



Internet Governance & Geopolitics History, Principles & Ecosystem

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Twitter

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Internet Governance, History & Principles

1

Internet
History

2

From Techies
to Lawyers
& From Lawyers
to Politicians

3

Various
organizations
ISOC / IAB / IETF
ITU / W3C / IGF
UN / I&J / ICANN

4

Multi-Lateral
vs.
Multi-Stakeholder

5

Conclusions

6

Your Questions

- **Internet Governance Definition**
- ***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***

The Five Waves of Internet Governance

- **Wave 1: Military (1957 –1970s)**
 - DARPA-Net
- **Wave 2: Academic (1970s –1990s)**
 - TCP/IP
- **Wave 3: Commercial (1990s –2000s)**
 - WWW
- **Wave 4: Mass media (2000s –2010s)**
 - WSIS
- **Wave 5: Everybody & Everything (2010+)**
 - The New Internet Complexity (Apps, 4G, 5G & IoT)

Internet Governance & Geopolitics History, Principles & Ecosystem



History



The Internet

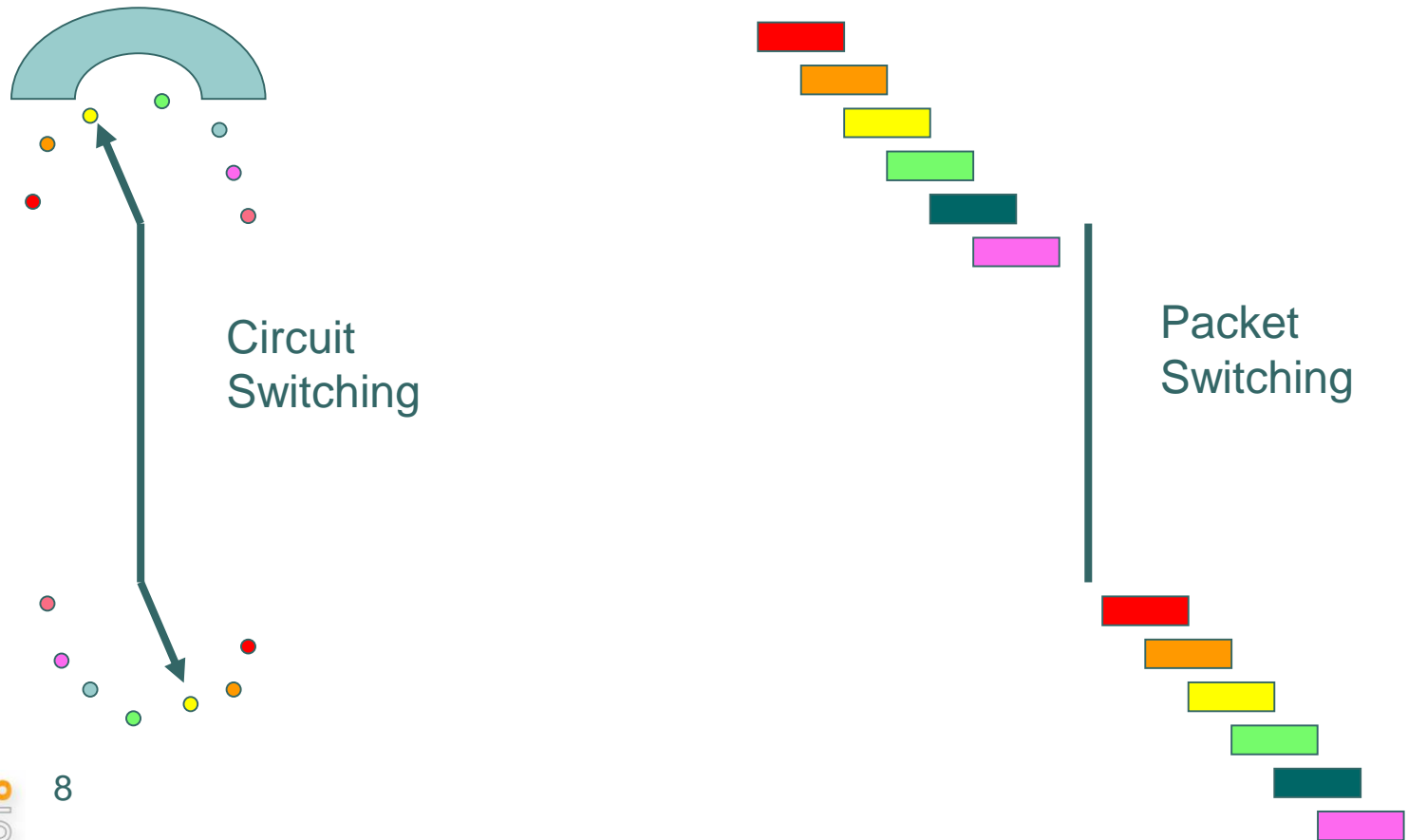
- Technology developed since the 1960s
- Technical specifications:
 - Internet Engineering Task Force (IETF)
 - Multi-stakeholder development
- Distributed system
 - Network of networks
 - No single owner of the Internet
- Domain Name System (DNS) since 1980s
 - A hierarchy of name servers with one single Root
 - Fully distributed around the world

The Internet Ecosystem

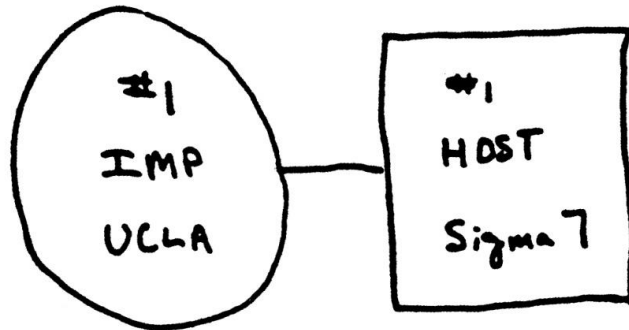
- **The Internet is successful in large part due to its unique model**
 - shared global ownership
 - development based on open standards
 - freely accessible processes for technology and policy development
- **The Internet's unprecedented success continues to thrive because the Internet model is**
 - open
 - transparent
 - collaborative
- **The model relies on processes and products that are local, bottom-up, and accessible to users around the world**

Internet timeline - 1961

J.C.R. Licklider (MIT): “Galactic Network” concept
Leonard Kleinrock publishes a paper on Packet Switching



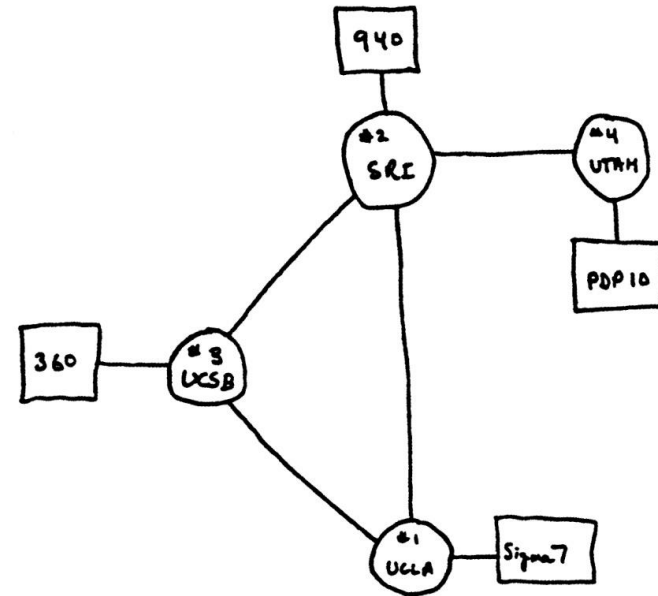
Self-management of these resources has allowed the global Internet to grow from this...



THE ARPA NETWORK

SEPT 1969

1 NODE



THE ARPA NETWORK

DEC 1969

4 NODES

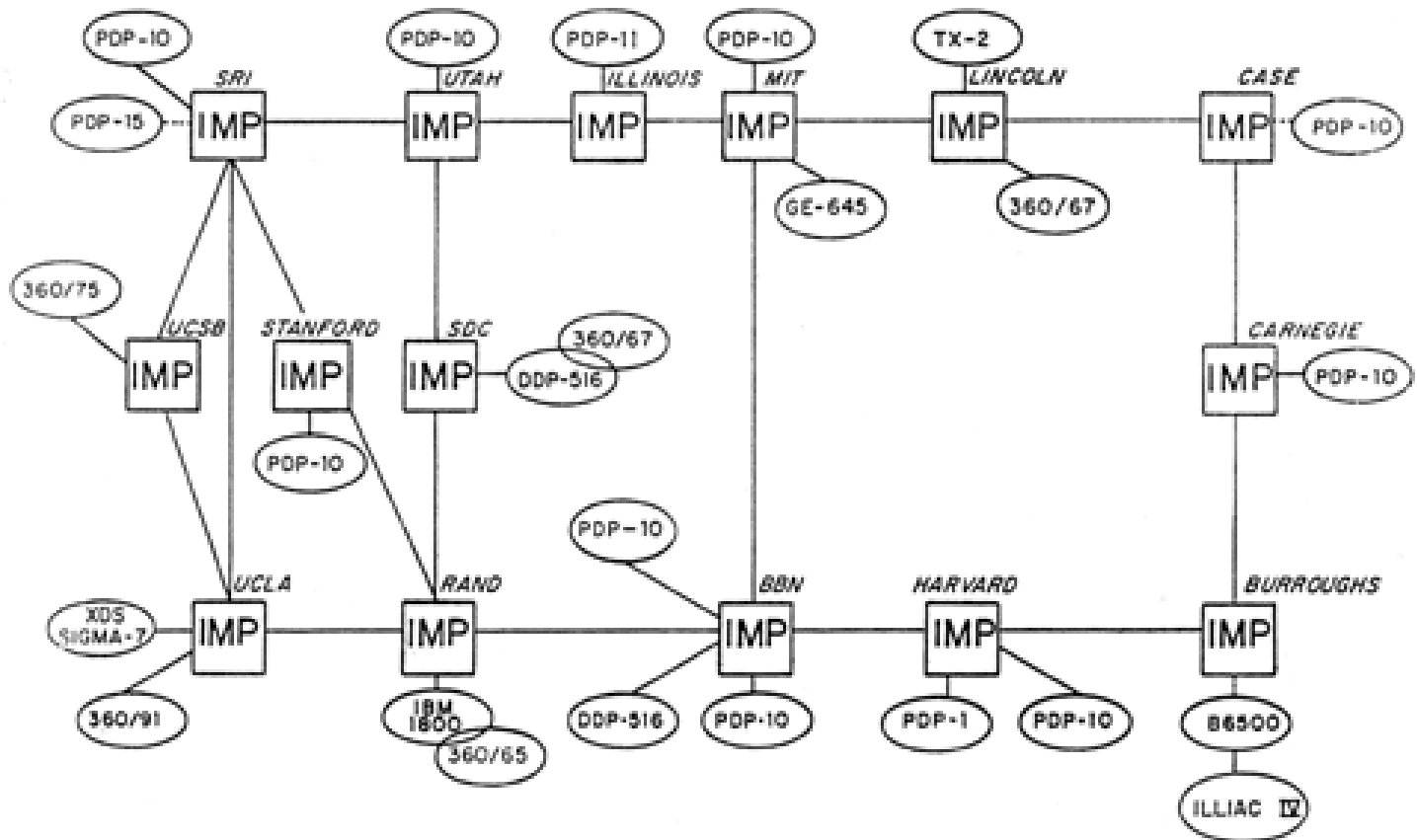
**1969 First Packet Switching Node of ARPANET
(Advanced Research Projects Agency Network)**



Internet timeline - tracking

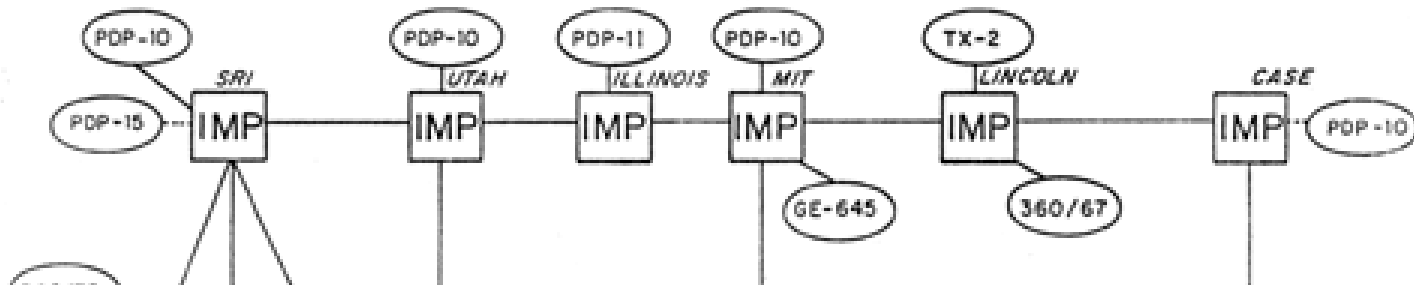
- Request for Comment (RFC) # 1 written by Steve Crocker in 1969
- RFCs are the “standards” of the Internet

Internet timeline - 1971

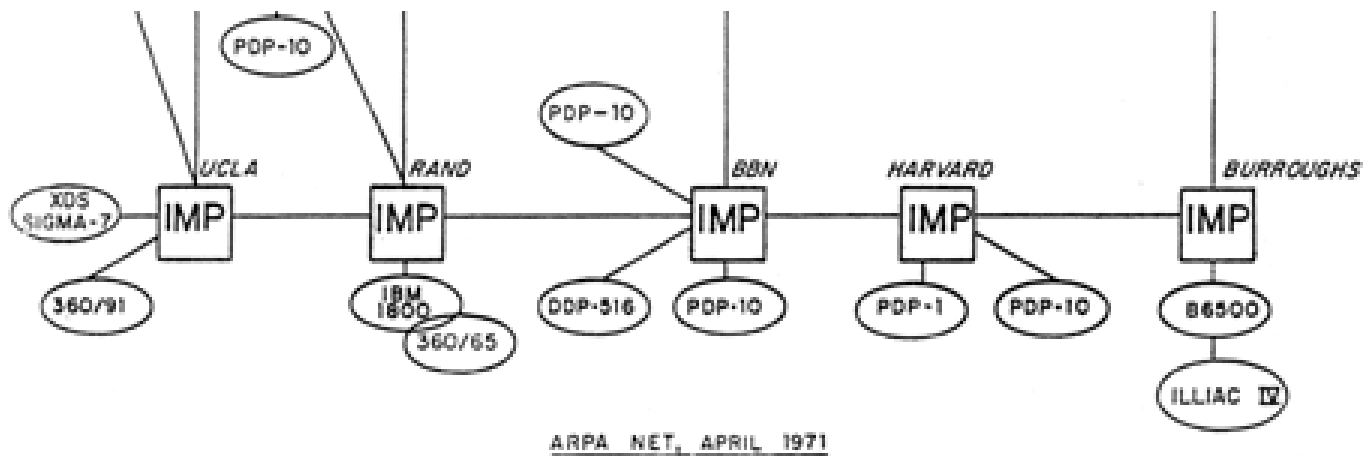


ARPA NET, APRIL 1971

Internet timeline - 1971

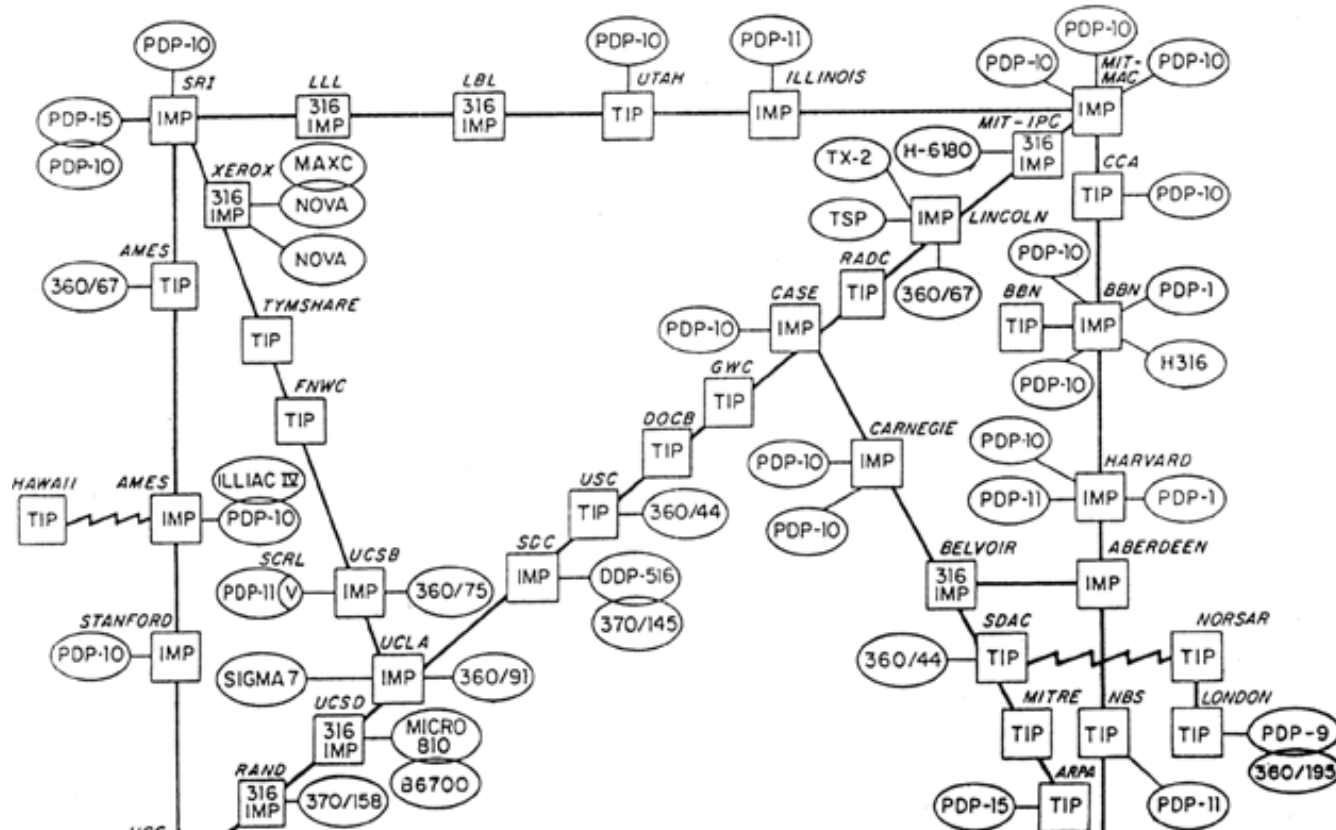


1972 First Electronic Mail sent.



Internet timeline - 1973

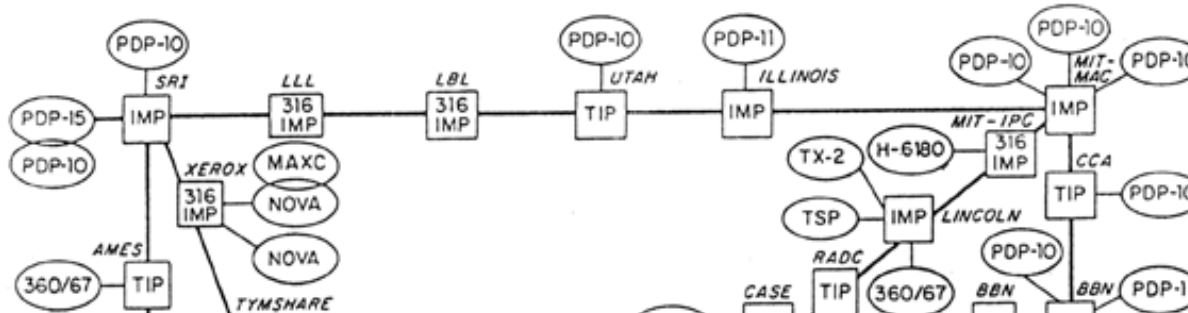
ARPA NETWORK, LOGICAL MAP, SEPTEMBER 1973



