How Can We Actualize the Sustainable Internet Society
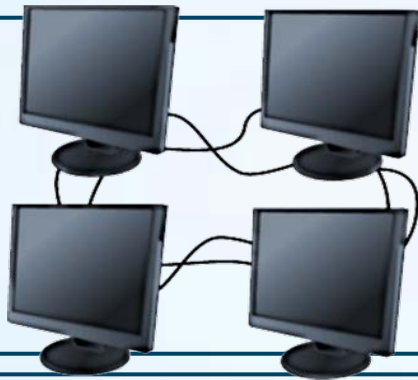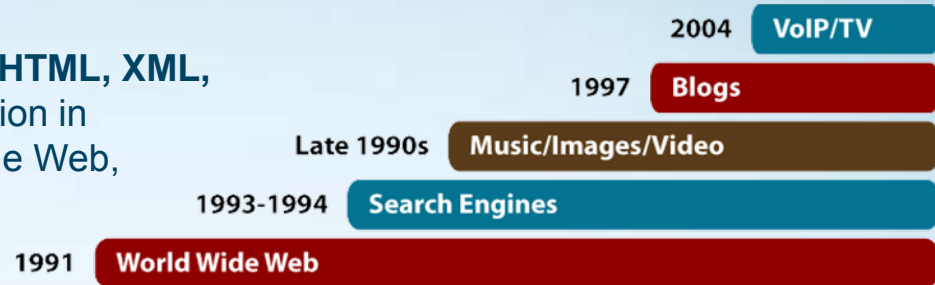
ICANN

Paul Twomey
President and CEO

24 April 2008

GIIC-Keidanren Conference
Tokyo, Japan

Internet ecosystem

Content and applications standards (HTML, XML, Java) – Promotes creativity and innovation in applications leading to email, World Wide Web, ebanking, wiki, Skype, and much more

2004	**VoIP/TV**
1997	**Blogs**
Late 1990s	**Music/Images/Video**
1993-1994	**Search Engines**
1991	**World Wide Web**

