Where Now? A Rough Guide to Global Internet Governance Post-WSIS

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Overview

- The Results of WSIS
- Where are we now?
- Where are we heading in the future?
  - The evolution of multi-stakeholder governance mechanisms
  - The evolution of IP-enabled networks
  - The role of research

The Results of WSIS

- The WSIS Internet governance framework
  - Working definition of Internet governance
  - Principles
  - Norms
  - Stakeholder roles and responsibilities
  - Objectives
  - Priorities
  - Internet Governance Forum (IGF)
  - "enhanced cooperation" among governments on Internet-related public policy issues

Working Definition of IG

- "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"

- Internet governance the product of many factors
  - Technology
  - Industry/institutional structures
  - Economic and social environment
  - Business/public service/regulatory models
  - Policy vision and process

Principles

- The Internet - a central element of the infrastructure of a "people-centred, inclusive, development-oriented and non-descriminatory Information Society" premised on:
  - purposes and principles of UN Charter
  - international law and multilateralism
  - fully respecting and upholding Universal Declaration of Human Rights

- "Freedom of expression and the free flow of information, ideas and knowledge are essential for the Information Society and beneficial to development"

- "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".

Norms

- "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"

Roles and Responsibilities

- States – international Internet-related public policy issues
- Private sector – technical and economic development of the Internet
- Civil society – Internet matters at the community level
- IGOs – facilitating role in coordination of Internet-related public policy issues
- IOs – development of Internet-related technical standards and relevant policies

Objectives

- Substantive
  - ensure an equitable distribution of resources
  - facilitate access for all
  - ensure a stable and secure functioning of the Internet, taking into account multilingualism
- Procedural
  - improve the coordination of the activities of international and intergovernmental organizations and other institutions concerned with Internet governance

Priorities

- **Cybersecurity**
  - Prevent/prosecute cybercrime, spam, terrorism, abuse
  - Protect/promote privacy, freedom of expression, access to information
  - Ensure (Inter)net stability and security
- **E-business**
  - Enabling environment
  - Consumer protection

- **Digital opportunity**
  - Interconnection costs
  - Capacity building
  - Multilingualism
  - Software and content development
- **Critical Internet resources**
  - Public policies for gTLDs
  - Improved framework for ccTLDs

Internet Governance Forum (IGF)

- UNSG to convene a new "forum for multi-stakeholder policy dialogue"

- Functions include
  - Facilitating discussion of cross-cutting issues
  - Identifying and raising awareness of emerging issues
  - Facilitating exchange of information and best practices
  - Promoting multi-stakeholder engagement
  - Capacity-building

- A "lightweight and decentralized structure" with a "neutral, non-duplicative and non-binding process", drawing on existing mechanisms

- First IGF in Greece, 30 October – 2 November, 2006

- To be reviewed after 5 years

"Enhanced Cooperation"

- Premises
  - All governments should have equal role and responsibility for IG
  - Need to develop globally-applicable public policy principles in consultation with all stakeholders – e.g. on coordination and management of critical Internet resources
  - Countries should not be involved in decisions regarding another country's ccTLD

- UNSG to start process in all relevant organizations that will
  - Include all stakeholders in their respective roles
  - Proceed as quickly as possible consistent with legal process
  - Be responsive to innovation

Where are we now?

- Preparations for IGF-06
  - Procedural
    - February 16-17 consultation meeting
    - Establishment of secretariat
    - Nominations for IGF Advisory Group
    - May19 consultation, May 22-23 Advisory Group
  - Substantive
    - IGF should have a development orientation
    - Capacity building an overarching priority
    - Confirmation of WGIG/WSIS priorities

Where are we now?

- Other UN actions
  - "Enhanced cooperation"
  - WSIS "action line" follow up
  - Global Alliance for ICT Policy and Development
- Other activities
  - ICANN: Results of Wellington meeting
    - GAC developments
    - Contract with VeriSign
  - ITU: Preparations for PP-06
    - Something dramatic in the works?

Questions for the Future

- Does the WSIS framework provide a coherent, practical basis for improving existing arrangements and designing new ones?
  - Who governs and how do they do it?
  - What is being governed and why?
  - What role does research play in the process?

