Introduction to Global Internet Governance

Internet Week Guyana
9/13 October 2017
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What is the Internet? How does it work?

THE THREE LAYERS OF DIGITAL GOVERNANCE

No one person, government, organization, or company governs the digital infrastructure, economy, or society. Digital governance is achieved through the collaborations of Multistakeholder experts acting through polycentric communities, institutions, and platforms across national, regional, and global spheres. Digital Governance may be stratified into three layers to address infrastructure, economic, and societal issues with solutions. For a map of Digital Governance Issues and Solutions across all three layers, visit https://map.netmundial.org

Source: ICANN
Historical Facts about the Internet

1975: TCP/IP test between two networks (Stanford University and UCL)

1983 Research network for ~ 100 computers adopts TCP/IP

1992 Internet is open to the commercial sector:
- Exponential growth
- IETF urged to work on a IP next generation protocol

1993 Exhaustion of the class B address space
- Forecast of network collapse for 1994!
- RFC 1519 (CIDR) published

1995: RFC 1883 (IPv6 specs) published
- First RFC about IPv6
What is Internet Governance? Narrow vs Broad Approach

**NARROW**

- Internet infrastructure (DNS, IP numbers, root servers)
- ICANN

**BROAD**

Legal, economic, developmental & sociocultural issues included
What is Internet Governance?
Technical vs policy

8.8.8.8

Why won’t you let me Google that for the benefit of the people!
Working definition (WGIG)

“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.”
Parlez-vous policy???

- Multi-stakeholder approach
- Theoretical policy frame known as discourse
- Actors, institutions, narratives, texts, interactions, events, discourse
- Multi-actor dynamics
- Features of information and communication public policy:
  - Thematic uncertainty - contents
  - Procedural uncertainty - processes
  - Multiplicity - heterogeneity of actors
Multi-stakeholder approach

• Experimental governance process (subject to continuous improvement)
• Mix of direct and representative democracy
• Mix of policy formulation (discursive construction) and diplomacy
• Think of 3 functions within ms policy dialogue as the tango of the *savoirs*
  — *Savoir*: data, hard facts, theoretical knowledge, contextual knowledge
  — *Savoir-faire*: know-how, process innovators
  — *Savoir-être*: thought leadership, strategic
1998 - an interesting year

1. International Telecommunication Union’s Plenipotentiary Conference (ITU-PP) in Minneapolis
   - “a joint and harmonized understanding of the information society”
   - “strategic plan for the development of the information society”

2. End of the so-called DNS wars (started 1994)

3. Incorporation of the Internet Corporation for Assigned Names and Numbers

4. WTO Agreement on Basic Telecommunications Services (BTA)
World Summit on the Information Society (WSIS)

- Entry into diplomatic agenda (UN system)
- Two phases held in Geneva (2003) and Tunis (2005)
World Summit on the Information Society (WSIS)

Geneva Principles:
The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations.

Tunis Agenda:
-Arts. 29 - 82 address Internet Governance

Working definition
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Who’s involved?

*Tunis Agenda Article 35:*

We reaffirm that the management of the Internet encompasses both technical and public policy issues and should involve all stakeholders and relevant intergovernmental and international organizations. In this respect it is recognized that:

**Policy authority for Internet-related public policy issues is the sovereign right of States. They have rights and responsibilities for international Internet-related public policy issues.**

**The private sector has had, and should continue to have, an important role in the development of the Internet, both in the technical and economic fields.**

**Civil society has also played an important role on Internet matters, especially at community level, and should continue to play such a role.**

**Intergovernmental organizations have had, and should continue to have, a facilitating role in the coordination of Internet-related public policy issues.**

**International organizations have also had and should continue to have an important role in the development of Internet-related technical standards and relevant policies.**
# Actor types and drivers

<table>
<thead>
<tr>
<th>Type</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Community</td>
<td>Pursuing technical excellence through standards development</td>
</tr>
<tr>
<td>Public Sector</td>
<td>Designing and implementing public policy</td>
</tr>
<tr>
<td>Private Sector</td>
<td>Enhancing shareholder value; can generate public policy effect as private intermediaries subject to customer acceptance (e.g. protection of personal information collected and processed by operators)</td>
</tr>
<tr>
<td>Academia</td>
<td>Constructing and disseminating knowledge</td>
</tr>
<tr>
<td>Civil Society</td>
<td>Propagating social and cultural norms</td>
</tr>
<tr>
<td>End User</td>
<td>Demanding high QoS, developing social networks, entrepreneurship, permissionless innovation</td>
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Remember this?

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ECONOMIC AND SOCIETAL LAYER

LAWs, POLICIES, AND REGULATIONS
Governing bodies in local, national, regional, and international spheres are engaged with their citizens and with other bodies to develop and apply laws, policies, and regulations. The international nature of the internet must be synchronized with the established international system of governance and laws.

CIVIC AND HUMAN RIGHTS
Privacy, identity, access to content, freedom of expression, cybercrime, consumer protection, cultural diversity, and many more.

SOCIAL MEDIA
Sharing photos, videos, ideas, and information. Such as Facebook, Twitter, Instagram, Tencent, QQ, WeChat.

SECURITY
Cybersecurity, cyber warfare, cyber espionage, cyber terrorism, and many more.

MOBILE
Smart phones, tablets, cars. There are now more mobile devices on the planet than people.

EDUCATION
Online universities, research, tutorials, classroom engagement.

