

Broadband for an inclusive digital society

Janis Karklins

UNESCO ADG/CI,

former President of the PrepCom of the WSIS Tunis phase

CSTD 2012-2013 Inter-Sessional Panel

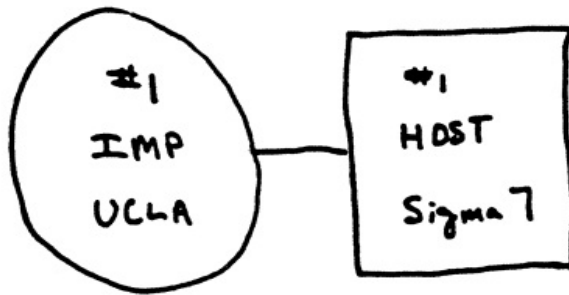
8 January 2013

Issues to be addressed in the presentation

- Internet in figures
- Main outcomes of the WSIS Summits
- Digital divide:
 - baseline
 - evolution of understanding
 - Digital vs knowledge divide
- Economic aspects of local content creation
- National Broadband Policy Framework

Internet

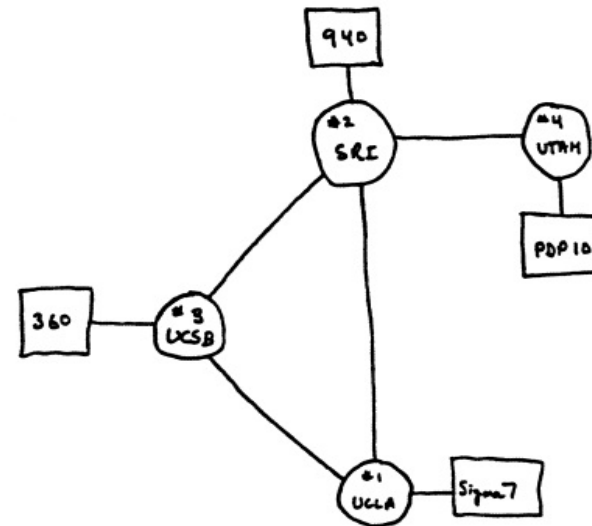
This was the beginning



THE ARPA NETWORK

SEPT 1969

1 NODE



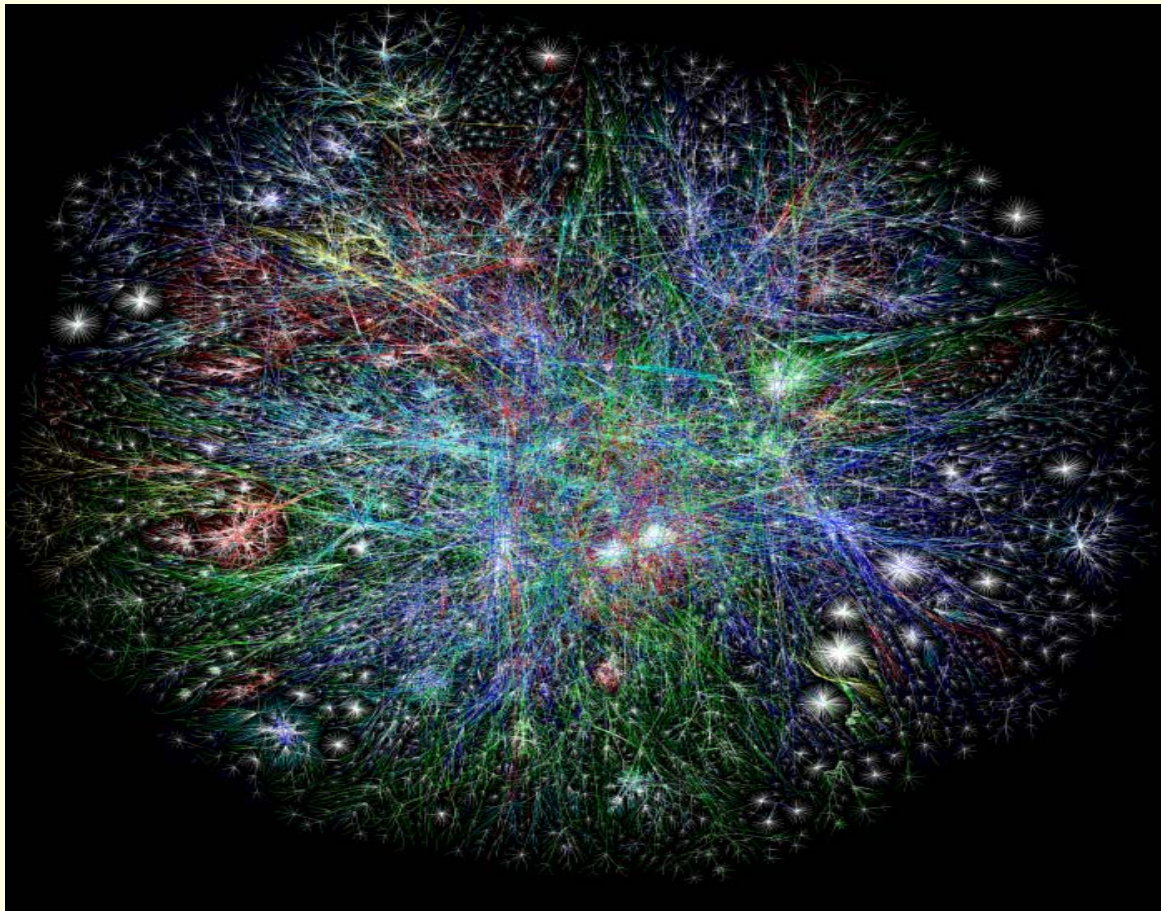
THE ARPA NETWORK

DEC 1969

4 NODES

Internet

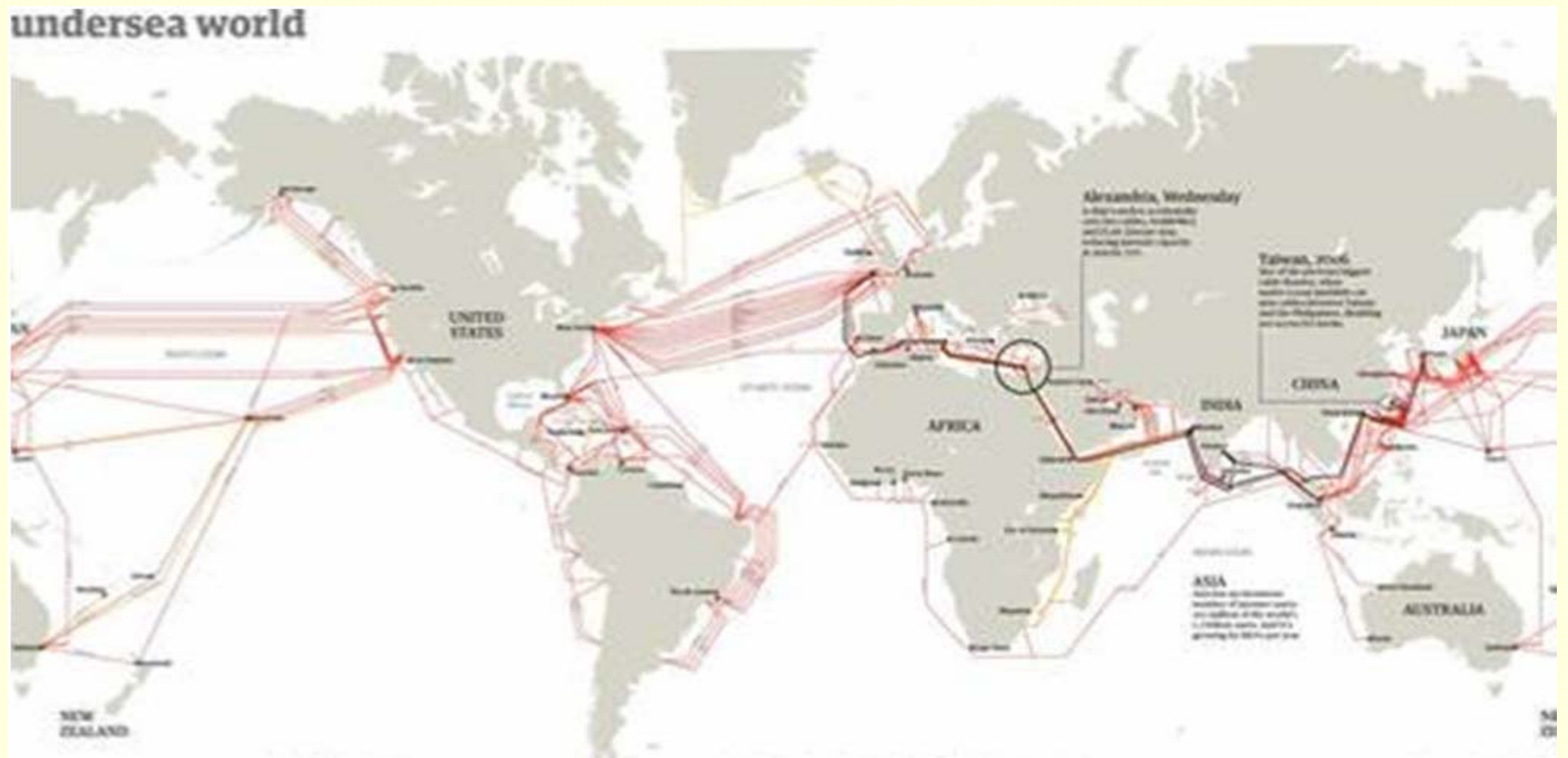
This is today



Happy 30th Anniversary to the modern-day Internet!

Transition to TCP/IP was finalized on
1 January 1983

Internet backbone



WORLD INTERNET USAGE AND POPULATION STATISTICS

30 June 2012

World Regions	Population (2012 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000- 2012	Users % of Table
