

# Introduction to Internet Governance

MENOG 14 Tutorial – April 1, 2014

# Definition of IG

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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 programs that shape the evolution and use of the Internet

# Evolution of IG

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- ▶ The Early Days [1960s – 1994]
  - ▶ DARPA Net was initiated in the late 1960
  - ▶ TCP/IP was invented in mid-1970s
  - ▶ The IETF was established in 1986
- ▶ The DNS War [1994 – 1998]
  - ▶ The NSF subcontracted the DNS to “Network Solutions” in 1994. The Internet community was not happy with this
  - ▶ ICANN was formed in 1998

## ... cont. (Evolution of IG)

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- ▶ The World Summit on Information Society (WSIS) [2003 – 2005]
  - ▶ WSIS 2003 in Geneva covered a broad range of topics, and the topic on IG was not resolved.
  - ▶ WGIG was formed and had a mandate to deliver a report to be used for next WSIS by end of 2004
  - ▶ WSIS 2005 in Tunis adopted a definition for IG, established the IGF, and established the MAG
- ▶ Global IGFs and Continuous Reviews of the WSIS Process [2006 - Today]

# Generic Baskets of IG

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- ▶ Infrastructure and Standardization
- ▶ Legal
- ▶ Economic
- ▶ Development
- ▶ Sociocultural



# Infrastructure and Standardization



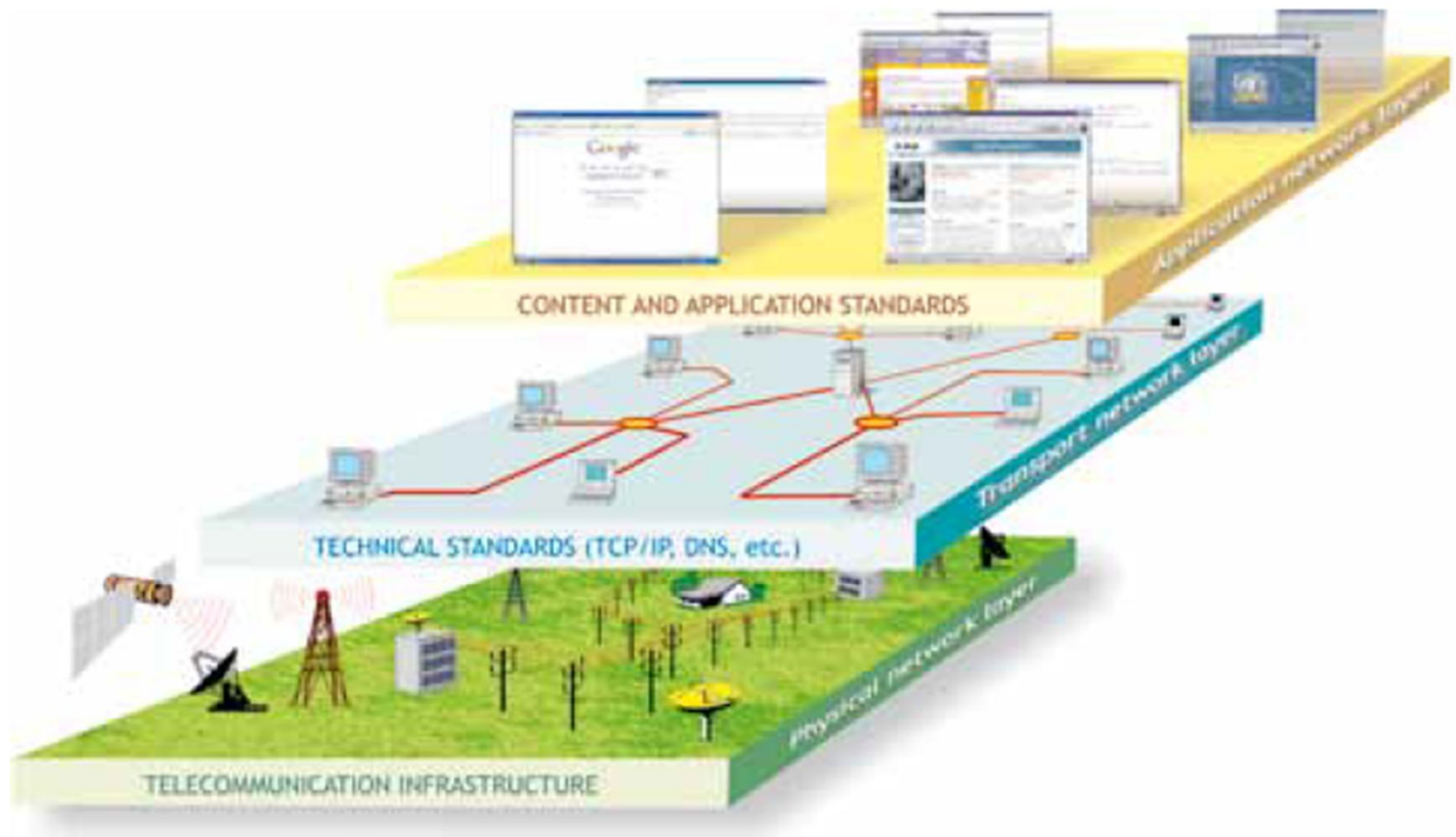
# Two Main Groups

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- ▶ The first group includes the essential issues without which the Internet and the World Wide Web could not exist
  - ▶ Telecommunications infrastructure (wired, wireless)
  - ▶ Internet technical standards and services (DNS, TCP/IP)
  - ▶ Content and applications standards (HTML and XML)
- ▶ The second group consists of issues related to safeguarding the secure and stable operation of the Internet infrastructure and includes cybersecurity, encryption, and spam

