



Global Internet Development and Governance

History and Emerging Trends

April, 2013

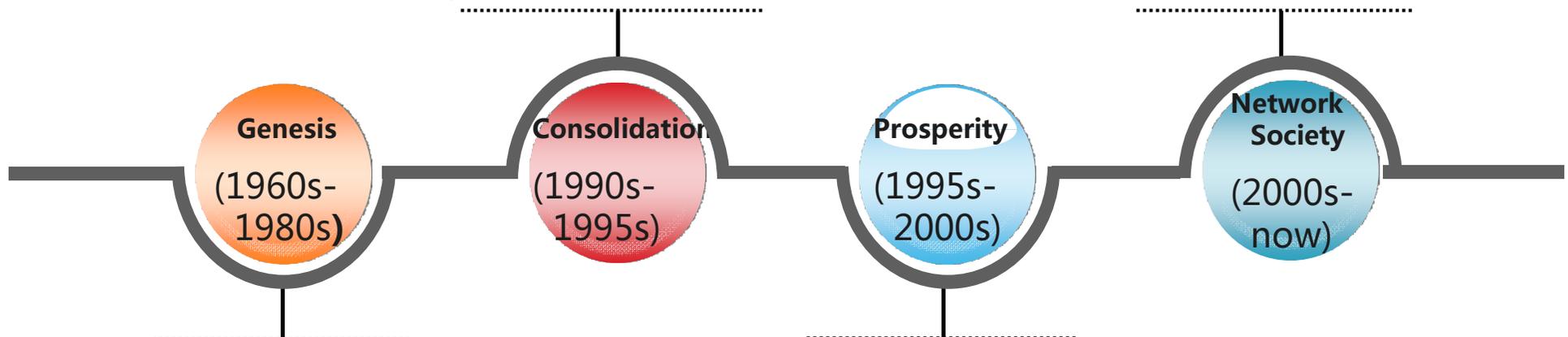
CNIC
中国互联网络信息中心
CHINA INTERNET NETWORK INFORMATION CENTER

- 01** The History of Internet
- 02** Internet Governance Development
- 03** The Infrastructure and Standardization Issues
- 04** The Legal Issues
- 05** The Economic and Development Issues
- 06** The Socio-Cultural Issues
- 07** Internet Governance Actors

Brief History of the Internet

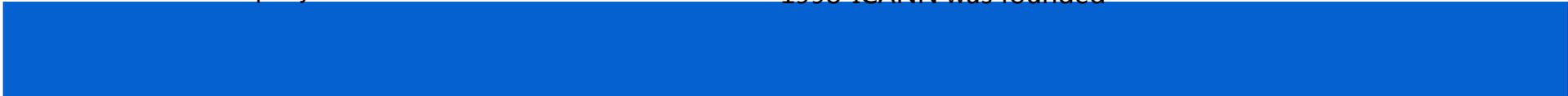
- 1990 – ARPANET was wound up
- 1990 – first search-engine (Archie) started service
- 1991 – NSF removed restrictions on private access
- “Information superhighway” project

- 2002 3G standard was developed
- 2003-2005 World Summit of Information Society
- 2004 Facebook was founded
- 2011 Global Internet population passed two billion



- 1968 - DARPA (Defense Advanced Research Projects Agency) contracts with BBN to create ARPAnet
- 1974 - TCP specification by Vint Cerf
- 1984 –the Internet with its 1000 hosts converts to using TCP/IP for its messaging
- 1984 – Introduction of DNS
- 1989 – WWW concept by Tim Berners-Lee

- 1994 – Hotmail starts web based email
- 1994 – World Wide Web Consortium (W3C) was founded
- 1995 – JAVA source code was released
- 1996 – Mirabilis (Israel) starts ICQ
- 1998 – Google was founded
- 1998-ICANN was founded

