

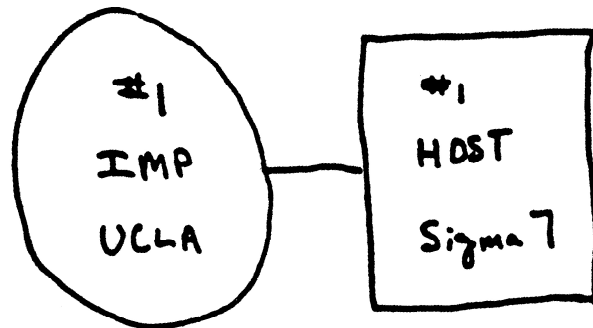
ICANN Overview



Baher Esmat
Middle East Liaison

APTLD Meeting,
Dubai
3-6 June, 2007

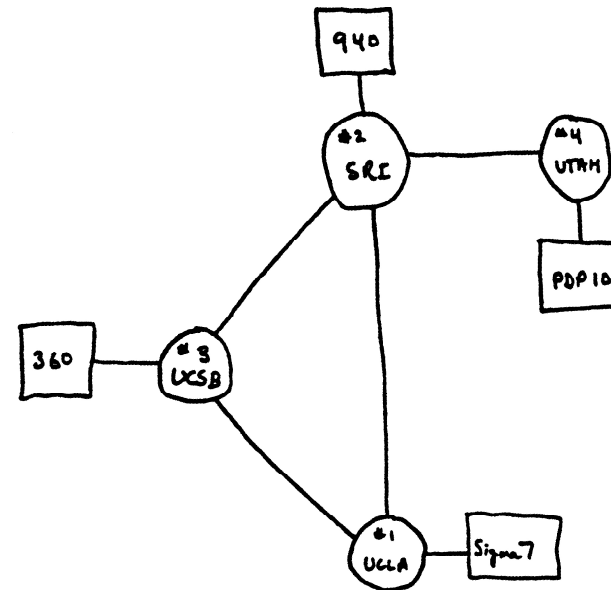
In the beginning...



THE ARPA NETWORK

SEPT 1969

1 NODE



THE ARPA NETWORK

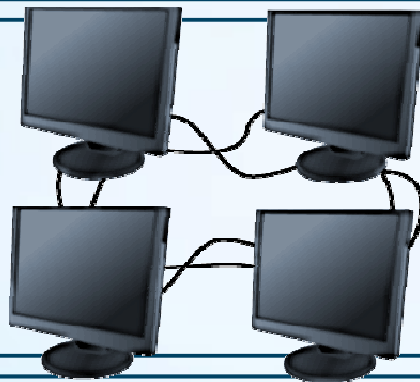
DEC 1969

4 NODES

Internet's Three Operating Layers

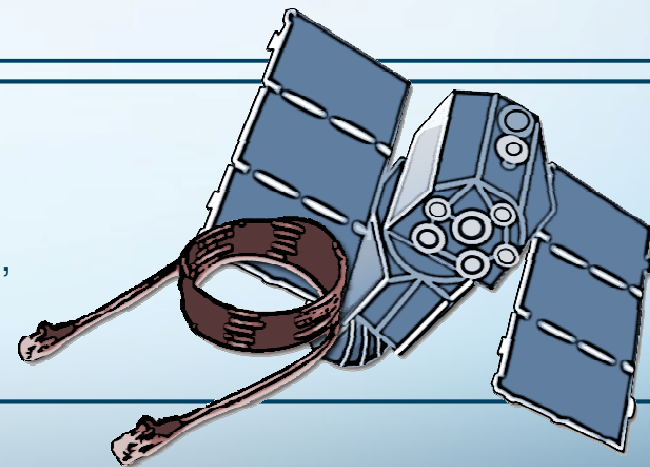


Content and applications standards (HTML, XML, Java) – Promotes creativity and innovation in applications leading to email, World Wide Web, ebanking, blogs, Skype, and much more