# Visualization of Group 1

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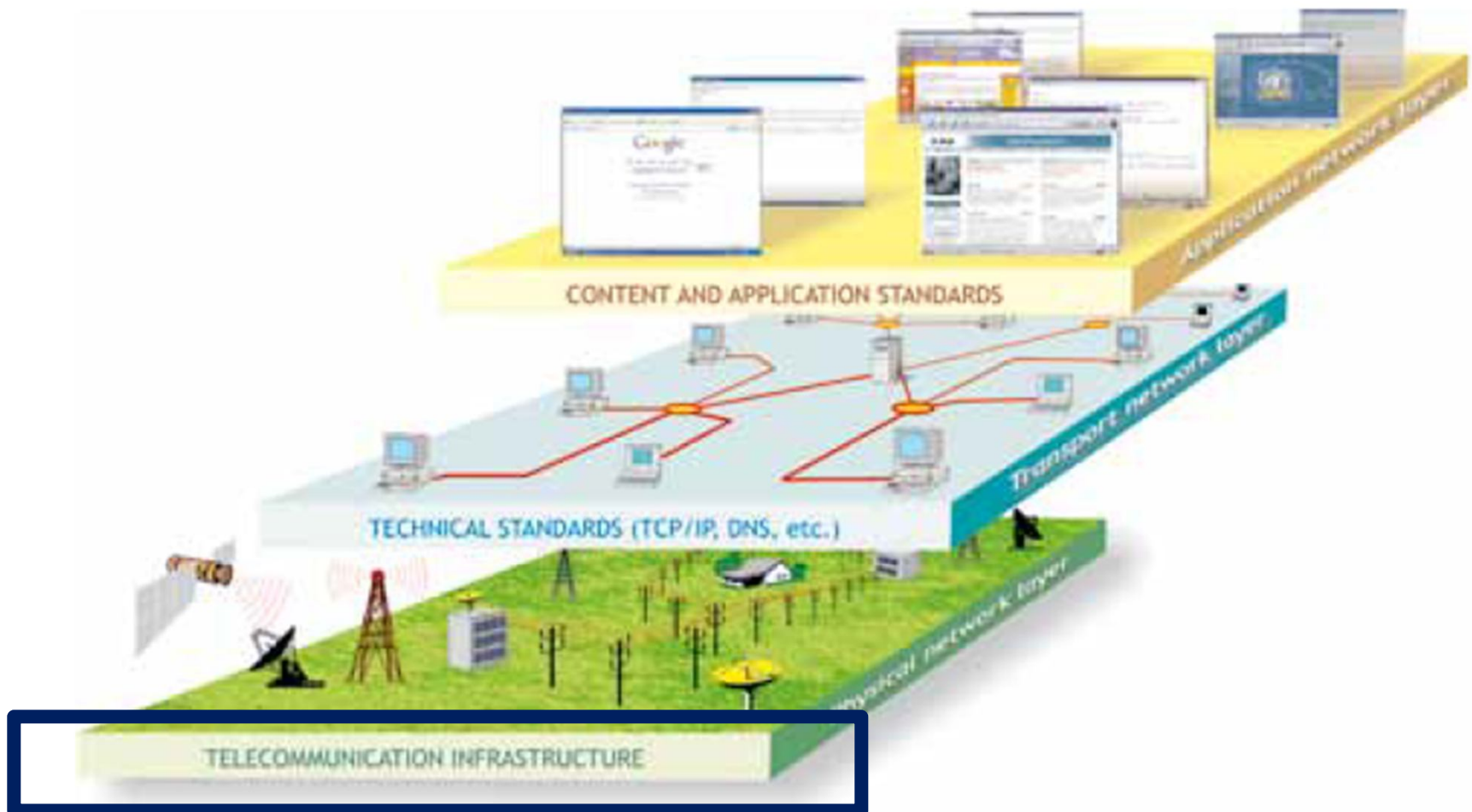


**Source** (An Introduction to Internet Governance -- Jovan Kurbalija – 5<sup>th</sup> Edition)



# Telecommunication Infrastructure

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**Source** (An Introduction to Internet Governance -- Jovan Kurbalija – 5<sup>th</sup> Edition)

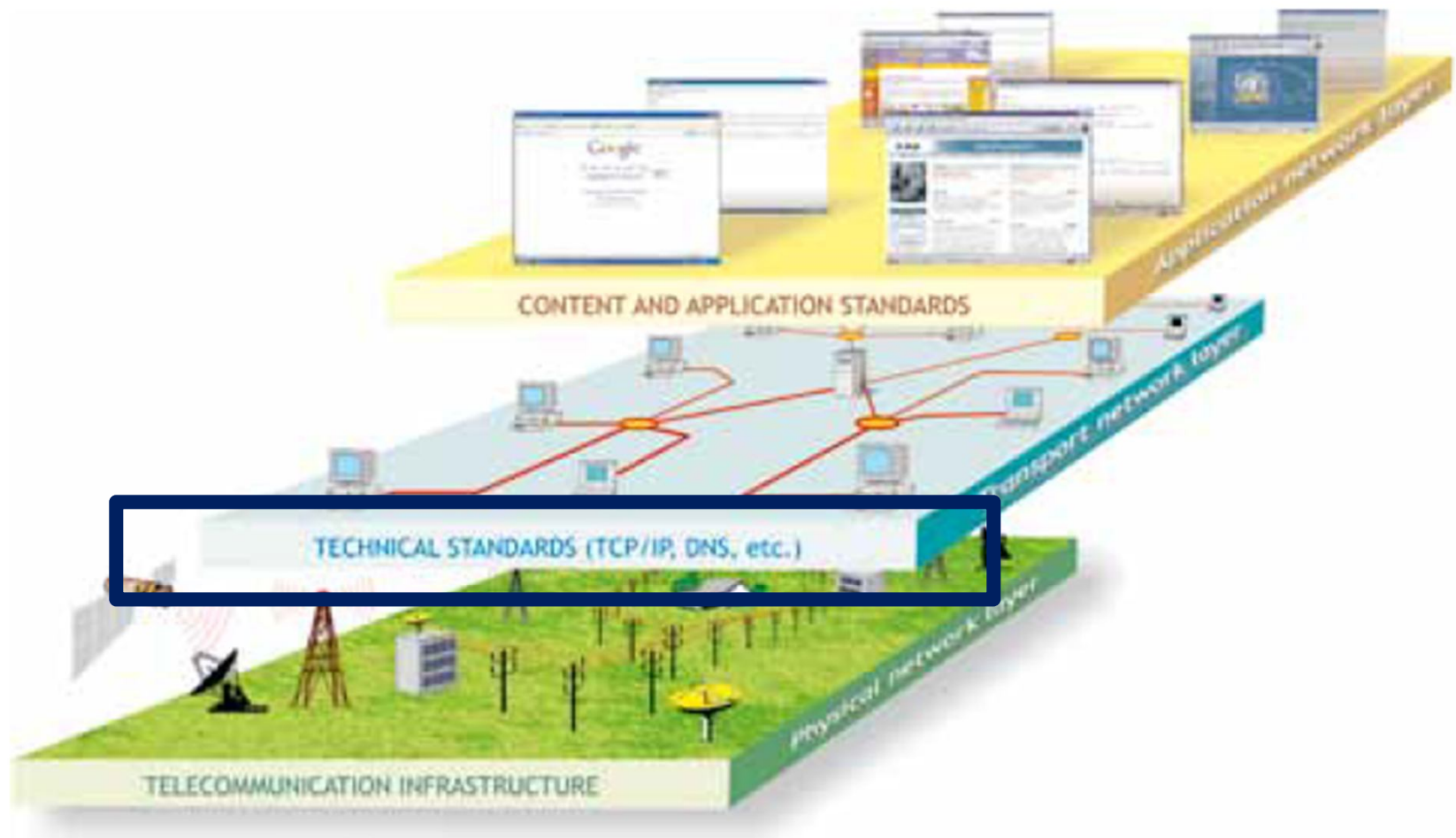
# The Telecommunication Infrastructure

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- ▶ Internet data can travel over a diverse range of communication media such telephone lines, fiber optic cables, satellites, microwaves, wireless links, and electric grids.
- ▶ Telecommunication is regulated at both the national level and the international level
  - ▶ National level via Telecommunication Regulatory Authorities
  - ▶ International level via the ITU and the WTO