ICANN'S Responsibility

Internet protocols and standards (TCP/IP, DNS, SSL) – TCP/IP, controls traffic flow by dividing email and web data into packages before they are transmitted on the Internet
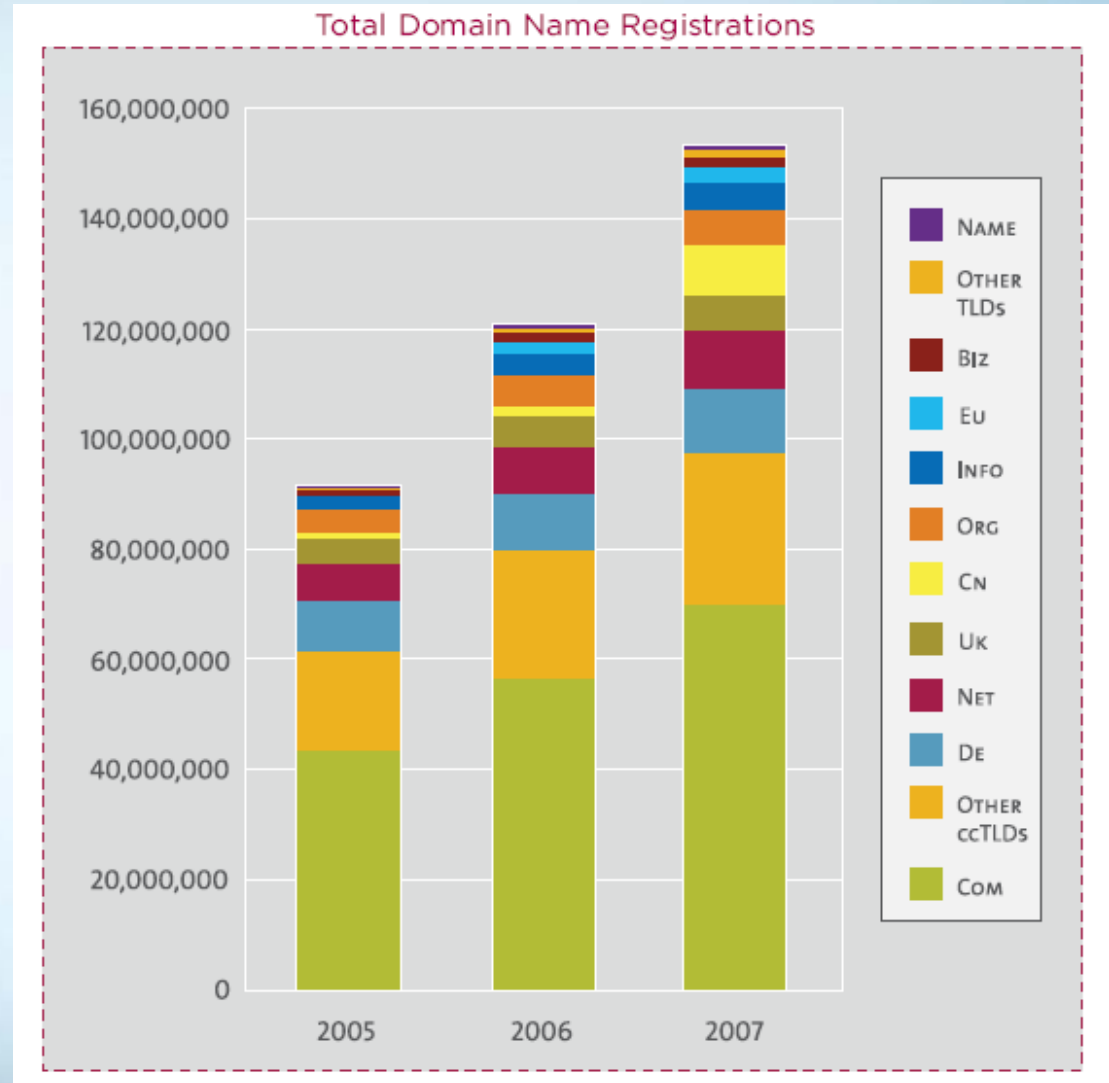
Telecommunications infrastructure – Physical network made up of underwater cables, telephone lines, fiber optics, satellites, microwaves, wi-fi, and so on – facilitates transfer of electronic data over the Internet

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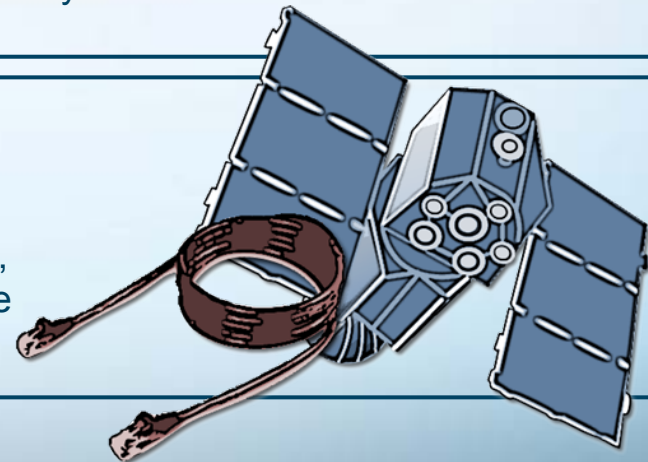
Snapshot of the domain name marketplace

- More than **153 million** domain names registered worldwide

- About 20 gTLDs and 252 ccTLDs support these registrations

- Users are demanding more

Total Domain Name Registrations

Legend:
- Name
- Other TLDs
- Biz
- Eu
- Info
- Org
- Cn
- Uk
- Net
- De
- Other ccTLDs
- Com

X-axis: 2005, 2006, 2007
Y-axis: 0 to 160,000,000

Source: VeriSign Domain Name Brief, March 2008

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Domain name demand – year over year