<u>Africa</u>	1,073,380,925	4,514,400	167,335,676	15.6 %	3,606.7 %	7.0 %
<u>Asia</u>	3,922,066,987	114,304,000	1,076,681,059	27.5 %	841.9 %	44.8 %
<u>Europe</u>	820,918,446	105,096,093	518,512,109	63.2 %	393.4 %	21.5 %
<u>Middle East</u>	223,608,203	3,284,800	90,000,455	40.2 %	2,639.9 %	3.7 %
<u>North America</u>	348,280,154	108,096,800	273,785,413	78.6 %	153.3 %	11.4 %
<u>Latin America / Caribbean</u>	593,688,638	18,068,919	254,915,745	42.9 %	1,310.8 %	10.6 %
<u>Oceania / Australia</u>	35,903,569	7,620,480	24,287,919	67.6 %	218.7 %	1.0 %
<u>WORLD TOTAL</u>	7,017,846,922	360,985,492	2,405,518,376	34.3 %	566.4 %	100.0 %

<http://www.internetworldstats.com/stats.htm>

TOP TEN LANGUAGES IN THE INTERNET	Internet Users by Language	Internet Penetration by Language	Growth in Internet (2000 - 2011)	Internet Users % of Total	World Population for this Language (2011 Estimate)
<u>English</u>	565,004,126	43.4 %	301.4 %	26.8 %	1,302,275,670
<u>Chinese</u>	509,965,013	37.2 %	1,478.7 %	24.2 %	1,372,226,042