# Technical Standards

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**Source** (An Introduction to Internet Governance -- Jovan Kurbalija – 5<sup>th</sup> Edition)

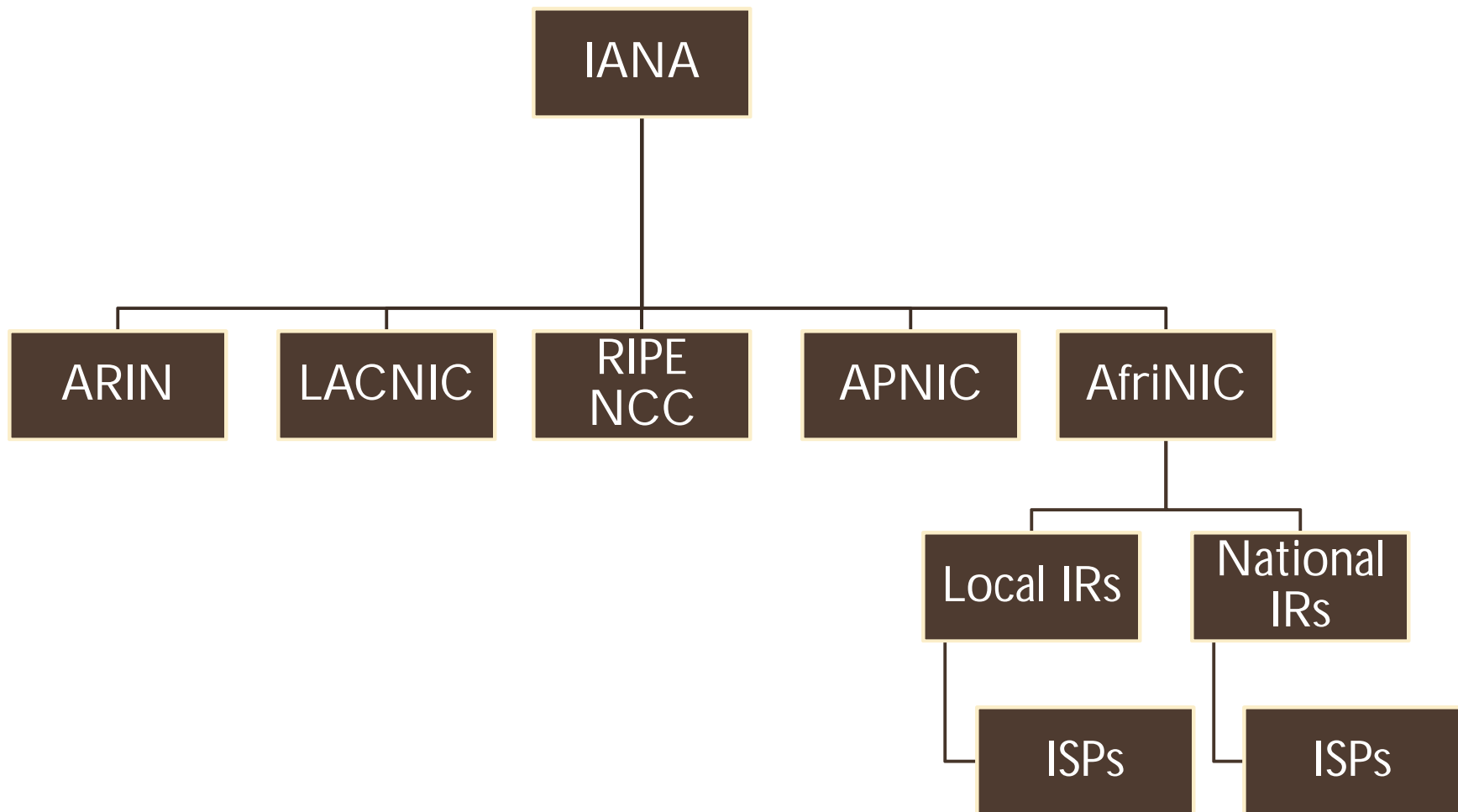
# TCP/IP

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- ▶ Transmission Control Protocol / Internet Protocol
- ▶ Two important aspects from an IG perspective:
  - ▶ Introducing new standards
  - ▶ Distribution of IP numbers
- ▶ TCP/IP standards are guarded by the IETF. Any changes to TCP/IP require extensive prior discussion and proof that they are an effective solution.

# Distribution of IP Addresses

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# Regional Internet Registries

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**Source** (ISOC at <http://www.internetsociety.org/deploy360/wp-content/uploads/2013/09/rirs-nro.jpg>)

# Issues with TCP/IP

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- ▶ Lack of IPv4 addresses and the need to move to IPv6
- ▶ Cybersecurity issues
- ▶ Changes in TCP/IP and the problem of limited bandwidth

# Lack of IPv4 Addresses

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- ▶ IPv4 addresses sum up to close to more than 4 billion addresses ( $2^{32}$  to be more precise)
- ▶ With more than 2.5 billion Internet users and billions of devices, the IPv4 pool is close to getting exhausted
- ▶ NATing and CIDR have been some solutions to better utilize the pool of IPv4 addresses
- ▶ The solution is the adoption of IPv6 which offers more than 340 trillion trillion trillion addresses ( $2^{128}$  addresses to be more precise)



# Migrating to IPv6

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- ▶ The uptake of IPv6 has been quite low
- ▶ Lack of backward compatibility between IPv4 and IPv6 has been a main issue, and so tunneling is used
- ▶ Many old devices do not support IPv6
- ▶ IPv4 and IPv6 are expected to co-exist for 10s of years
- ▶ Proper IPv6 allocation policies must be set to ensure proper and fair distribution of v6 addresses

# Cybersecurity Issues

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- ▶ When TCP/IP was initially designed, cybersecurity issues were not taken into account since the Internet was restricted to academia
- ▶ IPv6 has introduced some security extensions, yet they are not comprehensive
  - ▶ Solution is to revisit the very basis of the TCP/IP standards

# Limited Bandwidth and QoS

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- ▶ As the Internet is being used for audio/video streaming, real-time streaming, and VoIP, guaranteeing TCP/IP Quality of Service (QoS) is very essential
  - ▶ Improving QoS would require changes to the protocol

