

# ICANN: Myth & Reality

## TIES Workshop

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# Context: Recent Statistics

- 8.5m Level 2 Domains in .com, .net, .org (*NSI Jan 00*)
- 75 Million Hosts (*Est. Jan 2000*)
- 212/246 countries + territories with IP (*NW June 1999*)
- 201 Million Users (*NUA Nov 1999*)
  - Compare: 950 Million Telephone Terminations

# Users on the Internet – Nov. 1999

CAN/US - 112.4M

Europe - 47.15M

Asia/Pac - 33.61M

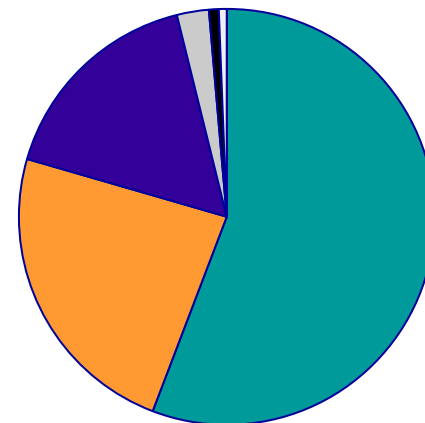
Latin Am - 5.29M

Africa - 1.72M

Mid-east - 0.88 M

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**Total - 201.05M**



# ICANN: The Basic Idea

**ICANN =**

An Experiment in  
Technical Self-Management  
by the global Internet  
community

# ICANN: The Basic Bargain

**ICANN =**

Internationalization  
of Policy Functions for DNS and IP  
Addressing systems

+

Private Sector  
(non-governmental) Management

# What does ICANN do?

Coordinates policies relating to the unique assignment of:

- Internet domain names
- Numerical IP Address
- Protocol Port and Parameter Numbers

Coordinates the DNS Root Server System

- through Root Server System Advisory Committee

# Domain names & IP addresses

- **Domain names** are the familiar, easy-to-remember names for computers on the Internet
  - e.g., amazon.com, tiesweb.org, ge.co.uk
- Domain names correlate to **Internet Protocol numbers** (IP numbers) (e.g., 98.37.241.130) that serve as routing addresses on the Internet
- The **domain name system** (DNS) translates domain names into IP numbers needed for routing packets of information over the Internet

# Categories of Internet Domains

- **Generic Top Level Domains (gTLDs)**
  - .com, .net, .org, .gov, .mil, .edu, .int, .arpa
  - .com, .net, .org open for registration by all persons and entities on a global basis
  - Proposals to add many more gTLDs (.shop, .arts, .union, etc.)
- **Country Code Top Level Domains (ccTLDs)**
  - .uk, .fr, .us, .mx, .ca, .de, etc.
  - Registration requirements vary by domain (many require domicile within the territory or other connection with the territory)
  - Derived from ISO 3166-1 list



# Status Quo Ante ICANN

Most Internet DNS and IP Address coordination functions performed by, or on behalf of, the US government:

- **Defense Advanced Research Projects Agency (DARPA)**
  - Information Sciences Institute (ISI) of University of Southern California
  - Stanford Research Institute (SRI)
- **National Science Foundation (NSF)**
  - IBM, MCI, and Merit
  - AT&T, General Atomics, Network Solutions, Inc. (NSI)
- **National Aeronautics and Space Administration (NASA)**
- **US Department of Energy**

# IANA



*Jon Postel*  
*1943-1998*

# Need for Change

- ◆ Globalization of Internet
- ◆ Commercialization of Internet
- ◆ Need for accountability
- ◆ Need for more formalized management structure
- ◆ Dissatisfaction with lack of competition
- ◆ Trademark/domain name conflicts

# White Paper Principles

White Paper: new policy/management structure must promote 4 goals:

- ◆ Stability
- ◆ Competition
- ◆ Private, bottom-up coordination
- ◆ Representation

# White Paper Implementation

- ◆ Internet community to form non-profit corporation meeting White Paper's 4 criteria
- ◆ US Government (through Commerce Department) to transition centralized coordination functions
- ◆ Amendment of Network Solutions agreement to require competitive registrars in gTLD registries
- ◆ Request to WIPO to study & recommend solutions for trademark/domain-name conflicts

