



the Internet is for  
everyone



# The Internet Ecosystem

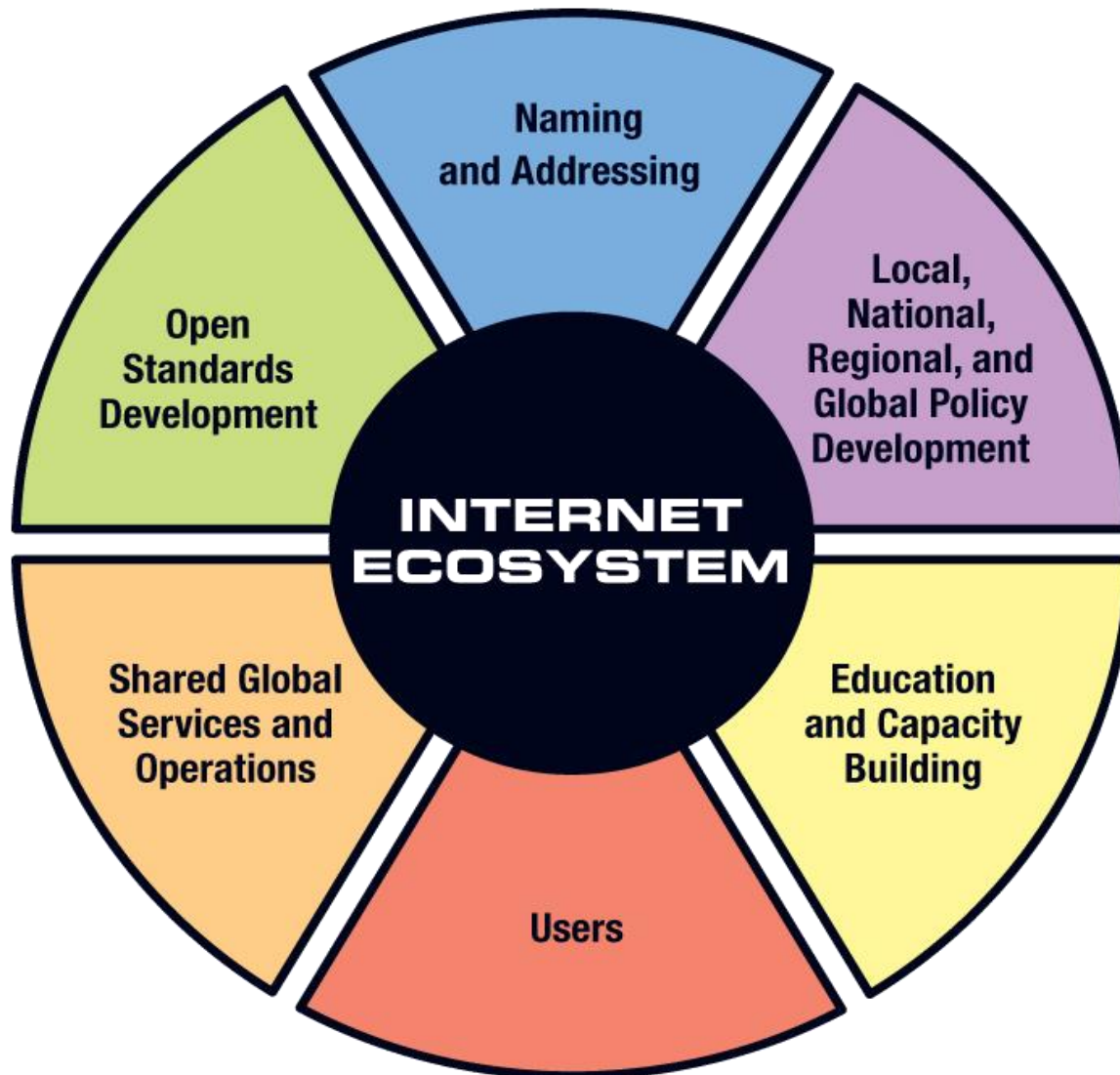
By

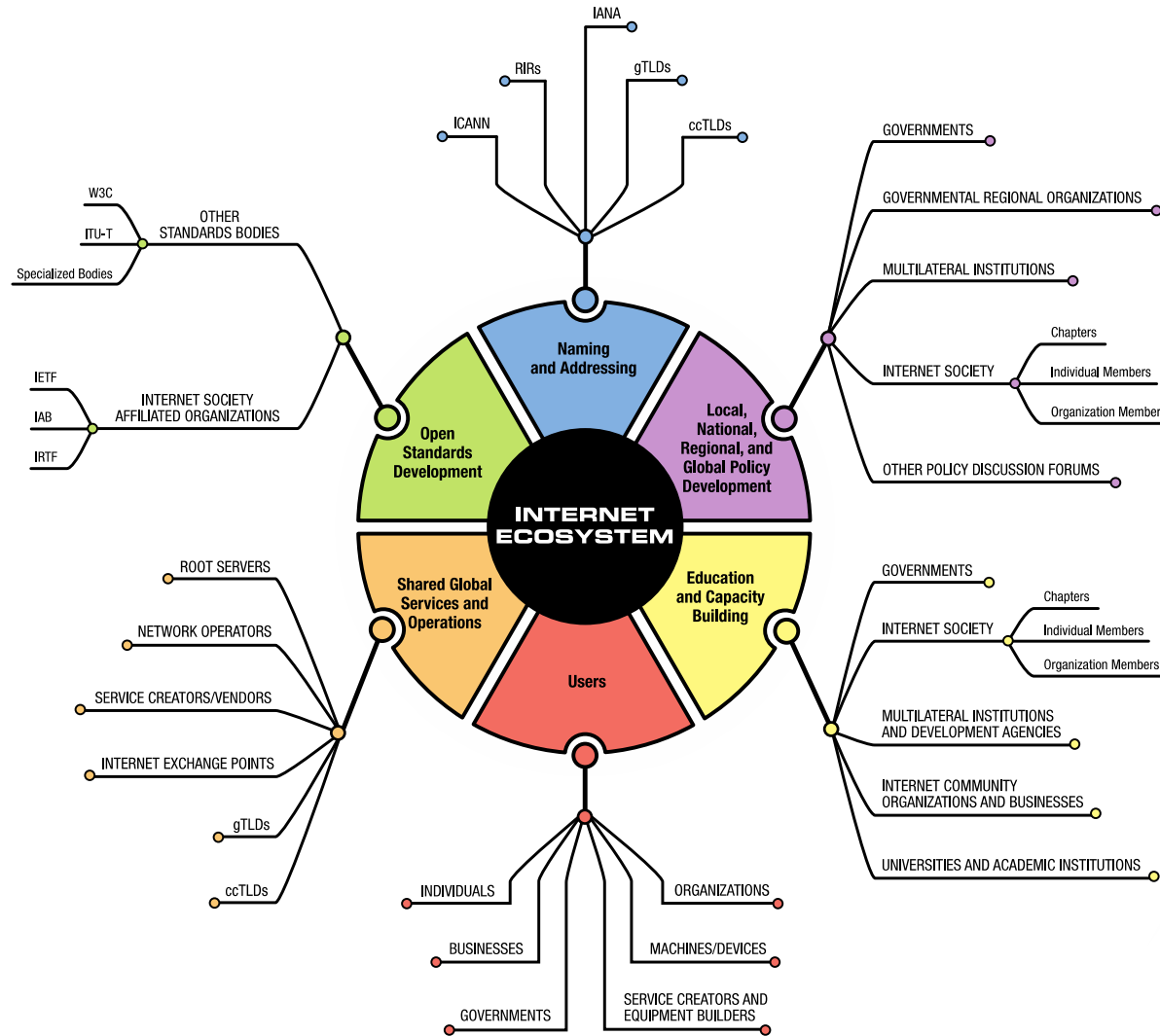
Caleb Ogundele

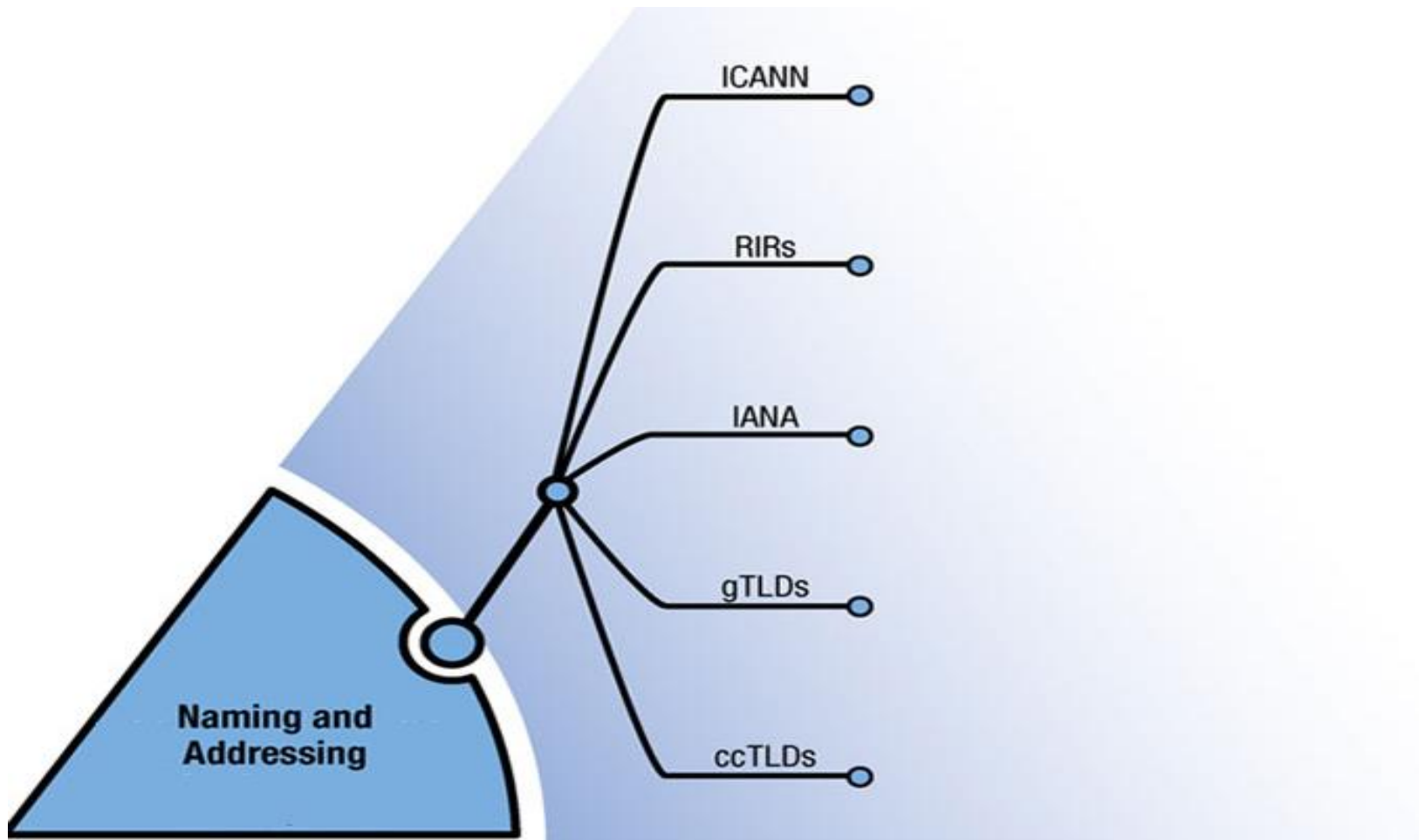
Modified based on initial slides by Shernon Osepa (ISOC)



InternetSociety.org







## IANA

The Internet Assigned Numbers Authority (IANA) is responsible for the global coordination of the Internet Protocol addressing systems, as well as the Autonomous System Numbers used for routing Internet traffic and other technical parameters associated with Internet protocols. ICANN performs the IANA function under contract with the United States Department of Commerce.

<http://www.iana.org/numbers/>

## ICANN

The Internet Corporation for Assigned Names and Numbers (ICANN) has responsibility for Internet Protocol (IP) address space allocation (through IANA), and the operation and evolution of the Domain Name System, along with the coordination of policy development reasonably and appropriately related to these technical functions.,.

<http://www.icann.org/tr/english.html>

## RIR

The Regional Internet Registries (RIRs) are responsible, within their assigned regions, for allocating Internet number resources such as globally unique IP addresses (IPv4 and IPv6) and autonomous system numbers. These resources are required by Internet service providers and users to identify elements of the basic Internet infrastructure such as interfaces on routers, switches and computers.<sup>1</sup> RIRs hold open policy forums to discuss and establish regional policies for number Allocation.

## NRO

The NRO is composed of the 5 Regional Internet Registries (RIRs). The purpose of the Number Resource Organization (NRO) is to ensure global coherence of certain RIR activities, and to provide a single common interface to all the RIRs where this is necessary. The NRO also undertakes joint RIR activities, including technical projects and liaison activities.