# The Domain Name System (DNS)

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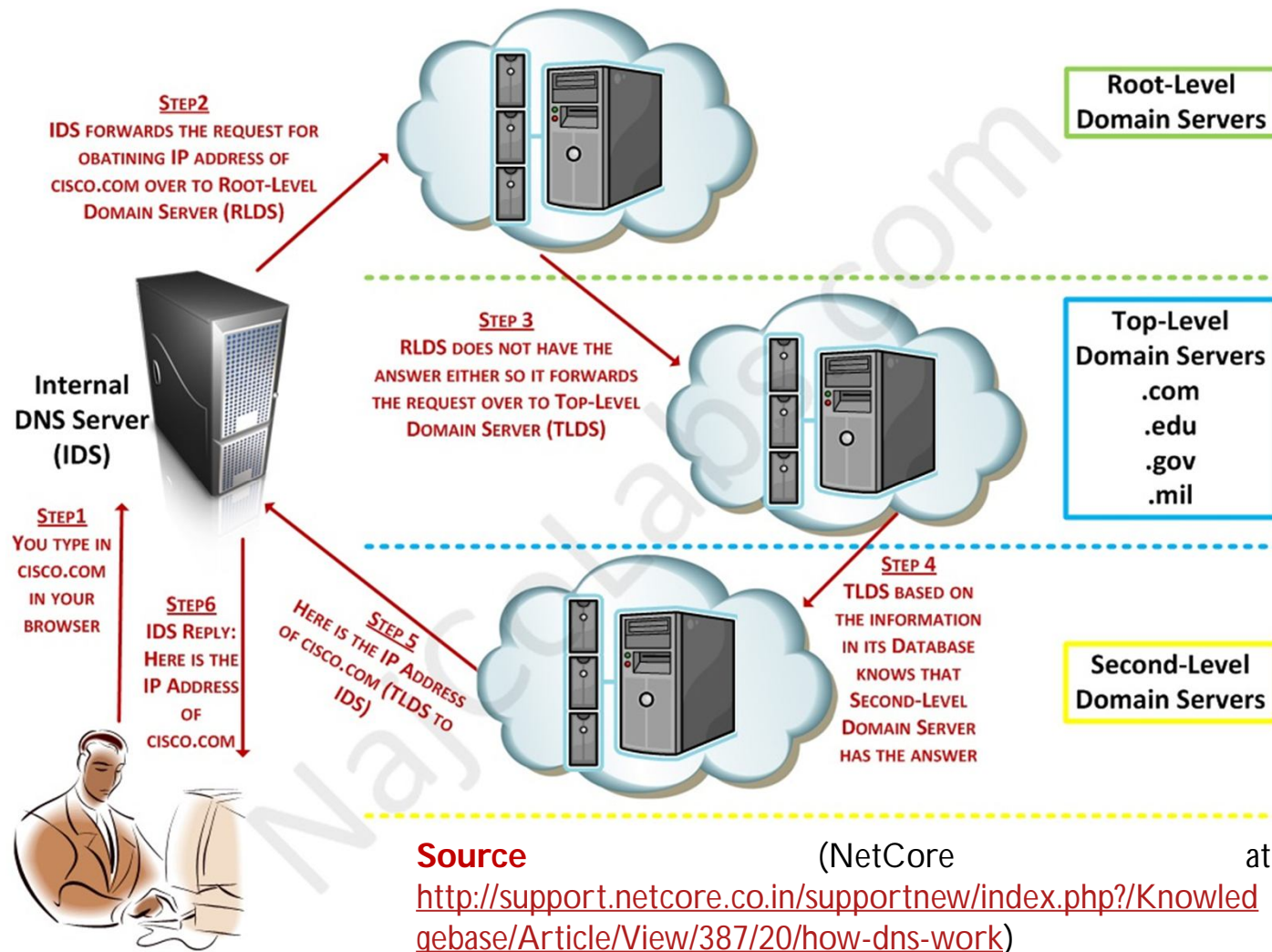
- ▶ Consists of root-servers, top-level domains (TLDs) and their respective servers, and DNS servers scattered around the world
- ▶ TLDs are either gTLDs, sTLDs, or ccTLDs
  - ▶ gTLDs – Generic TLDs such as .com, .net, .org
  - ▶ sTLDs – Sponsored TLDs tailored for specific uses or communities such as .aero, .int, .asia
  - ▶ ccTLDs – Country Code TLDs such as .ae, .jo, .qa

# The RRR Model

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- ▶ **Registry, Registrar, and Registrant**
  - ▶ **Registry** – The entity managing the TLD (VeriSign, NeuStar, Afilias, ARI Services, Nominet, deNIC, ... etc.)
  - ▶ **Registrars** – Sales channels of domain names (GoDaddy, KuwaitNet, TAG-Domains, Genious, ... etc.)
  - ▶ **Registrants** – Any person or entity interested in registering a domain name

# How DNS Works?



## New gTLDs

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- ▶ First round introduced in 2000, second round introduced in 2005, and third (current) round introduced in 2012
- ▶ First 2 rounds had a small number of applications, and on each occasion 5-6 new strings would be introduced to the root
- ▶ The New gTLD program of 2012 is by far the largest expansion to the DNS since its inception
  - ▶ 1,930 applications representing 1,420 unique strings
  - ▶ 116 applications for non-ASCII names (IDNs)
  - ▶ A mixture of closed applications (trademarks) vs. open applications (generic names)
  - ▶ Geographic names and community names

# Types of TLDs

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- ▶ Generic TLDs (.com, .org, .net)
  - ▶ For TLDs delegated prior to 2013, policies were developed by the Internet community
  - ▶ For TLDs as part of the 2012 New gTLD program, policies are developed by respective applicants
- ▶ Country Code TLDs (.ae, .jo, .us, .uk)
  - ▶ Policies developed by the respective country
- ▶ Generic IDNs
  - ▶ Introduced as part of the 2012 New gTLD program
- ▶ Country Code IDNs (.امارات, .الاردن, .भारत)
  - ▶ Policies developed by the respective country



# Regional TLD Organizations

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- ▶ APTLD (Asia Pacific)
- ▶ CENTR (Europe)
- ▶ AfTLD (Africa)
- ▶ LACTLD (Latin America and the Caribbean)

# Root Servers

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- ▶ 13 different naming conventions (A-M)
- ▶ Not 13 different servers, but rather 13 different naming conventions with each one managed by one entity
  - ▶ 385 different instances scattered around the world with the L-root being the most dominant with 145 instances
  - ▶ A good source for such information can be found at <http://root-servers.org/>
- ▶ Alternative root-servers (Alt-root) do exist where a different set of TLDs exist.
  - ▶ Requires additional software plug-ins to re-route to

