



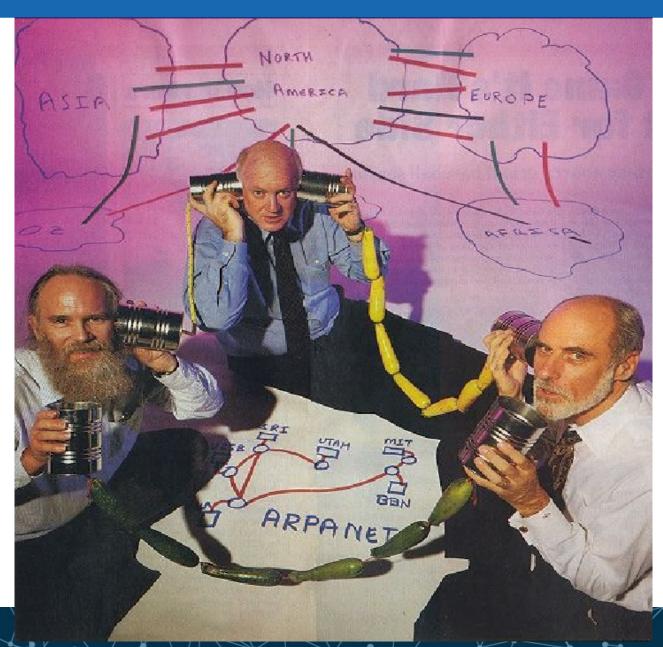
ICANN What's in it for me Andrea.Beccalli@icann.org

State of the art in communication technology 1967





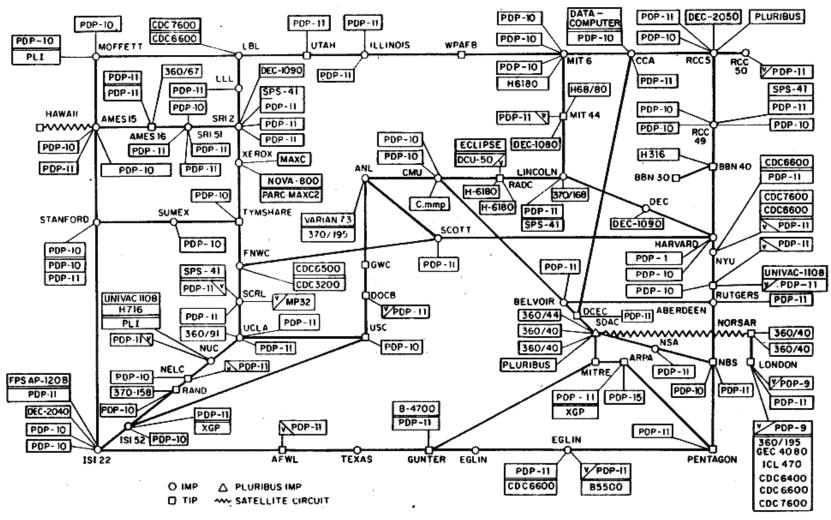
# At the beginning was ARPANET





# Arpanet 1977

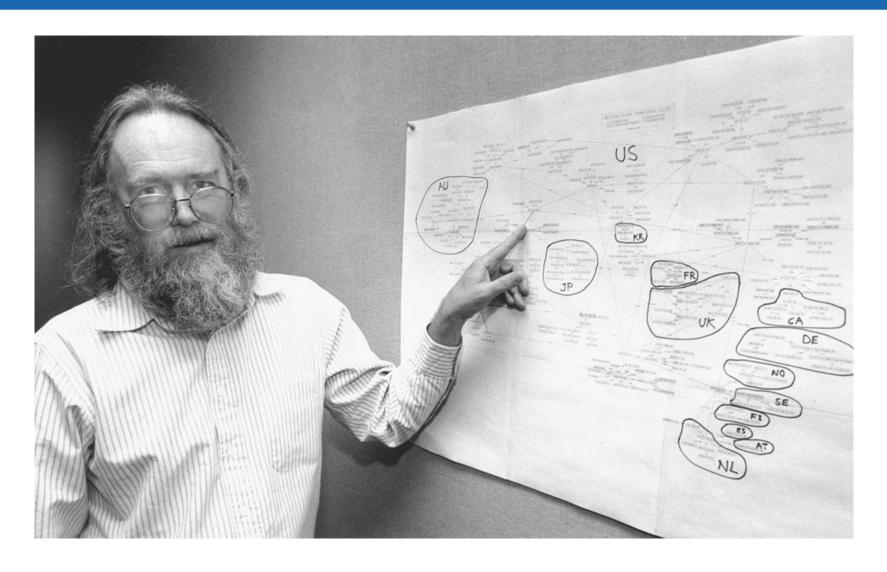
### ARPANET LOGICAL MAP, MARCH 1977



(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)