APPLICATIONS
Worldwide web, email, cloud, VoIP, mobile apps.

ENTERTAINMENT
Music, movies, television, games. Such as iTunes, Netflix, YouTube, Amazon, Netflix.

THE ROOT ZONE

ROOT SERVICES
13 organizations from 4 countries administering 13 different root servers that provide top-level DNS services via-hundreds of machines in dozens of countries.

~900 Anycast copies worldwide.

INTERNET BACKBONE (IP NETWORKS) 90% is privately owned by global companies like: Level 3 Communications, NTT Interconnection Carrier, CenturyLink, Windstream, Verizon, Sprint, AT&T

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MULTISTAKEHOLDER COLLABORATIONS
Solutions to issues in each layer include policies, best practices, standards, and specifications developed by the collaborations of expert stakeholders from actors in business, government, academia, technical, and civil society.

KEY GOVERNANCE ACTORS

- ETSI
- ICANN / IANA
- IETF
- ISO
- ITU
- NNI
- TLD Operators
- W3C

KEY GOVERNANCE ACTORS

- W3C
- Technical Organizations (ISO, W3C, ...)
- Netmundial
- World Economic Forum
- National Governments
- Civil Society
- Intergovernmental Organizations (OECD, UNESCO...)
- Law Enforcement Agencies

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THE ROOT ZONE

DOMAIN NAMES
- 300 Country Codes
- Top Level Domains (ccTLD) such as .fr, .uk, .us...
- 600+ Generic Top Level Domains (gTLD) such as .com, .biz, .net...
- 150+ Domain Name Registrars such as GoDaddy, Network Solutions, Register...

IP ADDRESSES
- IPv6: More than 14 billion addresses
- IPv4: 340 trillion billion (trillion, trillion) addresses
- 5 Regional Internet Registries (RIRs) who coordinate policy related to internet address resources.

INTERNET PROTOCOLS
Protocol parameters are the commands and identifiers that are used inside protocols, the structured communications used for the web, email, etc, to transfer the information.

These parameters are used in standards defined by the IETF in coordination with other standard organizations such as the RIR. e.g. TCP/UDP, HTTP, HTTPS.
Remember this?

IGF

ICANN
LACNIC

IETF

KEY GOVERNANCE ACTORS
- IGF
- Technical Organizations (ISOC, W3C,...)
- NETmundial
- World Economic Forum
- National Governments
- Civil Society
- Intergovernmental Organizations (OECD, UNESCO,...)
- Law Enforcement Agencies

KEY GOVERNANCE ACTORS
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- ICANN / IANA
- IETF
- ISO
- ITEE
- NRO
- TLD Operators
- W3C

KEY GOVERNANCE ACTORS
- GSMA
- IEEE
- IETF
- ITU
- National ICT Ministries
- Network Operator Groups
Just a few key actors: IETF
Just a few key actors: ICANN
Internet Governance Forum

The IGF is a forum for multi-stakeholder dialogue on public policy issues related to key elements of Internet governance issues, such as the Internet's sustainability, robustness, security, stability and development. The United Nations Secretary-General formally announced the establishment of the IGF in July 2006 and the first meeting was convened in October/November 2006.
National and Regional IGF Initiatives (NRIs)

“...organic and independent formations that are discussing issues pertaining to Internet Governance from the perspective of their respective communities, while acting in accordance with the main principles of the global IGF.”

Toolkit and support from IGF Secretariat:
http://www.intgovforum.org/multilingual/content/nris-tool-kit
LÍDERES

NRI support within Latin America and the Caribbean

Internet communities are organising National, Sub-Regional, Regional and Youth IGF initiatives (NRIs) more than ever. Among LACNIC-served areas, there have been roughly fifteen NRI-type activities including two regional initiatives (namely LACIGF and CIGF) and thirteen one-time or recurrent national initiatives.

LÍDERES intends to bolster NRIs across Latin America and the Caribbean by providing expertise from LACNIC to present at your NRI on topics related to the Internet and its governance. This initiative also provides support in the following ways:

1. Advice on organising the initiative:
   - Definition of objectives
   - Makeup of group and the sectors that ought to participate and become involved
   - Diversity of financial sources to ensure independence in decision-making

2. Small financial contributions determined on a first-come-first-serve basis and subject to the availability of funds
   - Support in defining sources of funding

3. Fellowships for LACIGF

4. Communication Support for your NRI
NRI Principles (organisational)

• Open
• Inclusive
• Non-commercial
• Bottom up consensus
• Multistakeholder participation [at least three stakeholder groups initially, and evolve toward inclusion of all stakeholder groups]
Where is Guyana re Internet Governance issues?

The Three Layers of Digital Governance

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1. Economic and Societal Layer
   - Laws, Policies, and Regulations
   - Industry and Trade
   - News and Information
   - Users
   - Education
   - Applications
   - Civic and Human Rights
   - Social Media
   - Security
   - Mobile

2. Logical Layer
   - Root Services
   - Domain Names
   - Numbers
   - Internet Protocols
   - Identifiers’ Public Registries
   - Protocol Parameters

3. Infrastructure Layer
   - Internet Exchange Points (IXPs)
   - Undersea Cables
   - Satellite
   - Wireless Systems

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Multistakeholder Collaborations
Solutions to issues in each layer include policies, best practices, standards, and specifications developed by the collaborations of expert stakeholders from actors in business, government, academia, technical, and civil society.
## Guyanese actors

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Questions?
Ways to keep in touch!

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