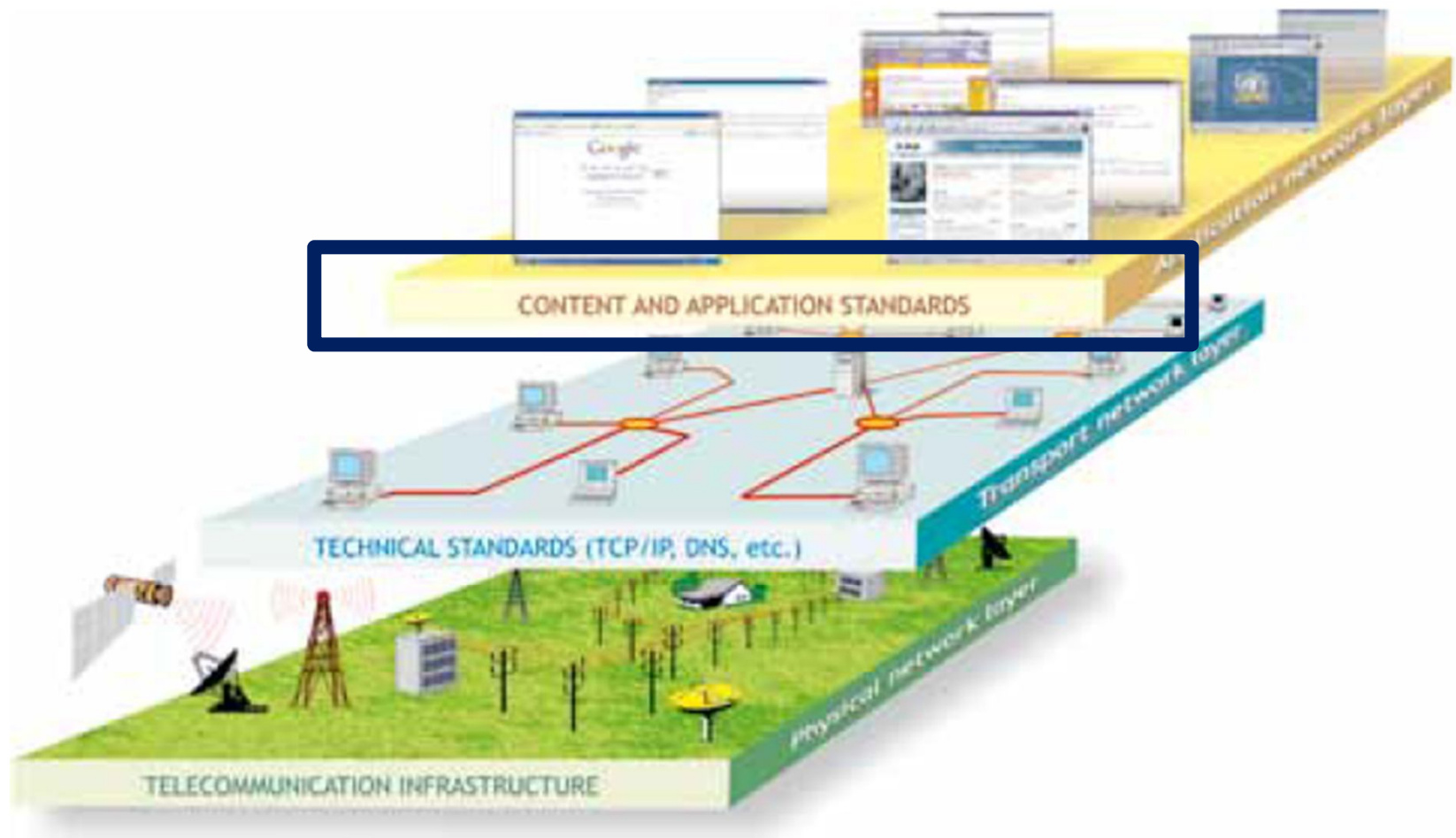
# Network Neutrality

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- ▶ The concept of treating all sorts of traffic online equally
  - ▶ Those in favor of this concept base their claims on the idea that “All bits must be treated equally”
  - ▶ Those against this concept base their request on the fact that some traffic could be given higher priority over others
    - e.g. Delays in VoIP traffic could affect the quality of a voice call, while a delay of a couple of seconds for an email delivery is no harm

# Content and Applications Standards

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**Source** (An Introduction to Internet Governance -- Jovan Kurbalija – 5<sup>th</sup> Edition)

# Web Standards

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- ▶ The Internet is the medium to share information, but how can this information be viewed by the end user?
  - ▶ Tim Berners-Lee and his colleagues at CERN invented HTML
  - ▶ HTML was good for viewing text and images, but what about the ever increasing demand for other sorts of content (database connectivity, videos, voice...)
  - ▶ XML and other forms of markup languages were devised to move forward
- ▶ The *World Wide Web Consortium (W3C)* is the body that develops web applications standards

# Cloud Computing

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- ▶ Shifting data from local hard disks to servers online
- ▶ Concept started with major online service providers such Google, Yahoo!, Facebook, Twitter... etc.
- ▶ Has its advantages and disadvantages. Advantages include being mobile, and being a more open platform for data exchange. Disadvantages include privacy issues and the need for more robust and resilient Internet connectivity.

# Cybersecurity

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- ▶ The Internet was initially developed for academic usage, and so security was not a concern back then
- ▶ With the expansion of the Internet and the need to serve an ever growing number of users, security has become a concern
- ▶ Many countries are developing local cyber-legislations, and some countries are working on developing regional initiatives
- ▶ The ITU have the *International Multilateral Partnership Against Cyber Threats (IMPACT)*; a global cybersecurity initiative that deploys solutions and services to combat cyber-threats

# Encryption

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- ▶ Back in the days, and due to the ever-rising security concerns online and the lack of tools to address them, encryption was a good solution
- ▶ Was in the hands of mainly governments, and was quite expensive to purchase and implement
- ▶ The issue was maintaining privacy on one hand, yet the need for some form of surveillance by governments to ensure “National Security”



# SPAM

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- ▶ Around 75% of emails is SPAM
- ▶ From a technical perspective, software filters do exist to combat SPAM. Nevertheless, they sometimes filter out healthy emails
- ▶ Technical solutions is not the only answer to SPAM. Legal measures are required to complement the process
- ▶ Discussions on SPAM were covered extensively during WGIG 2004 and WSIS 2005. However, SPAM has gone to 10 fold since then
- ▶ Regional and International cooperation is needed since local legislations is not enough

## ... cont. (SPAM)

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- ▶ Some countries have signed MoU's to work on combating SPAM
- ▶ The OECD established a task force on SPAM and prepared an anti-spam toolkit
- ▶ The *Anti-Spam Technical Alliance (ASTA)* was formed by key Internet companies such as Comcast, BT, America Online, ... etc.
- ▶ The main issue with SPAM is its definition; i.e. each country would define SPAM mail differently based on their legislations