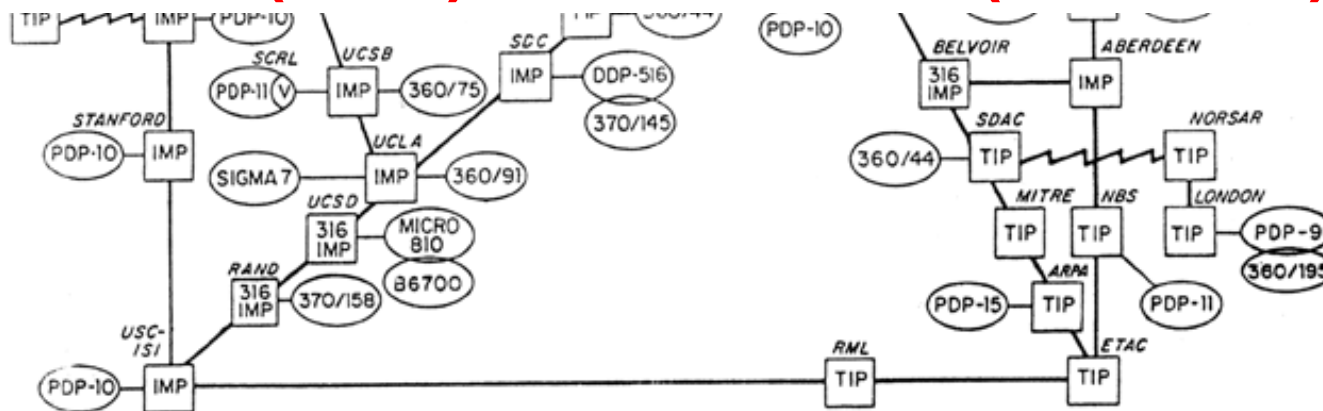
The network still uses NCP – Network Control Protocol

Internet timeline - 1973

ARPA NETWORK, LOGICAL MAP, SEPTEMBER 1973

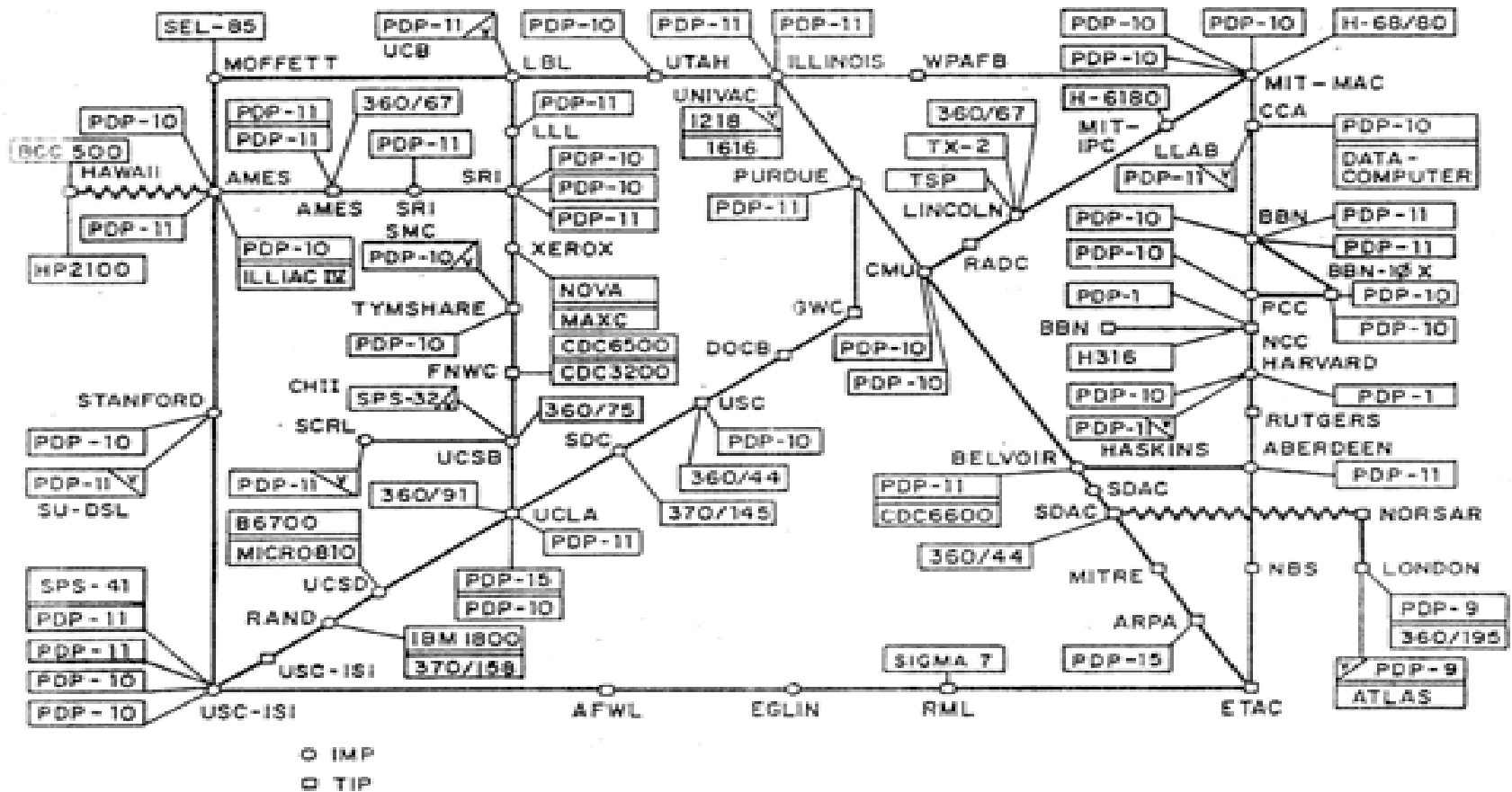


1974 TCP/IP with IPv4 designed by Bob Kahn (BBN) and Vint Cerf (Stanford)



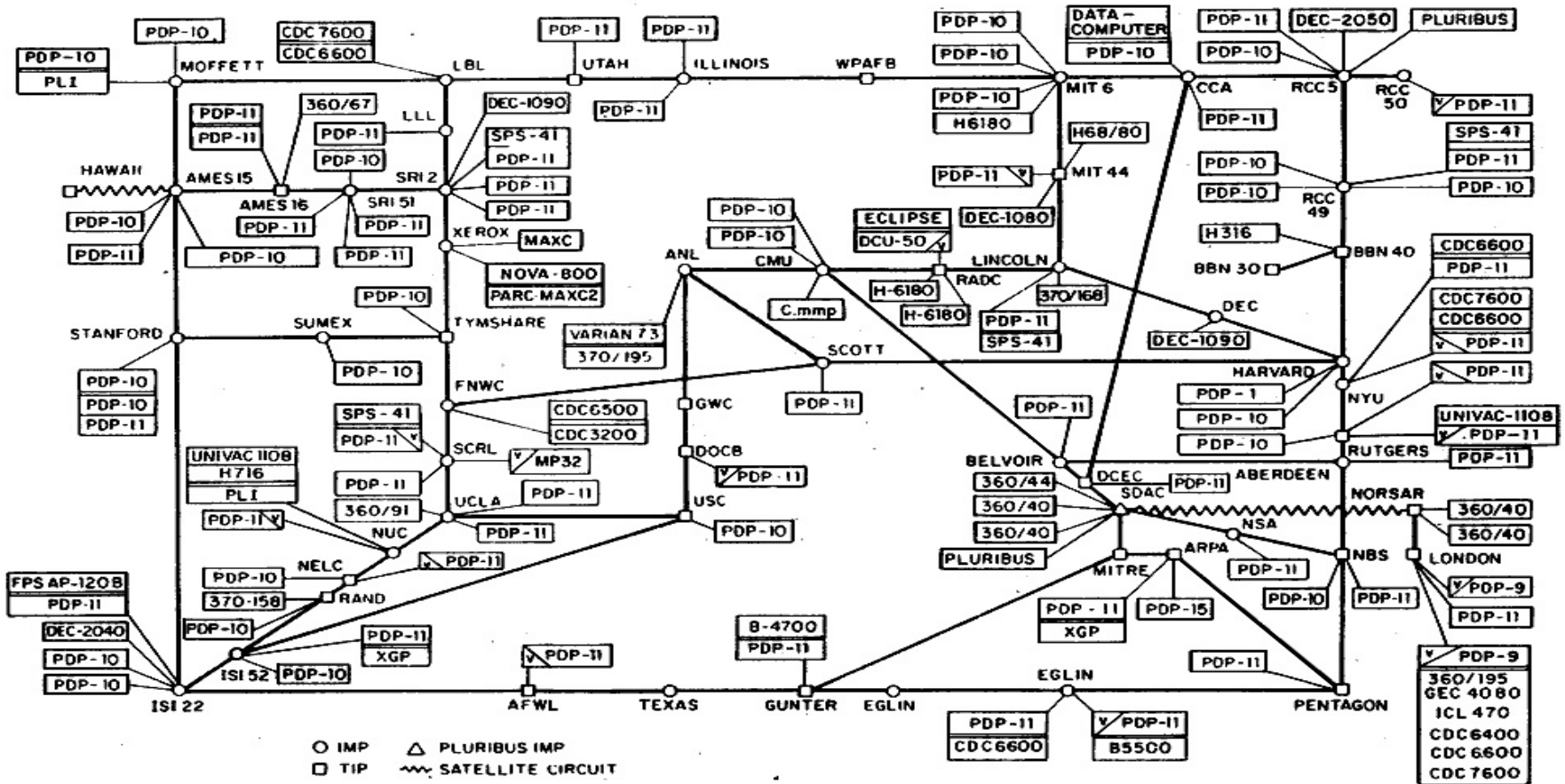
Internet timeline - 1975

ARPA NETWORK, LOGICAL MAP, JANUARY 1975



Internet timeline - 1977

ARPANET LOGICAL MAP, MARCH 1977

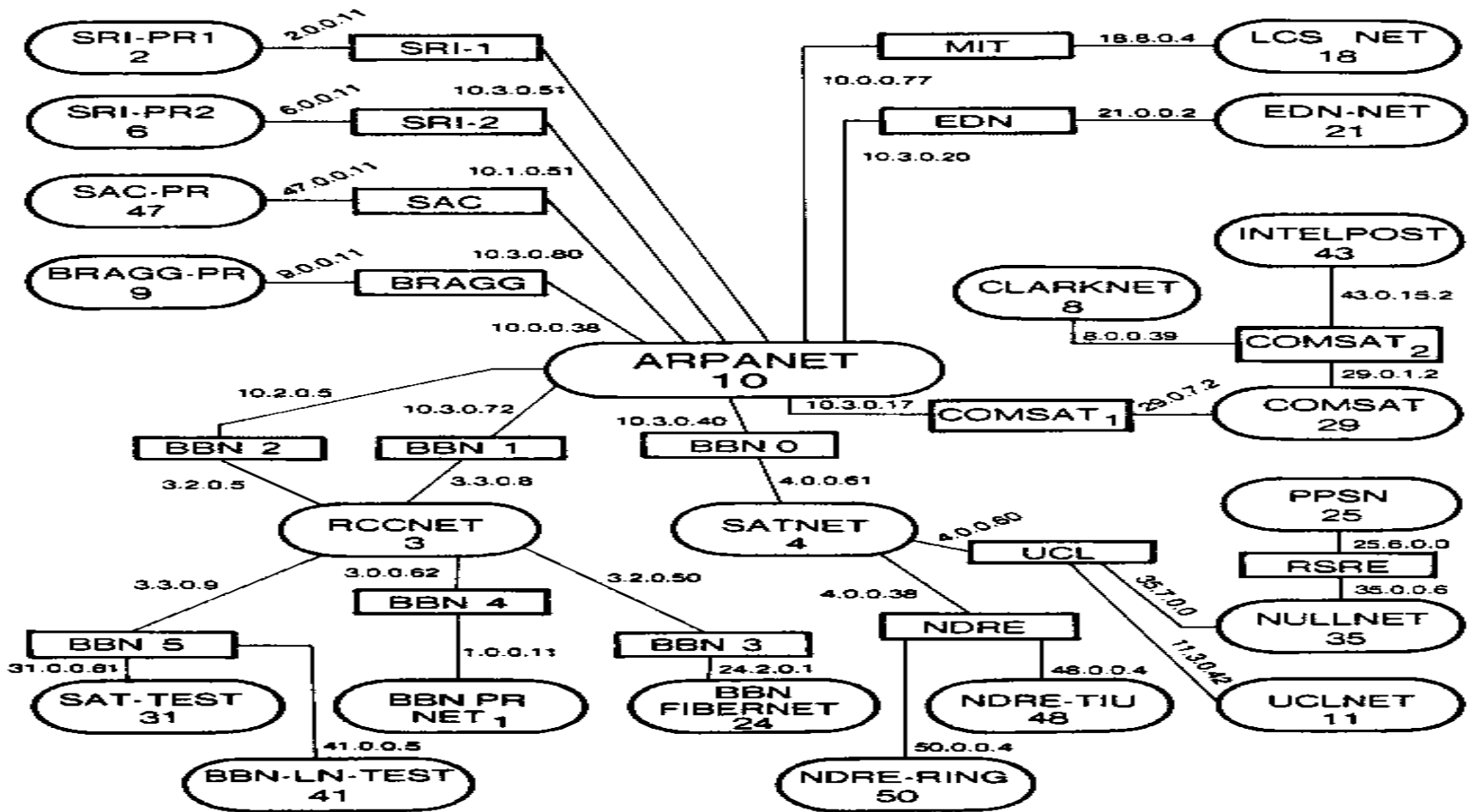


(PLEASE NOTE THAT WHILE THIS MAP SHOWS THE HOST POPULATION OF THE NETWORK ACCORDING TO THE BEST INFORMATION OBTAINABLE, NO CLAIM CAN BE MADE FOR ITS ACCURACY)

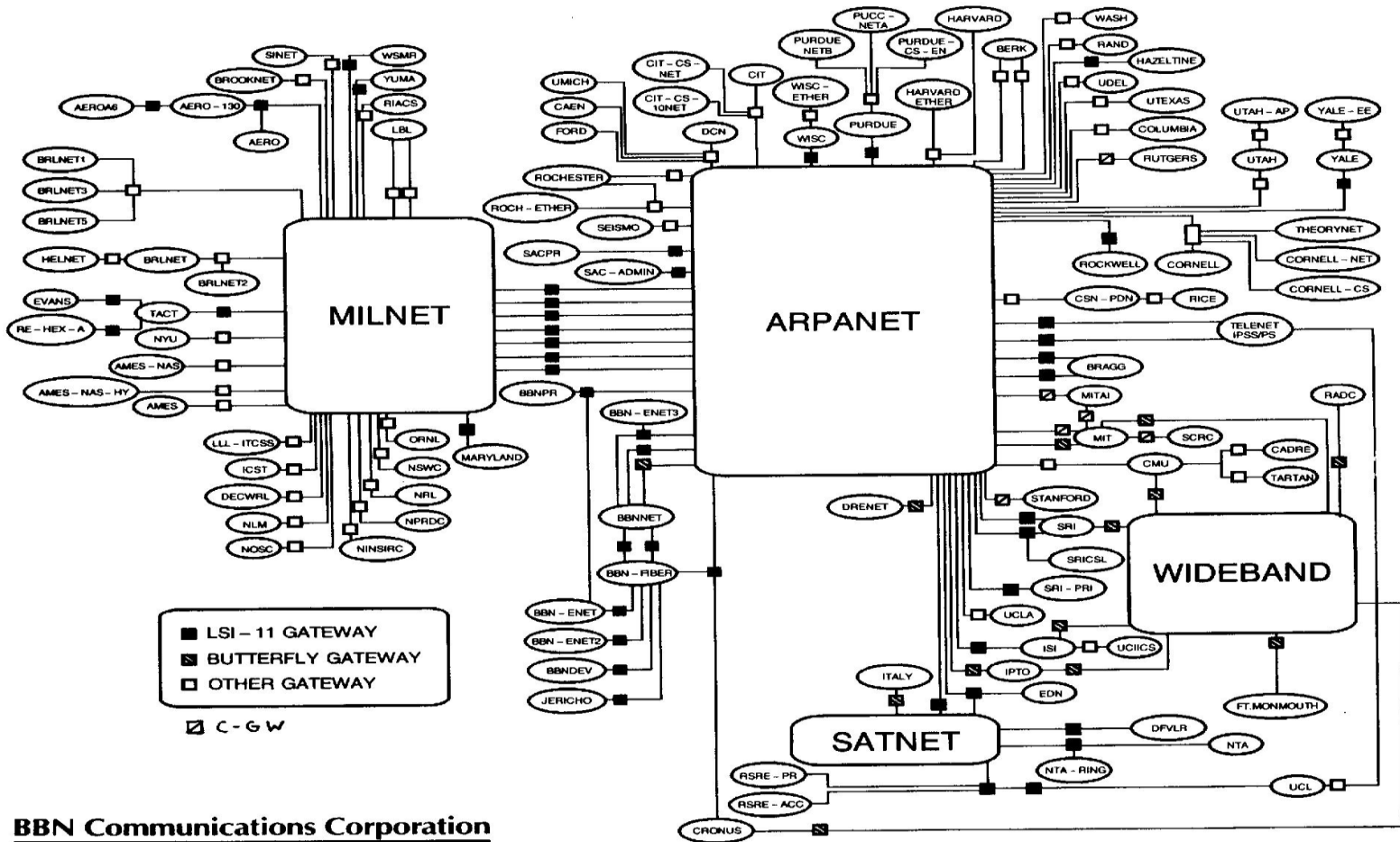
(NAMES SHOWN ARE IMP NAMES, NOT (NECESSARILY) HOST NAMES)