<http://www.nro.net/>

## NIR

A National Internet Registry (NIR) primarily allocates address space obtained from the relevant RIR, consistent with RIR policies, to its members or constituents, which are typically LIRs/ISPs. A limited number of NIRs exist in the Asia and Latin American and Caribbean Regions.

## LIR

A Local Internet Registry (LIR) is typically an Internet Service Provider (ISP) which assigns address space to users of its network services (who may be other ISPs, which then assign address space to their own customers).

## ISPs

Internet Service providers.

## GNSO

The Generic Names Supporting Organization (GNSO) is the main policy-making body of ICANN for gTLDs.

<http://gns0.icann.org/>

## CBUC

The GNSO's Commercial and Business Users Constituency (CBUC) is the voice of commercial Internet users within ICANN.

<http://www.bizconst.org/>

## ISPCP

The Internet Service Providers and Connectivity Providers (ISPCP) constituency within the GNSO.

<http://www.ispcp.info/default.htm>

## NCUC

The Non-commercial Users Constituency in the GNSO is the home for civil society organizations and individuals within ICANN.

[https://st.icann.org/ncsg-ec/index.cgi?membership\\_criteria#](https://st.icann.org/ncsg-ec/index.cgi?membership_criteria#)



## gTLD Registries Stakeholder Group

The gTLD Registries constituency represents those organizations running gTLD registries within the GNSO.

<http://www.gtldregistries.org/>

## Registrar Stakeholder Group

The registrar constituency represents companies that register domains for Internet users for a fee within the GNSO.

<http://www.icannregistrars.org/>

## IPC

The Intellectual Property constituency (IPC) represents intellectual property interests to ICANN through the GNSO.

<http://www.ipconstituency.org/>

## ccNSO of ICANN

The Country Code Names Supporting Organization (ccNSO) is the policy development body created for and by ccTLD managers for ccTLD issues within ICANN. <http://ccnso.icann.org/>

## ccTLD operators

See the list from the IANA website:

<http://www.iana.org/domains/root/db/>

Regional ccTLD associations There are a number of regional ccTLD organizations:

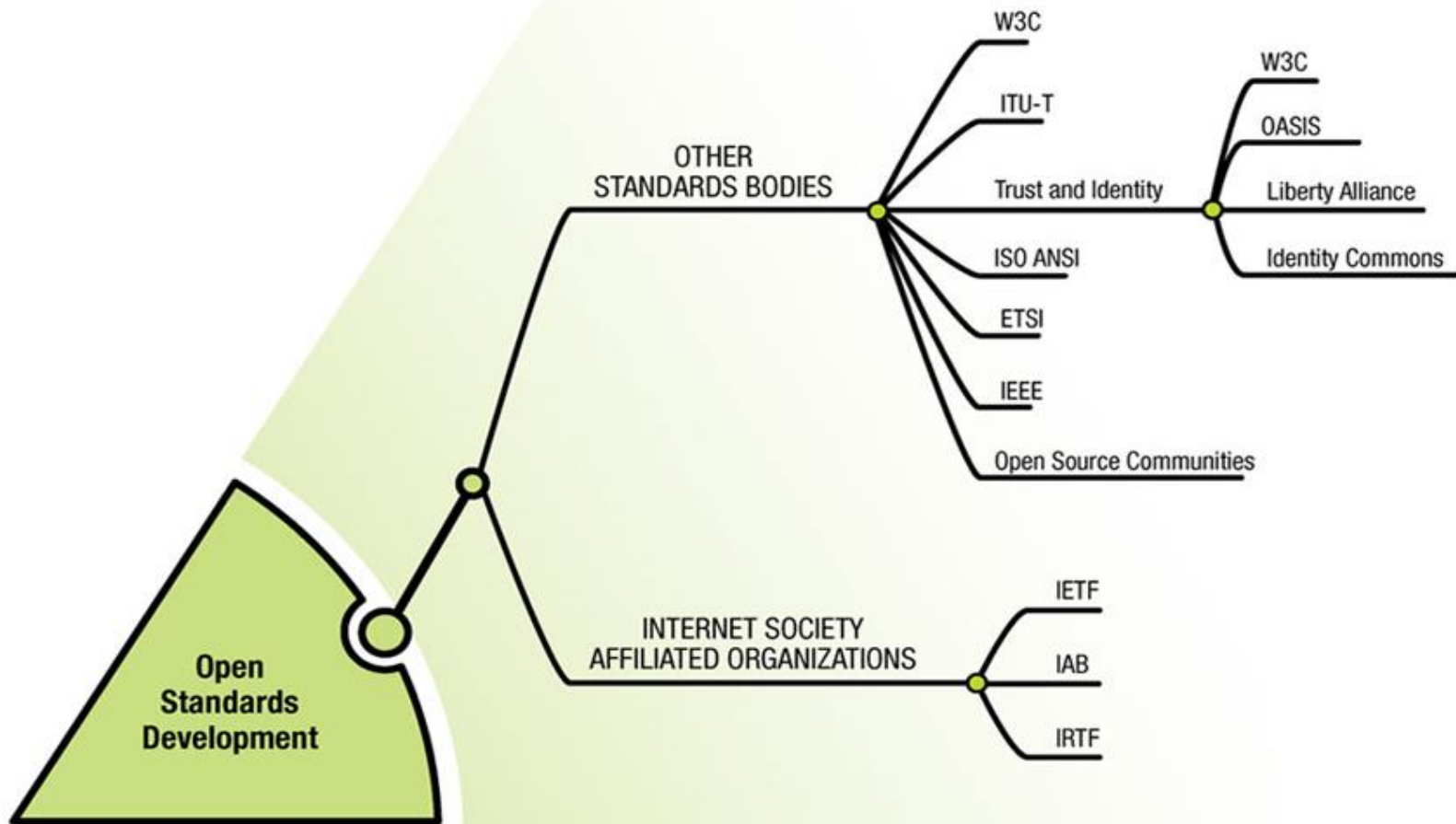
APTLD for Asia Pacific <http://www.aptd.org>