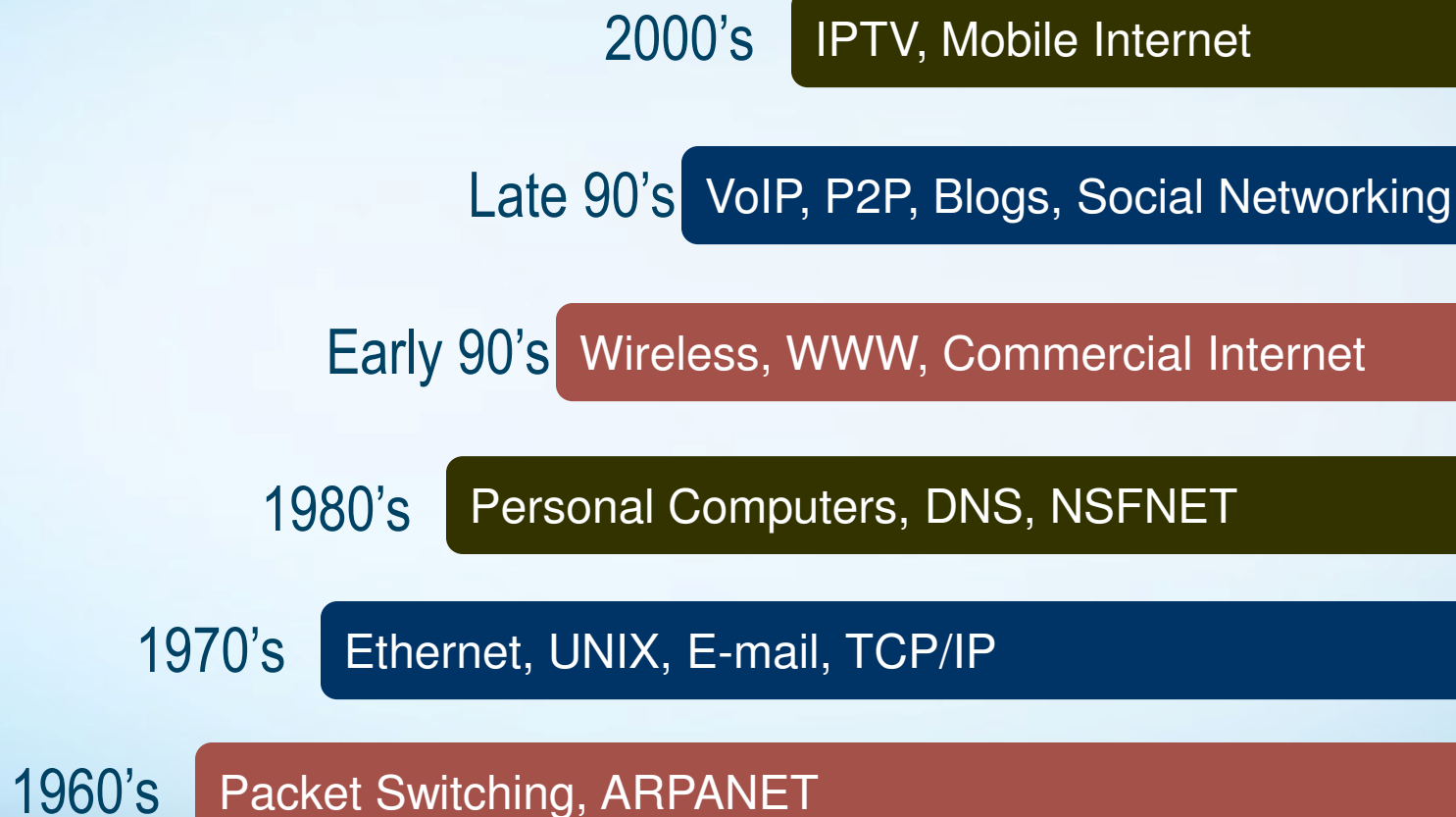


Internet protocols and standards (TCP/IP, DNS, SSL) – TCP/IP, controls traffic flow by dividing email and web data into packages before they are transmitted on the Internet