Internet timeline - 1982

POSTEL 25 FEB 82



Internet timeline - 1985





Internet timeline - 1985-6

Host Tables

- 26.17.0.1 obl-link-gw.eucom.mil obl-link-gw.arpa # gateway
- 26.4.0.2 dfvlren-gw.army.mil dfvlren-gw.arpa # gateway
- 26.19.0.2 patch-gw.army.mil # gateway
- 26.1.0.3 nosc-gw.nosc.mil nosc-gw.arpa # gateway
- 26.3.0.3 nprdc-gw.navy.mil nprdc-gw.arpa # gateway
- 26.5.0.3 sdcsvax-gw.ucsd.edu sdcsvax-gw.arpa # gateway
- 26.12.0.3 sssd-gw.sssd.navy.mil sssd.arpa # gateway
- 26.15.0.3 scubed-gw.scubed.com scubed-gw.arpa s-cubed-
gw.arpa # gateway
- 26.16.0.3 gw-grunion.nosc.mil # gateway
- 26.3.0.4 usarmypr-gw.arpa # gateway
- 26.17.0.6 rdm-link-gw.eucom.mil # gateway



Internet timeline - 1985

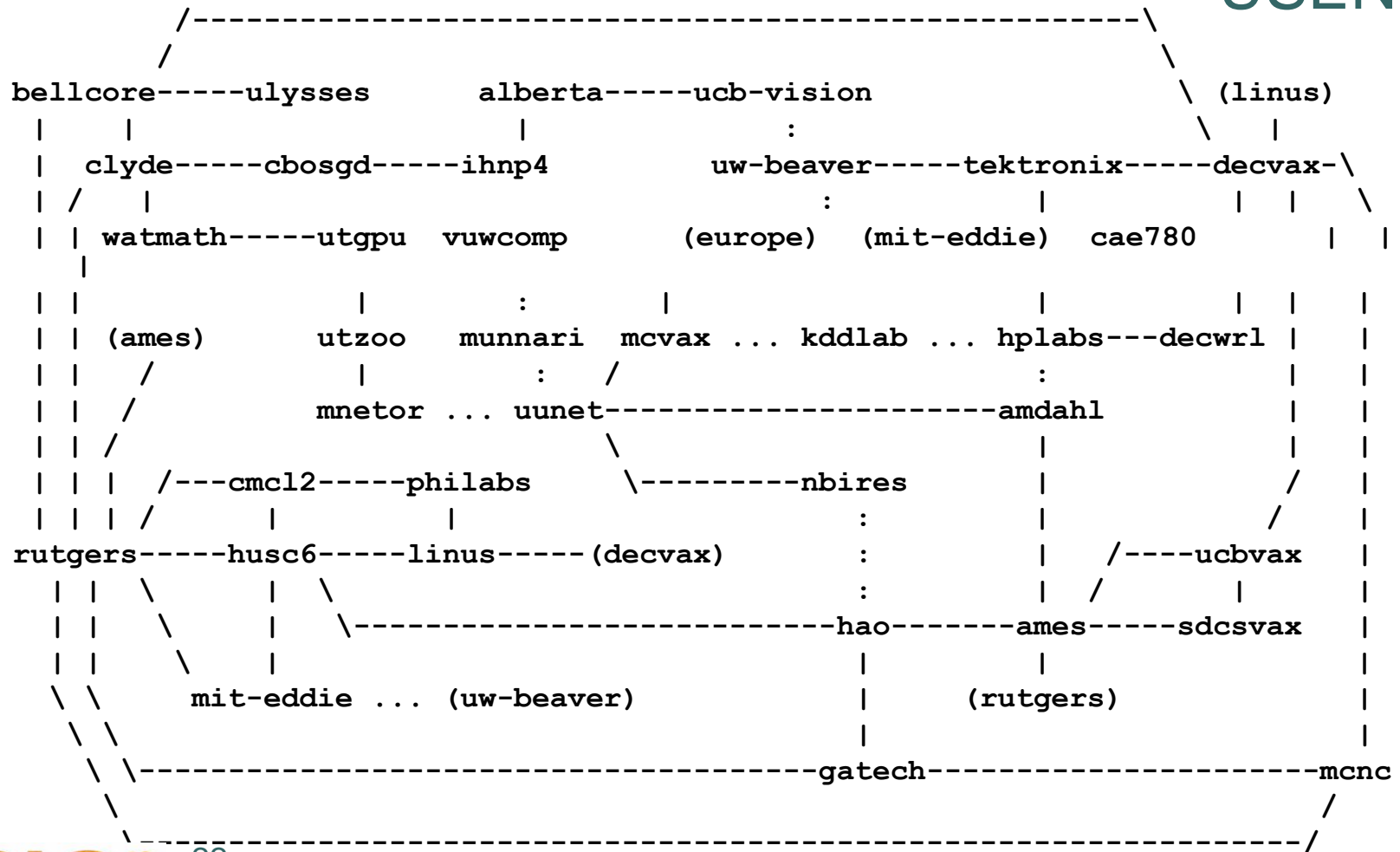
- Domain Name System introduced
 - MIL
 - GOV
 - COM
 - NET
 - ORG
 - EDU

Internet timeline - 1988

- A-LHI-BBN-01.ARPA BBN Communications Corporation
- A-LHI-SRI-03.ARPA BBN Communications Corporation
- A.CS.UIUC.EDU University of Illinois
- ACC-SB-UNIX.ARPA Advanced Computer Communications (ACC)
- AFTERLIFE.ARPA Baltimore-Washington Science and Industry Center
- AI-GW.AI.MIT.EDU Massachusetts Institute of Technology
- Artificial Intelligence Laboratory
- AI.AI.MIT.EDU Massachusetts Institute of Technology
- Artificial Intelligence Laboratory
- AI.CEL.FMC.COM FMC Corporation Central Engineering Laboratories
- AMC.XAIT.XEROX.COM Computer Corporation of America Four Cambridge Center
- ANOC1.ARPA Bolt Beranek and Newman, Inc. (BBN)
- ARPA-GW.CAM.UNISYS.COM Unisys
- ARPA-GW.CC.ROCHESTER.EDU NYSERNET, Inc.
- ARPA-GW.CS.UCLA.EDU University of California, Los Angeles
- School of Engineering and Applied Science

Internet timeline - 1988

USENET





Internet timeline - 1988

- **Large Networks**
 - **Military Network (MILNET)**
 - **CSNET (Computer Science Network)**
 - **JVNCNET, NYSERNET, SURANET, SDSCNET and BARRNET etc.**
- **BITNET (Because It's Time NETWORK)**
- **USENET (telephone dialling using modems and UUCP)**
- **30,000 nodes**



Internet timeline - 1989

- **Military Network Separated (MILNET)**
- **MCI starts commercial email service on the Internet**
- **The rest of the Arpanet/Internet was paid for by the US Taxpayer but had more and more companies on it**
- **From 80,000 nodes in January to 160,000 nodes in November**



Internet timeline – 1990-91

- **PSI, UUNET, ANS CO+RE**, are more commercial services starting operation
- NSFNET in full development for Education Network, with Acceptable Use Policies being developed
- The rest of the world starts connecting itself via various agreements – **peering agreements**



Internet timeline – 1990-91

- Internet Services:

- E-mail
- FTP (File Transfer Protocol)
- Gopher
- WAIS
- Archie
- Telnet (connect to remote host)

- All are text based



Internet timeline – Gopher

Internet Gopher Information Client 2.0 pl10

Directory Services

- > 1. About This Directory.
- 2. College Telephone Book (text)/
- 3. Connect to X.500 Directory <TEL>
- 4. Electronic Yellow Pages (Experimental) <TEL>
- 5. Finger to X.500 Services <?>
- 6. International Dialling Codes.
- 7. Internet "white pages" directory facility (Netfind) [Experime.. <TEL>
- 8. People's Locator on other sites (X.500 gateway)/
- 9. Search College Telephone Book <?>
- 10. Top level mail domains.
- 11. UK STD codes (long - nearly 8000 lines).
- 12. UK STD codes (string search) <?>
- 13. X500 Data Summary.
- 14. X500 Great Britain DIT statistics.

Press ? for Help, q to Quit, u to go up a menu

Page: 1/1



Internet timeline – 1991

- **CIX (Commercial Internet Exchange)** created by signatories PSINet, UUNET and CERFnet.
- First Neutral Exchange Point bypassing the NSFNET Backbone
- Established the concept of exchanging traffic between commercial Internet Service Providers

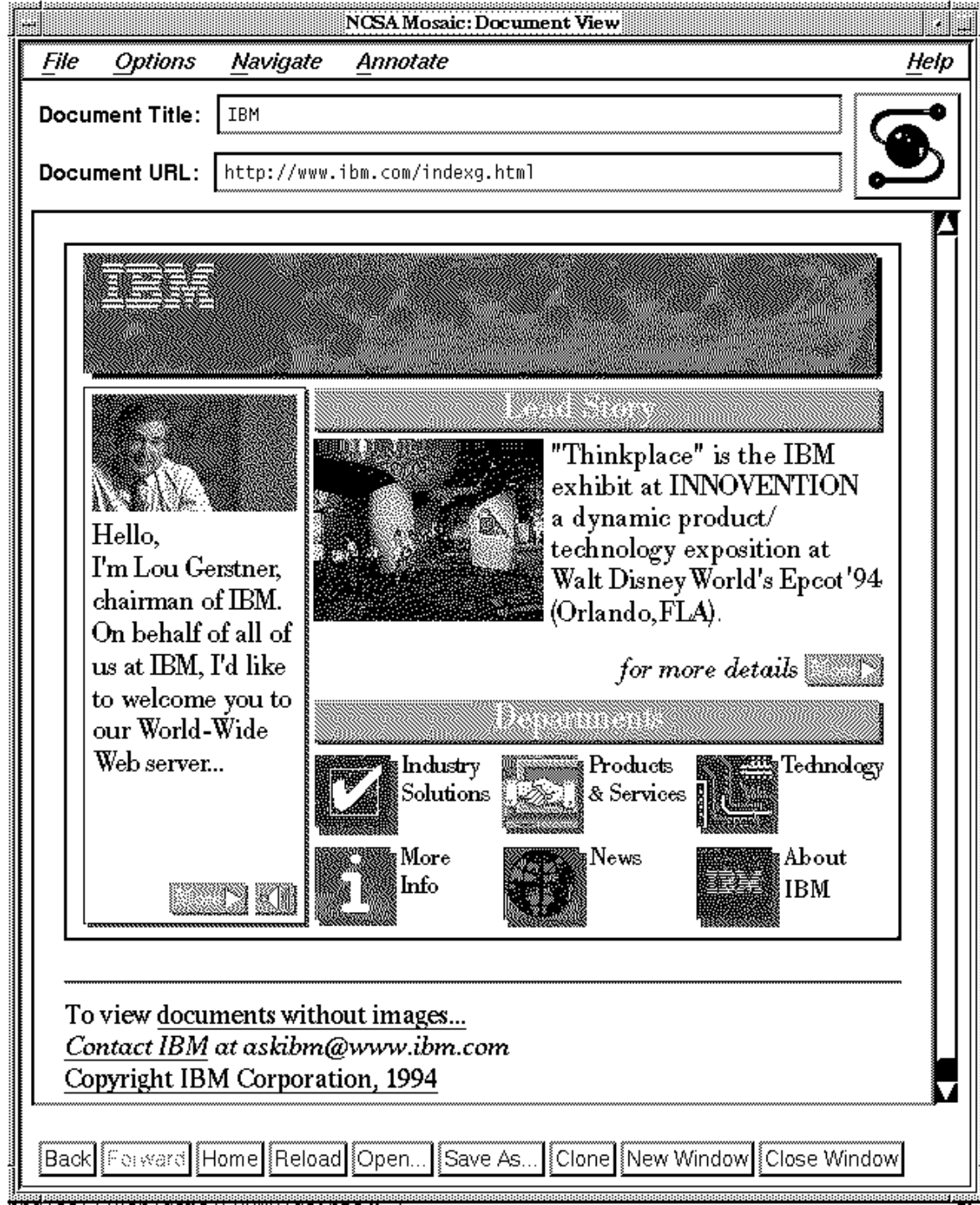


Internet timeline – 1992

- **Tim Berners Lee** invents HTML – Hypertext Markup Language and this opens the door to displaying text and pictures
- PCs start becoming more powerful to handle this
- University of Illinois at Urbana-Champaign releases NCSA Mosaic



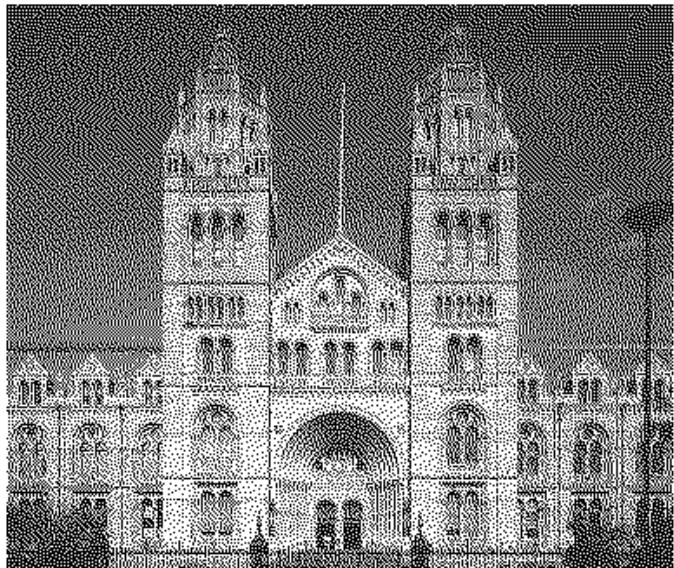
First IBM Web Page NCSA Mosaic 1994



Document Title: BEHIND THE SCENES AT THE NATURAL HISTORY MUSEUM

Document URL: <http://www.nhm.ac.uk/wonders.html>

BEHIND THE SCENES AT THE NATURAL HISTORY MUSEUM



Welcome to the Natural History Museum in London UK. Here is a chance to take a quick look behind the beautiful architectural facade and the world famous public exhibitions to see what goes on behind the scenes.

UNRIVALLED COLLECTIONS

During its long history, The Natural History Museum has assembled an unrivalled collection of more than 67 million specimens including insects, plants, fossils,

Data transfer complete.

[Back](#) [Forward](#) [Home](#) [Reload](#) [Open...](#) [Save As...](#) [Clone](#) [New Window](#) [Close Window](#)

UK Natural History Museum 1994

Document Title: BRAIN IMAGING

Document URL: <http://www.jnt.ac.uk/SuperJANET/Brain-Imaging/Brain-Imaging>

When generated locally on a super computer, the 3D images can be manipulated in real time: sliced, rotated and unpeeled to give an idea of the relationship of the component parts. The problem comes when people at other locations need to access these images.

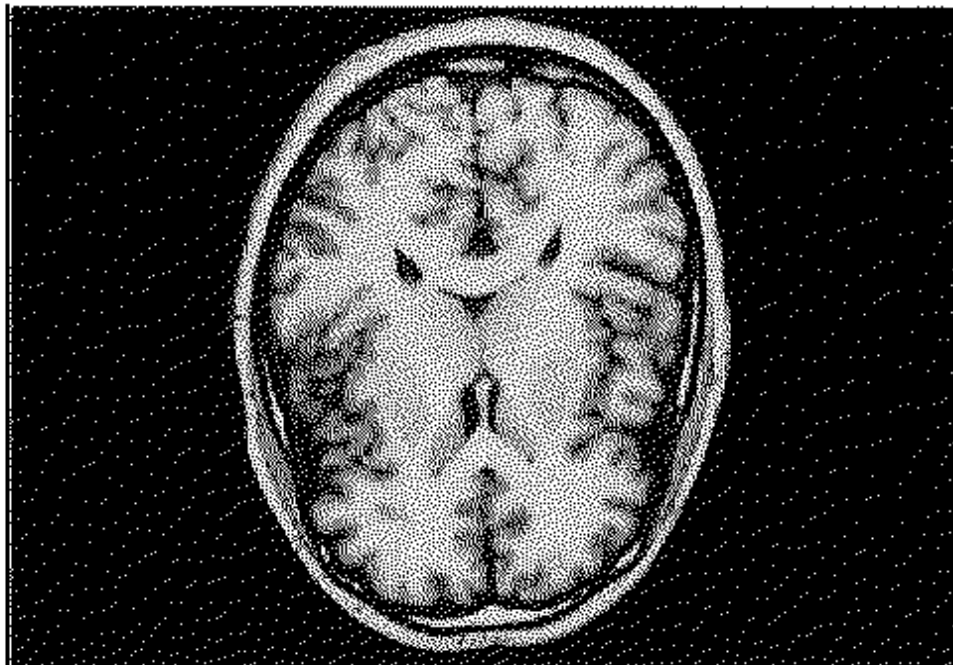


Figure 1. – *A magnetic resonance (MR) image of a horizontal slice through the human brain showing detailed structure.*

Data transfer complete.