AFTLD for Africa <http://www.aftld.org>

CENTR for Europe <http://www.centri.org>

NATLD for North America,

LACTLD for Latin America and the Caribbean <http://www.lactld.org>



## ISOC

The Internet Society (ISOC) is the organizational home of the Internet Engineering Task Force (IETF), the Internet Architecture Board (IAB), the Internet Engineering Steering Group (IESG), and the Internet Research Task Force (IRTF)<sup>23</sup> — the standards setting and research arms of the Internet community.

<http://www.isoc.org/>

## IETF

The Internet Engineering Task Force (IETF) is a large, open and international standardization community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet.

The IETF is responsible for the specifications of key Internet protocols such as IP (v4 and v6), as well as HTTP (the communication protocol for the World Wide Web)

<http://www.ietf.org/>

## IAB

The IAB (Internet Architecture Board) is chartered as a committee of the IETF. Its responsibilities include architectural oversight of IETF activities, Internet Standards Process oversight and appeal, and the appointment of the RFC Editor. The IAB is also responsible for the management of the IETF protocol parameter registries. <http://www.iab.org/>

## IESG

The IESG (Internet Engineering Steering Group) is responsible for the technical management of IETF activities and the Internet standards process. It is also responsible for the actions associated with entry into, and movement along, the Internet "standards track", including final approval of specifications as Internet Standards. <http://www.ietf.org/iesg/>

## W3C

The W3C (World Wide Web Consortium) develops interoperable technologies (specifications, guidelines, software, and tools) for the World Wide Web. The W3C is an international forum for information, commerce, communication, and collective understanding. One of the most important outcomes of the W3C is the standard specification of HTML, which is the publishing language of the World Wide Web.

## IEEE

The IEEE (Institute of Electrical and Electronics Engineers) is an international organization that develops electrical and electronic technology standards. Many of the IEEE standards are integral to computing science and networking technologies. Some examples of key technologies include Ethernet, WiFi, Bluetooth, and Fiber optic connection standards.