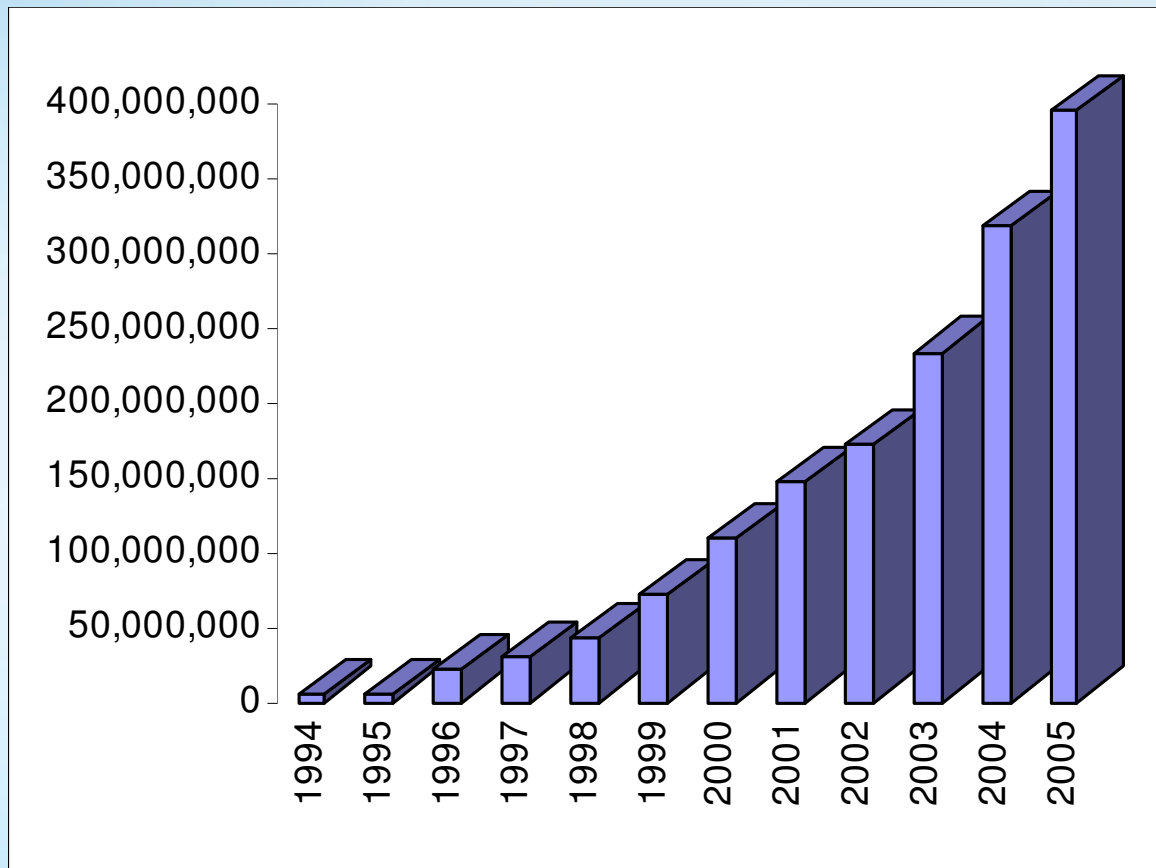
Telecommunications infrastructure – Physical network made up of underwater cables, telephone lines, fiber optics, satellites, microwaves, wi-fi, and so on Facilitates transfer of electronic data over the Internet



And it is yet evolving...