# Status of Transition from USG

- ✓ 25 November, 1998 - ICANN recognized in MoU
- ✓ June, 1999 - Cooperative agreement among ICANN, US Government, root server operators
- ✓ 10 November, 1999
  - ICANN and Network Solutions sign gTLD registry and registrar agreements
  - DoC transfers root authority over gTLDs to ICANN
- ✓ 9 February, 2000
  - Contract with US Government to complete transfer of IANA functions

# Remaining Transition Items

- Year 2000:
  - ccTLD registry agreements
  - IP Address registry agreements
  - Root server operator agreements
- September 30, 2000 - Target date for ICANN to settle all registry + registrar + root server relationships

# Domain Name Issues

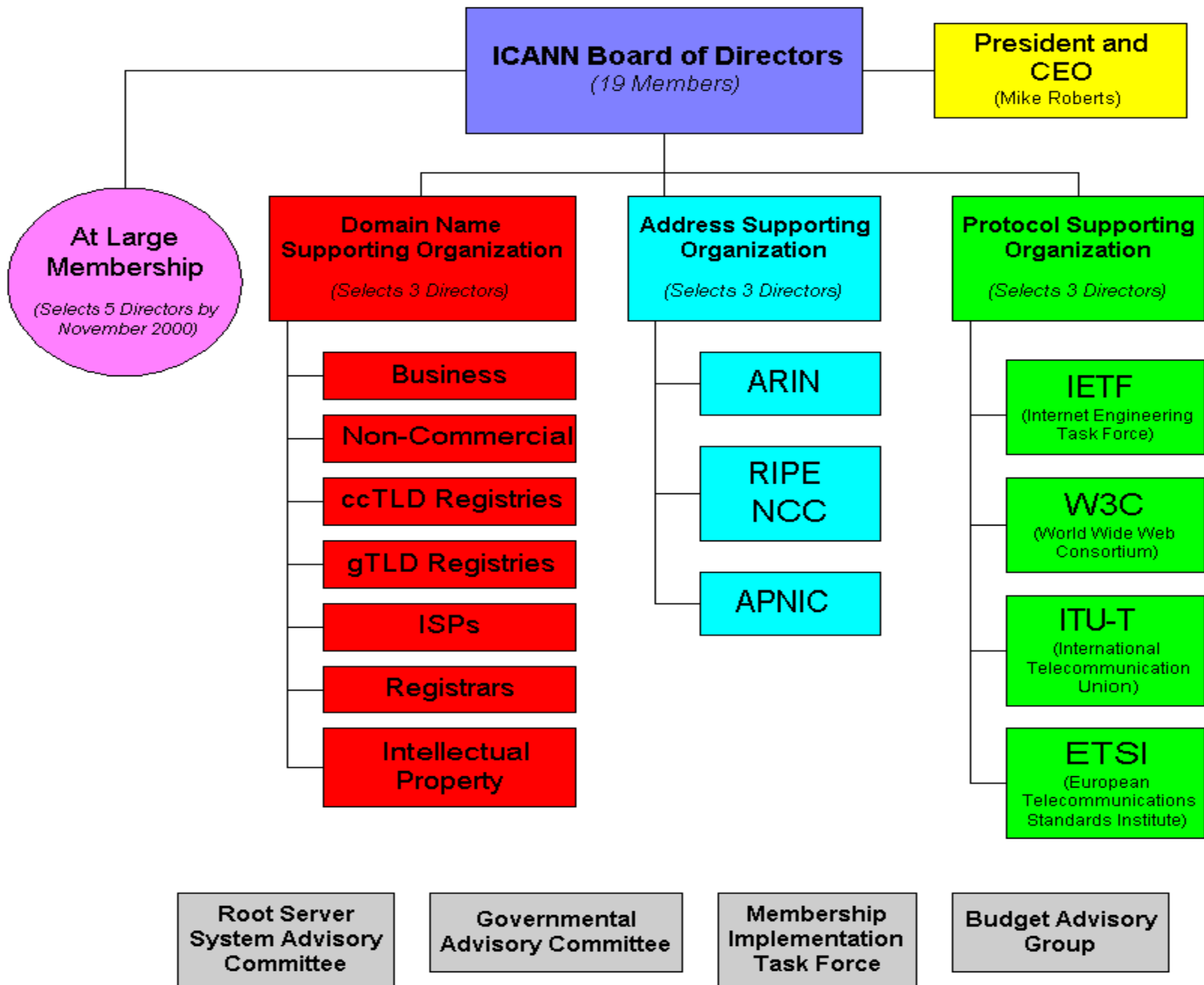
- **Uniform Dispute Resolution Policy**
  - Optional, non-binding alternative to court
  - Average time to resolution: 35-40 days
  - Targets abusive, bad-faith cybersquatting
  - Applies to .com, .net, and .org (not ccTLDs)
  - Three providers: National Arbitration Forum, Disputes.org/e-Resolutions; WIPO
- **Competition in registration services**
  - Pre-ICANN: Monopoly provider (NSI) for .com, .net, .org; minimum cost of US \$70
  - Now: Over 30 competitors; prices at US \$10
- **New Top-Level Domains**
  - ICANN Board to make decision in July
- **Internationalization of DNS character sets**
  - Problem for technical standards bodies (i.e., IETF), not ICANN
  - Need for open standard & interoperability with existing DNS