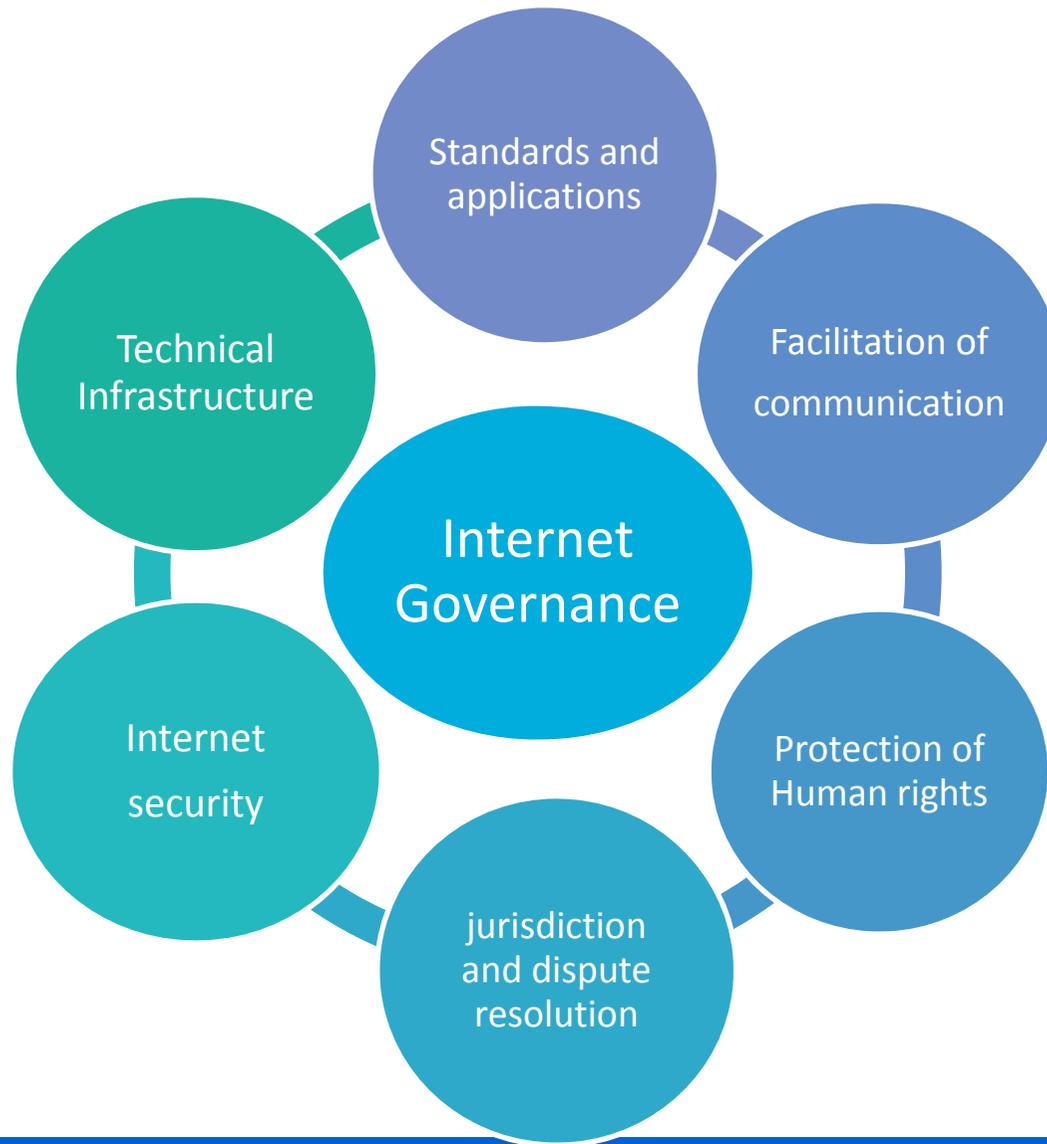


The World Summit on the Information Society (WSIS)'s working definition of Internet governance:

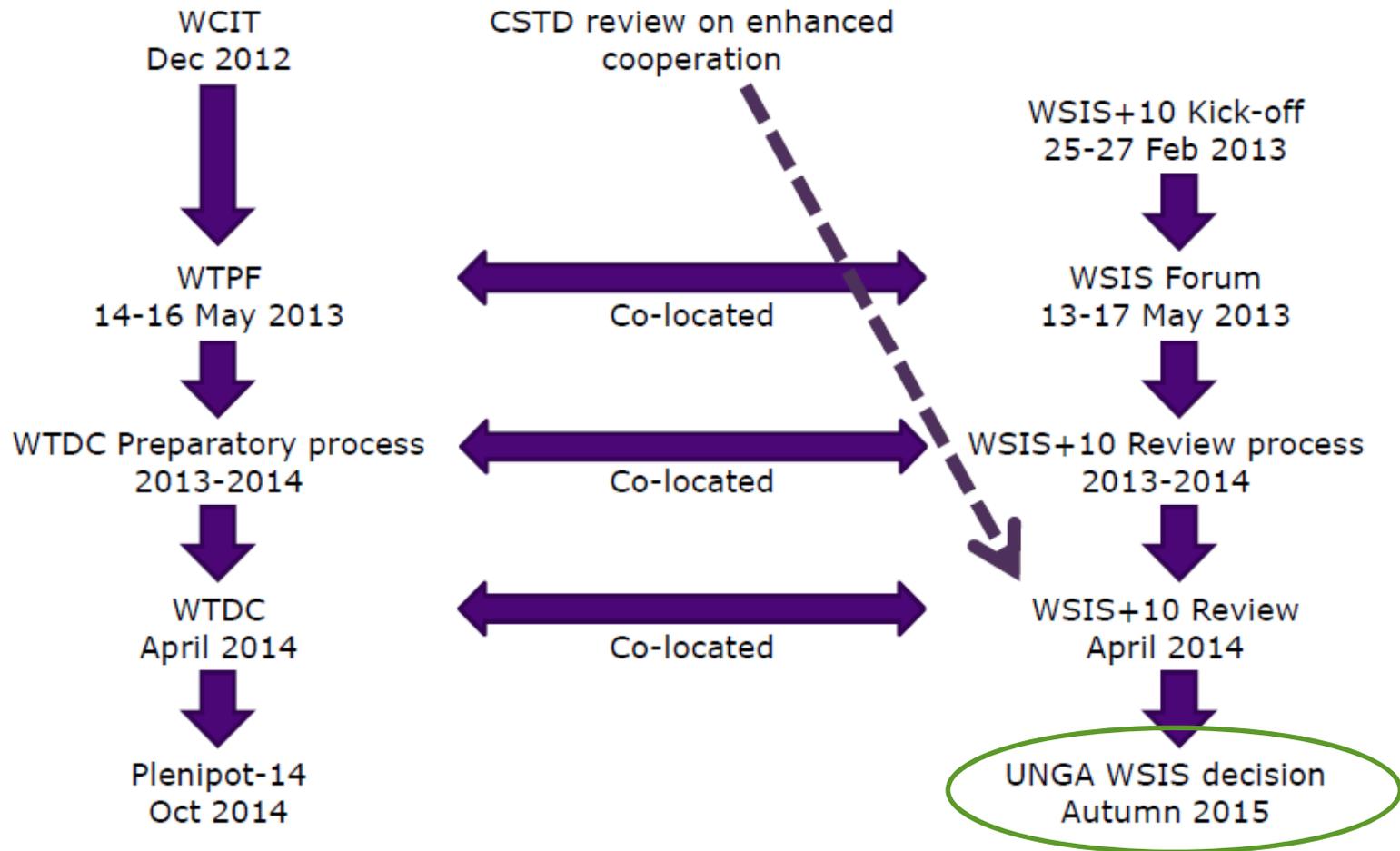
“Internet governance is the development and application by governments, the private sector, and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.”

Source: <http://www.itu.int/wsis/basic/about.html> [accessed 16 April 2013]