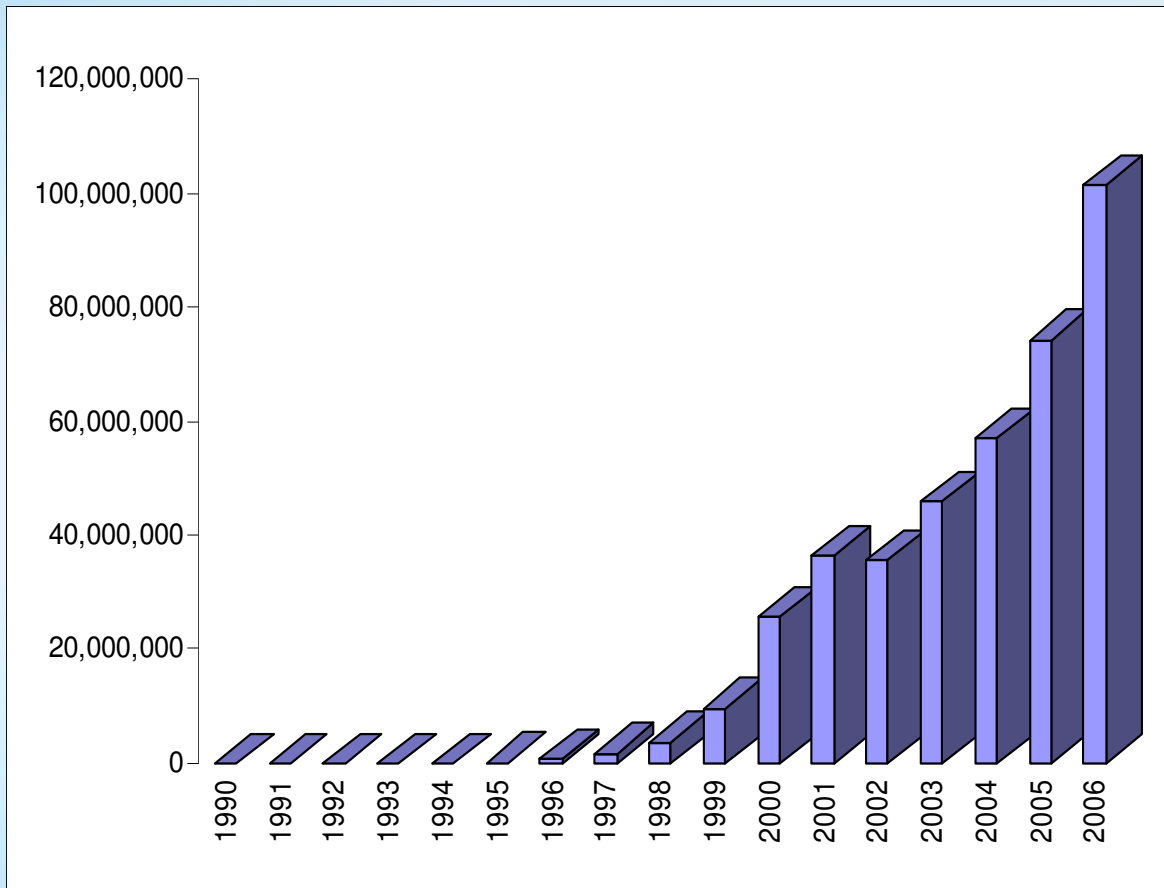
Growth in Hosts



Dec-69	4
Dec-74	62
Dec-79	188
Dec-84	1,024
Dec-89	159,000
Dec-94	4,852,000
Dec-95	5,846,000
Dec-96	21,819,000
Dec-97	29,670,000
Dec-98	43,230,000
Dec-99	72,398,092
Dec-00	109,574,429
Dec-01	147,344,723
Dec-02	171,638,297
Dec-03	233,101,481
Dec-04	317,646,084
Dec-05	394,991,609
Jul-06	439,286,364

Source: <http://www.zakon.org/robert/internet/timeline/>

Growth in WWW



1990	1
1991	10
1992	50
1993	623
1994	10,022
1995	100,000
1996	603,367
1997	1,681,868
1998	3,689,227
1999	9,560,866
2000	25,675,581
2001	36,276,252
2002	35,543,105
2003	45,980,112
2004	56,923,737
2005	74,353,258
2006	101,435,253

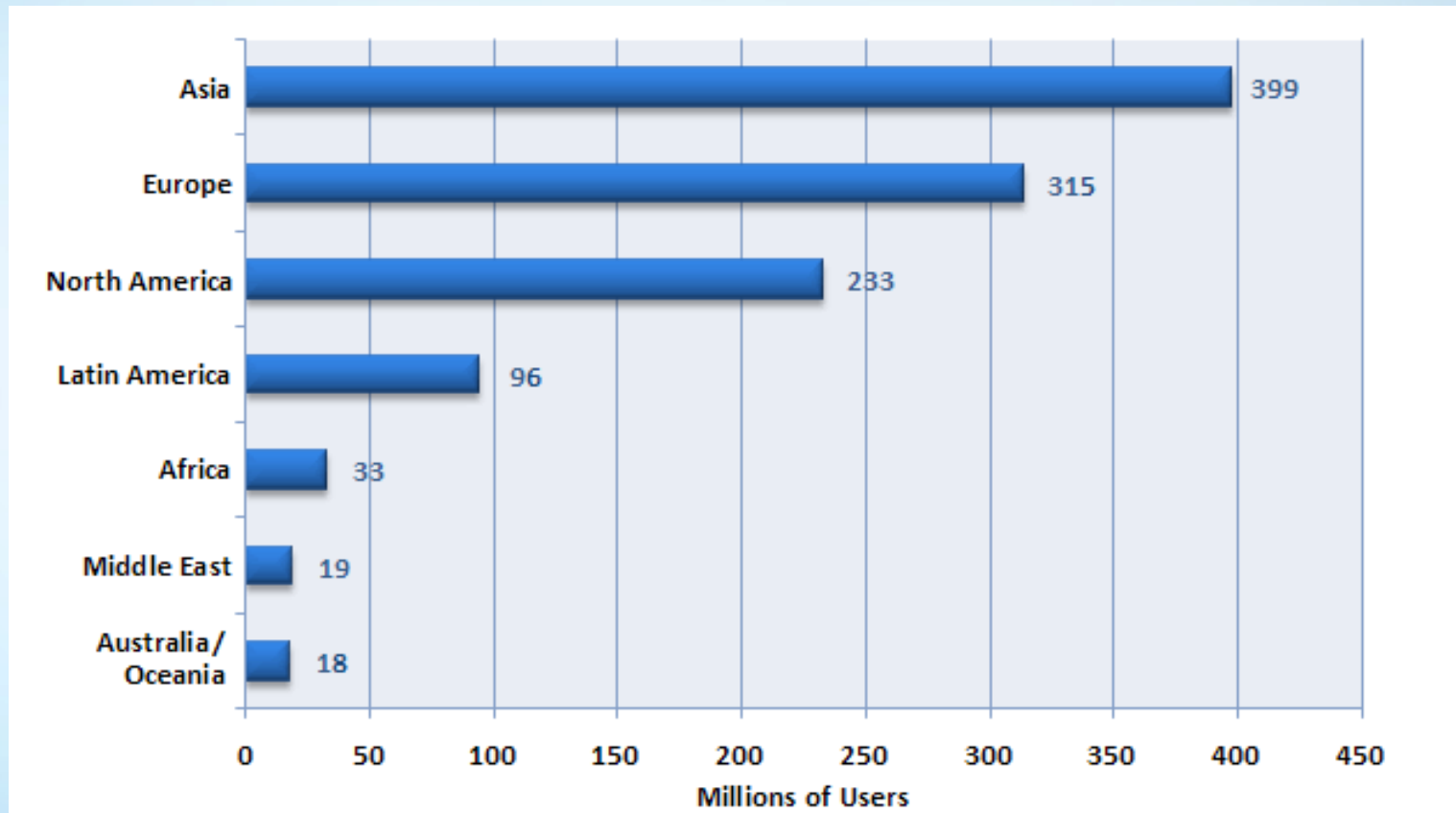
Source: <http://www.zakon.org/robert/internet/timeline/>

