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
Says *The Economist*:

- “ICANN is in many ways a completely new institutional animal.”
- “It is a hybrid between an online community and a real-world governance structure, an untested combination.”
- “It is also a new type of international organisation: an industry trying to regulate part of itself, across the globe, with little or no input from national governments.”

*(10 June 2000)*
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
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
Policy Objectives for Year 2000

• New Top-Level Domains
• At Large Membership Elections

• 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)
  - Four providers: National Arbitration Forum, Disputes.org/e-Resolutions; WIPO; CPR

- **Competition in registration services**
  - Pre-ICANN: Monopoly provider (NSI) for .com, .net, .org; minimum cost of US $70
  - Now: Over 45 competitors worldwide (+ resellers); prices start at US $10

- **New Top-Level Domains**
  - ICANN Board to make decision on how to proceed in July; staff proposals posted

- **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 Capdebsocq (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.)
New Model: Lightweight
(minimal staff = minimal bureaucracy)

Current Staff:
- President and CEO (Mike Roberts)
- Vice President/General Counsel (Louis Touton)
- Chief Policy Officer/CFO (Andrew McLaughlin)
- Registrar Liaison (Dan Halloran)
- IANA staff (Joyce Reynolds, Michelle Schipper, Suzanne Woolf)
- Network Administrator (Jim Villaruz)
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 + self-nomination
- 6-month study period to follow first election
- Membership Implementation Task Force
- JOIN!  http://members.icann.org
Applications for Membership (~7 June)

- Africa
  - 391 (2%)
- Asia/Pacific
  - 3164 (15%)
- Europe
  - 7838 (38%)
- LA/C
  - 435 (2%)
- North Am
  - 8871 (43%)
## Applications for Membership (~7 June)

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Why Elect Directors?

• Accountability
• Transparency
• Representation
  – Geographic
  – Sectoral
• Diversity of views
• Distributed architecture of selection
• BUT: ICANN needs high-quality directors, a goal which may be in tension with representation
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 govern/regulate?

• 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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http://www.icann.org