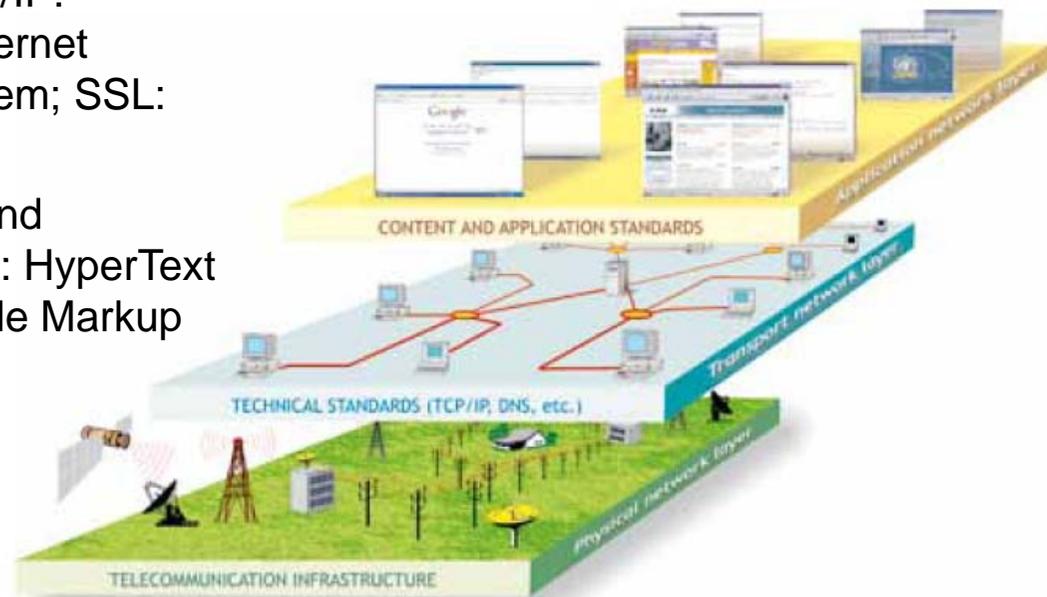


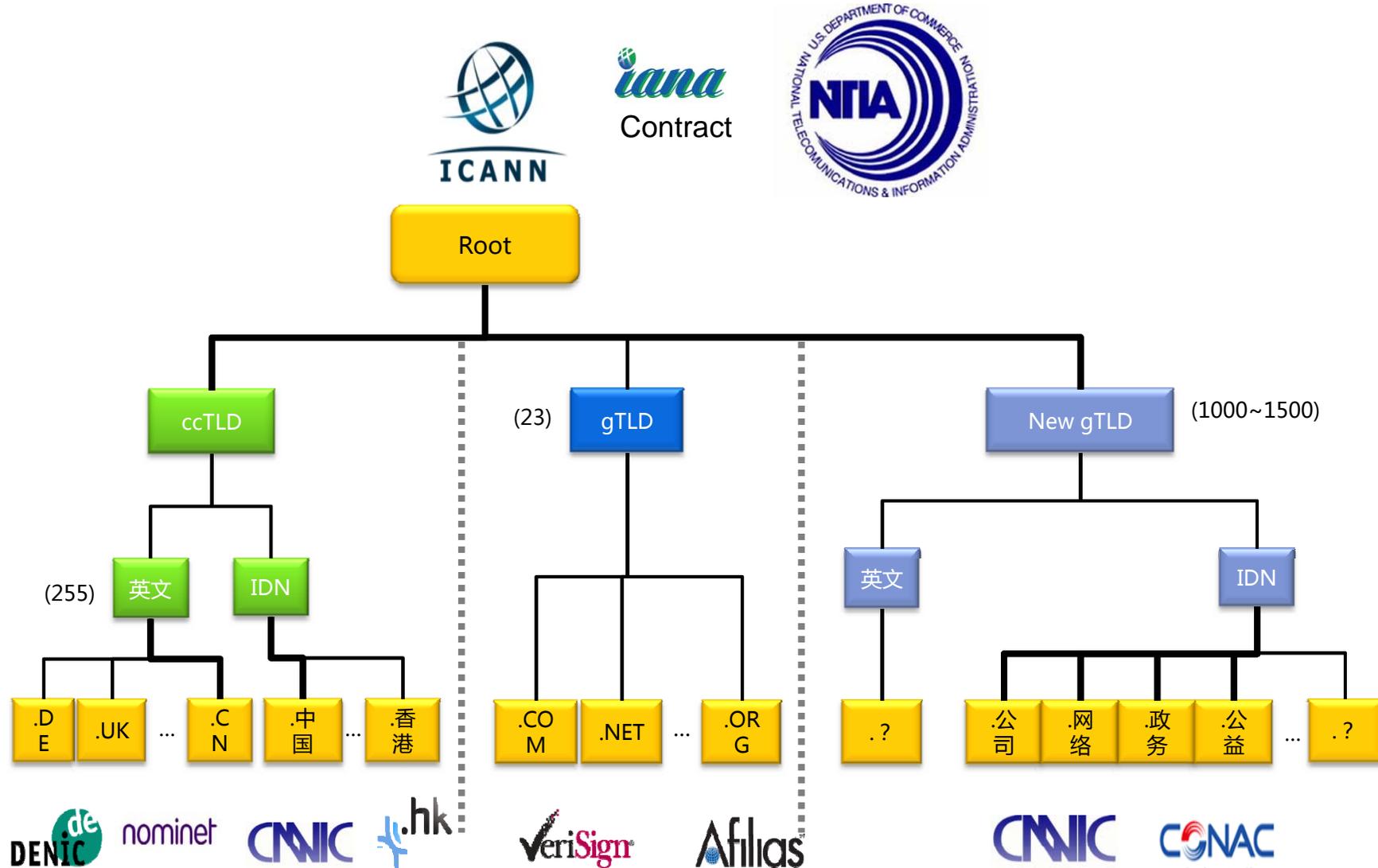
The Upcoming Global Internet Rule Making Negotiation