The next Internet generation

1 billion
new users
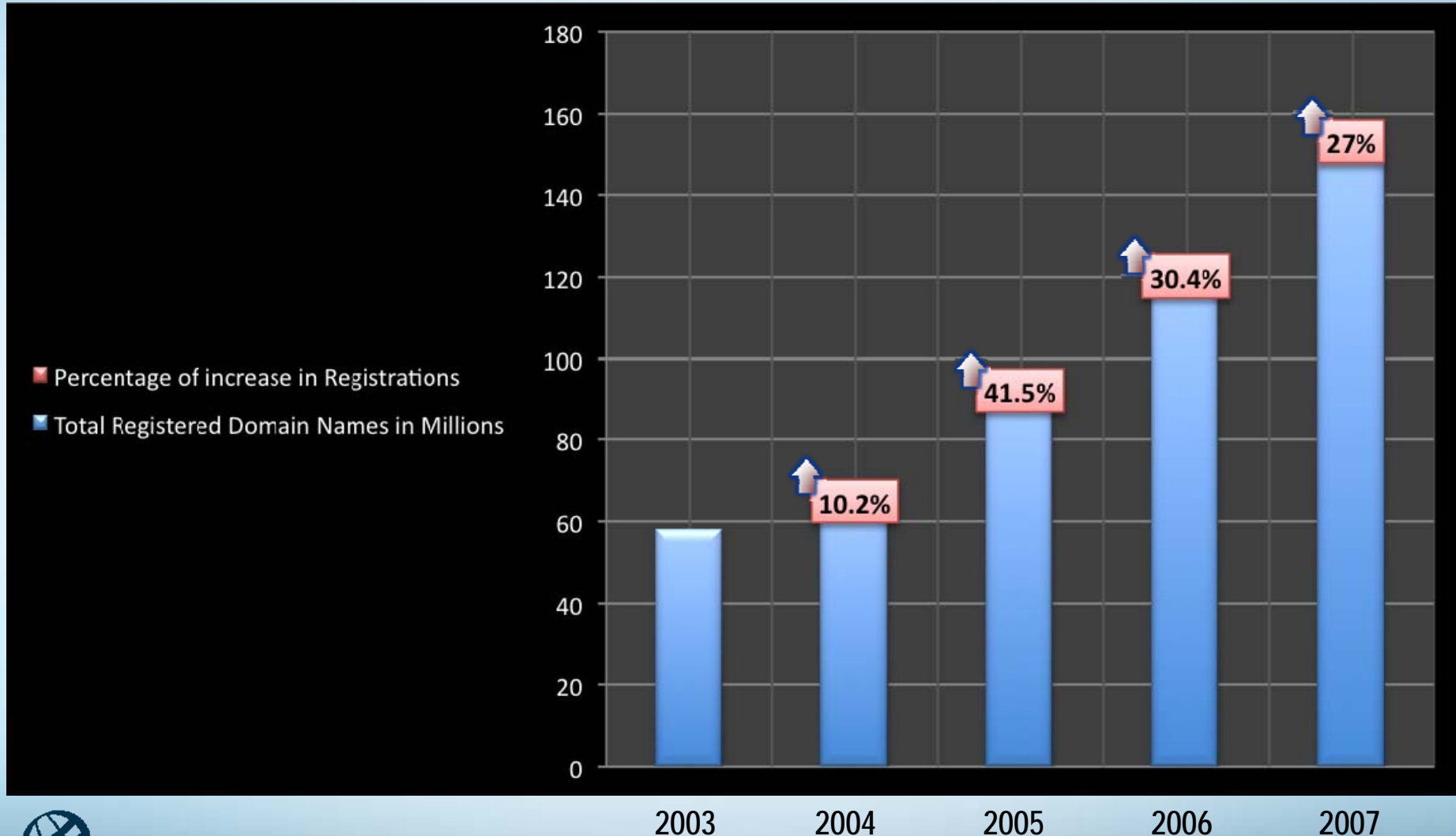