), with the United States, Canada and Europe refusing to sign the treaty (the Dubai-55). There were some defectors in each of these groups (*e.g.*, Costa Rica, Peru, Chile, Ecuador and Kenya went with the Dubai-55, while otherwise close allies like Mexico, Argentina, Brazil and South Africa went with the Dubai-89). Over time, it may be possible to understand the motivations behind these alignments. However, the fact remains that the delegates in Dubai did not know until the very last hours of the conference who would be signing and who would not, which is evidence that negotiations of this kind may lead to outcomes that are unpredictable, and this is not a good outcome when rules are enshrined in international law. At the core, we have looked at some of the examples from the divide between the Dubai-55 and Dubai-89, and we suggest that the following five topics will reappear in the future and are important to address in the coming months:

1. Domain policy should stay exclusively with ICANN. Many countries do not feel that they have enough say in the current domain-naming system and seek making this a government function. Still, the best multistakeholder approach solution would be to have these concerns heard within ICANN and addressed there—fought, debated, argued and pressed. The Government Advisory Committee role could be strengthened in aid of this outcome. In order to better show its ability to address these issues, ICANN should continue to expand its presence outside the United States and become more global.

2. The ITU's strength is infrastructure, not Internet standards. In the years of the telegraph, telephone and fax, the ITU was instrumental in enabling interconnectivity and interoperability. However, in the Internet, the IETF has proven that it efficiently develops open standards for interconnectivity and interoperability. The role of the ITU today is more on infrastructure and less on standards, otherwise the group within the ITU that sets standards, ITU-T, will continue to see itself tackling things that are way out of its mandate and expertise, such as what happened at the WCIT, when the ITU-T was charged with responsibility

for developing the next phase of the response to the “sending party pays” proposal, something that would fundamentally alter the economic model of the Internet. Such matters are best left to economic organizations like the OECD.

3. The content and social layers are not in any remit for new treaties; we should work on improving those existing treaties while leaving deliberation and “policy tech transfer” to the IGF. One of the most contentious areas of policy in the Internet is how to handle the information that flows across it. International organizations like UNESCO, UNHCR and the Council of Europe have established themselves as protectors of free expression in treaty instruments and reform should continue there. Many countries seek to have an influence regarding what information is acceptable for a variety of reasons, and the tussle and debate can continue in those existing fora, while allowing deliberation at the IGF, which is uniquely positioned for the discussion since the IGF will not enact new rules itself, but can inform the participants in the other fora. In Dubai, we saw free-expression interests clash starkly in the proposals for cybersecurity and spam. Although the final provisions of the treaty removed most of the sting, the effort to control content is likely to continue, as will the drive to create new treaties and rules, which will lead to more uncertainty in international conflict-of-laws than it is likely to resolve. Again, this is why it’s important for non-decisional fora like the IGF to flourish, since policymakers can meet with stakeholders to meet and discuss policies to accommodate each others’ interests without risk of each event turning into a new set of rules that lawyers then need to figure out how to implement.

4. The IGF needs to continue to evolve. There’s a lot of opportunity for the IGF to improve. For starters, as we’ve stated many times, the IGF should not become a decision-making body because exploratory discussion, together with honest and constructive deliberation would be swamped with positioning and negotiations. However, the IGF need not remain static. Along these lines, the IGF could be viewed as a policy-based “tech transfer instrument,” a “policy lab” of sorts, for example, by including recommendations at the conclusion of certain key workshops to refer topics to areas of competency within the multistakeholder governance system. Subsequent meetings of the IGF could track the progress of these exported issues.

5. Stakeholders must realize that Internet governance is not free.

Organizations like the IGF are acutely underfunded and governments and stakeholders around the globe need to step up and pay their share. Multistakeholder governance has brought us the Internet's innovation so far, but there is a strong imbalance between the perception of how to fund the policy development. For example, there are many countries that contribute highly to the ITU but provide no funding to the IGF (such as the examples discussed earlier of USA and Japan). We believe that national and private sector stakeholders who engage in and benefit from the IGF discussions should provide financial support to assure its continued operation.

In the end, we may never manage to separate issues into neat and clear, distinguishable “tussle” spaces and different stakeholders may never agree. However, permanent tensions exist in any functioning system and it is perfectly acceptable—and good—for some of these disagreements to exist, even in perpetuity. However, the Internet policy system should endeavor to mirror the dynamic and rapidly changing nature of the Internet itself. As Clark et al pointed out, the Internet's technical design allows for logical separation of functions outside of the technical space, and separating matters in a reasonable way might well be the most important challenge for (transnational) policymaking. We don't want to imply that anything should be static, but it will be important for each organization to understand its place within the Internet's “stack” and to work well to address global concerns within their stack and their primary area(s) of competency. If done properly, this process should avoid further moves for wholesale takeover of single international agencies into the entire stack.

The complex challenges of governing the internet as well as the aspiration to maximize the Internet's utility for all humankind allows only one conclusion: The internet is our shared responsibility.