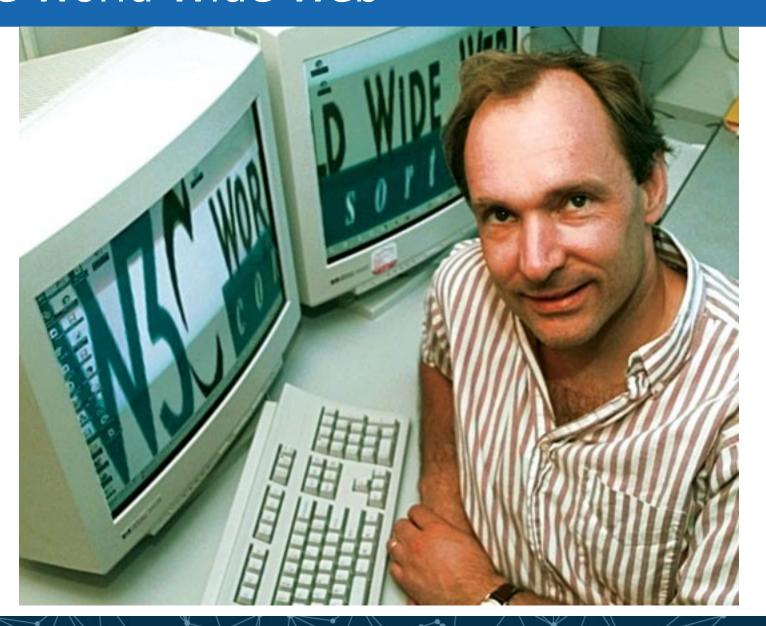
# Jon Postel



DNS - June 23, 1983



# The World Wide Web





# **ICANN** 1998





# Google 1998





Copyright @1998 Google Inc.



# Yahoo! 1998







Personalize

World Cup 98

ALL TITLES ON SALE!

Yahoo! Mail free @yahoo.com email

Search options

Yahoo! Games - play online chess, backgammon, bridge, blackjack and more...

<u>Yellow Pages - White Pages / People Search - Maps - Classifieds - Personals - Chat - Email</u>
<u>Shopping - My Yahoo! - News - Sports - Weather - Stock Quotes - more...</u>

Arts and Humanities
 Architecture, Photography, Literature...

Business and Economy [Xtra!]
 Companies, Finance, Employment...

Computers and Internet [Xtra!]
 Internet, WWW, Software, Multimedia...

Education
 Universities, K-12, College Entrance...

Entertainment [Xtra!]
 Cool Links, Movies, Music, Humor...

Government
 Military, Politics [Xtra!], Law, Taxes...

<u>Health [Xtra!]</u>
 <u>Medicine, Drugs, Diseases, Fitness...</u>

News and Media [Xtra!]
 Current Events, Magazines, TV, Newspapers...

<u>Recreation and Sports [Xtra!]</u>
 <u>Sports, Games, Travel, Autos, Outdoors...</u>

<u>Reference</u>
 Libraries, Dictionaries, Phone Numbers...

<u>Regional</u>
 <u>Countries</u>, <u>Regions</u>, <u>U.S. States</u>...

<u>Science</u>
 <u>CS</u>, <u>Biology</u>, <u>Astronomy</u>, <u>Engineering</u>...

Social Science
 Anthropology, Sociology, Economics...

Society and Culture
 People, Environment, Religion...