<u>Spanish</u>	164,968,742	39.0 %	807.4 %	7.8 %	423,085,806
<u>Japanese</u>	99,182,000	78.4 %	110.7 %	4.7 %	126,475,664
<u>Portuguese</u>	82,586,600	32.5 %	990.1 %	3.9 %	253,947,594
<u>German</u>	75,422,674	79.5 %	174.1 %	3.6 %	94,842,656
<u>Arabic</u>	65,365,400	18.8 %	2,501.2 %	3.3 %	347,002,991
<u>French</u>	59,779,525	17.2 %	398.2 %	3.0 %	347,932,305
<u>Russian</u>	59,700,000	42.8 %	1,825.8 %	3.0 %	139,390,205
<u>Korean</u>	39,440,000	55.2 %	107.1 %	2.0 %	71,393,343
TOP 10 LANGUAGES	1,615,957,333	36.4 %	421.2 %	82.2 %	4,442,056,069
Other languages	350,557,483	14.6 %	588.5 %	17.8 %	2,403,553,891
<u>WORLD TOTAL</u>	2,099,926,965	30.3 %	481.7 %	100.0 %	6,930,055,154

<http://www.internetworldstats.com/stats7.htm>

Main outcomes of the Geneva Summit

- **WSIS** – the first global intergovernmental forum where Internet issues were addressed in a multi-stakeholder setting and the first principles agreed.
- **Concept of multi-stakeholder governance**
 - The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations (Art 48, Declaration of Principles).