# The Legal Basket

# Approaches to Legal Aspects

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- ▶ There are two approaches when it comes to implementing law online:
  1. Use the current laws; i.e. what is used offline can be used online. The issue here is that no one-size-fits-all
  2. Use a more cyber law approach that is tailored to the online world. The issue here is that such laws would need to cope with the explosive growth and expansion of the Internet and the services it provides

# Legal Instruments

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- ▶ National and Community Legal Instruments
  - ▶ Legislation
  - ▶ Social Norms (Customs)
  - ▶ Self-Regulation
  - ▶ Jurisprudence
- ▶ International Legal Instruments
  - ▶ International Private Law vs. International Public Law
  - ▶ International Private Law
  - ▶ International Public Law
  - ▶ International Conventions
  - ▶ International Customary Law
  - ▶ Soft Law
  - ▶ Lus Cogens

# National and Community Legal Instruments

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- ▶ **Legislation**

- ▶ Consists of rules and sanctions, and is all binding

- ▶ **Social Norms (Customs)**

- ▶ They are enforced by the community through peer-to-peer pressure

- ▶ **Self-Regulation**

- ▶ Is similar to social norms, but is based on an explicit and well-organized set of rules

- ▶ **Jurisprudence**

- ▶ Most legal cases concerning the Internet are solved through analogies

# International Legal Instruments

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- ▶ **International Private Law**

- ▶ Resolves legal disputes involving individuals and institutions from different national jurisdictions

- ▶ **International Public Law**

- ▶ Regulates relations between nation states such as telecommunication regulations, human rights conventions, international trade treaties... etc.

- ▶ **International Conventions**

- ▶ Developed by umbrella organizations such as the United Nations
- ▶ One good example is the ITRs

## ... cont. (International Legal Instruments)

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- ▶ **International Customary Law**
  - ▶ Includes two elements: general practice, and recognition that such practice is legally binding
  - ▶ Best example is ccTLDs and gTLDs
- ▶ **Soft Law**
  - ▶ Contain principles and norms, and are usually non-binding
- ▶ **Lus Cogens**
  - ▶ A norm, accepted and recognized by the international community of States as a whole, and can be modified based on their consensus.
  - ▶ Examples include racial discrimination, crimes against humanity, genocide, slaves and piracy... etc.



# Arbitration and the Internet

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- ▶ Here, decisions are made by one or more independent individuals chosen by the disputants
- ▶ Provides a faster, simpler, and cheaper way of settling disputes
- ▶ One good example of arbitration in the online world is the *Uniform Domain Name Dispute Resolution Process (UDRP)*.
  - ▶ gTLDs are enforced to use this process to resolve disputes
  - ▶ Some ccTLDs use this either as is, or customize it based on national laws and regulations

# Intellectual Property Rights (IPR)

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- ▶ Copyrights
  - ▶ Trademarks
  - ▶ Patents
  - ▶ Designs
  - ▶ Utility Models
  - ▶ Trade Secrets
  - ▶ Geographical Indications
  - ▶ Plant Varieties
  - ▶ ... and the list goes on
- Closely related to the Internet

# Copyrights

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- ▶ The expressions of an idea is copyrighted, but not the idea itself
- ▶ The Internet provides powerful tools for protecting and monitoring the use of copyrighted material
  - ▶ Such a protection creates an issue between an authors' rights vs. the public interest of using such ideas

# Trademarks

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- ▶ Trademarks are relevant to the Internet because of the registration of domain names
- ▶ Cybersquatting is the practice of registering names of companies and selling them later at a higher price
- ▶ When ICANN was formed in 1998, one of the first tasks it was asked to undertake was to develop and implement a mechanism for the protection of trademarks in the field of domain names.
  - ▶ The UDRP was developed by WIPO and was introduced by ICANN as an answer to this request

# Cybercrime

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- ▶ Cybercrime is defined as all crimes committed via the Internet and computer systems, and would include a broader range of crimes such as computer-related fraud, infringements of copyright, child pornography, and network security
- ▶ In combating cybercrime, there is a thin line with human rights and privacy issues; mainly when ones computer has to be investigated

# Labor Law

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- ▶ The 8+8+8 law of 8 hours for work, 8 hours for sleep, and 8 hours for free time has to be defined; mainly for those whose work is online
- ▶ Is an employer allowed to monitor employees' use of the Internet?
- ▶ Differentiation between private life and working life when posting information online since some post information about their working environment in a personal context

# Data Protection and Privacy

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- ▶ Data protection is a legal mechanism that ensures privacy
- ▶ Privacy is the right of any citizen to control their own personal information and to decide about it (to disclose information or not)
  - ▶ Privacy is a fundamental human right
- ▶ The Internet is heavily being used today for all sorts of transactions. And due to the routing of traffic across many nodes, protecting data and maintaining privacy across various borders is hard to attain



# The Economic Basket



# E-Commerce

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- ▶ The production, distribution, marketing, sale, or delivery of goods and services by electronic means
- ▶ The importance of e-commerce is illustrated by the title of the document that initiated the reform of Internet governance and established ICANN; i.e. “Framework for Global Electronic Commerce”
- ▶ Many countries have been developing a regulatory environment for e-commerce
  - ▶ Laws have been adopted in the fields of digital signatures, dispute resolution, cybercrime, customer protection, and taxation

# Types of e-commerce

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- ▶ **Business-to-consumer (B2C)** – The most familiar type of e-commerce. An example is amazon.com
- ▶ **Business-to-business (B2B)** – Economically the most intensive, comprising over 90% of all e-commerce transactions
- ▶ **Business-to-government (B2G)** – Highly important in the area of procurement policy
- ▶ **Consumer-to-consumer (C2C)** – Such as eBay auctions

# E-Commerce and Consumer Protection

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- ▶ Consumer trust is one of the main preconditions for the success of e-commerce
- ▶ E-commerce regulation should protect customers in a number of areas:
  - ▶ Online handling of payment card information
  - ▶ Misleading advertising
  - ▶ Delivery of defective products

# Taxation

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- ▶ Should the Internet be taxed?
  - ▶ The USA government is against it
  - ▶ The OECD and EU are in favor of it
- ▶ Who should pay the tax, the source or the destination?
  - ▶ The USA is in favor of having the source (seller) do so since most of the e-commerce firms are based in the USA
  - ▶ The EU is in favor of having the destination (consumer) do so since the EU has more consumers than sellers

# Digital Signature

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- ▶ Digital signatures are linked to the authentication of individuals on the Internet
- ▶ The main challenge here is to create a new regulatory environment in which most have no practical experience
- ▶ Approaches to the regulation of digital signatures:
  - ▶ **The minimalist approach** – E-signatures cannot be denied because they are in electronic form
  - ▶ **The maximalist approach** – Specifies a framework and a set of procedures for digital signatures, including cryptography and the use of public key identifiers
  - ▶ **A combination of the above two** – E-signatures are recognized, but with cryptography, they are stronger legally