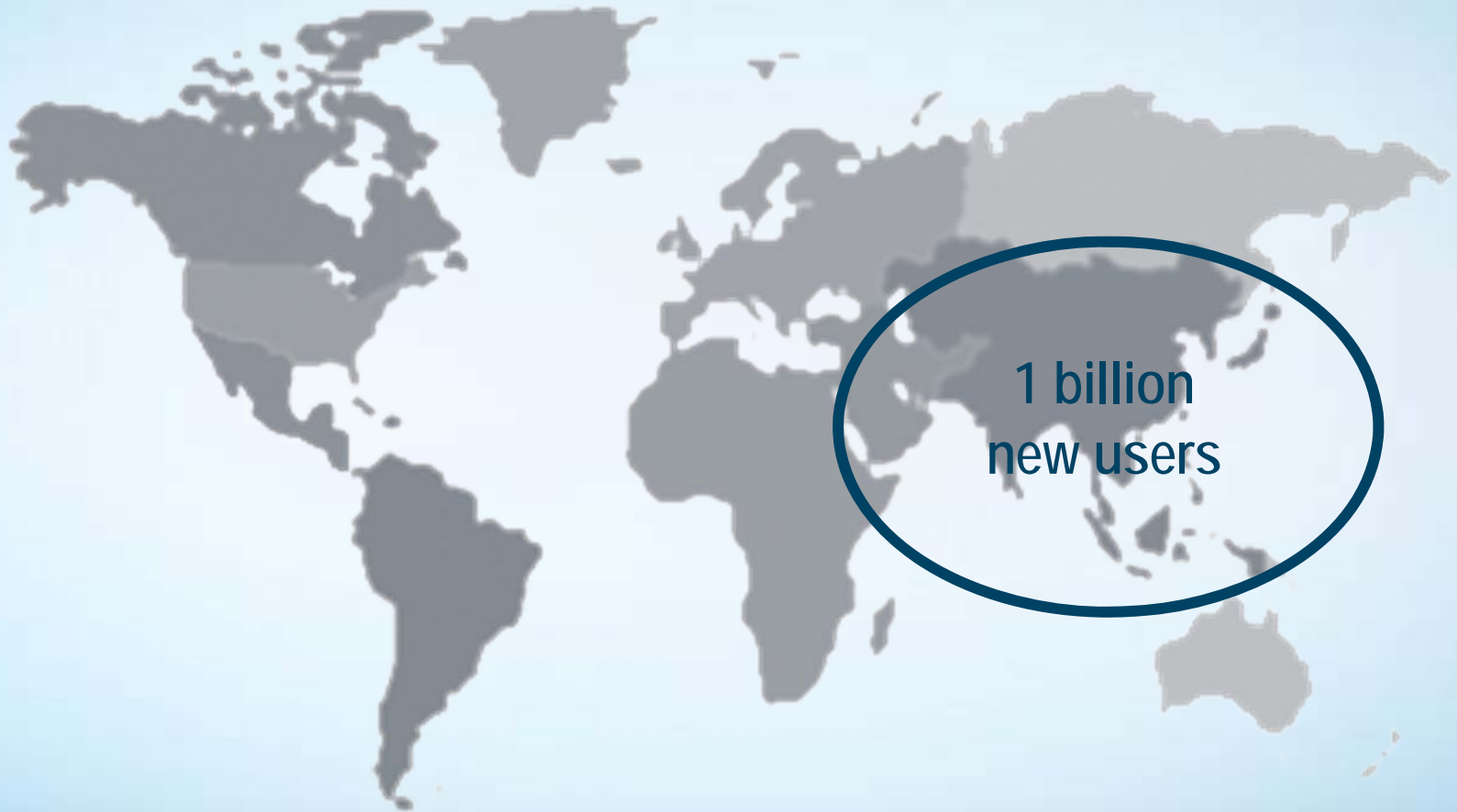
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Agenda