Internet Population

WORLD INTERNET USAGE AND POPULATION STATISTICS						
World Regions	Population (2007 Est.)	Population % of World	Internet Usage, Latest Data	% Population (Penetration)	Usage % of World	Usage Growth 2000-2007
Africa	933,448,292	14.2 %	33,334,800	3.6 %	3.0 %	638.4% %
Asia	3,712,527,624	56.5 %	398,709,065	10.7 %	35.8 %	248.8% %
Europe	809,624,686	12.3 %	314,792,225	38.9 %	28.3%	199.5 %
Middle East	193,452,727	2.9 %	19,424,700	10.0 %	1.7 %	491.4 %
North America	334,538,018	5.1 %	233,188,086	69.7 %	20.9%	115.7 %
Latin America/Caribbean	556,606,627	8.5 %	96,386,009	17.3 %	8.7 %	433.4 %
Oceania / Australia	34,468,443	0.5 %	18,439,541	53.5 %	1.7 %	142.0 %
WORLD TOTAL	6,574,666,417	100.0 %	1,114,274,426	16.9 %	100.0 %	208.7 %

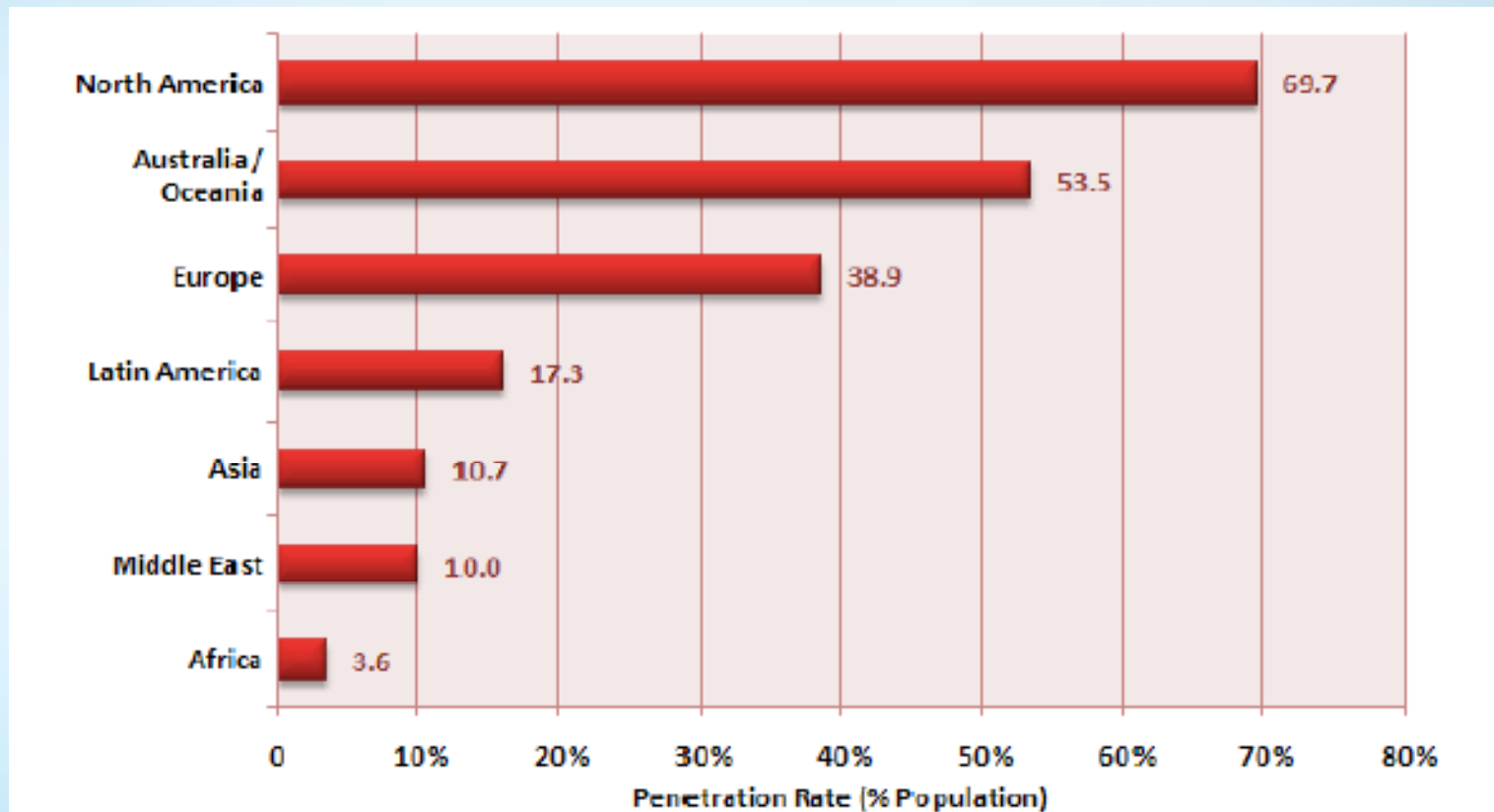
NOTES: (1) Internet Usage and World Population Statistics were updated on Mar. 10, 2007. (2) CLICK on each world region for detailed regional information. (3) Demographic (Population) numbers are based on data contained in the [world-gazetteer](#) website. (4) Internet usage information comes from data published by Nielsen//NetRatings, by the International Telecommunications Union, by local NICs, and other other reliable sources. (5) For definitions, disclaimer, and navigation help, see the [Site Surfing Guide](#). (6) Information from this site may be cited, giving due credit and establishing an active link back to [www.internetworldstats.com](#). Copyright © 2007, Miniwatts Marketing Group. All rights reserved worldwide.