# ICANN's Role

- ICANN is responsible for coordination of the global internet's unique identifiers; to ensure secure and stable operation of these systems
- ICANN staff does not create policy; staff support and resource the worldwide community, who determine Internet policy in "bottom up" manner
- ICANN mandate is to make competition and choice available in a safe, secure operating environment. Examples are new gTLDs and IDN's

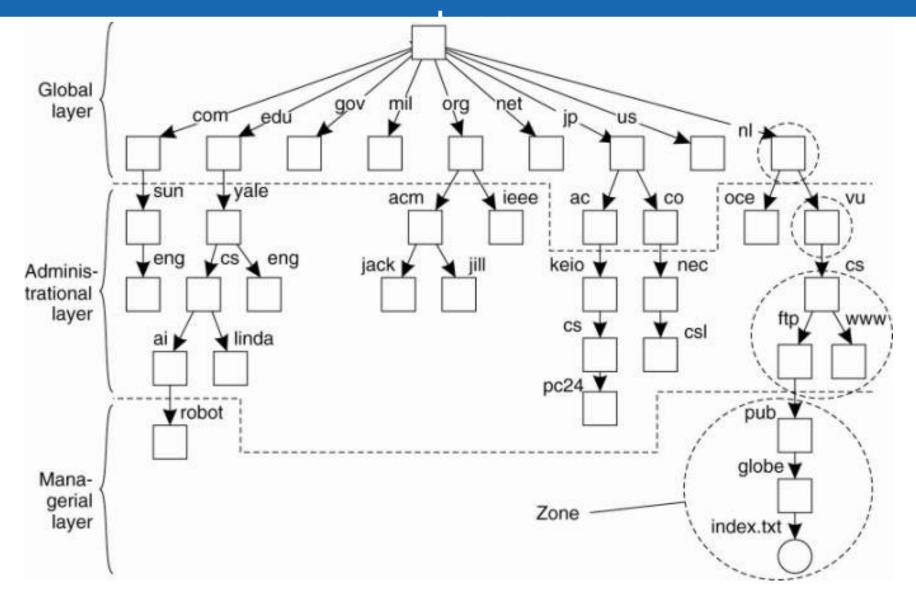


# Where did ICANN come from?

- Set up by Clinton Administration in 1998;
- Set up a as private sector non-for profit organisation under Californian law;
- Essentially to carry forward the commercialization of the DNS that was already in train under Jon Postel and colleagues;



# DNS hierarchically organized as a rooted





# DNS is a Public Directory Service

- Organizations and individuals publish the "names and locations" of their online presences
   A businessman's answer
- Fundamental characteristics of DNS information
  - You cannot copyright it: it's meant to be copied
  - If you keep it confidential no one can find you
  - DNS data are mostly temporal
    - Names are registered not owned
    - Addresses are registered or allocated not owned
    - DNS data and even some addresses have lifetimes
  - You can't prevent others from collecting it



# The Policy Development Process

ICANN achieves its mission through implementation of policies approved by its Board of Directors.

These policies start out as recommendations formed and refined by the global ICANN community through its Supporting Organizations and influenced by Advisory Committees.

The SOs and ACs are comprised of volunteers from over 130 countries and territories – in a bottom-up, open and transparent process



# Multistakeholder principles

- Bottom up agenda setting
- Equal footing
- Inclusivity
- Consensus
- Transparency
- Mutual recognition of stakeholders
- Democratic accountability
- Openness
- Self organization
- Iterative process





## 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?

**OPERATIONS** 

UNIQUE IDENTIFIERS

### 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

· Approval of global number allocation policies

Internet Numbers

- · 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.

## COMPLIANCE ICANN CONTRACTED PARTIES **Contractual Compliance** ICANN maintains the contracts and enforces the consensus policies developed through

COORDINATION

DNS ECOSYSTEM

### 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
- · Generic Names

### Advisory Committees

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

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.

