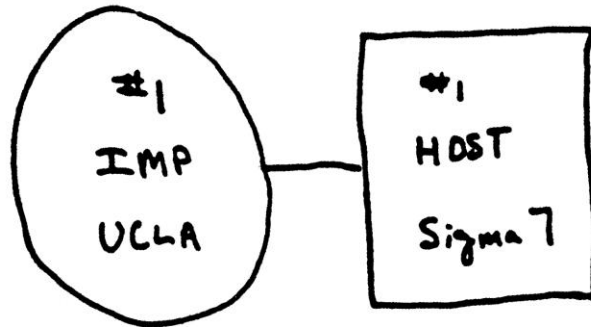# Telecom and Internet Regulatory Challenges and Opportunities – Names, Numbers, Internet Governance

ICANN

Theresa Swinehart

Vice-President

Global and Strategic Partnerships

Global Forum
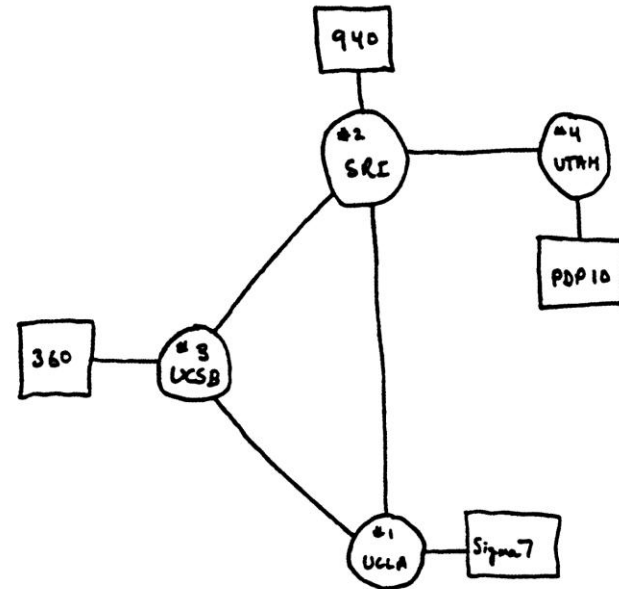ICT & The Future of Internet
Bucharest, Romania, 19-20 October 2009