- Multi-stakeholder participation through ICANN's bottom-up consensus-building model

- How the business community can enhance their business models — and at the same time strengthen the Internet's sustainability — by implementing IPv6

ICANN mission statement

- To coordinate, overall, the global Internet's system of unique identifiers, and to ensure stable and secure operation of the Internet's unique identifier systems. In particular, ICANN coordinates:

    1. Allocation and assignment of the three sets of unique identifiers for the Internet:

        - Domain names (forming a system called the DNS)
        - Internet protocol (IP) addresses and autonomous system (AS) numbers
        - Protocol port and parameter numbers

    2. Operation and evolution of the DNS root name server system

    3. Policy development reasonably and appropriately related to these technical functions

Principles of operation

- Contribute to the stability and security of the unique identifiers system and root management

- Promote competition and choice for registrants and other users

- Provide a forum for multi-stakeholder bottom-up development of related policy

- Ensure on a global basis an opportunity for participation by all interested parties

ICANN multi-stakeholder model

Board of Directors

Governmental Advisory Committee (GAC)

President and CEO

ICANN Staff
Marina del Rey - 60
Sydney - 4
Brussels - 10
Other - 20

Nominating Committee

15 voting members + 6 non-voting liaisons

Technical Liaison Group (TLG)

Internet Engineering Task Force (IETF)

ASO

Regional Internet Registries
ARIN
RIPE NCC
LACNIC
APNIC
AfriNIC

GNSO

Commercial and Business
gTLD Registries
ISPs
Non-Commercial Registrars
Intellectual Property

CCNSO

ccTLD Registries
(.de
.uk
.cn,
.nl,
etc.)

Root Server System Advisory Committee (RSSAC)

Security & Stability Advisory Committee (SSAC)
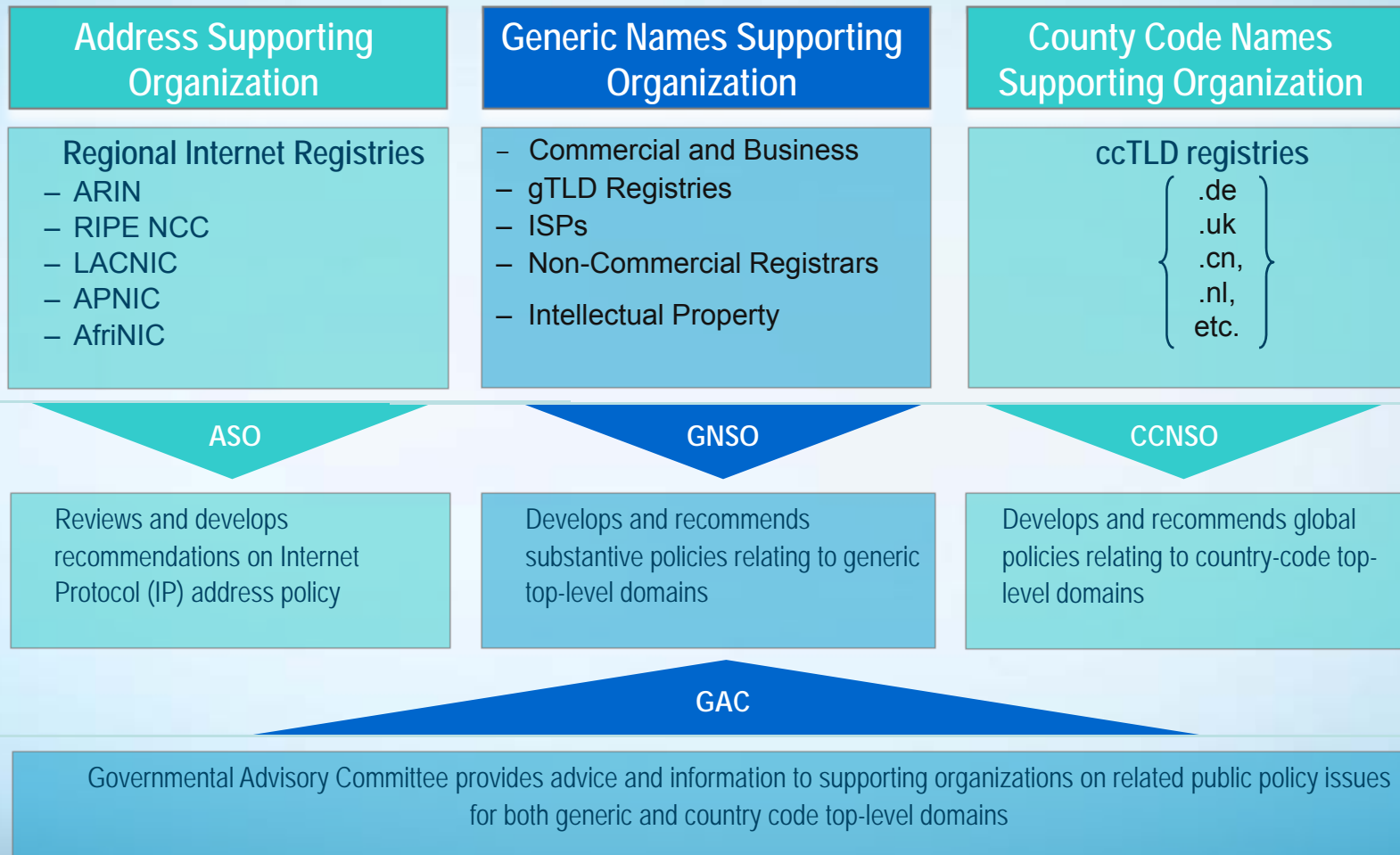
At Large Advisory Committee (ALAC)