Multi-stakeholder Governance

- The most important achievement of the WSIS process?
- International precedents
  - G8 DOT Force
  - UN ICT Task Force
- Interests
  - Governments: gaining control
  - Private sector: gaining market access
  - Civil society: gaining influence
- Practical examples at the national level, e.g.
  - E-Commerce
  - Broadband access
  - Spam

Multi-stakeholder Governance

- Issues
  - Theoretical: reconciling "corporatist" model with "multilateral, transparent, democratic, full involvement" norms
  - Practical: variability of IG-related issues and institutions
- Key questions
  - Revolution or evolution?
 - Effectiveness in relation to other models of stakeholder engagement?

Evolution of Internet Governance – Phase I

- TCP/IP
- Network of networks
- Internet community
- IETF
- End to end principle
- Running code and rough consensus

1970s-80s
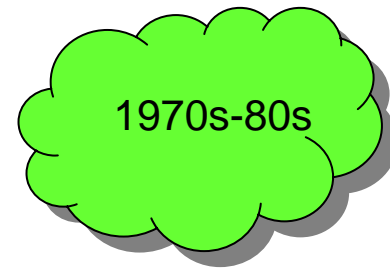
Evolution of Internet Governance – Phase II

- WWW
- DNS
- ISPs
- Dotcoms
- Globalization
- ICANN
- Governance by private contract

1990s

1970s-80s
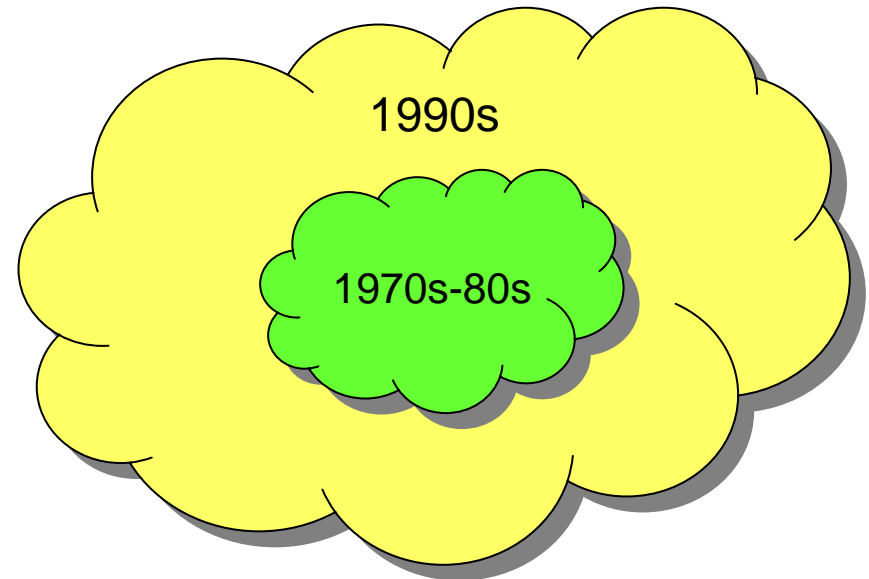
Evolution of Internet Governance – Phase III

- IPv6, MDNs, alternative roots, XML
- Portals, search engines, web services
- Dotbomb and telecom meltdown
- Convergence and competition
- Abuse and regulation
- Security and sovereignty
- WSIS, WGIG
- Multi-stakeholder governance
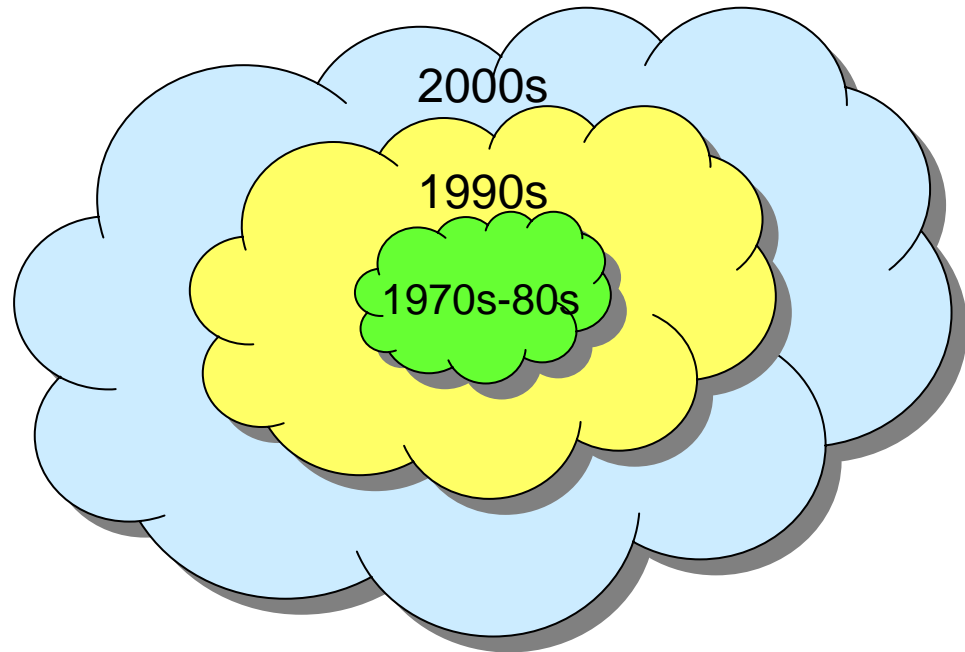
Evolution of Internet Governance – What's Next?

