CSCI 1800 Cybersecurity and International Relations

Internet Governance II

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Outline

• The status of Internet governance (IG)
• The International Telecommunications Union (ITU) and the WCIT 2012 crisis
• Snowden revelations and the response
• Competing governance models, ITU vs MSG
• Governance by multi-stakeholder process (MSP)
• What’s wrong with IG and how to fix it
• Recommendations concerning IG
• New issues: IANA liberation & Right to be Forgotten
Does Internet Governance Need Change?

- “The current approach to Internet governance is politically untenable because it lacks legitimacy in the eyes of many new Internet users. …
- The source of legitimacy in the existing governance model was technical expertise. This is now being displaced by political processes. While the current, informal multi-stakeholder model must be transformed … What will replace these processes remain unclear … there is real risk that any transition could lead to an Internet that is less free, … innovative and … valuable to the nations of the world.”

What Type of Governance is Viable?

“‘To be stable, a new governance system must be able to manage a global infrastructure. This will require technical expertise and perhaps new institutions, ... (and) the consent of the international community. A new model must find the balance between government and private sector, between US and global, and between sovereignty and human rights. ... A clear division of labour among the multi-stakeholder community that explicitly recognizes where governments must play a leading role would be a useful and achievable first step.”

Roles for Internet Governance

• Share best security practices
• Develop acceptable norms of behavior
• Protect intellectual property and human rights
• Cooperate to reduce cross-border cyber crime
• Engage in trust building to reduce threat of conflict
• Ensure continued expansion of content and access
Brief History of Internet Governance

• Interest in governance grown since USG in ‘98 gave ICANN responsibility for supervising most of the DNS.
  – ICANN sets policy concerning domain names and IP addresses
  – But US Department of Commerce has last word for changes to root zone, the Rosetta Stone for domain name translation

• WSIS convened by UN in 2003 and 2005.
  – Produced the Tunis agenda, clarifying Internet issues
  – Led to annual meetings of the Internet Governance Forum (IGF), a venue to discuss governance issues.
More History

• 2012 WCIT – Should International Telecommunication Union (ITU) be in charge of the Internet?
  – Western governments want Internet to remain open
  – Others want to see governments in control

• 2013 – Snowden revelations cause governments to want
  – To store local content locally
  – Avoid sending their Internet traffic via US
  – Have a voice on top level domains, such as .vin
  – Reduce US surveillance
  – Reduce influence of large US Internet companies
The Structure of the ITU

• ITU has three sectors,
  – Telecommunications (T) – wired communication
  – Radio (R) – wireless communication
  – Development (D) – developing nations

• ITU is important UN agency dating from 1865
  – Only nations can introduce topics and vote
  – Corporations and organizations can attend meetings
  – Technical decisions can be revised by politicians
World Conference on International Telecommunications (WCIT)

• Held by ITU in Dubai from December 3-14, 2012.
• Congress endorsed MSM in anticipation.
• International Telecommunications Regulations (ITRs) revised to include references to Internet
  — Previously (1988) ITRs applied only to public switched telephone networks (PSTNs)
• 1,600 diplomats from 151 countries attended!
The WCIT Crisis

• A direct challenge by a UN entity to the existing system for running of Internet!

• Autocratic nations proposed that ITU take over management of the Internet$^{5,6}$
  – US, EU, Canada, India, etc. did not ratify treaty
  – 89 nations did ratify, 55 did not

• Difficult to alter Internet governance
  – WCIT clearly signals that some nations want to try.

5. Did the U.N. Internet Governance Summit Actually Accomplish Anything?, Slate, 12/14/12
6. The UN's telecom conference is finally over. Who won? Nobody knows., Ars Technica, 12/14/12
Impact of Snowden on IG

• Montevideo Statement, October 7, 2013
  – Reinforced need for globally coherent Internet
  – Identified need to address IG challenges
  – Acceleration of globalization of ICANN, IANA

• Global Multistakeholder Meeting on the Future of the Internet – Brazil, April 23, 24, 2014
  – MSG endorsed by all nations except China, India and Russia
A Major Internet Governance Decision

• 2014 – USG announced “its intent to transition key Internet domain name functions to the global multi-stakeholder community” if following goals are met:
  1. “Support and enhance the multistakeholder model,
  2. Maintain the security, stability, and resiliency of the Internet DNS,
  3. Meet the needs and expectation of the global customers and partners of the IANA services; and
  4. Maintain the openness of the Internet.”
• No transition will occur if USG is replaced by another government or an intergovernmental organization.