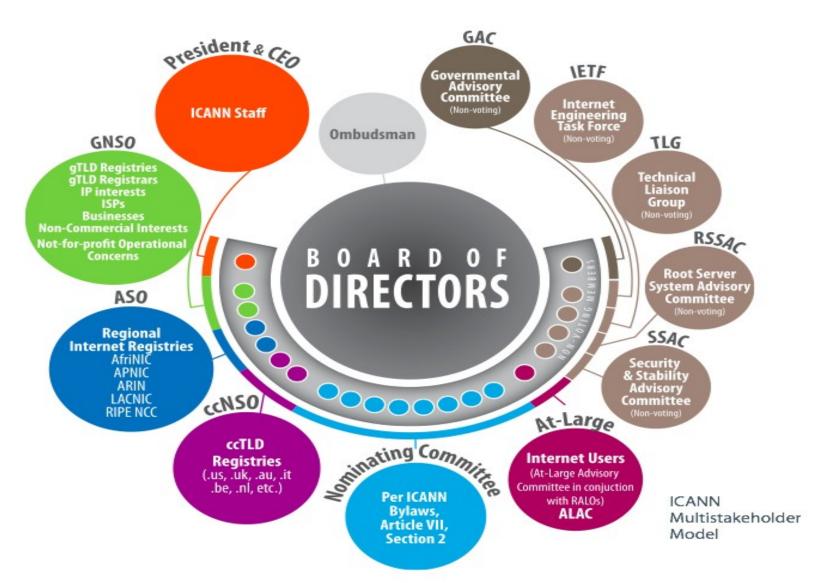
### Technical Advisory

#### · Technical Experts Group · Technical Liaisons from IETF, ETSI, W3C, ITU

### Board of Directors

+ 16 Community Appointed Board Members

# MULTISTAKEHOLDER MODEL: IN ICANN COMMUNITY



# Other Players in "our" IG Space

- Internet Engineering Task Force (IETF)
- Internet Society (ISOC)
- Internet Architecture Board (IAB)
- Internet Assigned Numbers Authority (IANA)
- Regional Internet Registries (RIRs)
- Regional Network Operators Groups (\*nogs)
- W3C, ITU,

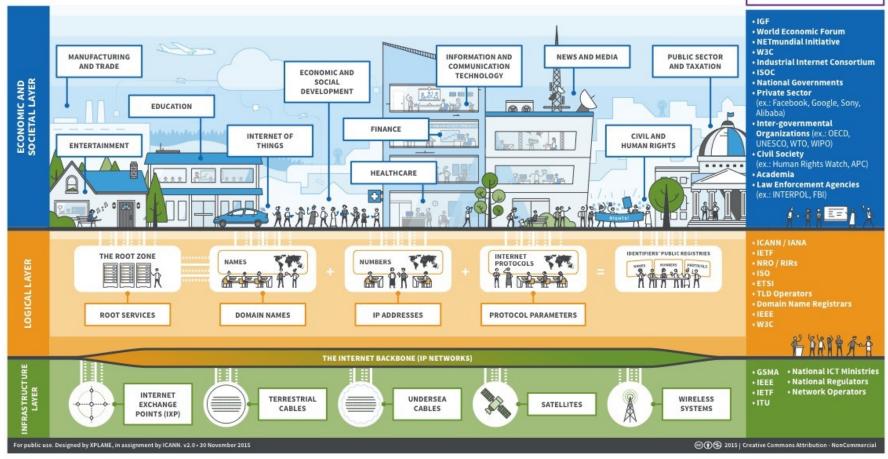


# The Three Lavers of Digital Governance

## THE THREE LAYERS OF DIGITAL GOVERNANCE

No one person, government, organization, or company governs the digital space. Digital Governance may be stratified into the three layers depicted here: Infrastructure, Logical, Economic and Societal. Solutions to issues in each layer include policies, best practices, standards, specifications, and tools developed by the collaborations of stakeholders and experts from actors in business, government, academia, technical, and civil society. For a map of Digital Governance Issues and Solutions across all three layers, visit <a href="https://map.netmundial.org">https://map.netmundial.org</a>.

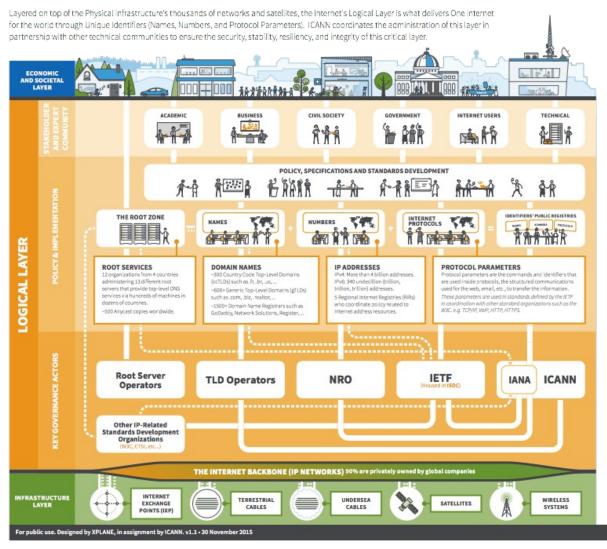
DIGITAL GOVERNANCE ACTORS





# The Logical Layer

### THE LOGICAL LAYER OF DIGITAL GOVERNANCE



#### TECHNICAL OPERATIONS

The technical operating community is made up of multiple independent actors bound by common principles and mutual commitments that ensure the security and stability of the Internet Infrastructure. Each actor's community develops policies and standards. in an open, inclusive, and consensus-based approach.