Participate through public comment on ICANN issues and work

Open for comment now:		Recently closed comment forums:	Upcoming forums and recent changes:	Archived forums:

GNSO Improvements Report 2008

- Discussion Draft of Interim Re IDNC WG (IDN ccTLD Fast T (ends 25 Apr 08)
- ICANN Travel Support Policy (ends 24 Apr 08)
- GNSO Improvements Report (ends 25 Apr 08)

Open: 25 Feb 08
Closed: ~~25 Mar 08~~
Extended to 25 Apr 08

Explanation: On February 15, 2008, ICANN's Board acknowledged receipt of the "GNSO Improvements Report" and indicated that it would like to receive final public comments on the Report to enable it to consider and implement the Report's recommendations as soon as possible. The Board has directed ICANN staff to open a public comment forum on the Report for 30 days, draft a detailed implementation plan in consultation with the GNSO, begin implementation of the non-contentious recommendations, and return to the Board and community for further consideration of the implementation plan. A copy of the Board's resolution regarding this matter can be found here.

You can read the full report here [PDF, 197K] and see a web page with more information here.

The ICANN Board Governance Committee's "GNSO Review Working Group" developed the Report's set of recommendations to improve the effectiveness of the GNSO, including its policy activities, structure, operations and communications. The Report reflects the Working Group's examination of many aspects of the GNSO's functioning, including the use of working groups and the overall policy development process (PDP), and the structure of the GNSO Council and its constituencies. The Board Governance Committee determined that the GNSO Improvements working group had fulfilled its charter and forwarded the report to the Board for consideration.

Originally due to close on 25 March 2008, the public comment period on the GNSO Improvements Report has been extended by one month, now closing on 25 April 2008. On 19 March 2008, the Board's Executive Committee agreed to grant the extension to permit sufficient time for: i) the parties requesting the extension to have sufficient time to provide to the ICANN Board their proposal, including the details of the consultations and nature of the support that they have gathered; and, ii) to allow time for an additional call to the community to file submissions relating to all aspects of the posted report.