Triple Layers of Internet Infrastructure:

- **Telecommunication Layer:** The telecommunications infrastructure, through which all Internet traffic flows.
- **Protocol Layer:** The Internet technical standards and services, the infrastructure that makes the Internet work (e.g. TCP/IP: Transmission Control Protocol/ Internet Protocol; DNS: domain name system; SSL: secure sockets layer).
- **Application Layer:** The content and applications standards (e.g. HTML: HyperText Markup Language; XML: eXtensible Markup Language)





Maintaining Community Standards on the Internet

- On availability and labelling of content
- Acceptable social behaviour

Competition Policy for access to telecommunications services

Protection of Intellectual Property

Restrictions on Free Speech

Protection of Privacy

Tackling Cybercrimes



Legislation

- The priority areas for Internet legislation have been privacy, data protection, intellectual property, taxation, and cybercrime.

Self-regulation

- The US government's White Paper on Internet Governance (1998)² that paved the way for the foundation of ICANN, proposed self regulation as the preferred regulatory mechanism for the Internet.

International conventions

- The main set of conventions on Internet-related issues was adopted by the ITU, with the ITR being the most important for preparing a telecommunication policy framework for subsequent Internet developments. The current version of the ITR (1998) has been going through revision in WCIT-12.

Arbitration

- Arbitration is a dispute resolution mechanism available in place of traditional courts. In arbitrations, decisions are made by one or more independent individuals chosen by the disputants. For example, UDRP has been widely adopted to solve the dispute of domain name registration globally.

Key questions related to IG4D:

- How will ICT/Internet-accelerated changes affect the already existing divide between the North and the South?
- Will ICT/Internet reduce or broaden the existing divide?
- How and when will developing nations be able to reach the ICT levels of more industrially developed countries?

The Primary Concerns about IG4D:

- The existence of a telecommunication infrastructure facilitates access, the first precondition for overcoming the digital divide.
- The current economic model for Internet access, which places a disproportionate burden on those developing countries that have to finance access to backbones based in developed countries.
- The global regulation of intellectual property rights, which directly affects development, because of the reduced opportunity of developing countries to access knowledge and information online.

Definition:

- Universal access is a well-developed economic and legal concept, which means provide the Internet access to all the people.

Efforts of Promoting Universal Access:

- The US universal access efforts has resulted in a well-developed system of various policy and financial mechanisms, the purpose of which is to subsidies access costs in remote areas and regions with high connection costs. The subsidy is financed by regions with low connection costs, primarily the big cities.
- The EU has also taken a number of concrete steps towards achieving universal access by promoting policies to ensure every citizen has access to basic communication services, including Internet connection, and enacting specific regulations thereof.
- Challenge: Frequent referral to universal access in the preambles of international declarations and resolutions without the necessary political and financial support renders it a vague principle of little practical relevance.

Who should cover the cost of links between developing and developed countries?

- Currently, developing countries cover the cost of links between developing and developed countries. The Internet model puts the entire burden on one side - that of developing countries that have to connect to backbones located mainly in developed countries. As a result, small and poor countries subsidize the Internet in rich countries.
- The need for adjustments in interconnection charges was reiterated in the WSIS final documents and in the WGIG report;
- ITU Resolution 101 has called for urgent completion of the study and the organization of a special forum on the matter in the first quarter of 2013