KEY GOVERNANCE ACTORS

### ICANN Internet Corporation for Assigned Names and Numbers

Helps coordinate the Internet's systems of unique identifiers including domain names and IP addresses, as well as manages the IETF's protocol parameter registries.

IANA, the Internet Assigned Numbers Authority, is a set of functions housed and operated within ICANN, It acts as the top-level allocator for blocks of IP addresses and AS numbers, proposes creation of and changes to DNS too-level domains, and manages lists of unique identifiers used in Internet protocols.

### IETF Internet Engineering Task Force

Develops and promotes a wide range of Internet standards dealing in nacticular with standards of the Internet protocol suite. Their technical documents influence the way people design, use, and manage the internet. The IETF operates under the internet Society (ISOC) with architectural oversight provided by the Internet Architecture Board (IAB).

### ISO International Organization for Standardizotion

Standardizes, among many other things, the official names and postal codes of countries, dependent territories, special areas of geographic significance.

### NRO Number Resource Organization

A coordinating body for the five Regional Internet Registries (RIRs). The Riffs manage the distribution of IP addresses and Autonomous System Numbers in their regions of the world.

AFRINIC www.shinic.net APNIC www.spricnet

LACNIC www.isenic.net RIPENCE www.ripenet

### TLD Operators Top Level Bomoin Operators

Organizations which have been assigned the management of Too-Level Domains such as: Generic TLOs (.com, .edu, .info, .name etc...), Country Code TLDs (fr. .us, .gh, .cn etc...) and non-ASCII alphabet TLDs (in language such as Chinese, Korean, Arabic, Russian, French etc., J -among others.

### Root Server Operators

12 independent organisations operate the 13 authoritative name servers (A through M) that serve the Domain Name System (DNS) root. zone. The name servers are a network of hundreds of physical servers located in many countries around the world.

### W3C

The World Wide Web Consortium (WBC) is an international community. where Member organizations, a full-time staff, and the public work together to develop Web standards. W3C's mission is to lead the Web to its full potential.

STAKEHOLDER AND EXPERT COMMUNITY

#### Academic

- Institutions of higher learning
- Professors & students

#### Business

- companies from
- Industry and trade

#### Civil Society

- organizations
- organizations
- organizations
- Think Tanks

### Government

- Distinct economies.
- international fora a Multipartingal governmental and
- treaty organizations
- lwith a direct interest

#### Internet Users

or global internet

### Technical

- Computer engineers
- Software developers

(C) (S) 2015 | Creative Commons Attribution - NonCommercial





# Internet & Global Governance

Given its nature, Internet governance is a form of global governance. A basic understanding of global governance principles and practices is necessary to create a better understanding for Internet governance.

Global governance is often called for to:

- a) manage common resources
- b) to coordinate cross-border actions
- c) to promote and protect core values.