Is it clear to you what this comment period covers? Do you have all the information you need to respond? Please click "More information please" below to email ICANN directly

Staff member responsible: Denise Michel | More information please

Announcement | Comments | Add comment | Summary/analysis of comments

Participate in ICANN policy development process

Address Supporting Organization	Generic Names Supporting Organization	County Code Names Supporting Organization
Regional Internet Registries – ARIN – RIPE NCC – LACNIC – APNIC – AfriNIC	– Commercial and Business – gTLD Registries – ISPs – Non-Commercial Registrars – Intellectual Property	ccTLD registries .de .uk .cn, .nl, etc.
ASO	**GNSO**	**CCNSO**
Reviews and develops recommendations on Internet Protocol (IP) address policy	Develops and recommends substantive policies relating to generic top-level domains	Develops and recommends global policies relating to country-code top-level domains

GAC

Governmental Advisory Committee provides advice and information to supporting organizations on related public policy issues for both generic and country code top-level domains

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Why you should participate

- **First,** to gain access to latest expert knowledge
- **Second,** to have easy and free access to reports
- **Third,** to have early awareness of problems and solutions
- **Fourth,** to contribute to global Internet policies
- **Fifth,** to reinforce private sector leadership
- **Sixth,** to take advantage of networking opportunities
- **Seventh,** to take advantage of a single, globally interoperable root

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Building an IPv6 business case

- Industry and government slow to adopt
  - Perceived as a tool
  - Technical advantages emphasized over business potential
- Business leaders are rightly concerned about how to resolve problems, how to generate revenue, and how to build efficiencies and cost savings into their organizations

IPv4 marketplace facts

- IPv4 address space is in short supply ─ will probably be allocated within two to three years

- IPv4 has been pushed to its limits

- Free pool of IPv4 space will run out before IPv6 is fully deployed ─ impeding Internet growth

- Technology advancements in areas like anycasting, multicasting, or peer-to-peer exchanges have been short-changed by IPv4 limitations

- Security and quality of service have been compromised

- Network extension measures are becoming inadequate ─ increasing complexity and creating problems