3. NTIA Press Release, March 14, 2014
Competing Governance Models

• **Multi-stakeholder governance (MSG)**
  – Open, transparent, and inclusive engagement.
  – Some want decisions to be made by “consensus.”
  – This model endorsed by many democratic governments

• **International Telecommunications Union (ITU)**
  – An intergovernmental UN organization
  – One vote per nation
  – Technical decisions can be changed at policy layer
  – Endorsed by governments concerned about state security

1. Exploring Multi-Stakeholder Internet Governance, Savage & McConnell, EastWest Institute, 2014
What is Good About MSG?

• Hemmati\(^2\): for decades multi-stakeholder processes (MSPs) used to address issues such as biotechnology, corporate conduct, energy, labor, gender inequality, tourism, mining, paper, sustainability, etc.

• MSPs inform and support decision makers, identify solutions, and encourage stakeholders to take ownership of issues.

• Effective in social, political, economic and technical contexts, when problems are new, fast changing, and complex with important social and cultural dimensions, especially when governments are slow to act.

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What is Bad About MSG?

• Hemmati (2002) calls MSG a “new form of communication, decision-finding (and possibly decision-making)” but “not a universal tool”.

• It is “suitable for ... situations where dialogue is possible and where listening, reconciling interests and integrating views ... [is] within reach.”

• “More often [than not] the process becomes a messy, loose-knit, exasperating, sprawling cacophony”
Weighing the Good and Bad of MSG

• MSG stimulated Internet development and web content.
  – IETF, W3C and ICANN employ some form of MSG
  – Unwise to abandon the MSG approach.

• But MSG has no universally accepted definition.
  – All agree it should be open, transparent, and inclusive
  – Some argue it should make decisions by “consensus”

• Opinion of Ambassador Phillip Verveer (2013):
  – “I tend to think of it as a kind of ethos of inclusivity, which doesn’t provide much other than guidance in terms of the notion.”

• Dangerous to use MSG exclusively for Internet governance!
  – But it is a powerful mediating mechanism
What’s Wrong With IG Today?

• IG defined too broadly, making it hard to manage, as agreed by leading experts.

• For example, 2014 IGF topics included:
  – Internet access, freedom of expression, child safety, privacy, cyber economics, IPv6 deployment, right to be forgotten, gender issues, climate change.
Is There More?

• Absence of rules for MSG meetings
  – Evident in IETF and ICANN
• A perceived lack of accountability
  – ICANN has commissioned study of its accountability
• ICANN’s legitimacy is being challenged.
  – USG addressed this by proposing to spin off control of the root zone
• Important stakeholders are not participating in governance discussions.

• Because MSG has weaknesses, it must be carefully crafted before used for global Internet governance.
How Should Internet Be Governed?

• If neither the status quo nor ITU is satisfactory, how should the Internet be kept open, inclusive and secure?

• Is there a middle ground between government control and laissez-faire form or governance?

• Let’s first ask what topics should be included in the term “Internet governance.”
Internet Governance Topics

1. **Network Architecture**, e.g. naming & routing, traffic management, network security, standards

2. **Content Control**, e.g. privacy, data filtering, data security, freedom of expression, information security

3. **Human Rights**, e.g. freedom of expression, economic, social and cultural rights, privacy, surveillance

4. **Cyber Crime**, e.g. identity and IP theft, fraud

5. **Cyber Attacks**, e.g. actions via networks causing serious harm to a nation, its interests, or infrastructure.
A Middle Ground Recommendation*

- We echo others who recommend simplification of Internet governance by assigning governance roles to relevant international bodies such as:
  - Human Rights Commission (HRC)
  - World Intellectual Property Organization (WIPO)
  - World Trade Organization (WTO)
  - International Telecommunications Union (ITU)
  - Council of Europe (CoE)
  - Shanghai Cooperation Organization (SCO)
  - See Joe Nye’s Regime Complex for others

* Exploring Multi-Stakeholder Internet Governance, Savage & McConnell, EastWestInstitute, 2014
Joe Nye’s Regime Complex
Additional Recommendations

• Attach a multi-stakeholder consultative group to each international body dealing with IG issues.