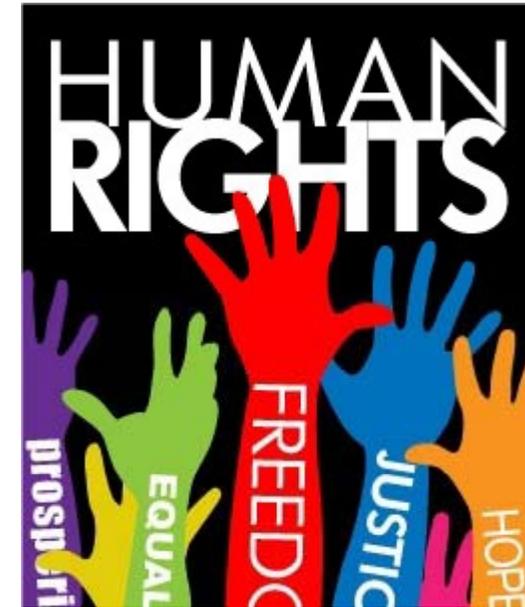
The development of national ICT sectors depends on the creation of necessary regulatory frameworks:

- The UN initiated the Digital Diaspora Networks to promote development through the mobilization of the technological, entrepreneurial, and professional expertise and resources of the diasporas in the ICT field.
- International initiatives and organizations such as One Laptop per Child or Computer Aid International aim at providing refurbished and low-cost equipments to under-served communities in developing countries.
- Initiated in WSIS, the Digital Solidarity Fund was established in Geneva as an independent foundation mainly supported by cities and local authorities worldwide.



Internet-related human rights includes:

- Privacy
- Freedom of expression
- The right to receive information;
- The rights protecting cultural linguistic and minority diversity
- The right to education



A Story of the Right of Internet Access:

Finland is the first country to legally guarantee the right to access the Internet. As of July 2010 all citizens in Finland have the right to a one-megabit broadband connection. However, opinions are still nuanced regarding a firm worldwide recognition of the access to Internet as a human right, since access involves different valences – from access to infrastructure to access to content – as the United Nations Human Rights Council report points out.

Who Controls the Internet?

IAB

INTERNET ARCHITECTURE BOARD
 Oversees the technical and engineering development of the IETF and IRTF.
www.iab.org
 P S X

ICANN

INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS
 Coordinates the Internet's systems of unique identifiers: IP addresses, Regional Internet Registries, top-level domain space (DNS root zone).
www.icann.org
 P O

IETF

INTERNET ENGINEERING TASK FORCE
 Develops and promotes a wide range of Internet standards dealing in particular with standards of the Internet protocol suite.
www.ietf.org
 S

IGF

INTERNET GOVERNANCE FORUM
 A multi-stakeholder open forum for debate on issues related to internet governance.
www.intgovforum.org
 P O A

IRTF

INTERNET RESEARCH TASK FORCE
 Promotes research of the evolution of the Internet by creating focused, long-term research groups working on topics related to Internet protocols, applications, architecture and technology.
www.irtf.org
 R

ISO 3166

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
 Defines names of countries, dependent territories, special areas of geographic significance.
www.iso.org
 S

ISOC

INTERNET SOCIETY
 Assure the open development, evolution and use of the Internet for the benefit of all people throughout the world.
www.internetsociety.org
 P S E

RIRs

5 REGIONAL INTERNET REGISTRIES
 Manage the allocation and registration of Internet number resources within geographic regions of the world.
www.afrinic.net www.apnic.net
www.arin.net www.lacnic.net
www.ripe.net