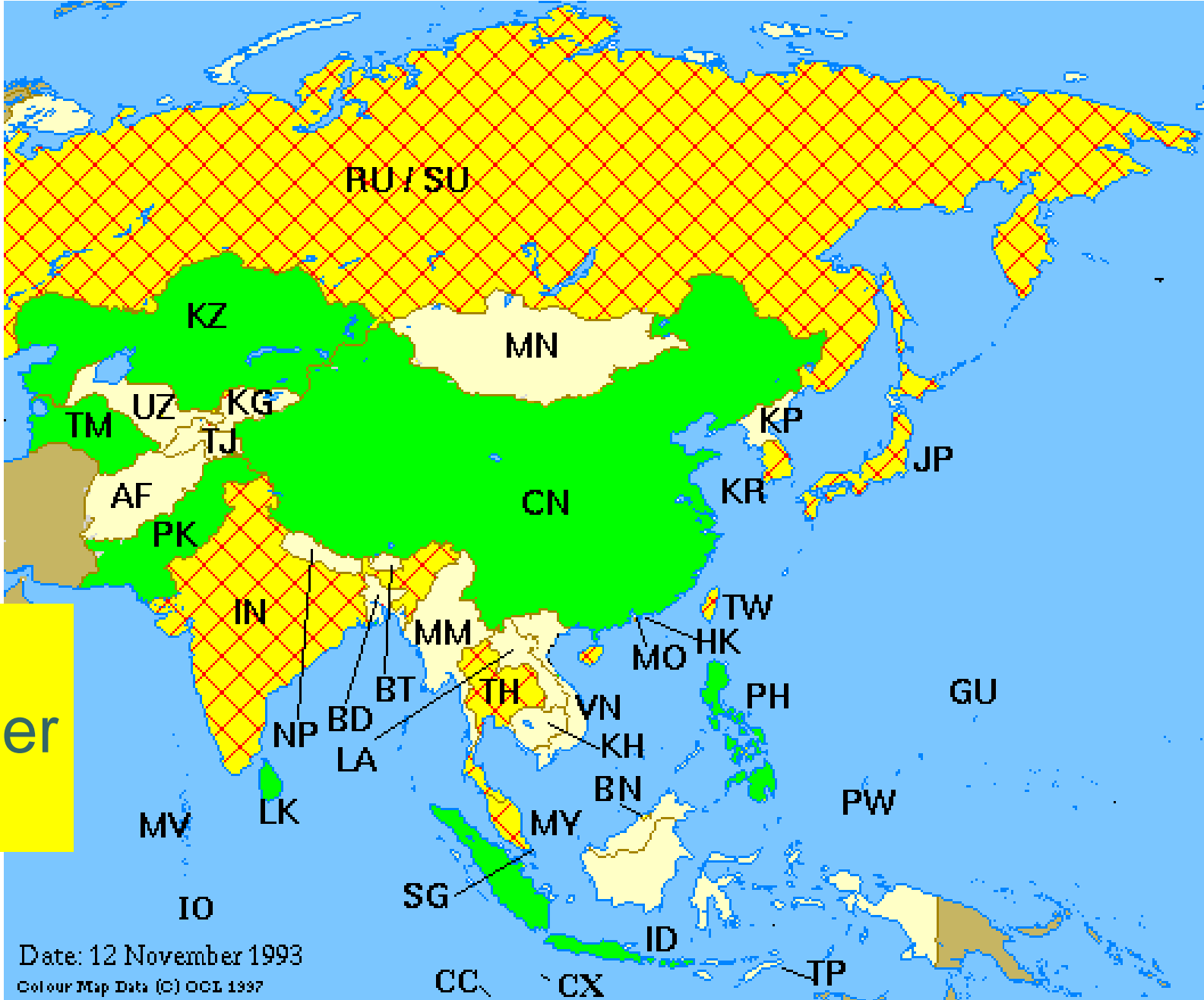
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Not only
Computer
Related Uses



Internet timeline

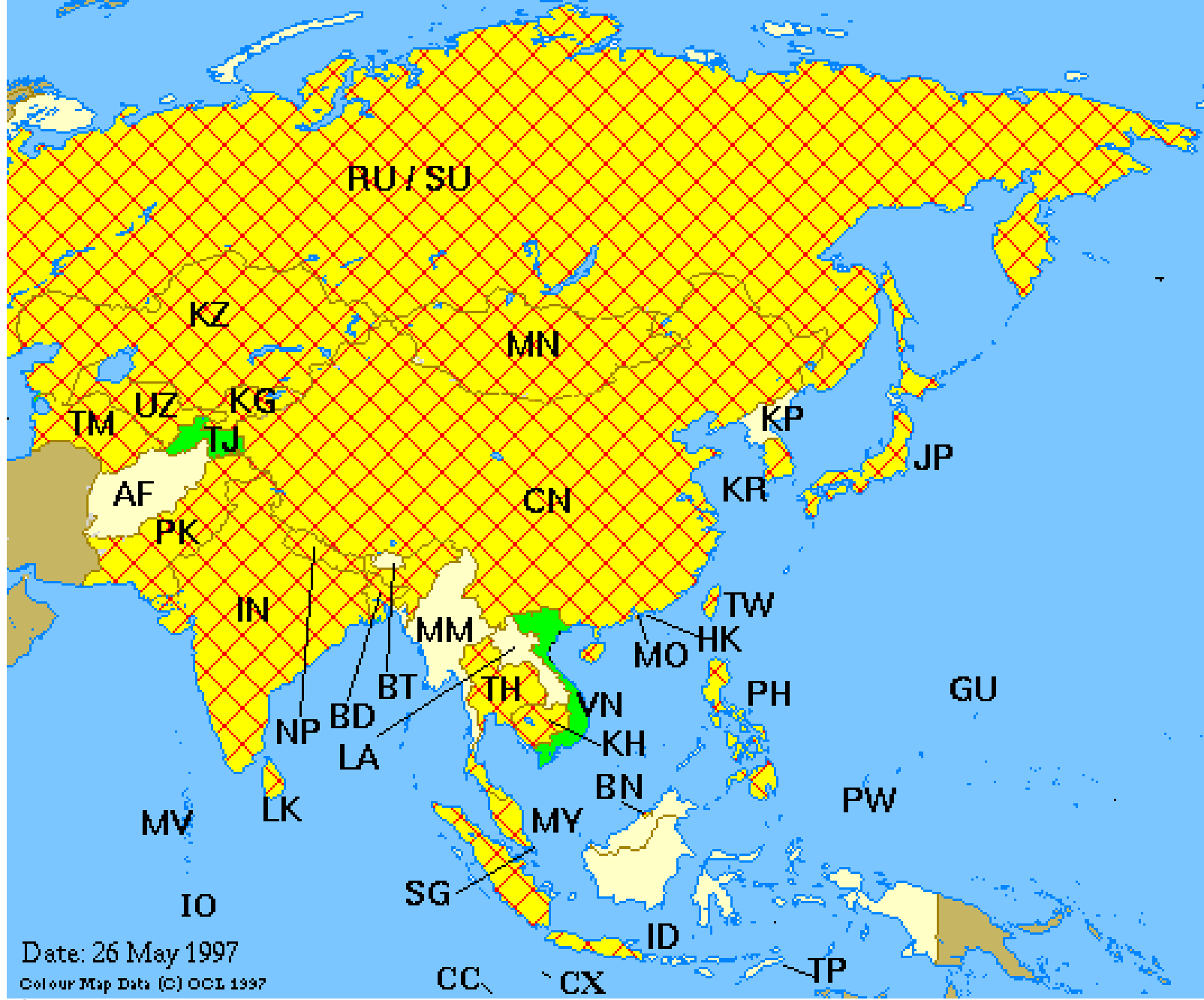
- **1994 the web browser NetScape**
- **April 1994 – WebCrawler**
- **1995 Yahoo!**
- **1995 Microsoft Internet Explorer released**
- **1995 Alta vista**
- **1996 Ask Jeeves Search Engine (UK)**
- **1998 Google**
- **2005 Video sharing (YouTube)**



ASIA
November
1993

Date: 12 November 1993

Colour Map Data (C) OGI 1997



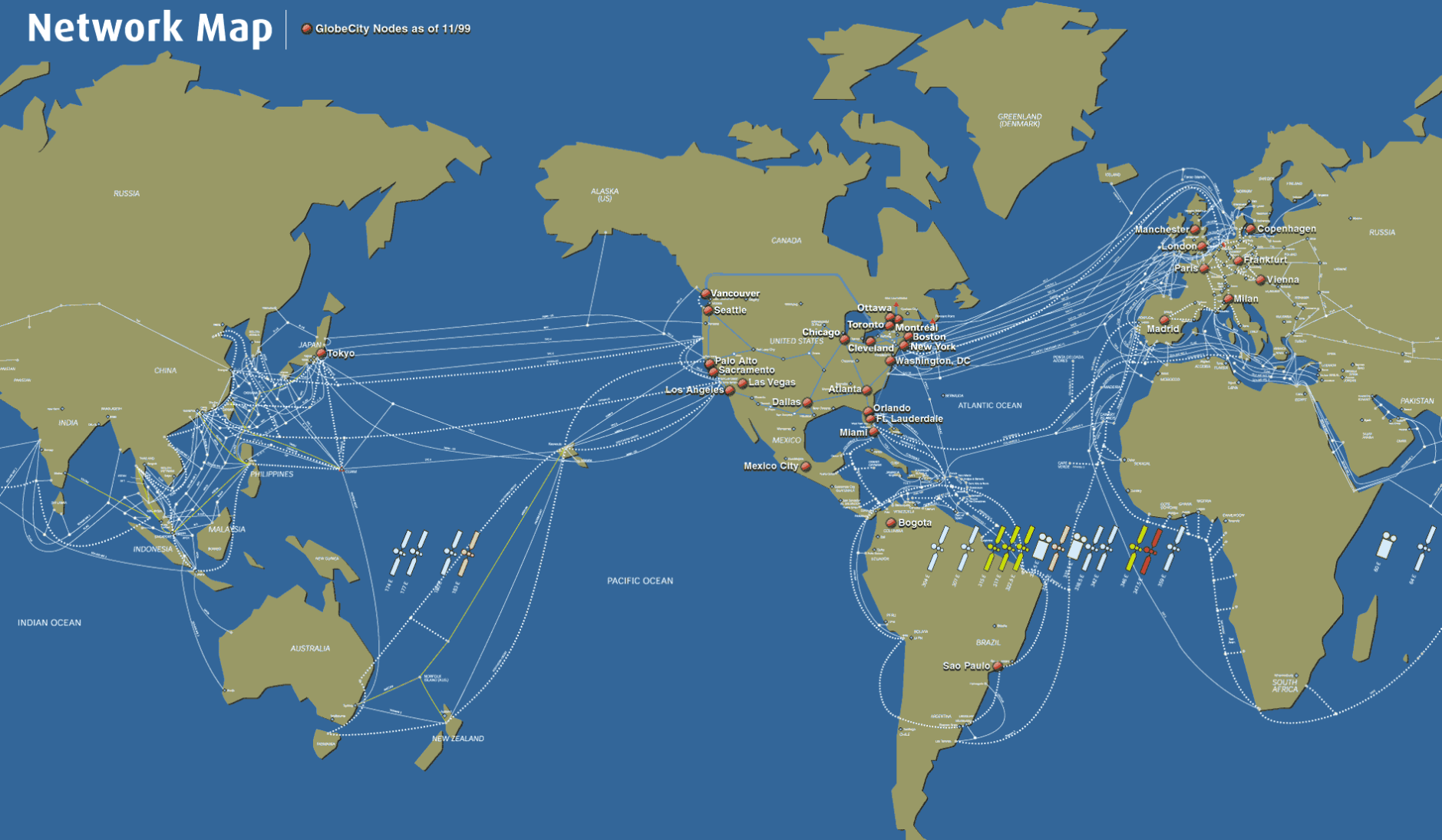
ASIA
May
1997

Date: 26 May 1997
Colour Map Data (C) OGI 1997

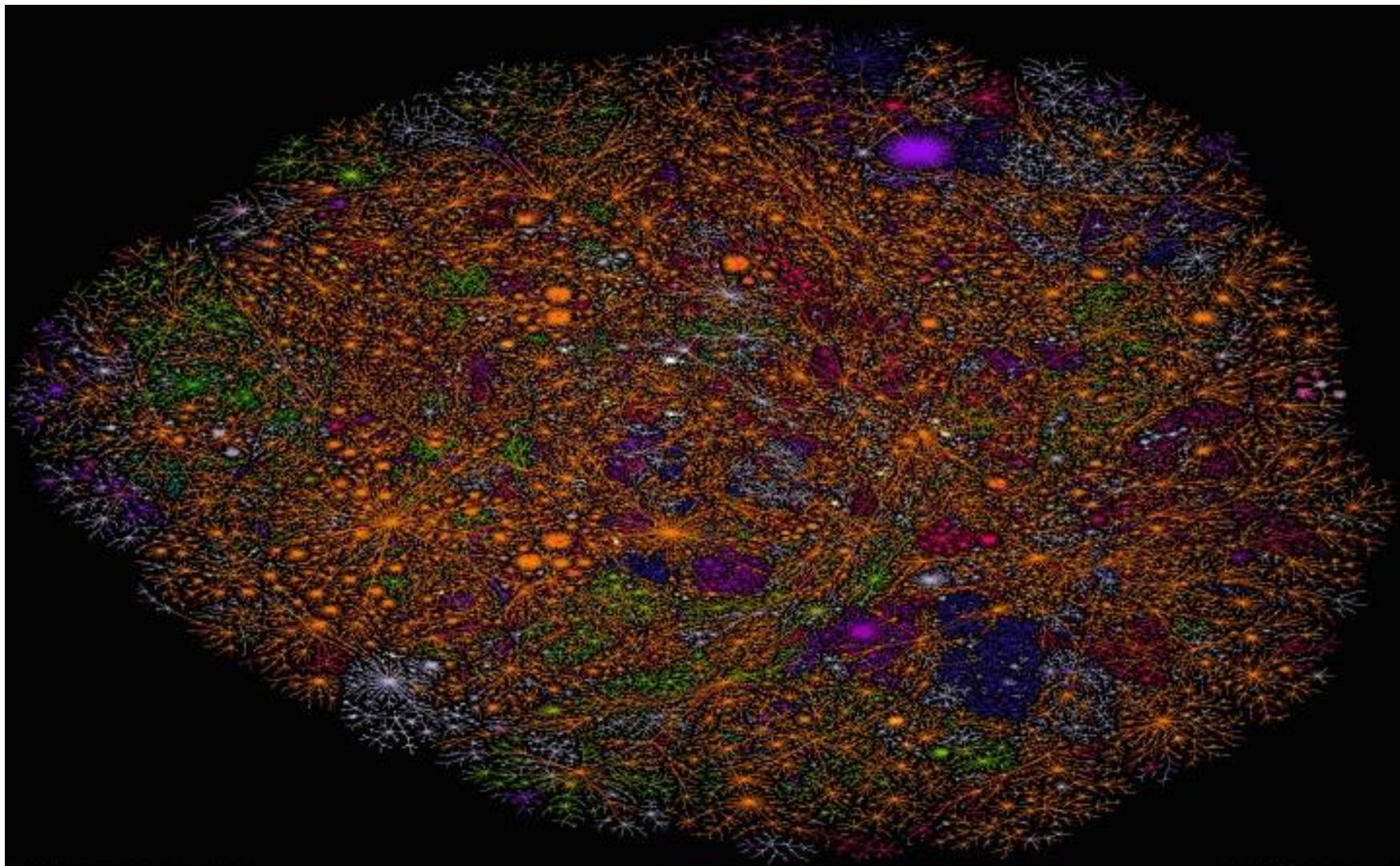
To this...

Network Map

● GlobeCity Nodes as of 11/99



And, eventually, to this...



This image is a mathematical map of Internet routing in 2002. The colors highlight the geographical and commercial distribution of the Internet's various networks.