The beginning…

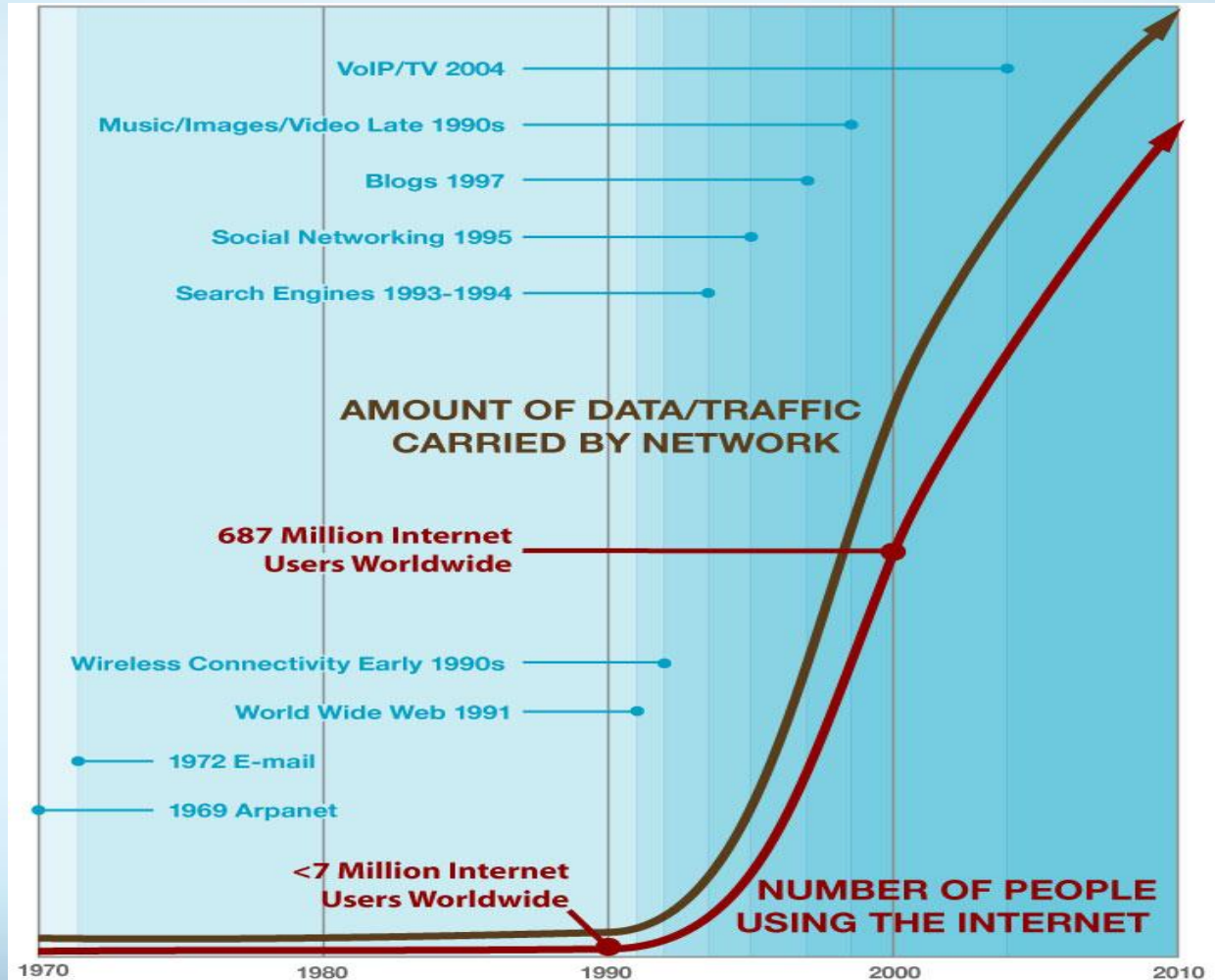THE ARPA NETWORK

SEPT 1969

1 NODE

THE ARPA NETWORK

DEC 1969

4 NODES

Internet is still evolving…

And so is its Governance
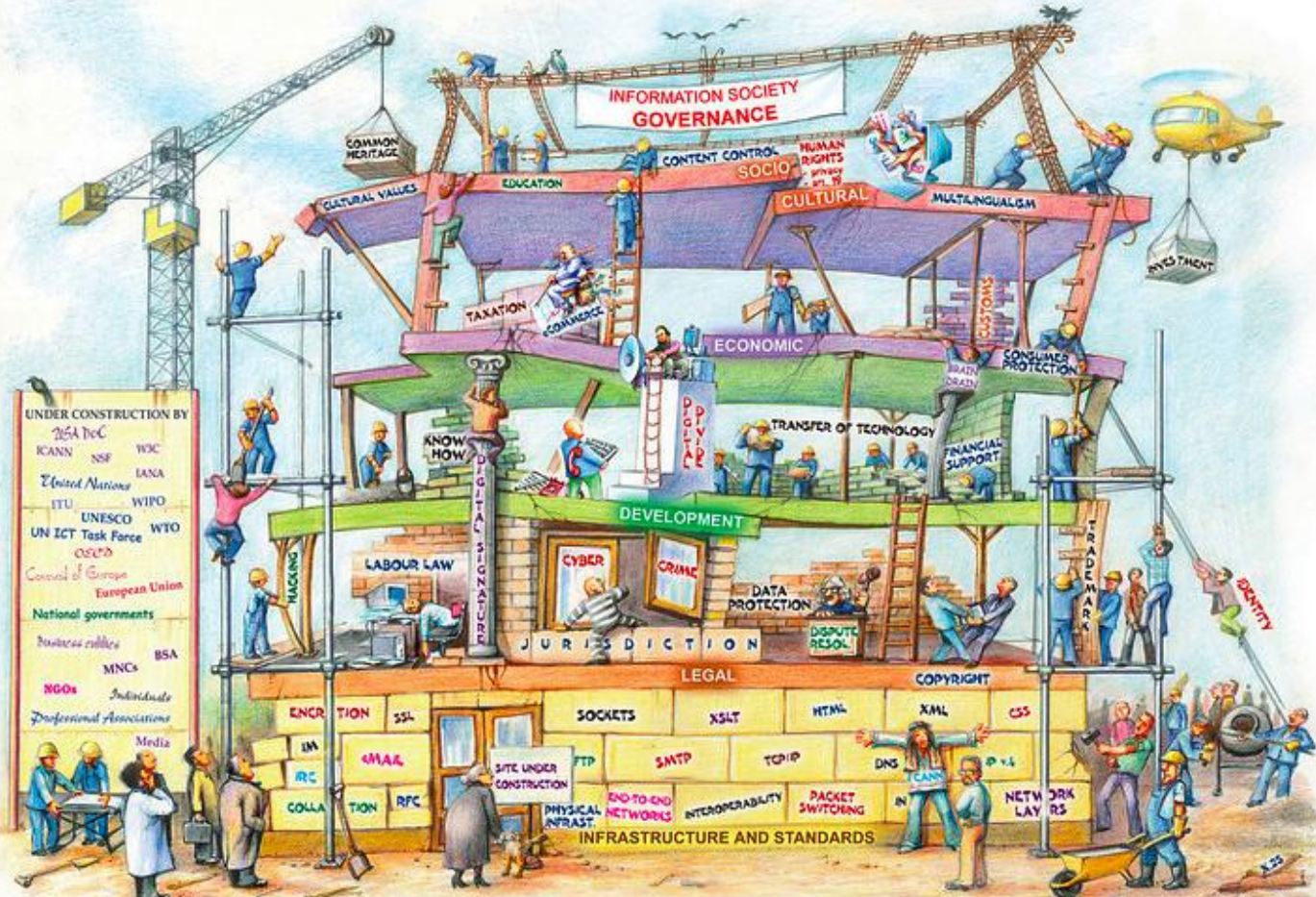
Internet from inside