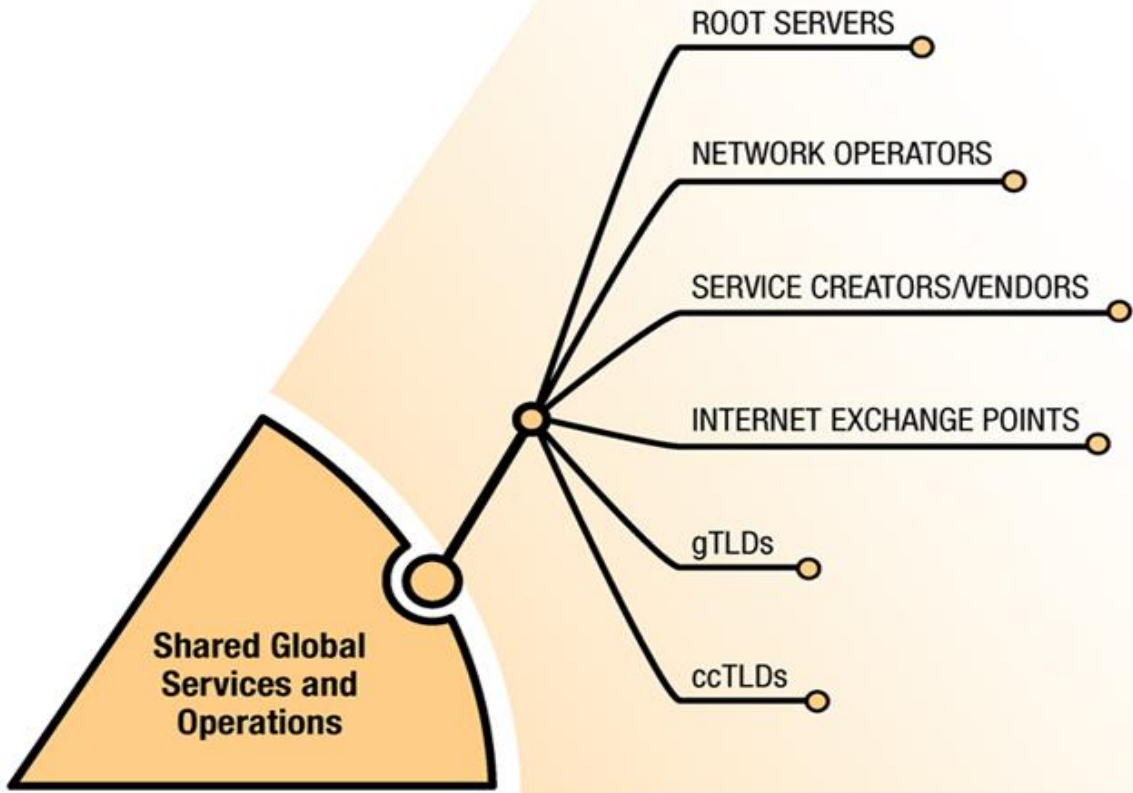
<http://www.ieee.org/index.html>

## ITU-T

The International Telecommunications Union (ITU) is a specialized agency of the United Nations dealing with information and communication technology issues. The ITU coordinates the shared global use of the radio spectrum, promotes international cooperation in assigning satellite orbits, works to improve telecommunication infrastructure in the developing world, and produces recommendations that foster the interconnection of communications systems. ITU-T (the telecommunications standardization sector of the ITU) produces global telecommunications recommendations. The recommendations produced by the ITU-T are not specific to the Internet, but because a portion of Internet traffic is carried over telecommunication networks, ITU-T is a part of the greater ecosystem.

<http://www.itu.int/ITU-T/>

<http://www.ieee.org/index.html>





## ICANN

In the context of root servers, ICANN is the responsible party for the operational management of IANA under contract with the United States Department of Commerce.