Social Networking Map (FaceBook)





IPv6 Space



IPv4: 4,294,967,296 addresses

IPv6: 340,282,366,920,938,463,463,374,607,431,770,000,000 possible addresses

50,000,000,000,000,000,000,000,000,000,000 addresses per human

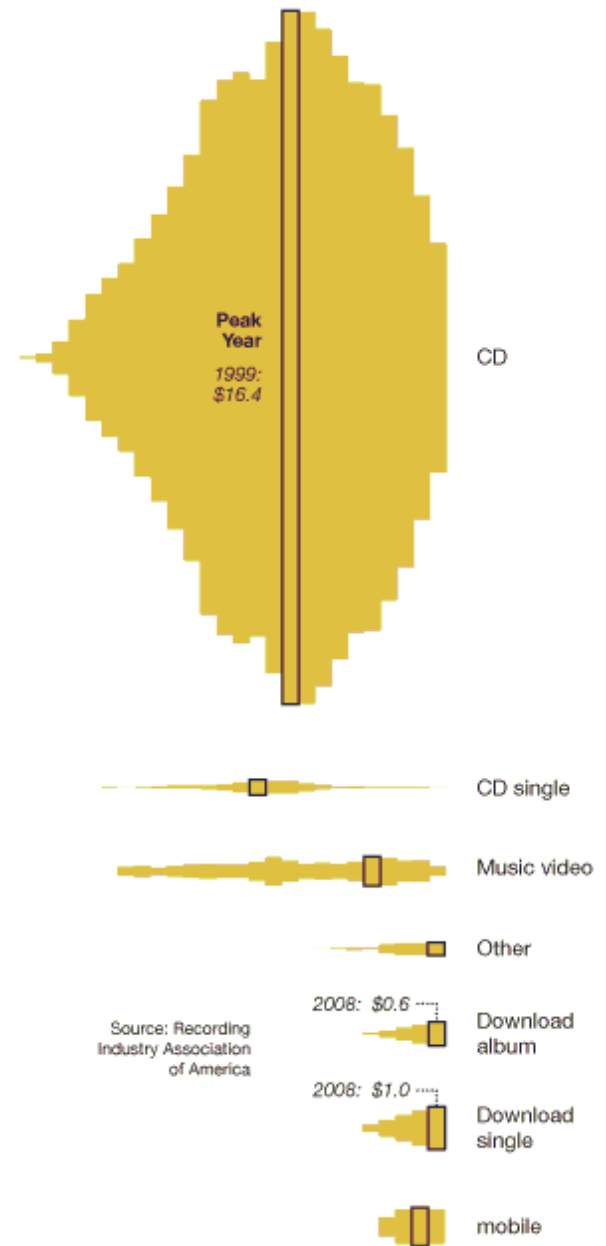
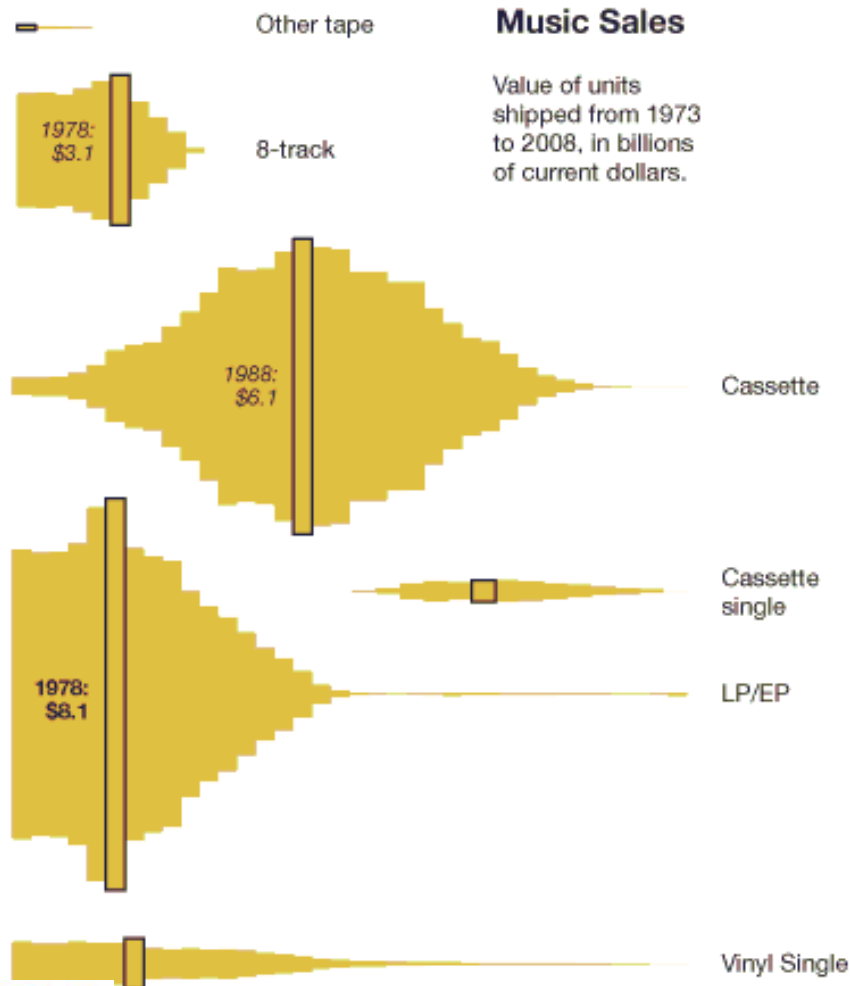
The End-User principle

- Any type of traffic is allowed
- No filtering
 - The end users have the choice of what services they want
- Champion for innovation
 - Imagine a service, design it and offer it
 - No need to obtain a license
 - No need to apply for permission
- The smallest start-up company could become very successful worldwide

Internet is changing the business world

- New business models
 - Google
 - Amazon.com
 - Skype (development in Estonia)
 - iTunes
 - youTube
 - Open Source Software
- New community spaces
 - Facebook (500+ million users)
 - Google+
 - Instagram, etc.

Internet is changing the business world



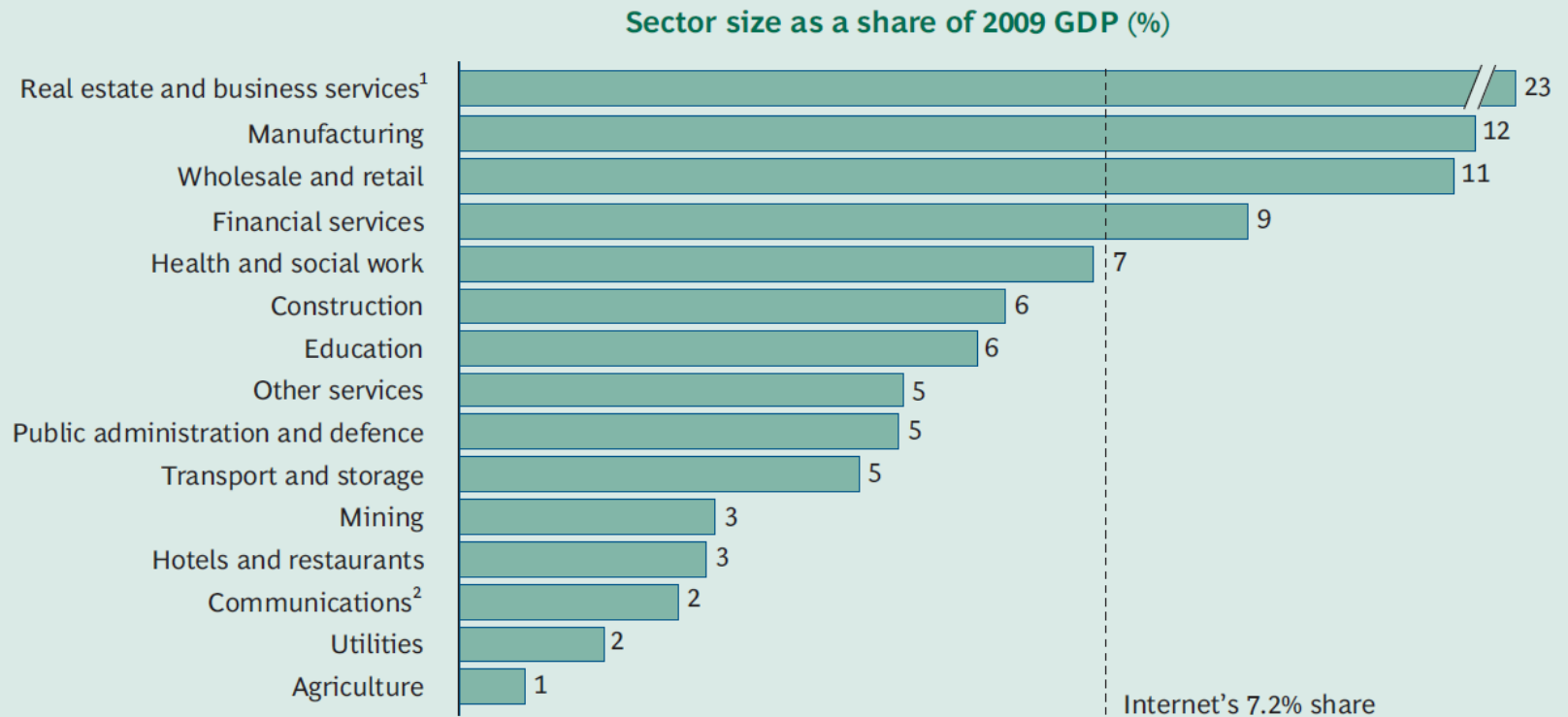
Internet is changing the business world

- A Boston Consulting Group report commissioned by Google in 2011 estimated the United Kingdom's Internet economy:
 - Was worth **£100 billion** a year,
 - Was growing at **10%** a year, and
 - directly employed **250,000** people.
 - **7.2%** of UK Gross Domestic Product (GDP)

- Source: <http://www.connectedkingdom.co.uk/> (now offline)

Internet is changing the business world

Exhibit 3. If the Internet Economy Were a Separate Sector, It Would Be the United Kingdom's Fifth Largest



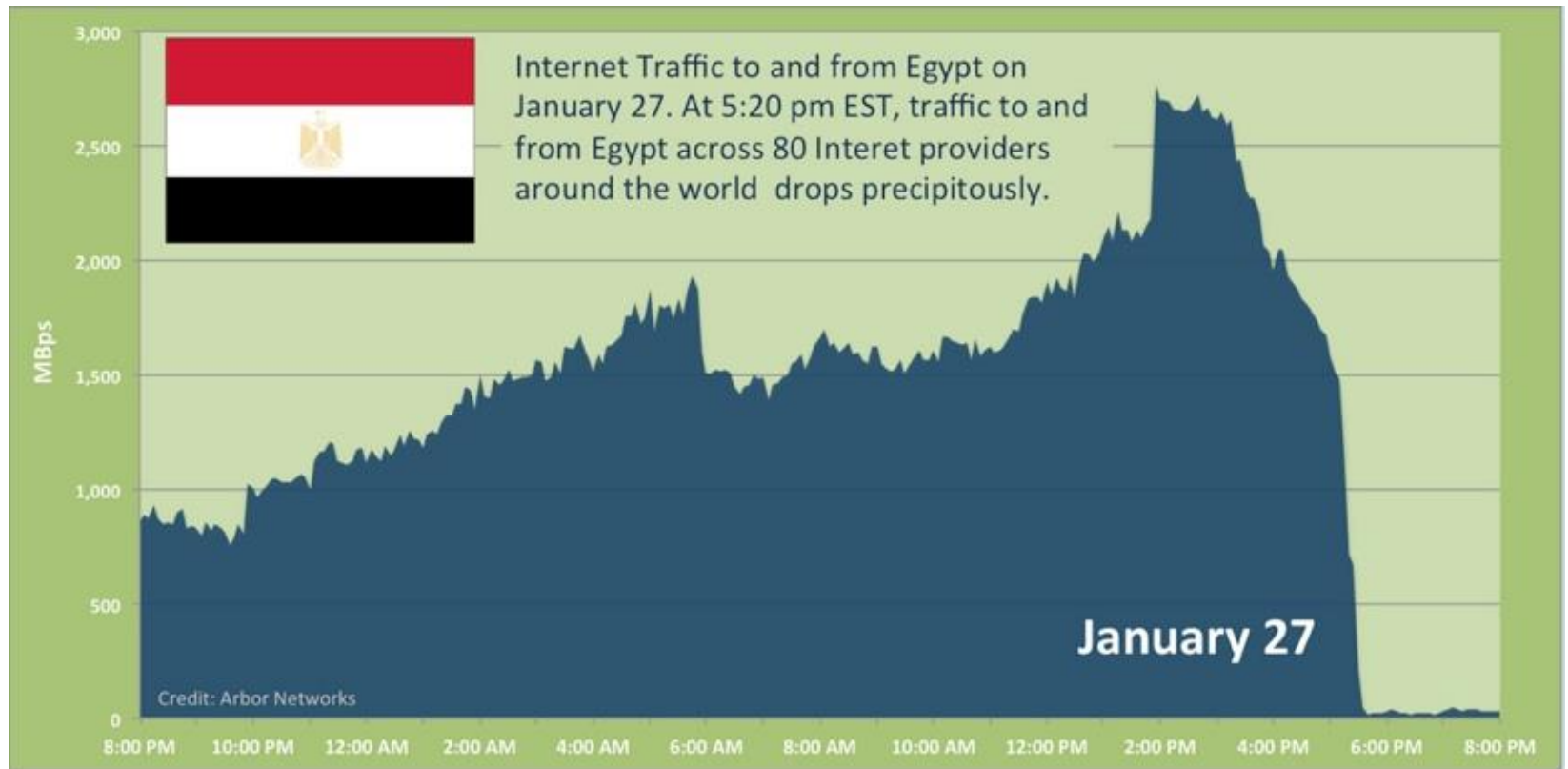
Sources: U.K. Office for National Statistics; BCG analysis.

Note: The size of the various sectors and the size of the Internet economy were calculated using different GDP methodologies, so direct comparisons are not precise. For example, the Internet economy includes slices of other sectors.

¹This sector includes rents and the imputed cost of home ownership, in addition to business activities and business services.

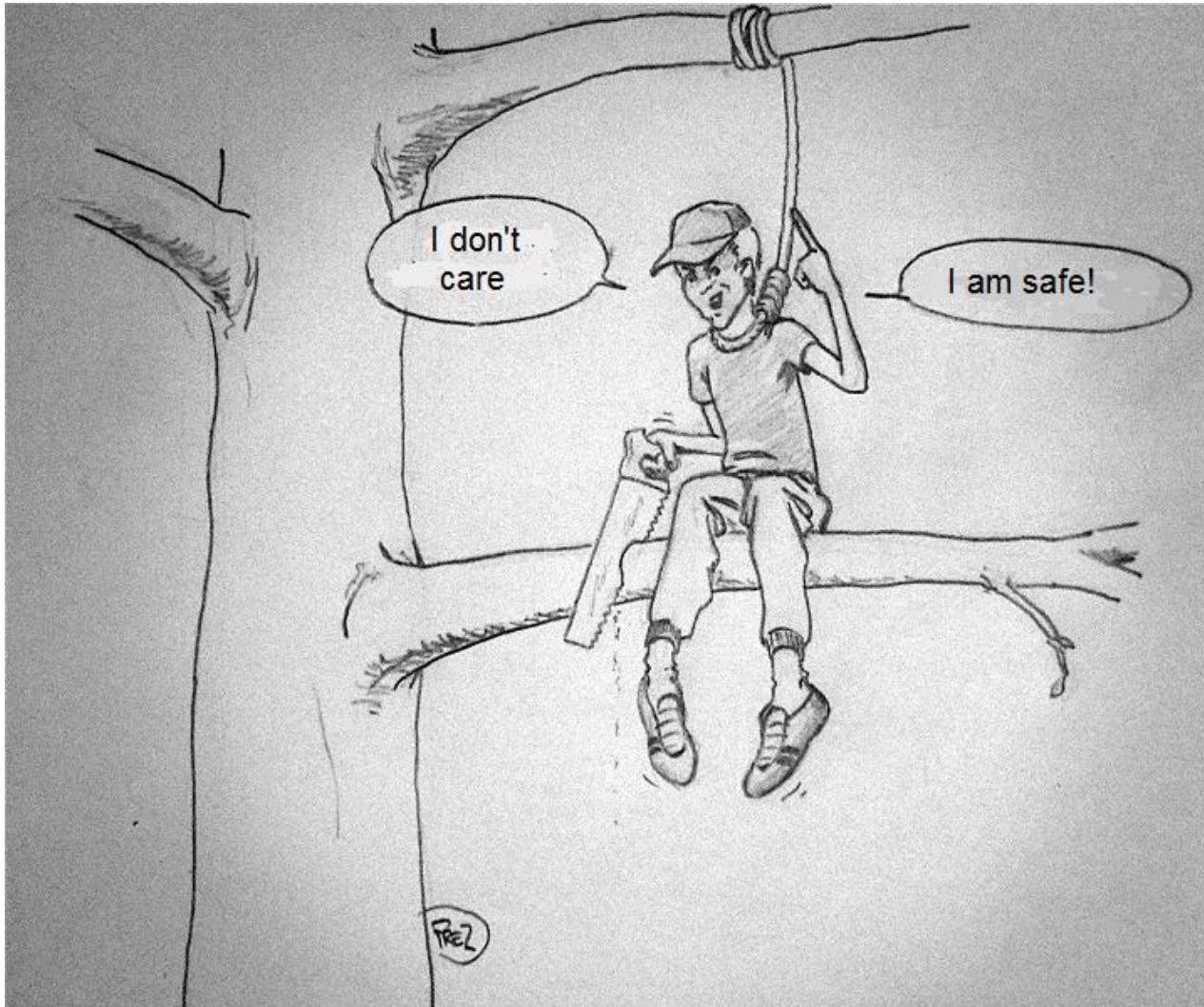
²This sector includes telecommunications, so there is a large overlap with the Internet economy.

Internet changed the world back in 2011



Cost: \$90 Million for 5 days (Source: OECD)

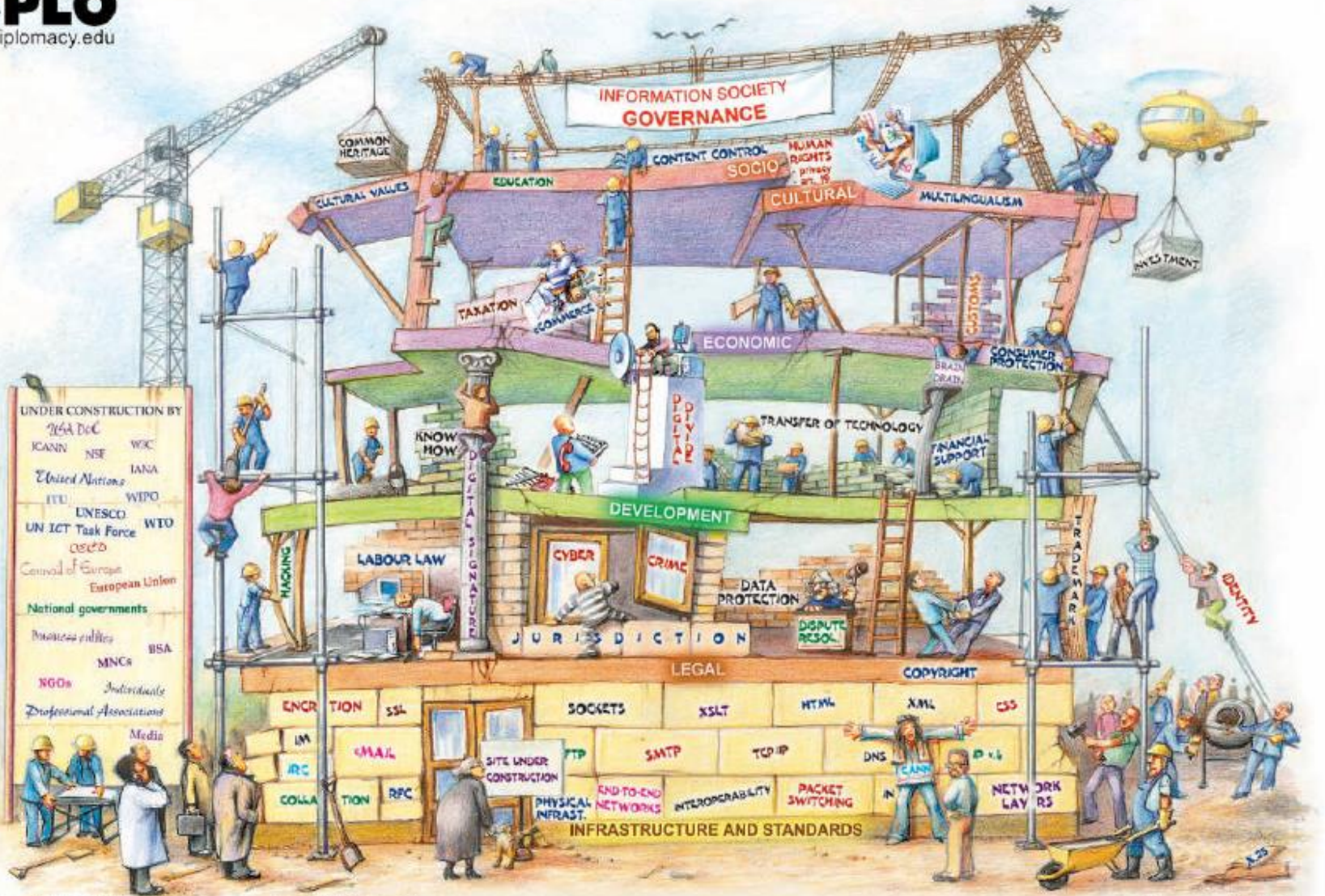
So what should you avoid?