# E-Banking

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- ▶ Involves the use of the Internet to conduct conventional banking operations, such as card payments or fund transfers
- ▶ Provides advantages to customers by introducing new services and reducing the costs of transactions
- ▶ Issues related to the governance of e-banking
  - ▶ “Virtual” banks possess issues related to licensing since they are “borderless”
  - ▶ Security issues
  - ▶ Customer protection at the international level

# E-Money

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- ▶ Associated with so-called smart cards issued by companies such as Visa and American Express
- ▶ Its characteristics include it being stored electronically, transferred electronically, and transactions involve a complex system of the issuer, the network operator, and a clear transaction
- ▶ Mobile money (m-money) is another form of e-money that is transaction'ed over mobile phones



# The Development Basket



# ICT for Development

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- ▶ The term “ICT for Development (aka ICT4D)” has been one of the hottest topics within the past couple of years
- ▶ Developing a proper telecommunication and Internet infrastructure is key for the developing and least-developed countries to develop their economies
- ▶ The term “Internet Governance for Development (aka IG4D)” has emerged of late
- ▶ WSIS and the IG process does promote access of all countries to information, knowledge, and communication technologies for development

# The Digital Divide

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- ▶ The digital divide can be defined as the gap between those who have access and capabilities to use ICT and the Internet, and those who do not
- ▶ Digital divide exists within the same country, between different countries, between rural and urban populations, between the young and the elders, as well as between men and women

# Telecom and Internet Infrastructures

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- ▶ While infrastructure is well developed in North American and Europe, other regions of the world are less developed in this context
  - ▶ Submarine cables are being installed at various under-served regions
  - ▶ Small remote islands face connectivity issues, and rely on expensive satellite connectivity
- ▶ Introduction of Internet Exchange points (IXPs) can resolve issues related to transit of local traffic to remain local

# Initiatives for Development

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- ▶ The infrastructural aspect of the digital divide has been the focus of the ITU through its ITU-D
- ▶ After WSIS, the Digital Solidarity Fund was established in Geneva as an independent foundation mainly supported by cities and local authorities worldwide
  - ▶ Other sources of funding include the UNDP and the World Bank
- ▶ Initiatives such as the “One Laptop per Child” have been undertaken in various parts of the world
- ▶ ISOC’s initiative with the AUC to develop IXPs around Africa is another good example

# Brain Drain

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- ▶ Brain Drain is defined as the move of skilled labor to the developed world in search of a better life
  - ▶ Considered a main obstacle hindering the development of developing and least-developing countries
- ▶ One approach to reverse this dilemma is outsourcing ICT tasks to developing countries. One good example is India

# What is Needed to Initiate ICT4D?

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- ▶ The gradual de-monopolization of the telecommunication market
  - ▶ Having a strong telecommunication regulatory authority
  - ▶ Telecom operators and ISPs are suggested to be privately owned and not owned by the state
- ▶ Introduction of Internet-related laws
  - ▶ Covering copyright, privacy, e-commerce, etc.
- ▶ The granting of access to all without restrictions



# The Sociocultural Basket



# The Impact of the Internet

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- ▶ The Internet has made a considerable impact on the social and cultural fabric of modern society
  - ▶ Introduces new patterns of social communication
  - ▶ Breaks down language barriers
  - ▶ Creates new forms of creative expressions



# The Internet and Human Rights

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

## Views in this Regard

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- ▶ Can we use the human rights developed for the offline world online?
- ▶ Is it time to declare the Internet as a Human right when we still have other basic rights not fulfilled for many around the world such as food, water, education... etc.?
  - ▶ In 2010, Finland declared the right to access the Internet as a human right where every citizen has the right to a 1 Mbps broadband connection

# Rights of People with Disabilities

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- ▶ According to UN estimations, there are 500 million people with disabilities in the world
- ▶ Several initiatives have been undertaken to make the Internet a useful place for the disabled
  - ▶ IGF Dynamic Coalition on Accessibility and Disability
  - ▶ The Internet Society Disability and Special Needs Chapter
  - ▶ The International Center for Disability Resources on the Internet

# Content Policy

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- ▶ Three dimensions to it:
  - ▶ Human rights (freedom of expression and right to communicate)
  - ▶ Government (content control)
  - ▶ Technology (tools for content control)
- ▶ Classification of Content:
  - ▶ Content that has a global consensus for its control (Child Pornography, Terrorism, genocide)
  - ▶ Content that is sensitive to certain countries, religions, and/or cultures
  - ▶ Content that is politically controlled

# How Content Policy is Conducted?

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- ▶ **Governmental Filtering of Content**
- ▶ **Private Rating and Filtering Systems** – Done by end users or at the ISP level
- ▶ **Content Filtering Based on Geographical Location** – Yahoo! and Nazi content in France case
- ▶ **Content Control through Search Engines** – Google China case
- ▶ **End User Content Regulation** – Blogs, YouTube Videos, Wikis... etc.
- ▶ **International Initiatives**

# The Internet and Education

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- ▶ Online learning (e-learning) is a strong tool nowadays
- ▶ Some estimates forecast that the worldwide online learning market will grow to approximately \$49.6 billion by 2014
- ▶ While e-learning within the same jurisdiction is straightforward, e-learning across boundaries requires new governance mechanisms
- ▶ Many platforms available:
  - ▶ DiploFoundation -- <http://learn.diplomacy.edu/>
  - ▶ ICANN Learn – <http://learn.icann.org/>
  - ▶ ISOC Inforum -- <http://www.internetsociety.org/inforum>

# Child Safety Online

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- ▶ **Cyber-Bullying**
  - ▶ Harassing kids online
- ▶ **Abuse and Sexual Exploitation**
  - ▶ Building a relationship with kids online in an attempt to meet them in real life
- ▶ **Violent Games**
  - ▶ The top 10 games of 2011 were rated as “Action/Violent”

# Multilingualism and Cultural Diversity

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- ▶ Latest statistics show that while 50% of web content is in English, 70% of the world's population does not speak English
- ▶ The Unicode Consortium develops standards to facilitate the use of character sets for different languages
- ▶ ICANN and the IETF have worked extensively on issues related to Internationalized Domain Names (IDNs)





# Internet Governance Actors



# Main Actors in the Debate

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- ▶ **Governments**

- ▶ Policy authority for Internet-related public policy issues (including international aspects)

- ▶ **The Business Sector (Private Sector)**

- ▶ The development of the Internet, both in the technical and economic fields

- ▶ **Civil Society**

- ▶ Have an important role on Internet matters, especially at the community level

- ▶ **Technical Community and Academia**

## ... cont. (Main Actors in the Debate)

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### ▶ International Organizations

- ▶ The development of Internet-related technical standards and relevant policies
- ▶ Examples include ICANN, ISOC, IETF, IAB... etc.