Community Networks

DIY Media/
Social Networks

Research Networks

2000s

1990s

1970s-80s

Mobile Multimedia

Grids

Next Generation Networks

Ubiquitous Networks

Critical Infrastructure
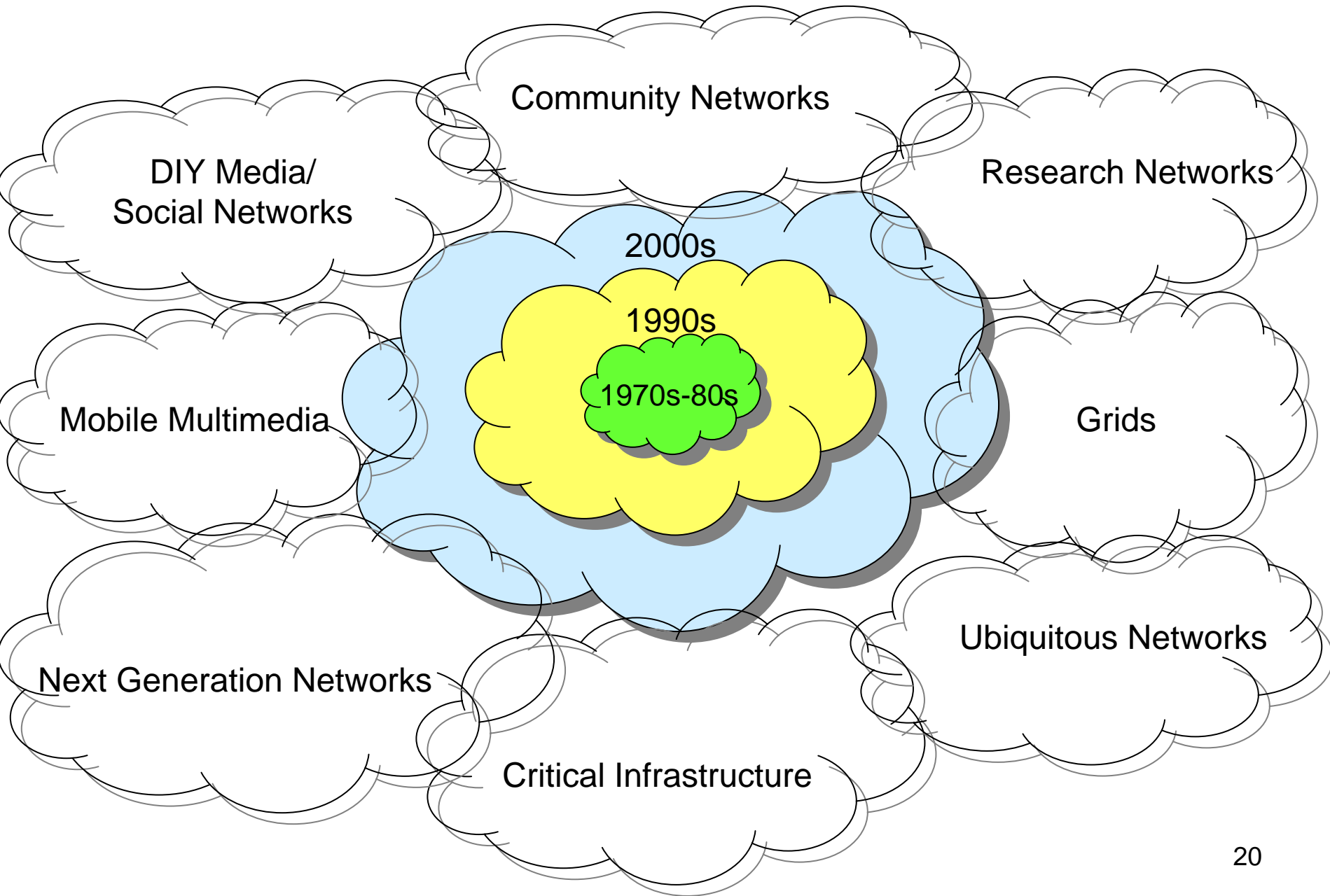
Next Generation Networks (NGNs)