Internet Governance & Geopolitics History, Principles & Ecosystem

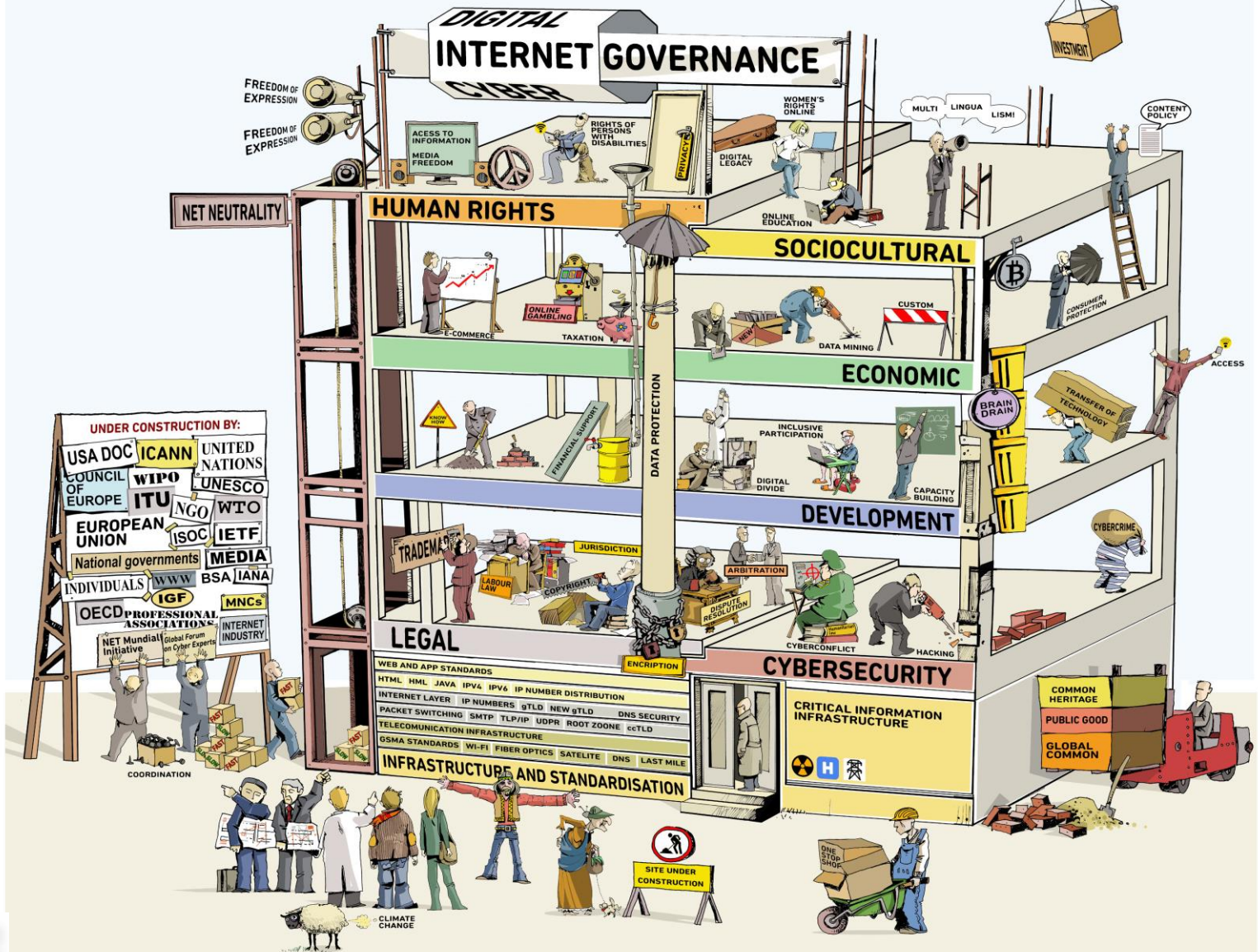


Internet
Governance?

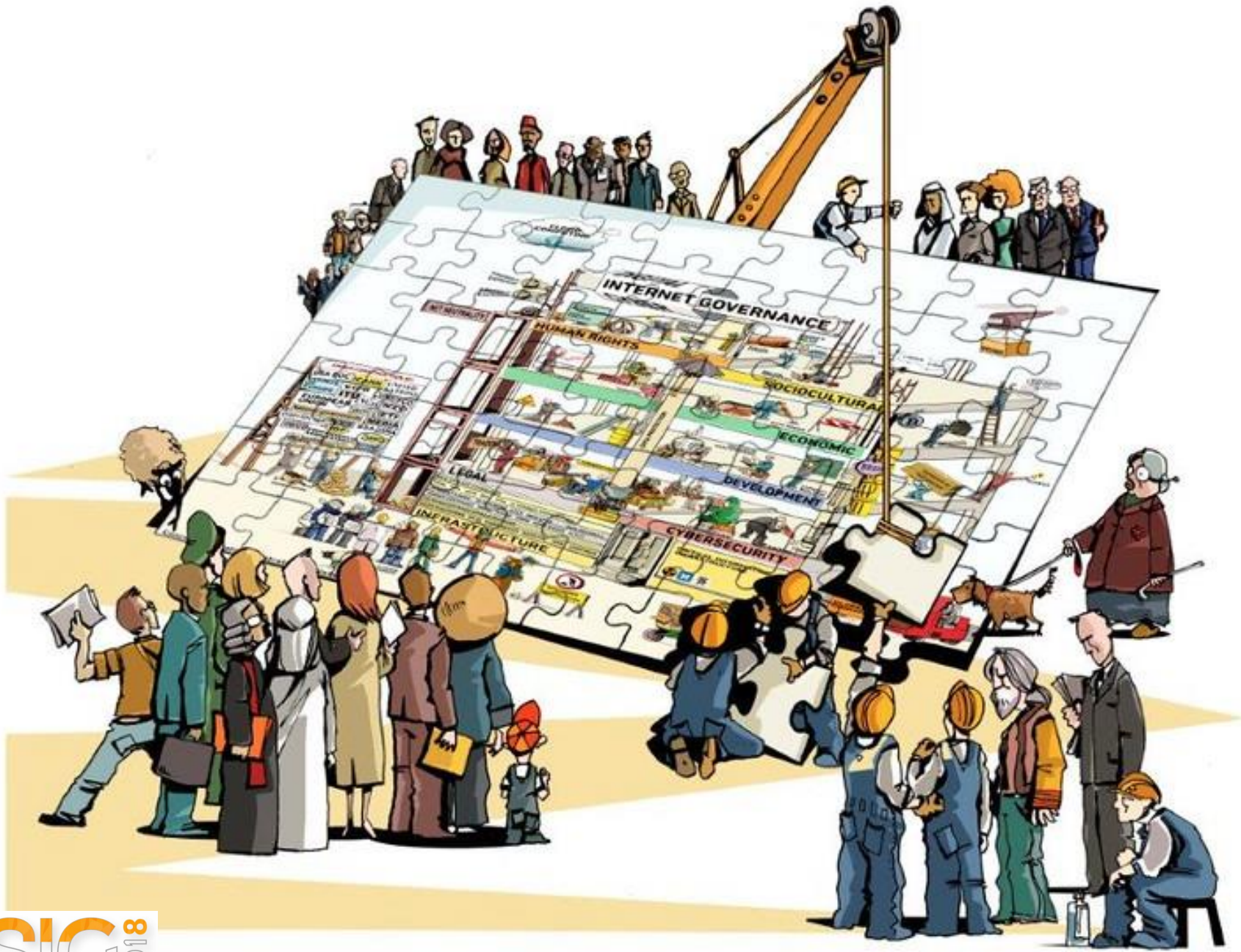


Concept: BALDI • GELBSTEIN • KURBALIJA Illustration: ZORAN MARČETIĆ • MARČA
More information is available in the Information Society Library at <http://www.diplomacy.edu/isl>

www.diplomacy.edu © 2003, DIPLO
This is an illustration of Diplo's research and training methodology on Internet governance.