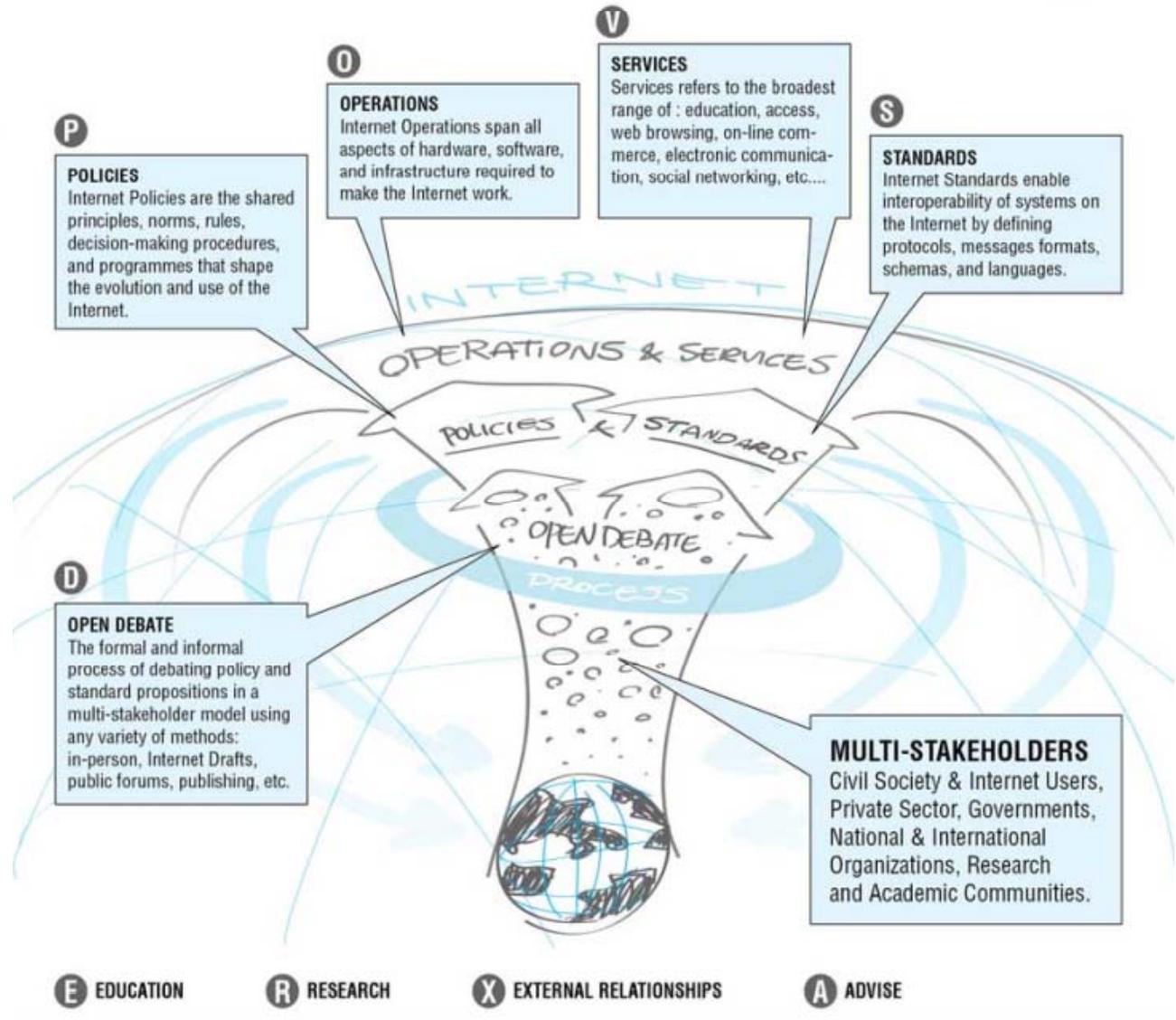
P O

W3C

WORLD WIDE WEB CONSORTIUM
 Create standards for the world wide web that enable an Open Web Platform.
www.w3.org
 S

WGIG

WORKING GROUP ON INTERNET GOVERNANCE
 Vestibulum soelerisque lacus eu mi pellentesque sit amet sollicitudin lorem sollicitudin. Integer a mauris libero. Donec eget justo mi, vel venenatis nisl.
www.wgig.org
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The Presence of Civil Society for the Internet Governance:

- Civil society has been the most vocal and active promoter of a multistakeholder approach to Internet governance.
- In the WSIS Process Civil Societies prepared a Civil Society Declaration as an alternative vision to the main declaration adopted at the Geneva WSIS.
- Civil society groups proposed eight candidates for WGIG, all of whom were subsequently appointed by the UN Secretary General.
- Civil society has continued to be actively involved in IGF activities. One of the sui generis forms of civil society representation in Internet governance processes is the Internet Governance Caucus (IGC) which includes individuals interested in sharing opinions, policy options and expertise on Internet governance issues, which are discussed in a mailing list format.

Key Actors from the Civil Society:

- Academic Institutions, such as Harvard University Berkman Center, Oxford Internet Institute, Diplo foundation, etc.
- NGOs, such as Internet Society (ISOC) , AT-Large organizations, UNESCO, UNDP
- Community Group Organizations, such as EuroDIG, CENTR, AFNIC, etc.



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