Internet Users by Region



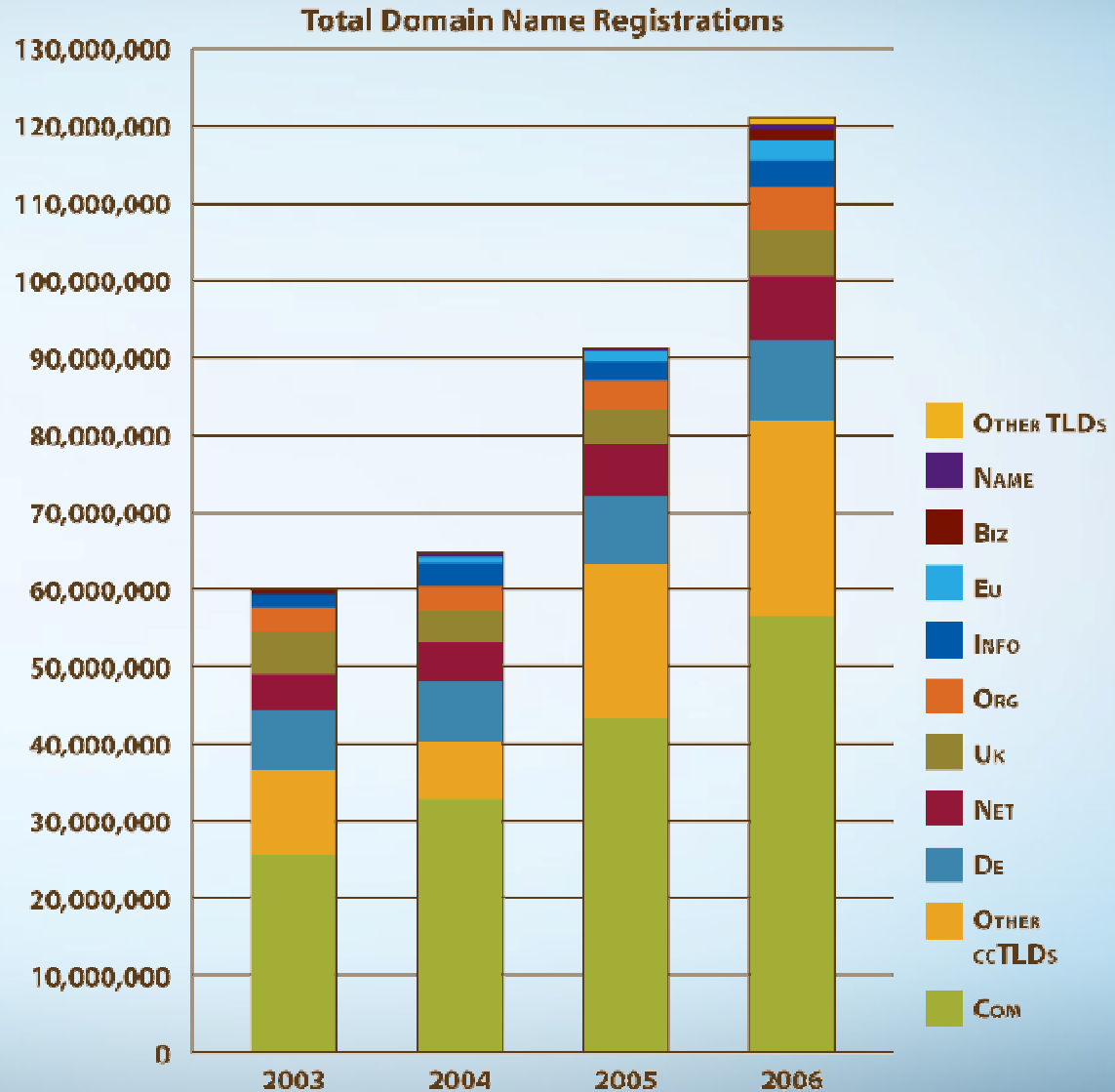
Source: <http://www.internetworldstats.com/stats.htm>