### ▶ Inter-Governmental Organizations

- ▶ The coordination of Internet-related public policy issues
- ▶ Examples include ITU, UNESCO, UNCTAD... etc.

# Governments

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- ▶ During the early days of WSIS and IG, it was mainly governments involved in the process; mostly ICT ministries and those involved with the ITU
- ▶ Moving forward, ICT ministers realized that other governmental bodies had to be included in the process such as Culture, Media, Economy, and Justice.

# The Business (Private) Sector

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- ▶ The main players include:
  - ▶ Domain name companies (Registries and Registrars)
  - ▶ ISPs
  - ▶ Telecommunication companies (Internet Infrastructure)
  - ▶ Software developers (W3C and IETF)
  - ▶ Internet content companies (Google, Yahoo!, Facebook)

# Civil Society

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- ▶ Has been the most vocal and active promoter of a multistakeholder approach to Internet governance

# Internet Society (ISOC)

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- ▶ Engages in a wide spectrum of Internet issues, including policy, governance, technology, and development
- ▶ Have chapters all around the world
- ▶ Provide online training as well as physical training
- ▶ Develop lots of content and materials
- ▶ More at <http://www.internetsociety.org/>

# IETF

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- ▶ Internet Engineering Task Force
- ▶ A large, open, and international community of folks concerned with the evolution of the Internet architecture
- ▶ Work is done via working groups, and mostly happens over mailing lists
- ▶ Hold 3 annual meetings
- ▶ The Internet Architecture Board (IAB) is a committee of the IETF
- ▶ More at <http://www.ietf.org/>

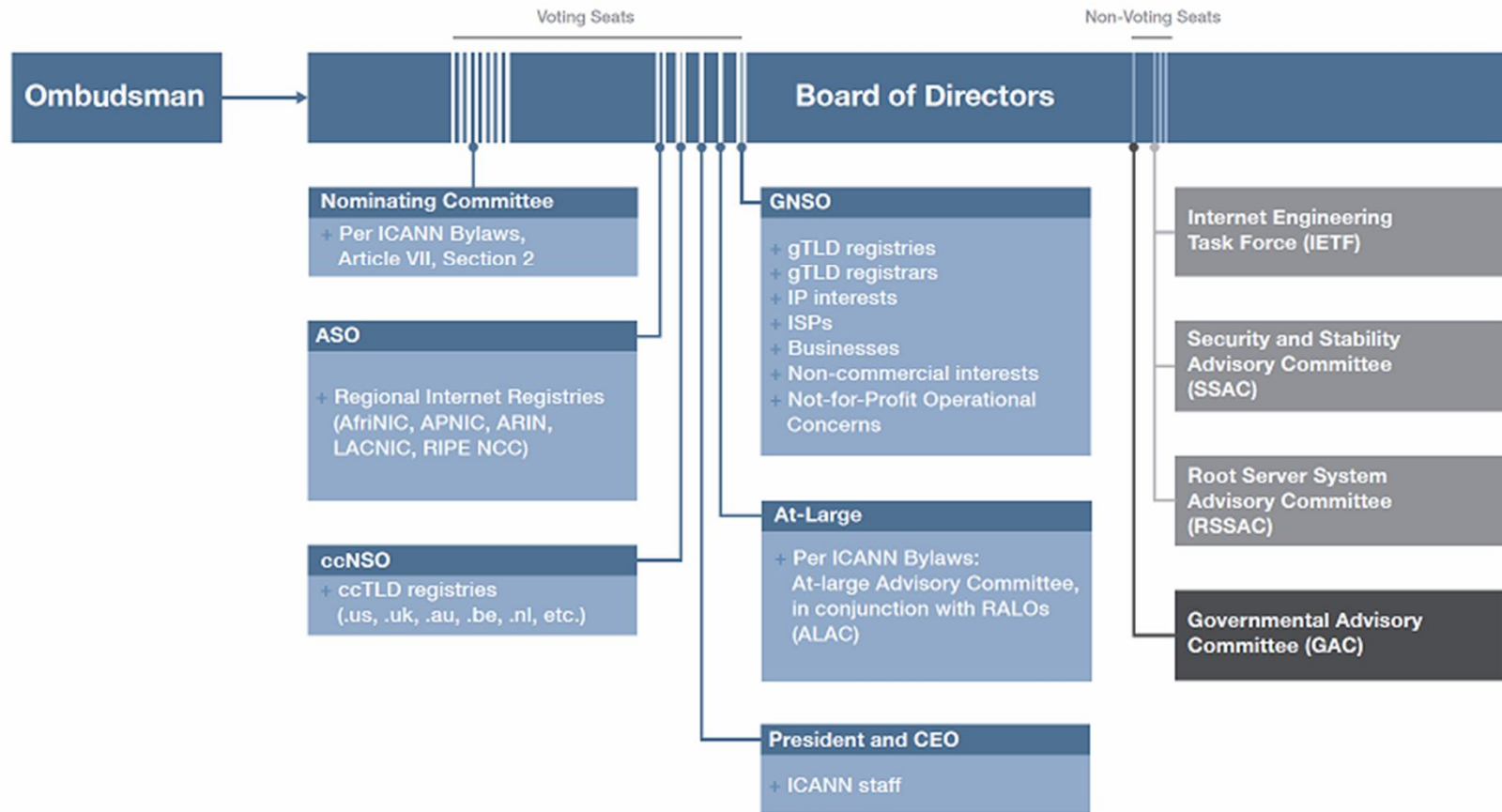


# ICANN

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- ▶ Coordinates the Critical Internet Resources (CIR); domain names and IP addresses
- ▶ Maintains one of the root-servers (L-root)
- ▶ Holds 3 annual meetings around the globe
- ▶ Develops Internet related policies in a bottom-up, consensus-driven, multi-stakeholder model

# ICANN Organizational Chart



# The IANA Functions

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- ▶ Contracted to ICANN as a \$ 0 contract
- ▶ Currently administered by the USG
- ▶ Current contract expires in September 2015
- ▶ On March 14, the NTIA announced that it is willing to transition key Internet domain name functions to the global Internet community
  - ▶ ICANN to lead on the transition process via an extensive global community consultation process

## What Exactly is the NTIA Announcement?

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- ▶ It is not a final decision to surrender control of the Internet
- ▶ It is not a response to disclosures by *Edward Snowden* about the National Security Agency (NSA) and its policies
- ▶ It will not lead to a division of the Internet into smaller, less technically resilient pieces
- ▶ It shall transfer stewardship of an administrative and clerical function. ICANN does not serve a policing function in the Internet ecosystem
- ▶ It will NOT affect the billions who use the Internet every day

# What is Your Role in the NTIA Announcement?

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**Be part of the consultation process**

# Questions?!

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