## Root Server Operators

For a full list of the root server operators: <http://www.root-servers.org/>

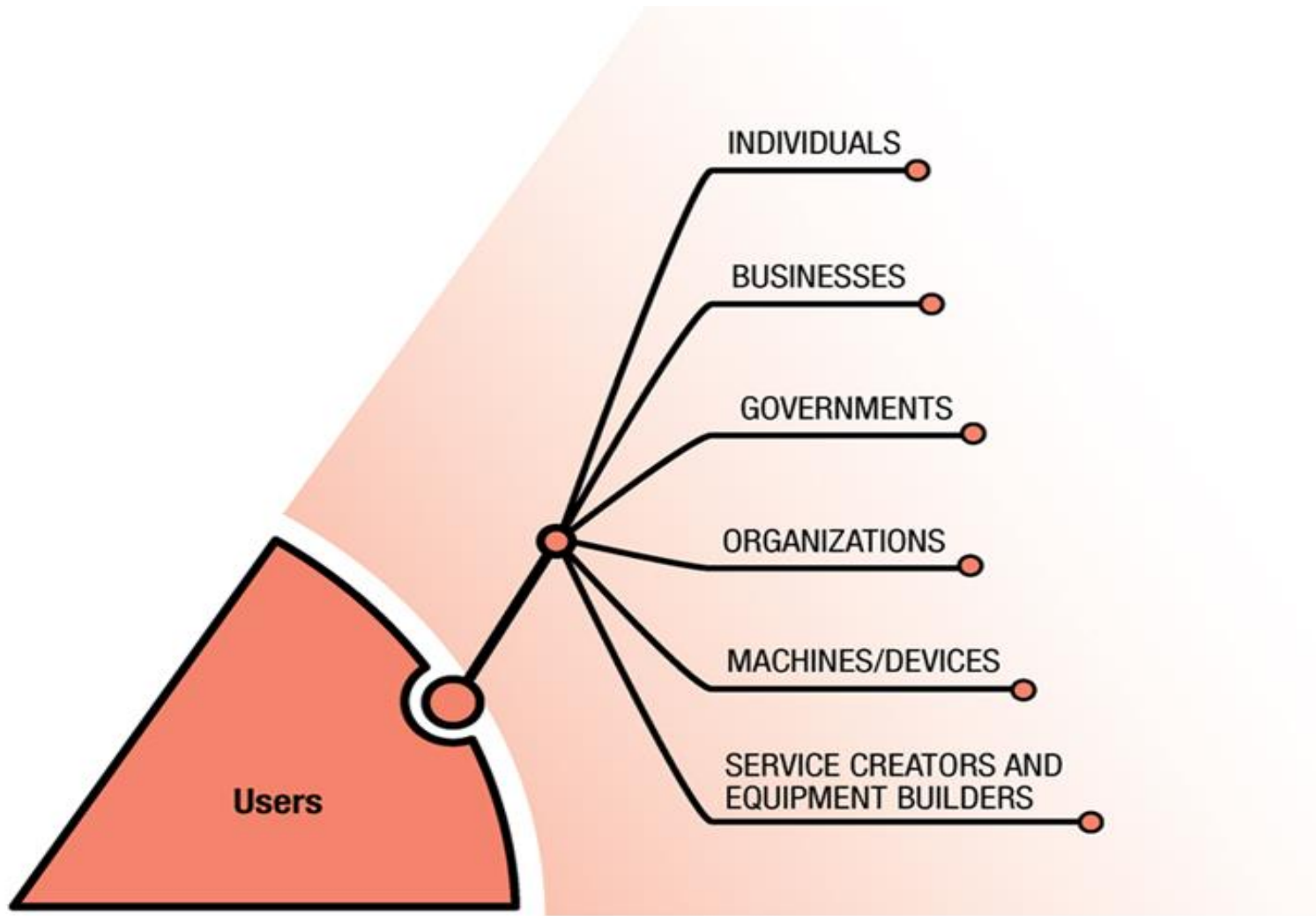
## RSSAC

Root Server System Advisory Committee advises the ICANN Board on the operation of the root name servers of the domain name system.