Main outcomes of the Geneva Summit

- Roles and responsibilities of the stakeholders (Art 49)
 - **Policy authority** for Internet-related public policy issues is the sovereign right **of States**. They have rights and responsibilities for international Internet-related public policy issues.
 - The **private sector** has had, and should continue to have, an important role in the development of the Internet, both in the technical and economic fields.

Main outcomes of the Geneva Summit

- Roles and responsibilities of the stakeholders (Art 49 cont)
 - **Civil society** has also played an important role on Internet matters, especially at community level, and should continue to play such a role.
 - **Intergovernmental organizations** have had, and should continue to have, a facilitating role in the coordination of Internet-related public policy issues.
 - **International organizations** have also had and should continue to have an important role in the development of Internet-related technical standards and relevant policies.

Main outcomes of the Tunis Summit

- **Geneva principles confirmed (Art 29, 35, 81)**
- **Working definition developed by WGIG**
 - *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 (Art 34)*
- **Creation of the IGF (Art 67, 72-78)**
- **Launch of the process leading towards enhanced cooperation (Art 69-71)**

Digital divide: baseline

Early 2000

- 361 million Internet users
- Less than billion mobile subscriptions
- Main issue - access to Internet
- Africa not embraced by fiber
- Dial-up, low speed access
- Content mainly in English

Today

- 2,4 billion internet users
- Nearly 6 billion mobile subscriptions
- Main issue – actual use the Internet
- Africa – linked with several fiber cables
- Broadband speed definition
- Growth of content in non-English
- 1 billion smartphones sold in 2012 worldwide

Digital divide is changing its nature

Early 2000 – digital divide

- Access divide
- Access price divide
- Technological divide
- Basic skill divide
- Generational divide
- Urban/rural divide
- Gender divide
- Content divide
- Language divide

Today – knowledge divide

- Enabling environment divide
- Access price divide
- Access speed divide
- Technological skill divide
- Application and service divide

Digital divide: evolution of understanding

Early 2000

- Access/connectivity is the main issue
- Need to develop infrastructure
- Need to give each child a computer to improve the education process

Today

- Actual use is becoming the main issue
- Infrastructure and content development should go hand in hand
- In order to benefit from ICTs in the classroom an ecosystem needs to be put in place

Example: ICT at school ecosystem

- Technology in the classroom is just an expense, unless there is an ecosystem in place:
 - ICTs and connectivity
 - Teaching methodology and adapted school system
 - Skilled teachers
 - Adapted teaching/learning materials

Economic aspects of local content creation

- OECD/ISOC/UNESCO in 2011 conducted study “The Relationship between Local Content, Internet Development and Access Prices”.
- The idea was to prove the positive correlation between the volume of local content that is kept on local Internet infrastructure and access prices for local users.
- Initial assumptions:
 - Majority of local consumption is local content
 - Local traffic is always cheaper than international

Economic aspects of local content creation

- Main findings:
 - There is a strong correlation between the development of network infrastructure and the growth of local content.
 - More developed local Internet markets tend to report lower international prices for bandwidth.
 - Markets with more intense international Internet traffic tend to report lower local prices for Internet access.
 - Existence of IXPs drives access prices down
 - Investing in local infrastructure is investment in local knowledge base.

National Broadband Policy Framework

- Multi-stakeholder model is a key
- Has proven itself in many countries
 - Brazil (Internet Steering Committee) is very good example
 - Proliferation of national and regional IGFs proves the need for the multi-stakeholder dialogue
- Each stakeholder has its role and responsibility

Stake for governments

- Governments are responsible for public policy
- But public policy is :
 - not clearly defined
 - intertwined with other interests and results in tensions with other stakeholder groups
- It is high time to define the scope of public policy and agree with all stakeholders on this definition.

Thank you

Janis Karklins

Assistant Director General of UNESCO

[j.karklins at unesco.org](mailto:j.karklins@unesco.org)