Internet

207.248.168.180

ISP

192.0.34.163

ISP

Backbone

ISP

icann.org

192.0.34.163

DNS

.org   .com

.eg

Root
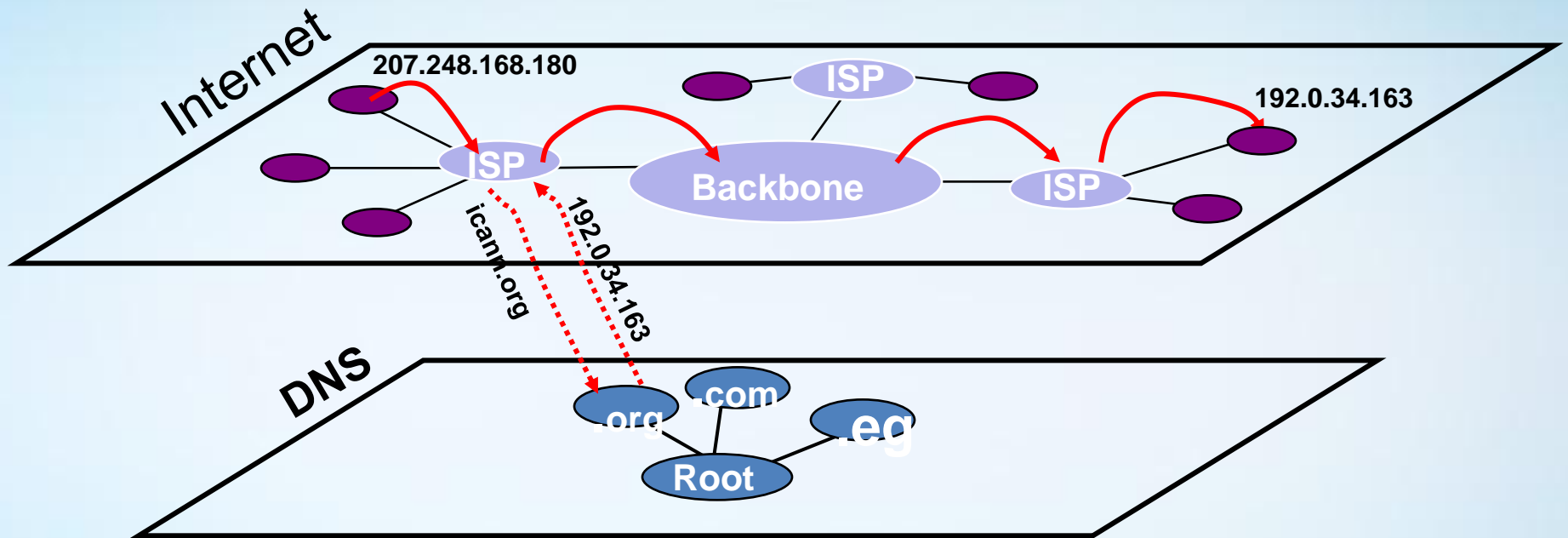
Technically, it is names and numbers…