Remember the next Internet generation

1 billion
new users

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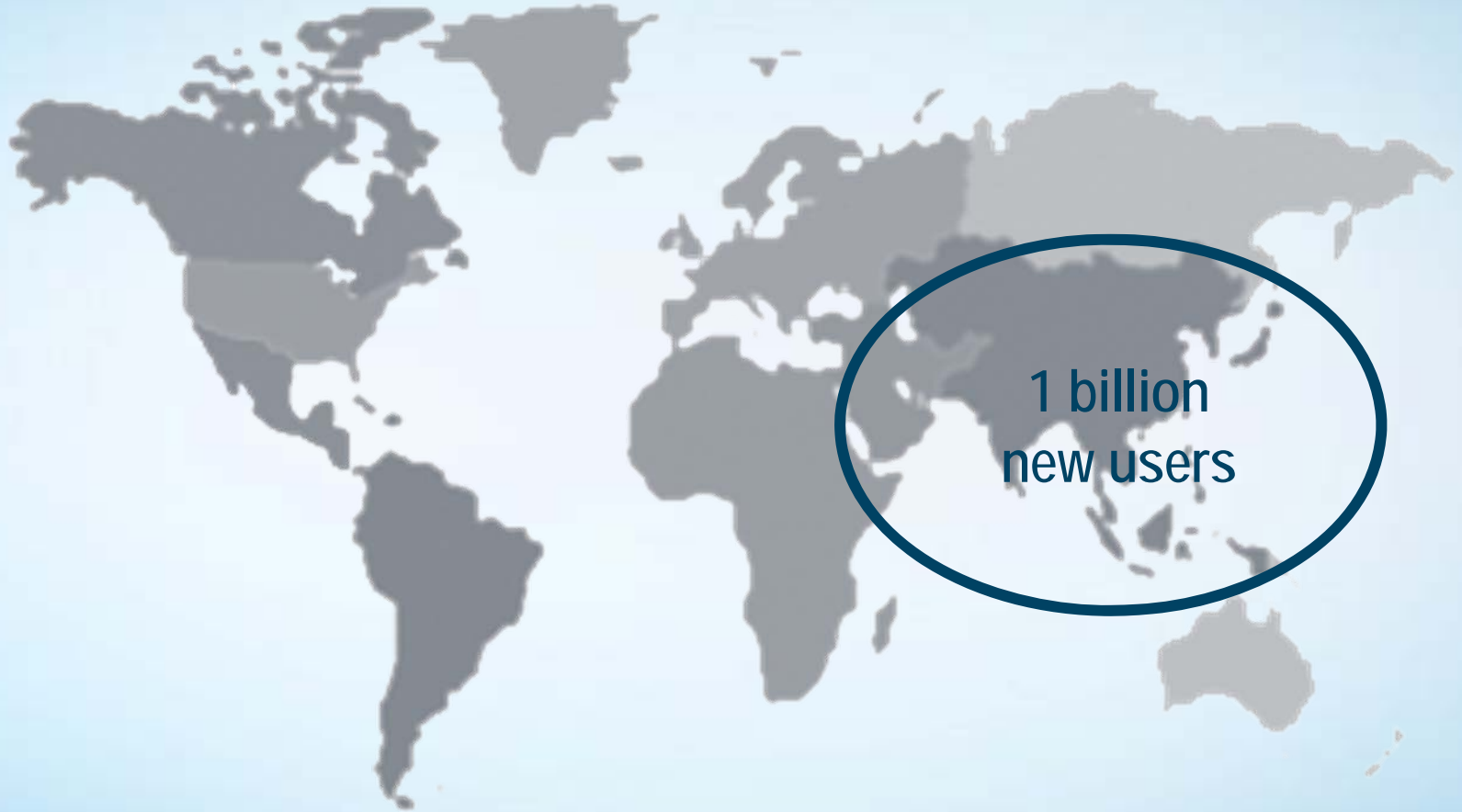
IPv6 support by governments and standards bodies

- IETF IPv6 working group work is done ─ IPv6 management working group focus is on tweaks
- Japan identified IPv6 as a critical part of the eJapan 2005 initiative
- The Asia Pacific region is among the leaders in IPv6 deployment
- The Chinese government created and financially supports CNGI, an IPv6 backbone network
- United States Department of Defense mandated the integration of IPv6 ─ procurement mandates in place
- NIST is developing profiles that will apply to all US government agencies

IPv6 support by industry

- Most commercial ISP networks must offer IPv6 services as part of their standard packages
  - Support by commercial network operators is essential to maintain credibility
- Strong business case will come from
  - Cost savings
  - Potential for considerably larger networks
  - Greater network stability and security
  - Long-term potential for the creation of new and improved net-centric sets of products and services

IPv6 potential

- IPv6 can be used to solve real world problems that add value to organizations and have return on investment models attractive to management, such as
  - Sensor networks
  - Product tethering/communities of interest
  - Ubiquitous communications
- IPv6 offers a very stable and flexible platform that supports mobility, ad-hoc networking, and a large number of simple devices

IPv6 advancement and awareness front

- Strategic planning at the corporate level
  - US Department of Defense long-term strategic planning by a large-scale organization is one example
- Return on investment
  - Chinese government's 20-year plan to connect is an example of long-term planning for ROI
- Technical knowledge at a tactical level
  - 3GPP Greenfield standard for next generation wireless with strategic thinking in scale and dimension

What's happening now

- OECD risk-reward study
- ICANN. Number Resource Organization and the Regional Internet Registries are addressing
  - Backend server support
  - Front end website support
  - IPv6 glue records in zone files
  - IPv6 enabled registration services
- ICANN, IETF and other organizations working to ensure
  - IPv6 is first-class citizen in DNS root zone
  - IANA/ICANN does everything it can to support rapid and universal IPv6 deployment

Thank You

www.icann.org