Appendix - Internet Governance Ecosystem Institutions & Madates

The following table lists a selection of relevant institutions in the Internet governance ecosystem as listed in Illustration 2. The list is by no means comprehensive, but we hope to have included the most significant institutions as well as suitable examples for all three categories.

United Nations Agencies are the traditional fora for international diplomatic activities including the negotiation of treaties and policies. For the most part these institutions are based on inter-governmental practices with only peripheral consultations with civil society and the private sector. Over the last decades several process have been opened up and next to the developments in Internet governance other fields e.g. in the political discours and cooperative activies agains global warming are developing successful multistakeholder governance approaches.

The “native” Internet Governance institutions have naturally all been founded in the last 25 years and have either an academic or engineering origine. Given the success of the network and the speed of development and innovation the institutions have followed an open (multistakeholder) approach to participation (everybody who is interested can participate) as well as a cooperative ground swell regarding decision making practices (running code and rough consensus).

As described in section 1 many professions and media technologies conflate on the Internet. The professional associations of these traditional actors (e.g. journalists) as well as native online professions (e.g. service providers in GNI) are also important voices in the discourse and sources of self regulation and moral practices (i.e. professional codes of conduct).

Name	Mandate or Mission
ISOC - Internet Society	To promote the open development, evolution, and use of the Internet for the benefit of all people throughout the

	<p>world.</p> <p>http://www.Internetsociety.org/who-we-are/mission</p>
IETF - Internet Engineering Task Force	<p>“make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.”</p> <p>http://www.ietf.org/about/mission.html</p>
IAB - Internet Architecture Board	<p>“architectural oversight of IETF activities, Internet Standards Process oversight and appeal, and the appointment of the RFC Editor. “</p> <p>http://www.iab.org/about/</p>
ICANN - Internet Corporation for Assigned Names and Numbers	<p>“coordinate, at the overall level, the global Internet’s systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet’s unique identifier systems.”</p> <p>http://www.icann.org/en/about/governance/bylaws#I</p>
W3C - World Wide Web Consortium	<p>“lead the World Wide Web to its full potential by developing protocols and guidelines that ensure the long-term growth of the Web.”</p> <p>http://www.w3.org/Consortium/mission</p>
ITU - International Telecommunication Union	<p>“allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.”</p> <p>http://www.itu.int/en/about/Pages/default.aspx</p>

IEEE	<p>“foster technological innovation and excellence for the benefit of humanity.”</p> <p>http://www.ieee.org/about/vision_mission.html</p>
ISO	<p>“develop International Standards.”</p> <p>http://www.iso.org/iso/home/about.htm</p>
WPFC - World Press Freedom Committee	<p>Defense and promotion of press freedom in all media.</p> <p>http://www.wpfc.org/?q=node/2</p>
GNI - Global Network Initiative	<p>help ICT companies “navigate face pressure by governments to act in ways that may impact the fundamental human rights of privacy and freedom of expression.”</p> <p>http://www.globalnetworkinitiative.org/about/index.php</p>
WBU - World Broadcasting Union	<p>“coordinating body for broadcasting unions who represent broadcaster networks across the globe. “</p> <p>http://www.worldbroadcastingunions.org/wbuarea/about/about.asp</p>
WEF - World Economic Forum	<p>“promote policies that will improve the economic and social well-being of people around the world.”</p> <p>http://www.oecd.org/about/</p>
OECD - Organisation for Economic Co-operation and Development	<p>“promote policies that will improve the economic and social well-being of people around the world.”</p> <p>http://www.oecd.org/about/</p>

IGF - Internet Governance Forum	<p>“convening a new forum for multi-stakeholder policy dialogue”</p> <p>http://www.intgovforum.org/cms/aboutigf</p>
WIPO - World Intellectual Property Organisation	<p>“promote innovation and creativity for the economic, social and cultural development of all countries, through a balanced and effective international intellectual property system.”</p> <p>http://www.wipo.int/about-wipo/en/</p>
WTO - World Trade Organisation	<p>“provides a forum for negotiating agreements aimed at reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development.”</p> <p>http://wto.org/english/thewto_e/whatis_e/wto_dg_stat_e.htm</p>
UNESCO - United Nation Education, Science and Culture Organisation	<p>“create the conditions for dialogue among civilizations, cultures and peoples, based upon respect for commonly shared values. “</p> <p>http://www.unesco.org/new/en/unesco/about-us/who-we-are/introducing-unesco/</p>
UNHRC - United Nations Human Rights Council	<p>“strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them.”</p> <p>http://www.ohchr.org/EN/HRBodies/HRC/Pages/AboutCouncil.aspx</p>
FAO - Food and Agricultural	<p>“improve nutrition, increase agricultural productivity, raise the standard of living in rural populations and</p>

Organisation	contribute to global economic growth.” http://www.fao.org/about/en/
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