Key areas of ICANN activities

Internationalized Domain Names (IDNs)

- IDNs at the top level of the domain names tree
  - For both country code top-level domains (.eg, .sy, etc.) and generic top-level domains (.net, .org, etc.)
- Demand for "quick" implementation of IDN ccTLDs
  - Fast Track mechanism
  - The Governmental Advisory Committee (GAC) and the country code Name Supporting Organization (ccNSO) took lead in this
  - ICANN published 3rd revision of the implementation
- All countries and regions interested have been participating in the debate, including Russia, China, Arab region
- Important dimension to contributing to a further multilingual Internet

New generic top-level domains (gTLDs)

- Why new gTLDs?
  - Bylaws, core values: "6. *Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest*"
- Internet community's interest in expanding the domain name space to accommodate the introduction of new ASCII and IDN TLDs
  - Choice for end users
  - Opportunity for businesses
- Program implementation
  - Draft applicant guidebook
  - Papers and studies on overarching issues
    - Trademark protection
    - Demand and economic impact
    - Malicious conduct
    - Root zone scaling

IPv4 depletion and IPv6 transition

- Global policy for the allocation of the remaining IPv4 address space
    - 5 /8s have been selected and set aside
    - One /8 per each Regional Internet Registry (RIR)
- To date
    - Expected to run out around mid 2011:
      http://www.potaroo.net/tools/ipv4/index.

- 8 of the root servers are v6 enabled
- RIPE NCC now offers /48 IPv6 Provider Independent (PI) to end users (not LIRs)
- 300% increase in IPv6 routing entries in the past two years
- ICANN supports efforts around the world leading to the smooth transition to IPv6

Security, stability and resiliency

- The secure, stable and resilient operation of the Internet's unique identifier systems is a core part of ICANN's mission

- Plan for enhanced Internet security, stability, and resiliency
  - Improve authentication of communications with TLD managers and support implementation of DNS Security Extensions (DNSSec)
  - Collaborate with security community to effectively respond to malicious abuses of the DNS, including ccTLD operators.
  - Collaborate with governments across the globe and provide technical perspective in relation to security of DNS
  - Engage with other international organizations targeting efforts in enabling regional activities to improve security and resiliency of the DNS (e.g., ICANN has an MOU with UNESCWA)

Internet Governance

Models of Management contribute to Innovation

- Governance models
  - Not a new debate
- Rapid evolution of Internet's use, impact on economic growth, social engagement, the 'digital divide'
- Balance between government versus private sector, private sector versus private sector, consumer interests, incentives, innovation
- Few institutional models
  - IGF 'Platform'
  - ICANN

Upcoming IGF- 5-18 November 2009, Sharm el Sheikh

Theme: "Internet Governance – Creating Opportunities for all"

- Underlying theme: renewal of IGF
- Agenda themes
    - Managing critical Internet resources
    - Security, opennes and privacy
    - Access and diversity
    - Internet governance in light of WSIS principles
    - Taking stock and the way forward – on desirability of the continuation of the forum
    - Emerging issues: Impact of Social Networks

Another governance area

- Evolution of the multi-stakeholder model reflected in ICANN

- Established almost 11 years ago, with an original MOU using the word "Test" – a test whether ICANN could perform the function

- Organization evolved, taking steps to better internationalize

- Recently concluded series of MoU's to a permanent recognition of the organization, its mission, and its public trust responsibilities in what is referred to as the Affirmation of Commitments

Affirmation of Commitments

- Concludes the MoU processes
- Institutionalizes coordination of DNS by private sector
- No control by any one entity
- Commitments intended to be 'of long standing'
- Recognition of the private Multi Stakeholder led organization, Not for Profit, and acting in the public interest
- Rigorously evaluate costs and benefits
- Be transparent and accountable
- Remain with historical US based
- Undertake 'Commitment reviews' lead by the community and including governments

Commitment Reviews

- Three reviews by Community relating to:
    - Ensuring accountability, transparency and the interests of global Internet users;
    - Preserving security, stability and resiliency;
    - Promoting competition, consumer trust and consumer choice.
- CEO and GAC Chair select members
- Reviews at regular intervals

The next Internet generation

1 billion new users

The Internet should be a platform that amplifies voices that might otherwise never be heard and creates equal opportunities for increasing the wealth of nations and their citizens.
─ Vint Cerf

Thank you

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