<http://www.icann.org/en/committees/dns-root/>

## Root Server Technical Operations Association

<http://www.root-servers.org/>



**Education  
and Capacity  
Building**

**GOVERNMENTS**

**INTERNET SOCIETY**

**MULTILATERAL INSTITUTIONS  
AND DEVELOPMENT AGENCIES**

**INTERNET COMMUNITY  
ORGANIZATIONS AND BUSINESSES**

**UNIVERSITIES AND  
ACADEMIC INSTITUTIONS**

Chapters

Individual Members

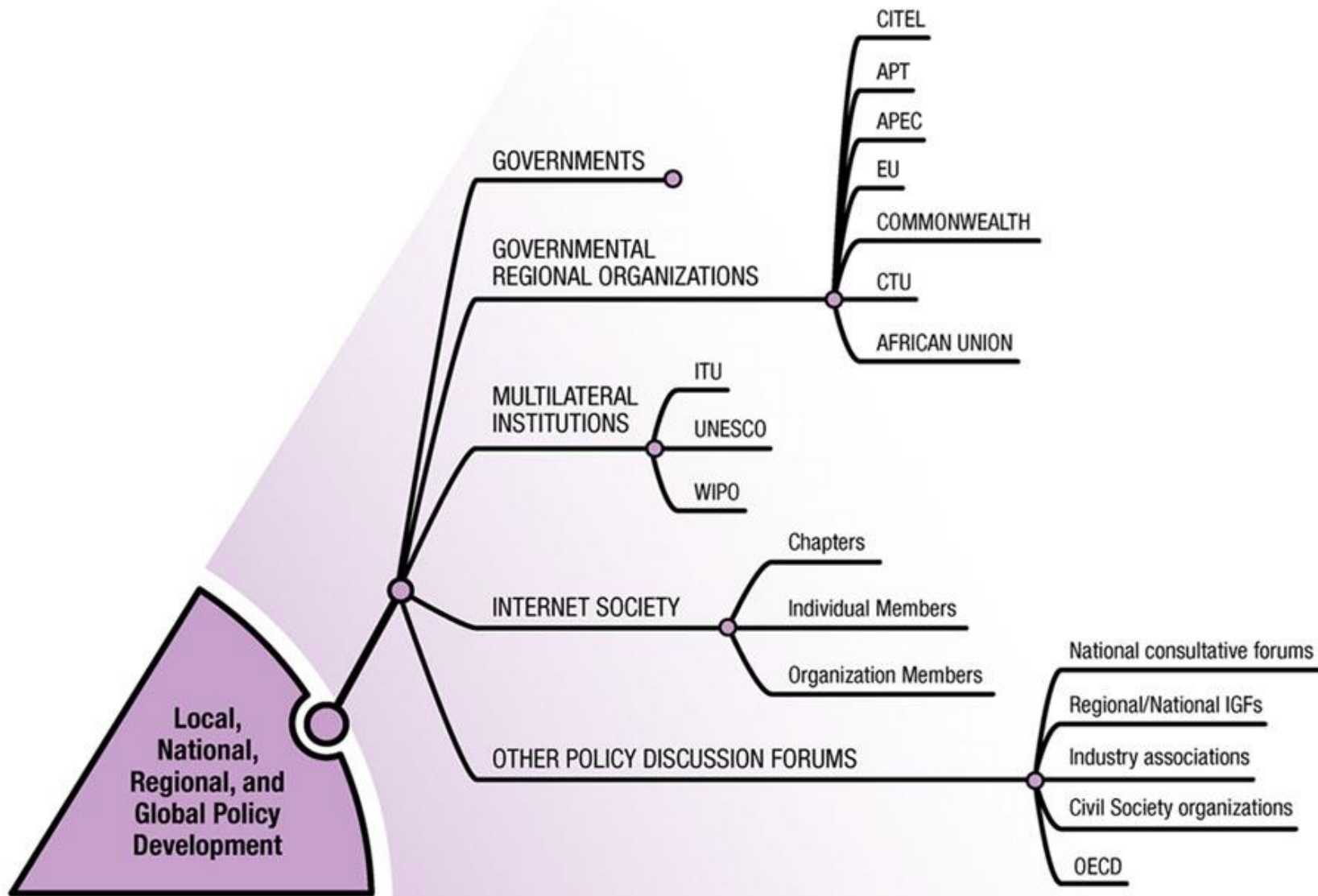
Organization Members

RIRs

Regional and National  
Network Operators

Network Startup  
Resource Centre





# The Nigerian Internet Ecosystem

Nigeria Internet Governance Forum (NIGF) - [www.nigf.org.ng](http://www.nigf.org.ng)

Nigeria ICT Forum for Partnership Institutions (ICTForum) – [www.forum.org.ng](http://www.forum.org.ng)

Nigeria Network Operators Group (NgNOG) – [www.forum.org.ng/ngnog](http://www.forum.org.ng/ngnog)

The Internet Society, Nigeria Chapter (ISOC Nigeria) – [www.isoc.ng](http://www.isoc.ng)

Nigeria Internet Registration Association (NIRA) – [www.nira.org.ng](http://www.nira.org.ng)

Nigeria Internet Group (NIG) – [www.nig.org.ng](http://www.nig.org.ng)

# The Nigerian Internet Ecosystem

Association of Telecommunication Operators of Nigeria (ATCON) –  
[www.atcon.org.ng](http://www.atcon.org.ng)

Internet Services Providers Association of Nigeria (ISPAN) –  
[www.ispan.org.ng](http://www.ispan.org.ng)

The Nigeria Computer Society (NCS) – [www.ncs.org.ng](http://www.ncs.org.ng)

Ibadan School of Government and Public Policy (ISGPP)

Federal Ministry of Communications (Commtech) –  
[www.commtech.gov.ng](http://www.commtech.gov.ng)

# Thank You!