- "A Next Generation Network (NGN) is a packet-based network able to provide Telecommunication Services to users and able to make use of multiple broadband, QoS-enabled transport technologies and in which service-related functions are independent of the underlying transport-related technologies. It enables unfettered access for users to networks and to competing service providers and services of their choice. It supports generalised mobility which will allow consistent and ubiquitous provision of services to users."

  - ITU-T Recommendation Y.2001 (12/2004)

Changing Network Architecture

Content	Information From Web Sites	Columbia Records (Music)	Sportsnet (Sports clips)	Disney (Movies)	CBC/CNN (News)	Course Material (Learning)	Software Library (Software)	ETC

Core Network

Application	Legacy Voice TDM Switch	Legacy Voice Mail Node	IP TV Server	VoIP Server / Gateway	Video on Demand Server	Search Engines	Gaming Server	ETC

Voice/TDM   IP   Video   IP   IP   Voice/TDM   IP

Network Element Interface

Signal/Transport	VF / DMT(QAM)	QAM	WDM	CDMA / OFDM

Physical	Copper Twisted Pair	Coax Cable	Optical Fiber	Wireless

Customer Premises Network Interface (Modems, Adapters, etc.)

POTS Phone	PC / VoIP	Legacy TV	PC / VoIP	HDTV TV	PC / VoIP	Cell Phone	PC / VoIP

Source: Industry Canada, Telecommunications Policy Review Panel, Final Report, March 2006

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NGN v. Internet (2005)

NGN

- Nature and quality of end to end service provided by the network

- Convergence between wireline and wireless control architectures

- QoS and session signalling basic network features

- End to end systems management

- Standardized approach to security (X.805)

Internet

- Burden of end to end service on end systems

- Mobility protocols to fit many architectures

- Add-ons on top of best effort service and no signalling

- Device monitoring and configuration

- Multiple simultaneous efforts to improve security of Internet technologies

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Source: Joint ITU-T/IETF Report, ITU-T NGN Workshop in Collaboration with IETF, Geneva, 1-2 May 2005

GENI Design Challenges (2006)

- Improved security and robustness
- Supporting new wireless and optical technologies
- Supporting sensors
- Supporting distributed services and applications
- Service in time of crisis (911)
- Network management
- Business model – "network neutrality'' and interconnection

Evolving Governance Models

- Some emerging/converging IP-enabled networks bring heavy national/international governance baggage (e.g. NGNs, multimedia, secure infrastructure)

- Others are relatively light and likely to remain so (e.g. DIY media, social, community and research networks)

- Still others are likely to acquire baggage as they evolve (e.g. ubiquitous networks, grids)

- How robust is the WSIS governance framework? Can it incorporate some, most, all of these network evolutions? Will it break under the strain? Or will it evolve as a complement to others?

The Role of Research in Multi-stakeholder Governance

- Distributed among the "Big Three"?
  - "We recognize the valuable contribution by the academic and technical communities within (the) stakeholder groups to the evolution, functioning and development of the Internet"

- A separate layer?
  - Mandate of IGF includes facilitating the exchange of information and best practices, and in this regard "making full use of the expertise of the academic, scientific and technical communities".

Lessons from WGIG

- WGIG results
  - Enlarged understanding of Internet governance
  - Mapping of issues and institutions
  - Identification of priorities
  - IGF
- Success Factors
  - Clearly defined task
  - WSIS framework
  - Human factors: composition and leadership
  - Bottom up approach
  - Good tactical decisions
  - Transparency
- Open questions
  - Nature and limits of multi-stakeholder mechanisms?
  - "Horse-and-buggy governance for the automobile age"?
  - Perception v. knowledge: what do we really know about Internet governance?