• New Principle: in each new body policymakers do not make or modify technical decisions but they may reject them.

• This principle currently applies to the UN International Civil Aviation Authority (ICAO).
More Recommendations

- For legitimacy major Internet nations might appoint members to ICANN’s Independent Review Panel (IRP) so that it is independent of the ICANN board.
- A US role on IRP can help prevent ICANN’s capture.
- Given the importance of maintaining the integrity of the root zone file, the authority of a new IRP must be carefully circumscribed.
  - It could include allocation and de-allocation of gTLDs, approval of deployment of DNS and BGP standards, and management of keys for secure versions of DNS and BGP.
Our Conclusions

• Internet governance is too important to be left to the Internet designers, operators and telecommunications ministers alone

• Both users and governments also need to work together to safeguard the operation of the Internet while ensuring that the vitality of the Internet is not lost.
Contemporary Issues
NETMundial Initiative

- This initiative was launched by ICANN and CGI jointly with the World Economic Forum in 2014
- CGI is the Brazilian Internet group that hosted the NETmundial meeting in Sao Paulo
- The goal is to engage world economic leaders
- So far, very little progress has been made
Current Status of IANA Administration

• A Cross-Community Working Group (CWG) was formed in October 2014 to prepare a transition plan for the stewardship of IANA functions.

• Another working group (CCWG – Accountability) has been formed by ICANN to examine its accountability procedures.

• The recommendations of the CWG as of January 30, 2015 are shown below.
Two CWG Models for Replacing NTIA

**External**
Replacement entity cannot be ICANN but ICANN would be granted the contract for the IANA functions after creation of this entity.

**Internal**
NTIA would transition its functions, including the right to determine who performs the IANA Functions, to ICANN, which would continue to operate the IANA. Functions (without a contract) are subject to the community’s ultimate right to require ICANN to transfer the authority and the IANA Functions to another operator.
Common Elements in Both Models

• Multistakeholder Review Team (MRT)
  – A group of stakeholder representatives responsible for completing the new IANA functions definitions (a contract under the external solutions), deciding, under certain limited circumstances, if the IANA functions should be moved from ICANN, and how to select a new operator in that case. Also responsible for addressing IANA performance issues escalated by the CSC.

• Customer Standing Committee (CSC)
  – Oversees the IANA performance on a regular basis, predominantly composed of registry representatives. CS would take issues up directly with IANA with possibility of escalating to MRT.
Common Elements in Both Models

• Independent Appeals Panel (IAP)
  – All decisions and actions (including deliberate inaction of the IANA Functions Operator) would be subject to an independent and binding appeals mechanism.

• Separability
  – The IANA Function would not be transferred from ICANN at the beginning of the transition from NTIA but could be initiated by MRT.
External Trust Model

• New trust, Contract Co., would be set up **under US Law**

• Trustees selected from multistakeholder community

• Primary role: select & contract for IANA Functions Operator
Internal Trust Model

• ICANN creates “Golden Bylaw”
  – Guarantee that ICANN would relinquish the right to perform the IANA functions to third party if required by multistakeholder MRT.
  – Separation may require creation of Contract Co.
• ICANN creates bylaw defining MRT as standing committee
• NTIA then transfers it authority to ICANN
• NTIA enters into a “Declaration of Trust” with ICANN to perform IANA functions for benefit of MS community
• A “Guardian” of the trust would be appointed, which would be a cross-community group similar to MRT. Authority of Guardian limited to initiating escalation process, not transfer
• More rules
The Right to be Forgotten
The Right to be Forgotten

• Since 2014, Europeans have been able to petition search engines like Google or Yahoo to remove links about them when the link contains inaccurate, irrelevant or excessive information about people.

• Nearly nine in 10 U.S. voters want "the right to be forgotten" on the Internet, according to a new poll.

• Eighty-eight percent support a U.S. law that would let them petition companies like Google, Yahoo and Bing to remove certain personal information that appears in search results. While 52 percent strongly support a U.S. law, another 36 percent somewhat support it.

• That proposal is similar to the European policy known as the "right to be forgotten," which has divided those advocating for increased privacy and others who argue it could curtail free expression.

http://na-aba.marketo.com/rs/benensonstrategygroup/images/Beyond%20the%20Beltway%20February%202015%20for%20Public%20Release%5B1%5D.pdf
Review

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