# Structure of ICANN





# ICANN Board of Directors

## At Large Directors:

- Esther Dyson (USA) – Chairman
- Geraldine Capdeboscq (France)
- George Conrades (USA)
- Greg Crew (Australia)
- Frank Fitzsimmons (USA)
- Hans Kraaijenbrink (Netherlands)
- Jun Murai (Japan)
- Eugenio Triana (Spain)
- Linda S. Wilson (USA)

## ASO Directors:

- Blokzijl (Netherlands)
- Fockler (Canada)
- Wong (Hong Kong, China)

## DNSO Directors:

- Abril i Abril (Spain)
- Cohen (Canada)
- Pisanty (Mexico)

## PSO Directors:

- Abramatic (France)
- Cerf (USA)
- Davidson (U. K.)

# At Large Membership

- Open to any individual with verifiable name, email address, physical address
- Free to join and to vote
- Members will directly elect 5 ICANN Directors by November 2000
- Election by Region
- Nominations committee + petition process
- 6-month study period to follow first election
- Membership Implementation Task Force
- JOIN! <http://members.icann.org>

# Why At Large Elections?

- Accountability
- Transparency
- Representation
  - Geographic
  - Sectoral
- Diversity of views
- Distributed architecture of selection

# ICANN Staff

New Model: Lightweight, minimal staff  
(= minimal bureaucracy)

Current Staff:

- ◆ Interim President and CEO (Mike Roberts)
- ◆ Vice President/General Counsel (Louis Touton)
- ◆ CFO/Policy Director (Andrew McLaughlin)
- ◆ IANA staff (2.3 full-time)

# So does ICANN make law?

- Or: Is ICANN a cyber-government for the Internet?

**A: NO!**

- ICANN has no inherent coercive power, only the ability to enter into contractual relationships through a process of consensus & consent
- ICANN is not a substitute for the powers of governments (i.e., courts and laws)

# Does ICANN regulate/govern?

- **No: ICANN coordinates.**
- **But:** technical coordination of unique values sometimes requires accounting for non-technical policy interests:
  - Data privacy protection
    - (WHOIS database)
  - Intellectual property/trademark law
    - (UDRP)
  - Competition law
    - (Registrar accreditation for .com, .net, .org)



# What ICANN doesn't do

- Network security
- Spam
- Web Sites' Data Privacy Practices
- Internet Content
  - Pornography
  - Hate speech
  - Copyright violations
  - Deceptive business practices / consumer protection
- Multi-jurisdictional commercial disputes
- Definition of technical standards
  - Network surveillance and traceability
- Internet gambling

# Lessons from the Experiment?

- Private-sector self-management is possible, if narrowly chartered
- Global consensus on policy is difficult to define; even harder to achieve
  - Consensus is a tradition in the technical community in which ICANN is rooted, because you can test solutions & refer to objective data
  - Consensus on policy questions can be elusive, because it depends upon subjective values

# For Further Information:

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