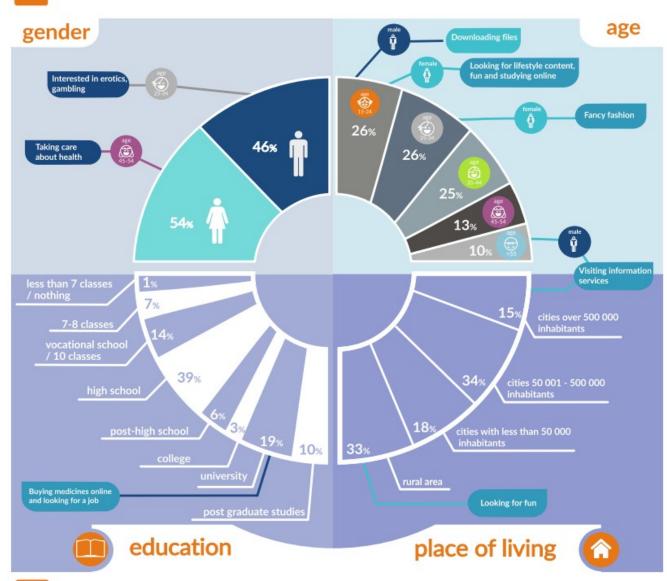


# Romania on the Internet

### WHO ARE ROMANIAN INTERNET USERS?

11

Chart 14. Socio-demographic profiles of internet users in Romania



8.8 M users

48% of population



Table 5. Top 10 global & local publishing websites in Romania by reach level

	Top 10 commercial publishing websites	Real Users <sup>6</sup>	Reach
1	google.ro/.com	7 546 211	86%
2	facebook.com	7 022 396	80%
3	yahoo.com	6 405 519	73%
4	youtube.com	5 928 902	68%
5	realitatea.net	2 943 987	34%
6	stirileprotv.ro	2 549 657	29%
7	wowbiz.ro	2 162 551	25%
8	rol.ro	2 071 046	24%
9	romaniatv.net	1 949 128	22%
10	protv.ro	1 864 343	21%



Source: gemiusAudience (age:14+), XI.2013



Table 6. Top 10 global & local non-publishing websites in Romania by reach level

	Top 10 commercial non-publishing websites	Real Users	Reach
1	bet365.com	3 614 741	41%
2	wikipedia.org	2 883 052	33%
3	tocmai.ro	2 680 011	31%
4	wordpress.com	2 471 128	28%
5	mercador.ro	2 330 760	27%
6	emag.ro	2 327 380	27%
7	vube.com	2 308 601	27%
8	ask.com	2 258 663	26%
9	goodgamestudios.com	1 813 269	21%
10	microsoft.com	1 788 718	20%



Source: gemiusAudience (age: 14+), XI.2013

# Development and Public Responsibility Department (DPRD) Focus Areas

# Supporting Education and Academic Outreach Programs include:

- Online Learning Platform: ICANN Learn
- Development of Educational Materials
- Supporting University Outreach

# Supporting the Next Generation de:

- Fellowship Program
- NextGen@ICANN
- Newcomer Program

involvement



 Collaborations with local, national, regional, and international organizations



# Fellowship Program

1

A Means Tested Program: Applicants must be 21 yrs of age or older, citizens of economically eligible countries as listed in either the World Bank or UN

2

Target those who are either new to ICANN or the ICANN
Meeting environment, returning to further engage and learn
with intent to join community, or as an Alumni Coach of
Newcomers

3

If selected through the Online Application process, granted support covering travel, hotel and stipend with expectation of active engagement at the Meeting as well as after the



# Fellowship at ICANN

1

Support provided by Alumni Coaches starting 6 weeks prior to the Meeting to prepare for Meeting and create spirit of Team

2

Set Schedule of Mandatory Morning and Afternoon Sessions aimed at fast and effective immersion into the ICANN Multistakeholder Community

3

Networking Opportunities; feeling of support, team, community

4

Post Meeting Summary of the Fellowship Experience and thoughts of how to participate and engage moving forward in community, region, globally....



# NextGen@ICANN & ICANN Fellowship

- Education and awareness based
- Designed for smaller, younger, and more region specific group of participants
- 20 to 30 individuals selected per meeting
- Applicants must be students between 18 and 30, and live in the region of the meeting

NextGen@ICANN

# Fellowship

- Focused on capacity building
- Participants from developing and lessdeveloped nations
- 50 Fellows selected for each ICANN meeting
- Candidates must be at least 21 years of age, with no age cap to participate
- Must demonstrate interest in continued engagement with the ICANN community, and meet other selection criteria
- NextGen graduates are encouraged to later apply to the Fellowship program or join other stakeholder groups

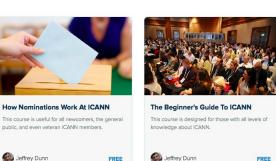


# About ICANN Learn

- Presents resources in easy-to-use format for the community
- Courses are regularl updated to stay rele
- Courses cover ICANI and Non-ICANN topic
- Beginner, IntermediaAdvanced levels
- Simple to sign up, us and learn
- Easy to create a course, too!
- New version in proce (sneak peek in this



Featured Courses





View All Courses



# Goals Of ICANN Learn

1

Make it easier to understand ICANN and get involved 2

Increase understanding of ICANN activities and tools 3

Increase understanding of non-ICANN technical tools

4

Have a resource for learning when you have time. Ready when you are.

5

Bolster knowledge among the community.

6

Be a place where you can share your expertise with others



# How It Works

- Currently in development
- Visit icann.usefedora.com
- Create a free account
- Take any course you wish
- Share thoughts and discuss
- Want to teach? Click'StartTeaching'
- Got a request? Click 'Request'



Featured Courses





View All Courses