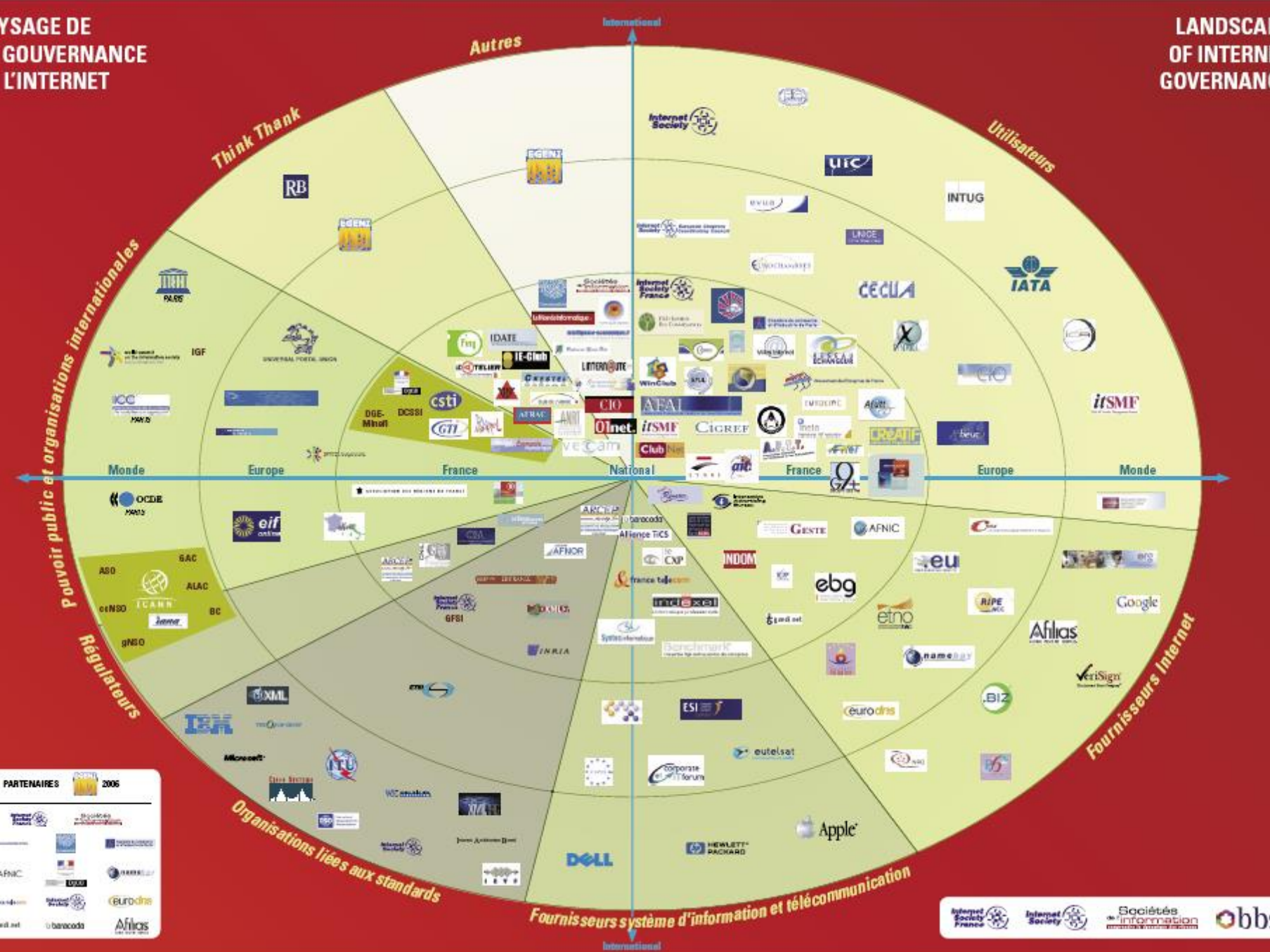


Concept: Baldi - Gelbstein - Kurbalija Illustration: Veljašević



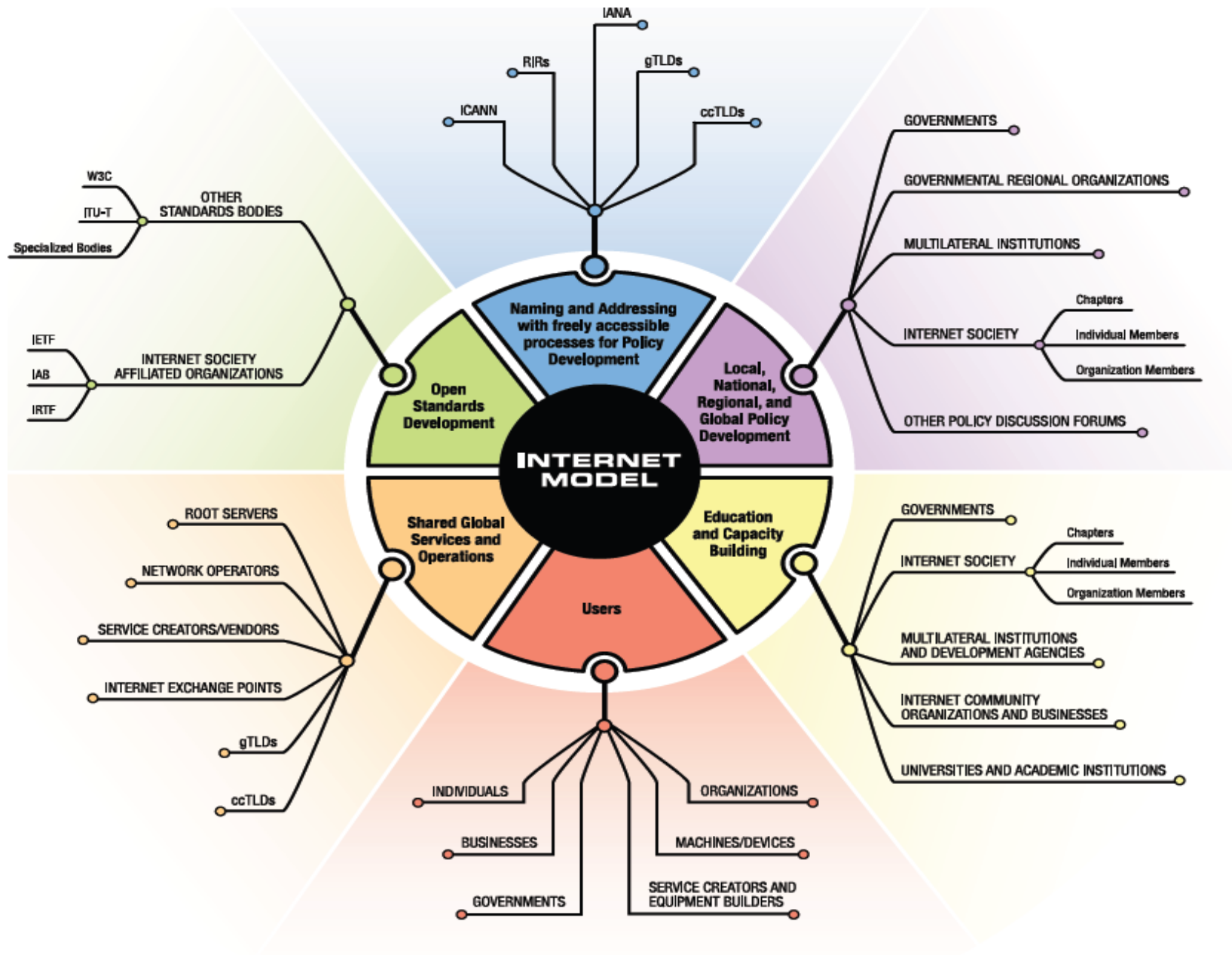
PAYSAGE DE LA GOUVERNANCE DE L'INTERNET

LANDSCAPE OF INTERNET GOVERNANCE



PARTENAIRES 2006

© 2006 AFNIC - Juin 2006



Internet Governance & Geopolitics History, Principles & Ecosystem



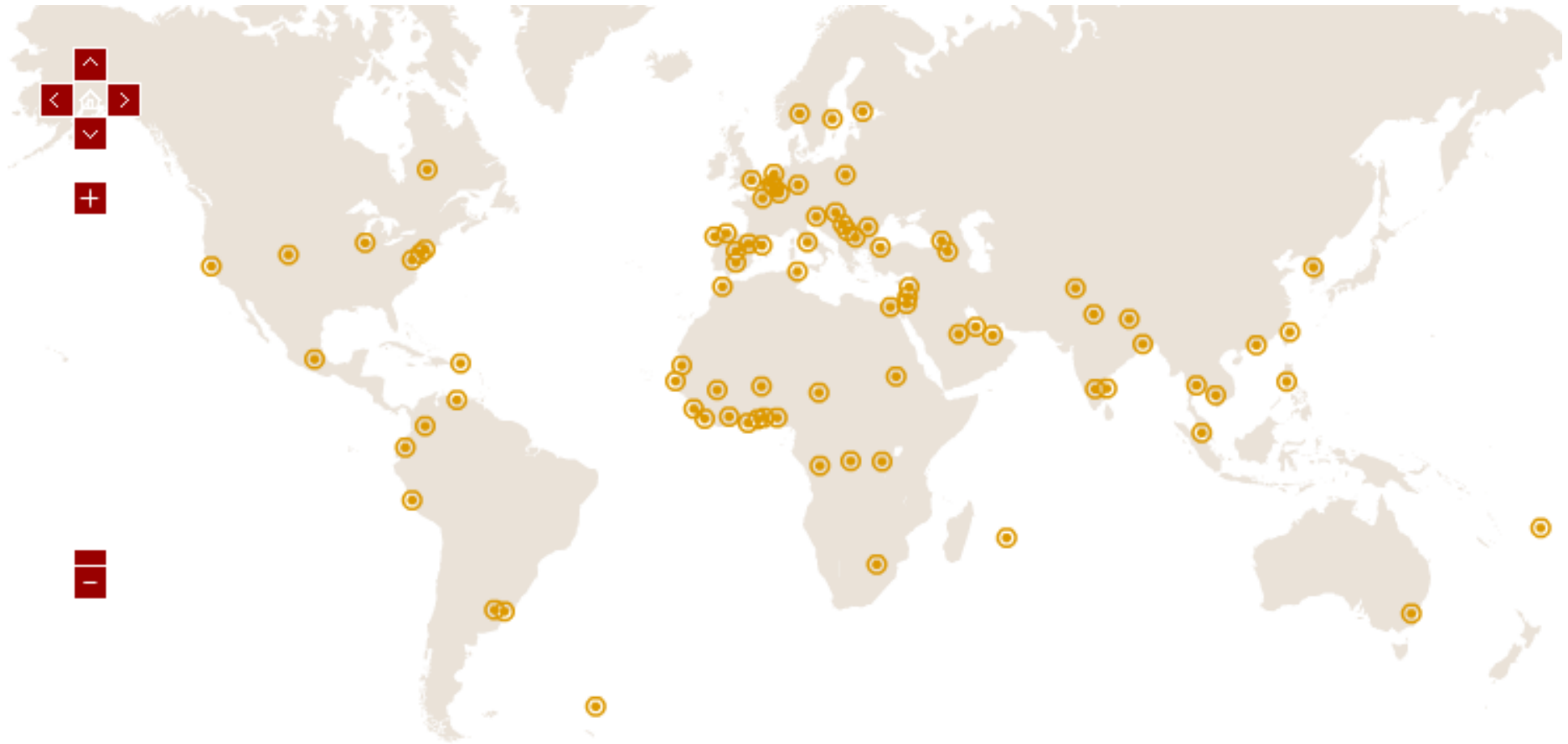
Various key
organisations



- **ISOC = Internet Society**
 - **Founded in 1992**
 - **Non-profit organisation founded to provide leadership in Internet related standards, education, and policy.**
 - **Dedicated to ensuring the open development, evolution and use of the Internet for the benefit of people throughout the world.**
 - **Acts as the legal home for the IETF**

- **Vision**
 - **The Internet is for everyone**
- **Mission**
 - **To promote the open development, evolution, and use of the Internet for the benefit of all people throughout the world**

ISOC Local Chapters



120+ Chapters around the world

- **129 Chapters around the world**
- **157 Organization members**
- **103,580 members and supporters**



- **Internet Architecture Board**
 - Is chartered as a committee of the Internet Engineering Task Force and as an advisory body of the Internet Society
 - Its responsibilities include
 - architectural oversight of IETF activities,
 - Internet Standards Process oversight and appeal
 - appointment of the RFC Editor
 - Is responsible for the management of the IETF protocol parameter registries
 - <http://www.iab.org/>



- **Internet Engineering Task Force**
- Is a large, open, global community of
 - network designers
 - operators
 - vendors
 - researchers
- **Concerned with**
 - the evolution of the Internet architecture
 - the smooth operation of the Internet.
- It is open to any interested individual
 - <http://www.ietf.org/>

**Internet
Governance & Geopolitics
History & Principles
Ecosystem**



**ICANN
Structure
Organization**

What is ICANN ?



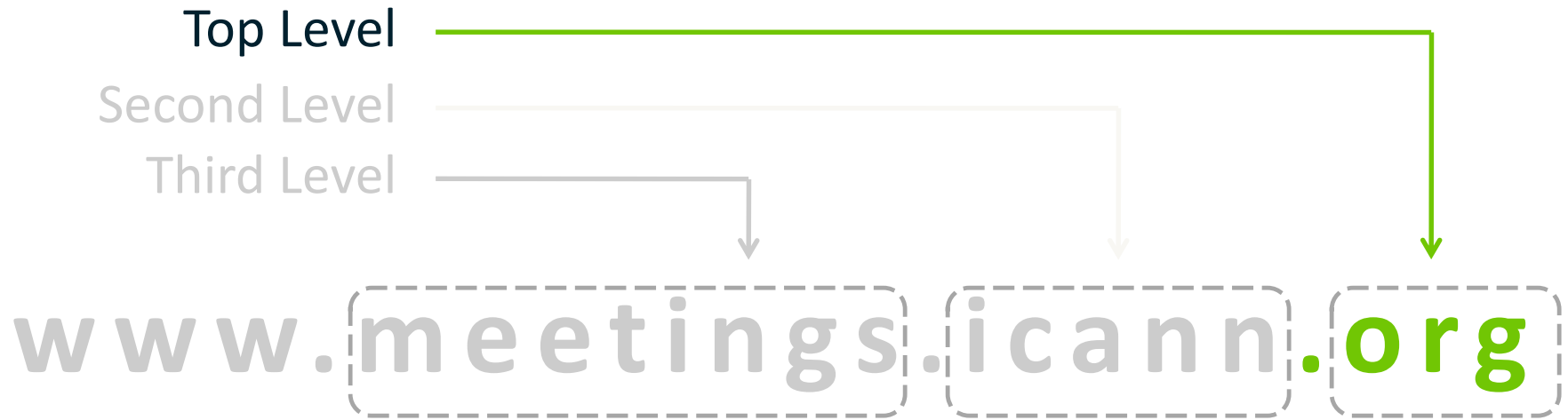
Internet Corporation for Assigned Names and Numbers (ICANN) is a non for profit organization, multi-stakeholder and global organization for coordinating the Internet resources maintenance in the public interest

ICANN coordinates the first level of the Internet's unique identifier system through global, multi-stakeholder, bottom-up consensus-based policy processes, the results of which are implemented by the IANA functions

Definitions - ICANN

- **ICANN = International Corporation for Addresses, Names and Numbers**
 - **Founded in 1998**
 - **Not-for-profit public-benefit corporation with participants from all over the world dedicated to keeping the Internet secure, stable and interoperable. It promotes competition and develops policy on the Internet's unique identifiers:**
 - **Domain Names**
 - **IP Addresses**
 - **Took over these functions from the US Government**

Anatomy of a domain Name



One World, One Internet

WHAT DOES ICANN DO?

To reach any device or thing connected to the Internet, you (or your search engine) must know their address – a name or a number. That address must be unique, so you can reliably find and connect to other devices, things, or information sources no matter where you are in the world. That's how the tens of thousands of physical networks appear and operate as 'One Internet'.

In concert with the technical operating community, ICANN maintains and administers the registries containing these unique addresses across the world ensuring the security, stability, and integrity of One Internet where we can reliably find each other.

Community-Driven Global Policy Development

To keep pace with dynamic technologies and rapid innovation, ICANN facilitates an open, consensus-driven, multistakeholder policy development process that is run from the bottom up.

Multistakeholder Model

Civil Society & Internet Users, the Private Sector, National & International Organizations, Governments, Research, Academic and Technical Communities are all represented.

Competition & Choice

From accrediting over 1000 registrars, to introducing new Top Level Domains (TLDs), ICANN works to expand consumer choice by fostering competition and innovation in the domain name marketplace.

WHICH FUNCTIONS DOES ICANN COORDINATE?

DNS

- Development of generic TLD policy
- Facilitation of country code TLD policy discussions
- Delegation of and changes to Top-level domains
- Management of the root's DNSSEC trust anchor
- Facilitating Root Server System discussions

Internet Numbers

- Approval of global number allocation policies
- Allocation of top-level blocks of Internet numbers
- Recognize Regional Internet Registries

Protocol Parameters

- Creation of and changes to protocol parameter registries
- Management of the Time Zone Database

Security & Stability

ICANN supports DNS security by supporting a secured DNS infrastructure (DNSSEC) and managing the top-level key of that infrastructure, requiring close coordination and collaboration with the community and volunteers around the world.

Interoperability

ICANN's work plays a role in helping the community to develop new technologies that flourish while maintaining interoperability across the global Internet. For example, the central publication point of unique protocol identifiers maintained by ICANN makes it easier for protocol developers to create protocols that allow communications using secure connections between users.

Contractual Compliance

ICANN maintains the contracts and enforces the consensus policies developed through the community-driven process embodied in those contracts. While we are not a regulator, we comply with the law and enforce community policies through contractual obligations.

HOW DO I PARTICIPATE?

- Sign up for updates at icann.org
- Join one of the many Public Comment Forums on ICANN's website
- Attend ICANN's Public Meetings in person or online to provide input at a Public Forum
- Join one of ICANN's Supporting Organizations or Advisory Committee
- Follow us on Twitter, Facebook, LinkedIn
- Subscribe to newsletters
- Participate in our fellows program
- Join a regional engagement group

WHO'S INVOLVED?

A number of groups, each of which represents a different interest and expertise on the Internet. All of them come together with the Board of Directors to shape policies and ICANN work.

Supporting Organizations

- Addressing
- Country Code Names
- Generic Names

Advisory Committees

- At-Large
- Governmental
- Root Server System
- Security & Stability

Technical Advisory Bodies

- Technical Experts Group
- Technical Liaisons from IETF, ETSI, W3C, ITU

Board of Directors

- 16 Community Appointed Board Members

Internet Governance & Geopolitics History & Principles Ecosystem

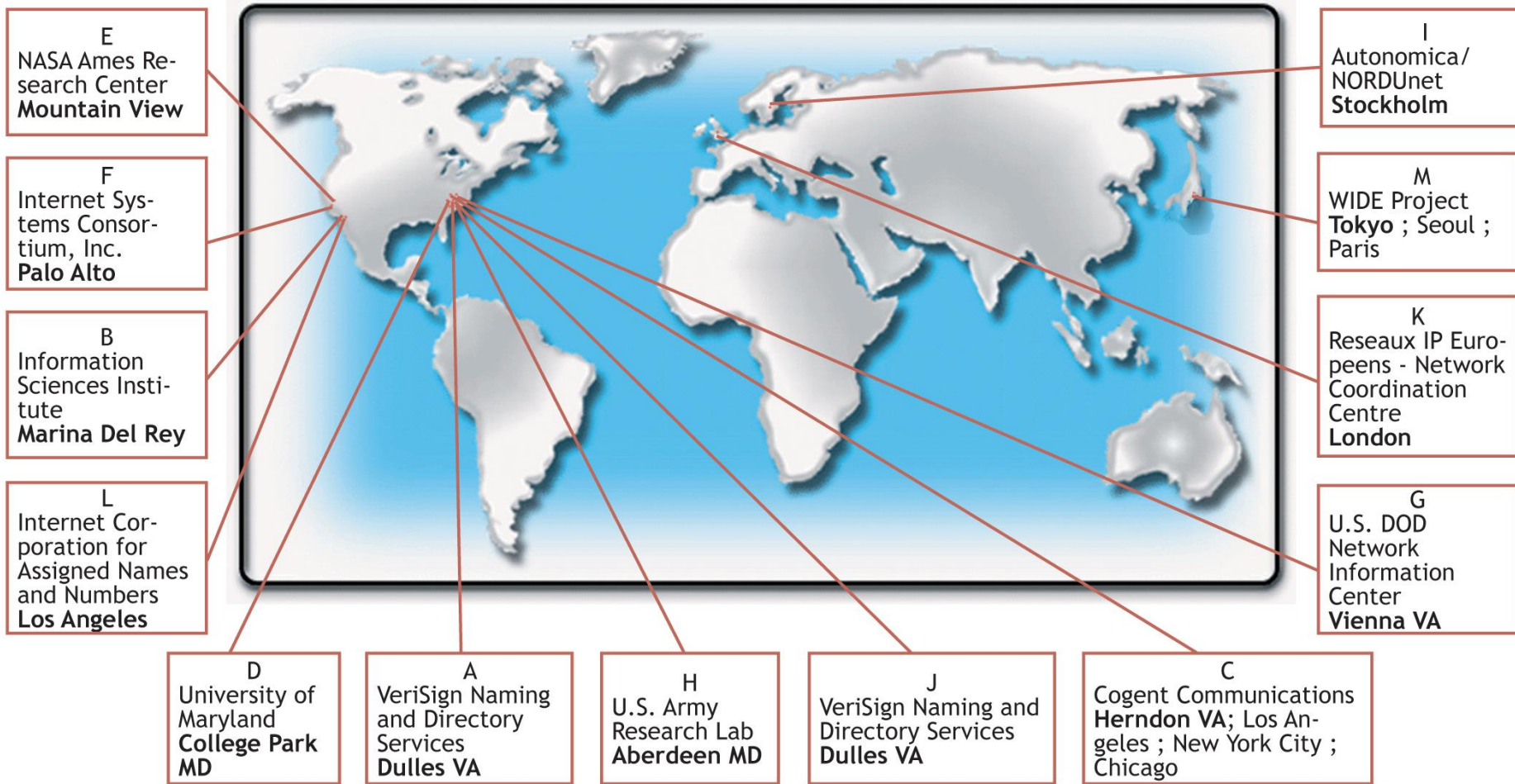


Root Servers
RIRs

Root Servers

- **DNS root name servers reliably publish the contents of one small file called a root zone file to the Internet**
- **This file is at the apex of a hierarchical distributed database called the Domain Name System (DNS), which is used by almost all Internet applications to translate worldwide unique names like www.isoc.org into other identifiers**
- **The DNS is used by**
 - web
 - e-mail
 - other services
 - <http://www.root-servers.org/>

Root servers



Root Server Instances



918 Instances of Root Server System

Regional Internet Registries

- RIRs oversee the allocation and registration of **Internet number resources** within a particular region of the world. (the famous IP addresses!)
- All the RIRs form the Number Resource Organization NRO
 - African Network Information Centre (AfrinIC)
 - Asia Pacific Network Information Centre (APNIC)
 - American Registry for Internet Numbers (ARIN)
 - Latin American and Caribbean Internet Addresses Registry (LACNIC)
 - Réseaux IP Européens Network Coordination Centre RIPE NCC
 - <http://www.nro.net/>

NRO / ASO = 5 RIRs

ARIN
American Registry for Internet Numbers

RIPE NCC
RIPE NETWORK COORDINATION CENTRE





& other regional organizations

- **Centr**
 - The association for exchange, dialogue and innovation of country code domain registries in Europe
- **LACTLD**
 - Latin American and Caribbean TLD Association
- **AfTLD**
 - African Top Level Domains Organization
- **APTLD**
 - Asia Pacific Top Level Domain Association



World Wide Web Consortium

- **The World Wide Web Consortium (W3C) is an international community where**
 - **[Member organizations](#)**
 - A full-time **[staff](#)**
 - The public work together to develop **[Web standards](#)**
- **W3C's mission is to lead the Web to its full potential**
- **Led by Web inventor [Tim Berners-Lee](#) and CEO [Jeffrey Jaffe](#)**



**Committed to Connect
the World**



- **International Telecommunications Union**
- **Created in 1865 as International Telegraph Union**
- **Regulations regarding telephone service:**
 - **Billing**
 - **Standards (V.21, V.32, V.90, X.25 ...)**

ITU Plenipotentiary Conference:
Constitution and Convention

ITU Council



World Conference on International
Telecommunications (WCIT):
**International Telecommunication
Regulations (ITRs)**

ITU – R	ITU-T	ITU-D
World Radio Conference (WRC): Radio Regulations	World Telecommunication Standardization Assembly (WTSA)	World Telecommunication Development Conference (WTDC)
Radio Advisory Group (RAG)	Telecommunication Standardization Advisory Group (TSAG)	Telecommunication Development Advisory Group (TDAG)
Study Groups	Study Groups	Study Groups

CEPT - European Conference of Postal and Telecommunications Administrations: 48 Countries

APT – Asia Pacific Telecommunity: 38 Member Countries

ATU- African Telecom Union: 46 Member States

CITEL – InterAmerican Telecommunications Commission: 35 Member States (OAS Members)

Arab States – 22 Administrations

RCC – Regional Commonwealth in the Field of Communications 12 Administration Members (former Soviet Republics)

International Telecommunication Regulations (ITRs)



A 1988 treaty to Establish **general principles** for the provision and operation of international telecommunication to

- facilitate global **interconnection** and **interoperability**
- underpin harmonious development and **efficient operation of technical facilities**
- promote **efficiency**, usefulness, and **availability** of international telecommunication services

- **World Telecommunication Policy Forum**
- **This – held in May 2013 – was an opportunity for calmer reflections post WCIT**
- **Agreed Policy Recommendations on Internet Governance**
- **<http://www.itu.int/en/wtpf-13/Pages/overview.aspx>**

- **World Telecommunications Development Conference**
- **This four yearly Conference for ITU-D was held in Dubai (March 29 - April 10, 2014)**
- **Agree a new work programme for ITU-D ; the Dubai Declaration and update / new Resolutions;**
- **Primary focus on capacity building; ICT, Broadband and accessibility;**
- **Recognition of need for IG education; ITU in conjunction with others (like ICANN)**
- **<http://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC14/Pages/default.aspx>**

Plenipotentiary Conference (PP-18; Dubai)

- **Four yearly Treaty Conference of all of ITU;**
- **Took place in Busan; Korea; October – November 2014;**
- **Included elections; Strategic Plan adoption; potential changes to Constitution and adoption of revised / new Resolutions;**
- **Important for ICANN as addressed IG issues (not least current Resolutions 101, 102 and 130);**
- **Potential change for scope of work – IPV6; IG?**
- **Next one: PP-18 – Dubai – Oct-Nov 2018**



- **Internet Governance Forum (IGF)**
- **Commission on Science and Technology for Development (part of United Nations conference on Trade and Development – UNCTAD)**
- **UNESCO**



- **As Called for in the Tunis Agenda (2005);**
- **Essentially to look at “effectiveness” of WSIS Action Lines;**
- **UNGA sanctioned two Review Sessions; UNESCO (March 2013) and ITU (June 2014)**

Internet Governance & Geopolitics History & Principles Ecosystem



Internet Governance?



IGF

Internet Governance Forum

- **THE IGF IS A MULTISTAKEHOLDER PLATFORM THAT FACILITATES THE DISCUSSION OF PUBLIC POLICY ISSUES PERTAINING TO THE INTERNET**
- **Was initiated as part of WSIS process in 2005**
- **Yearly meetings**
- **IGF 12-14 November 2018 at UNESCO – Paris, France**
- **The Internet Governance Forum serves to bring people together from various stakeholder groups as equals, in discussions on public policy issues relating to the Internet**
- **While there is no negotiated outcome, the IGF informs and inspires those with policy-making power in both the public and private sectors**
- **At their annual meeting delegates discuss, exchange information and share good practices with each other**
- **The IGF facilitates a common understanding of how to maximize Internet opportunities and address risks and challenges that arise**

National & Regional IGFs – world wide



National IGFs | Regional IGFs | Youth IGFs

Source: Anja Gengo, UN IGF Secretariat Focal Point

Internet Governance & Geopolitics History & Principles Ecosystem



Multi-Lateral
vs.
Multi-Stakeholder

What is Multi-stakeholder

- **An environment where decisions are taken in concertation with**
 - **Governments**
 - **Businesses**
 - **Civil Society**
 - **Individual users**
 - **Any other stakeholder not covered by the above**

What about Multi-Lateral?

- **No cross community discussion:**
 - **Governments speak to governments**
 - **Businesses speak to businesses**
 - **Civil Society speaks to civil society**
- **Governments make decisions**
 - They **may** ask for advice from **businesses or civil society**
 - They **may** invite input from **businesses or civil society**

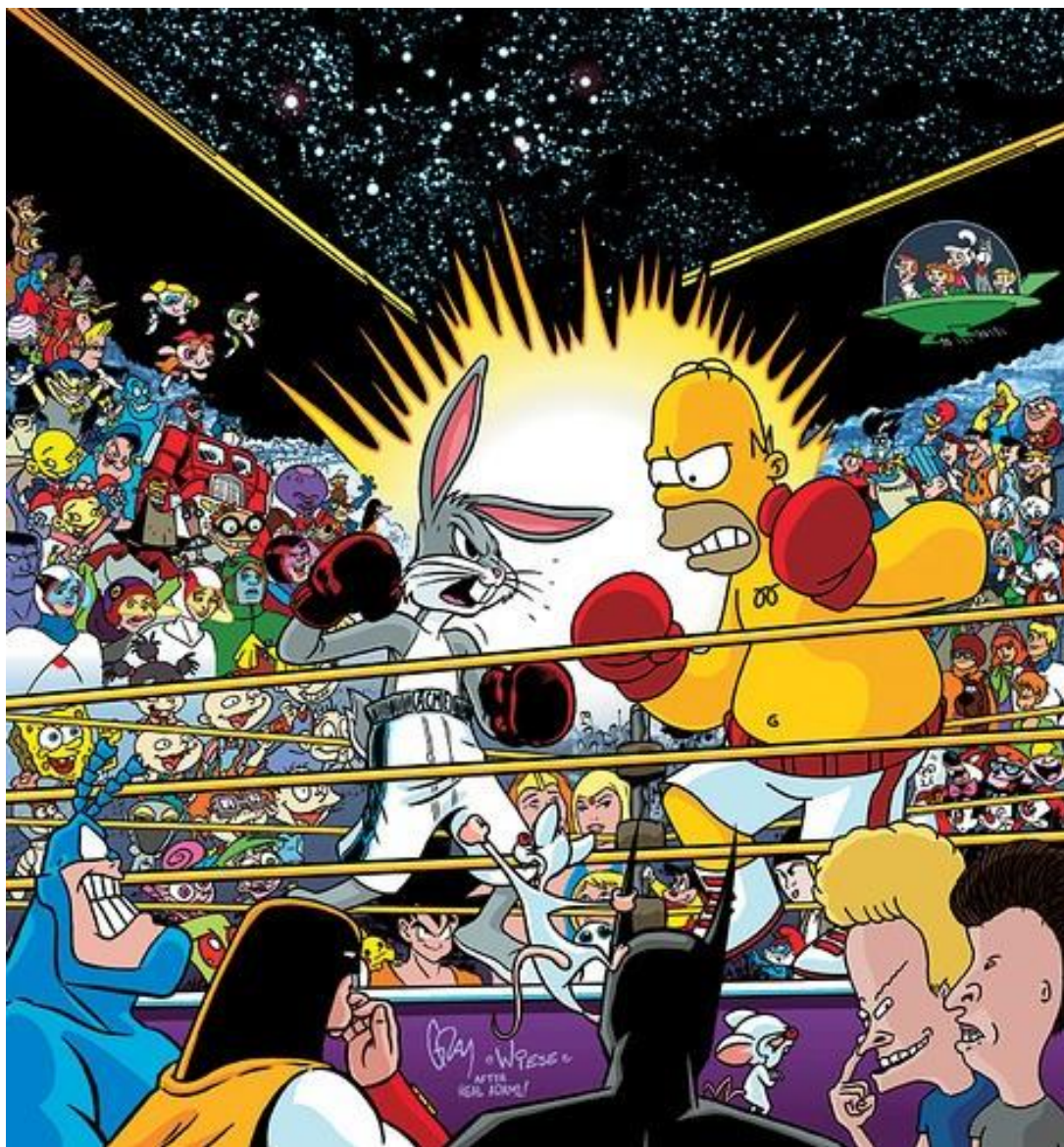
Why is multi-stakeholder better?

- **Early engagement of all actors**
- **Early identification of potential problems**
- **By engaging everybody in the discussion, decisions are more legitimate**
- **Difficulty: Need to reach consensus**
- **Tendency to being theoretical**
- **Are all stakeholders funded?**

Why it is important for Internet Users?

- **Because policies that are decided in those fora and in ICANN will affect all Internet users**
- **Because a true multi-stakeholder system of governance involves Users**
- **Because the strength of the Internet is that it is User-Centric**

Multi-stakeholder vs. Multi-lateral



World Conference
On International
Telecommunications

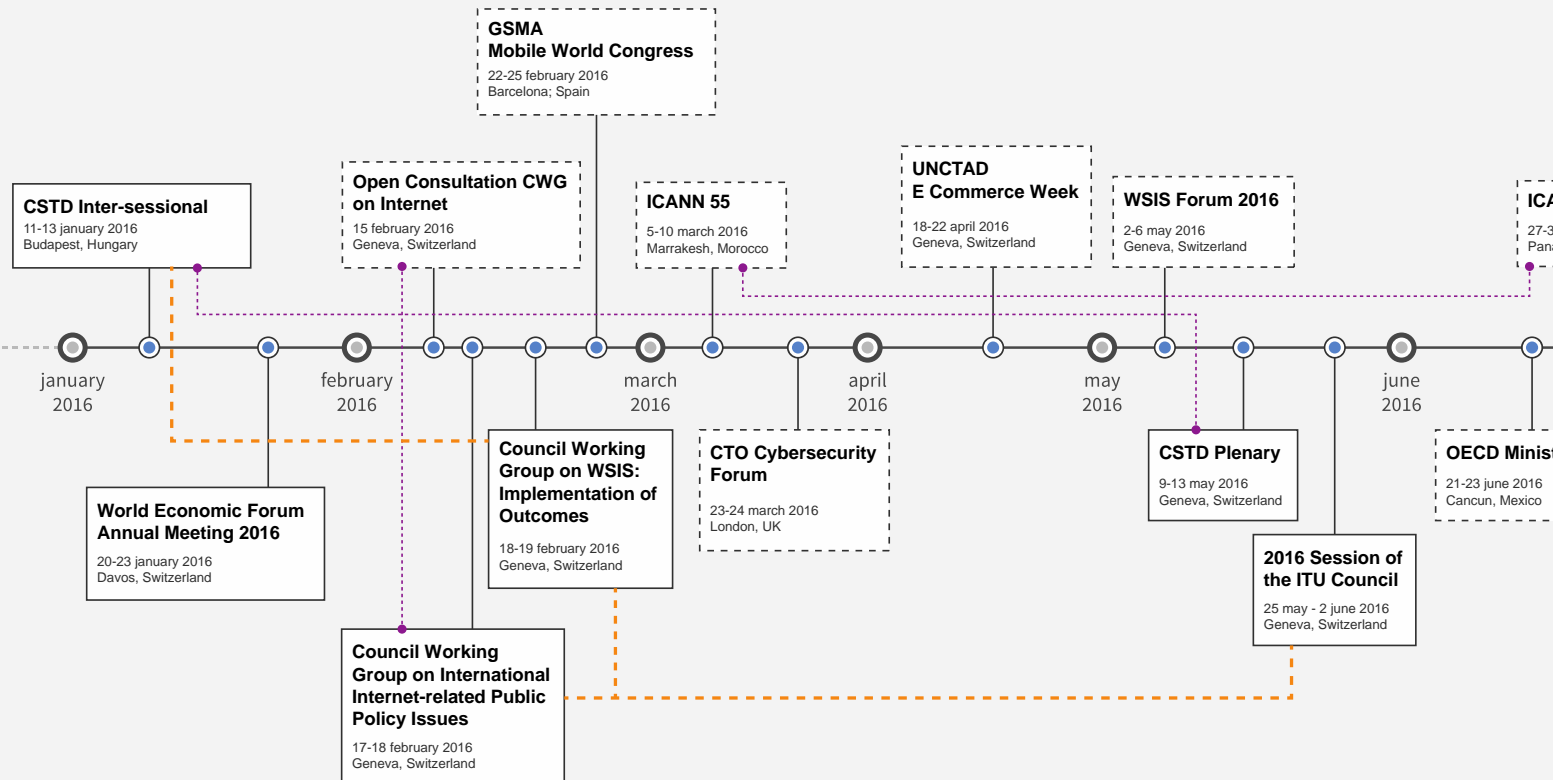
Dubai
3-14 December 2012

A world map where the continents are defined by a network of white dots connected by thin white lines. The background is a solid teal color. The text "Calendar of Key Global Events" is centered over the map in a bold, white, sans-serif font.

Calendar of Key Global Events

Key Global Internet Events 2016

Key Global Internet Events 2016



References

- meeting / event
- closed or partially closed
- open or partially open
- indirect relation
- direct relation
- document

Key Global Internet Events 2016

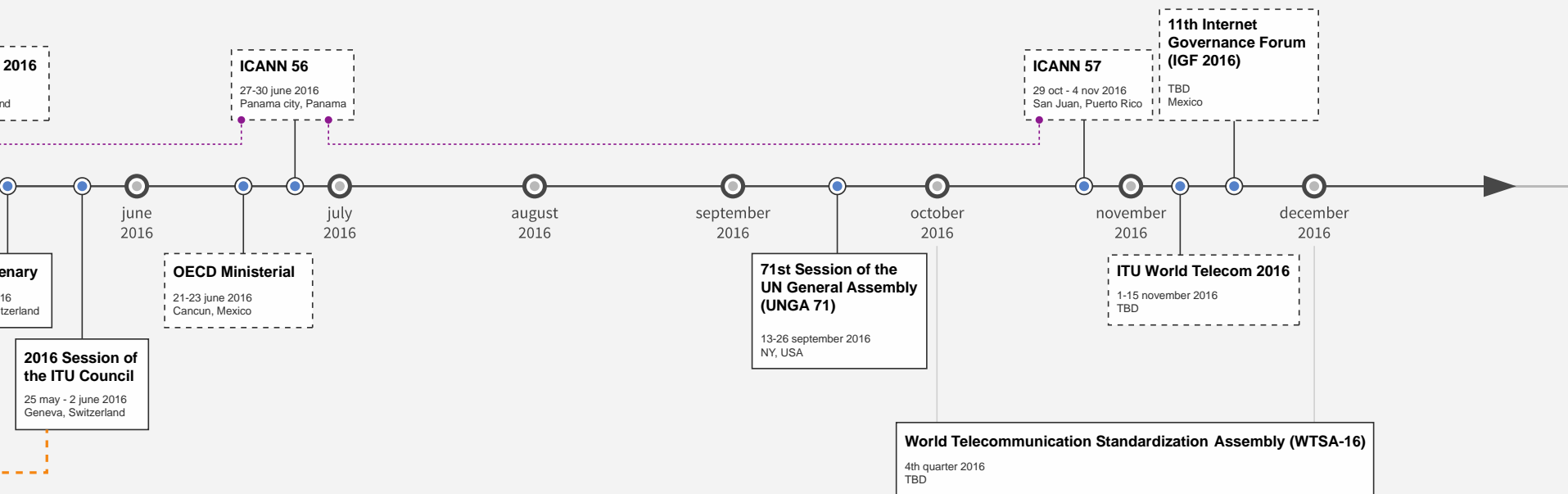


Diagram: Global Key activities towards the Global Multistakeholder Meeting on the Future of Internet Governance by ICANN is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

Examples of “some” IG and Related Events - 2018

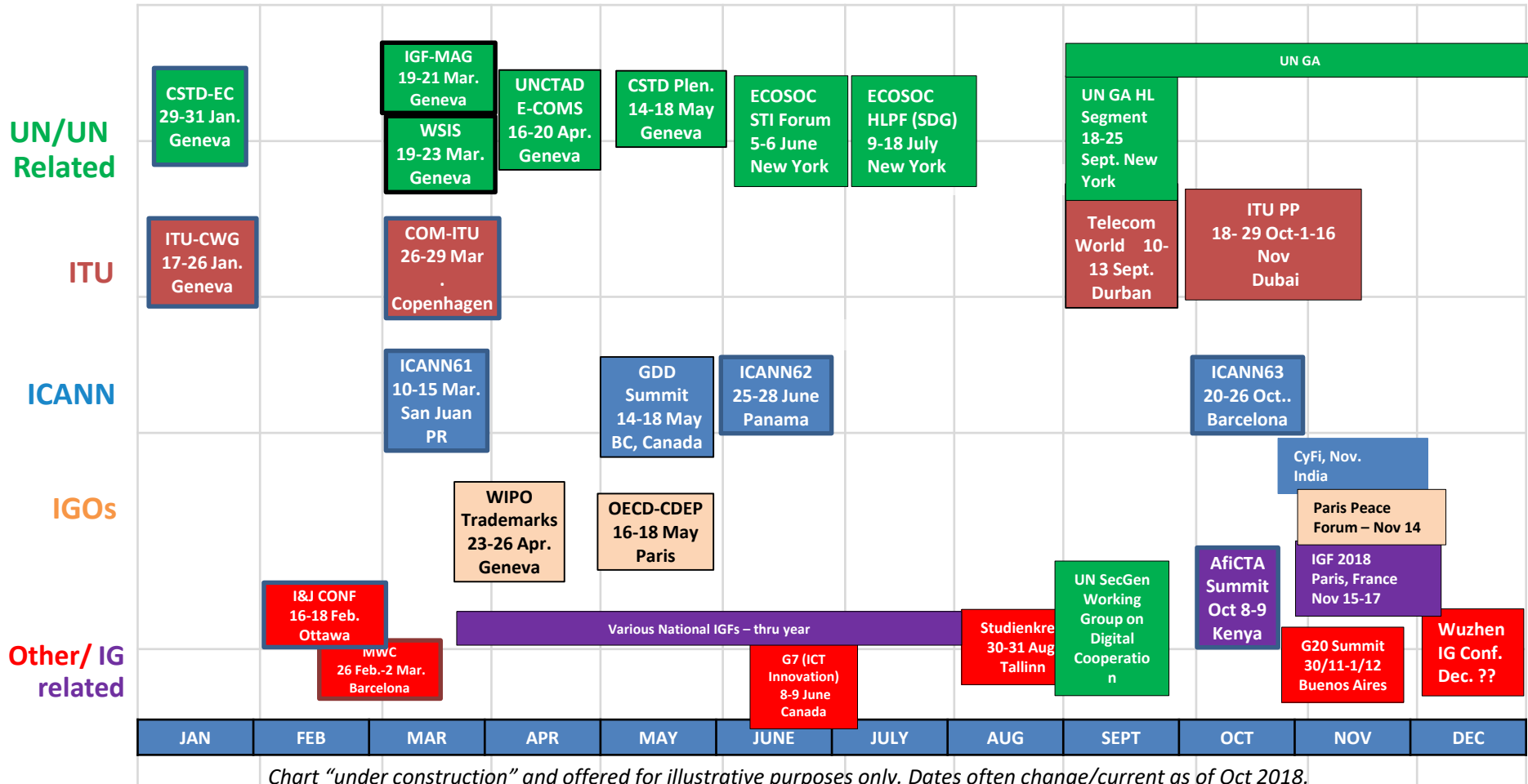


Chart “under construction” and offered for illustrative purposes only. Dates often change/current as of Oct 2018.

Don't be afraid of change!

- Horse drawn carriages are **history**
- Today there's a **systemic barrier** to the Internet's Growth
 - Laws and processes are designed to safeguard what is **currently** in place
 - Baggage which, in some cases, will have to be **changed**
 - Otherwise? The market will dictate change and it will find opportunities **elsewhere**

So what needs to be done?

- The Internet Train is here. Do not miss it.
- It will continue to grow and if you are not ready, business will go elsewhere
- Get ready for IPv6 – the next network addressing
- Get ready for new technologies and promote them
- Engage in multi-stakeholder processes: ICANN, IETF, W3C, IGF, etc.

Thank you !



Questions? Comments? Suggestions?

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