Internet Penetration by Region

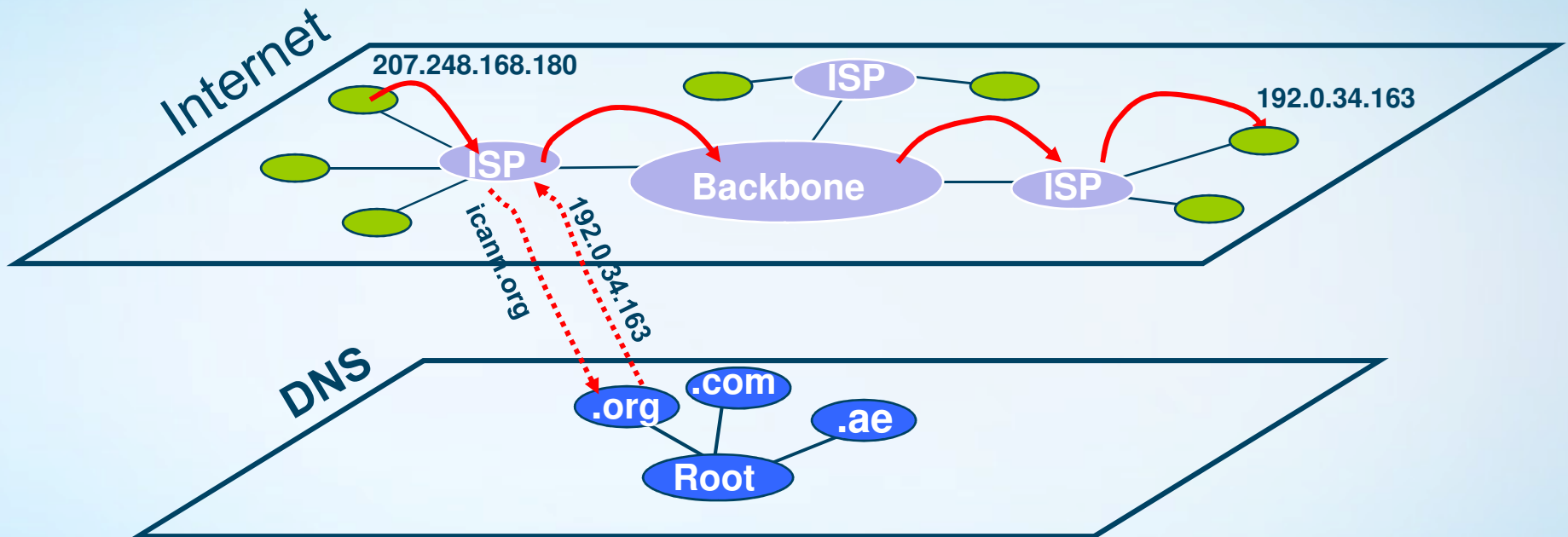


Top Level Domain Names

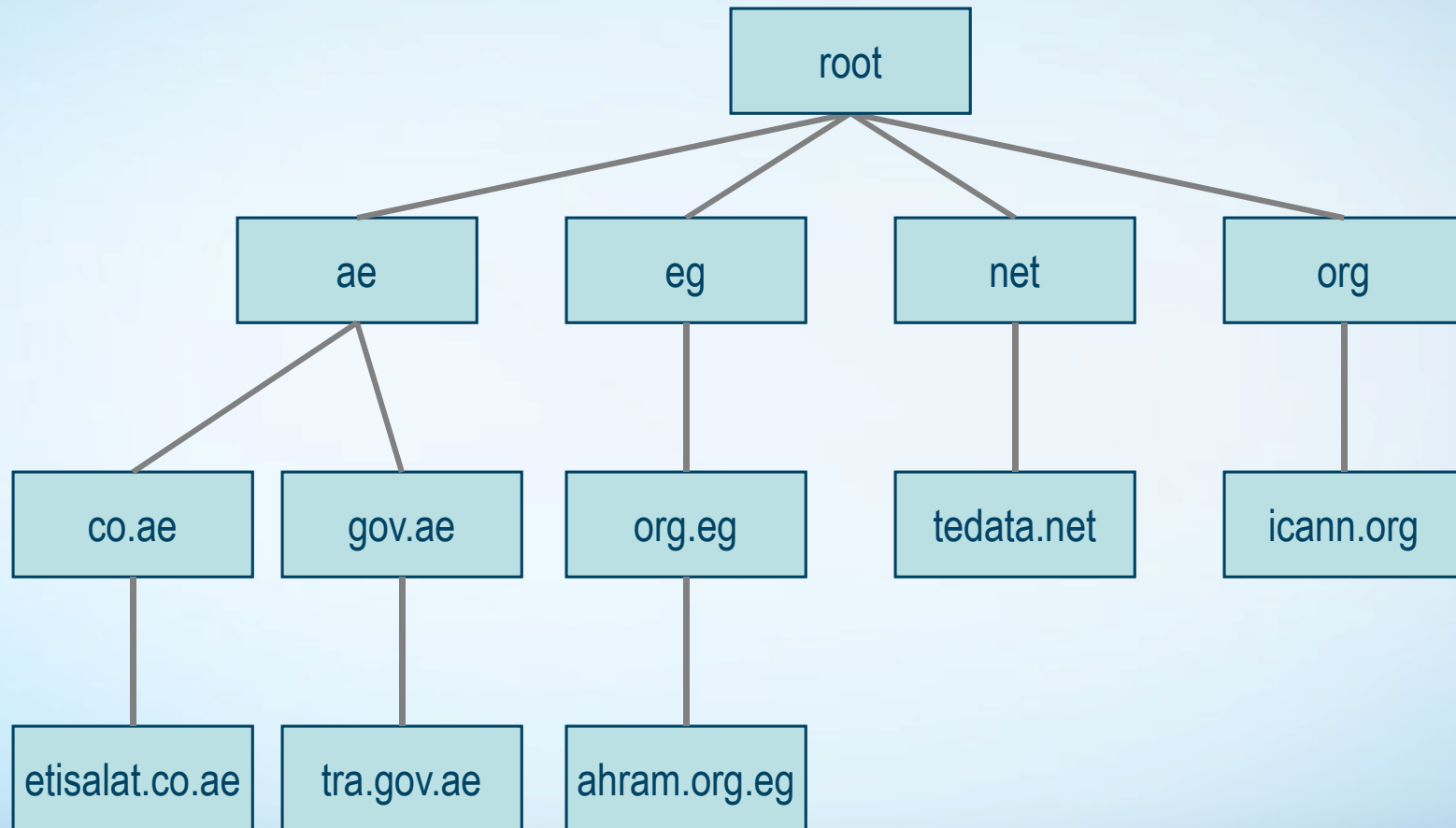
More than **120 million** domain names registered globally today



Internet Names and Numbers



The DNS Tree



Root Servers

- 13 root servers which together contain authoritative databases listing all top level domains (*i.e. org, net, uk, ae*)
- Root servers names are *letter.root-servers.net* where *letter* ranges from a to m (m.root-servers.net)
 - a NSI Herndon, VA,
 - b USC-ISI Marina del Rey, CA,
 - c PSInet Herndon, VA,
 - d U of Maryland College Park, MD,
 - e NASA Mt View, CA,
 - f Internet Software C. Palo Alto, CA,
 - g DISA Vienna, VA,
 - h ARL Aberdeen, MD,
 - i NORDUnet Stockholm,
 - j NSI (TBD) Herndon, VA,
 - k RIPE London,
 - l ICANN Marina del Rey, CA,
 - m WIDE Tokyo,
- The C, F, I, J, K and M servers exist in multiple locations on different continents using anycast

Internet Assigned Numbers Authority (IANA)



- Established informally as a reference to various technical functions the Information Sciences Institute performed for ARPANET
- The first reference to the name "IANA" in the RFC 1060, published in 1990, but the function, and the term, was well established long before that
- Jon Postel managed the IANA function from its inception until his passing in October 1998
- On December 24, 1998, USG entered into a transition agreement with the Internet Corporation for Assigned Names and Numbers ICANN, transferring the IANA function to ICANN, effective January 1, 1999

Need for change circa 1996–97

- **Globalization** of Internet
- **Commercialization** of Internet
- Lack of **competition** in domain name space
- Trademark–domain name **conflicts**
- Need for a new model of **governance**

The “New Corporation” - ICANN

- July 1997
 - Clinton’s administration published a Framework for Global Electronic Commerce in which it directed the Secretary of Commerce to privatize the Domain Name System
 - US DoC issued an RFC on DNS administration soliciting public input on issues pertaining to the overall framework of the DNS administration, creation of new top-level domains, policies for domain name registrars, and trademark issues
- January 1998
 - NTIA, an agency of the DoC published a Proposal to Improve the Technical Management of Internet Names and Addresses (Green Paper) that called for the creation of a new private non-commercial corporation (New Corporation)
- June 1998
 - NTIA published the White Paper in which it articulated 4 principles for the new system:
 - Stability
 - Competition
 - Private, bottom-up Coordination
 - Representation
- September 1998
 - The Internet Corporation for Assigned Names and Numbers (ICANN) was established

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

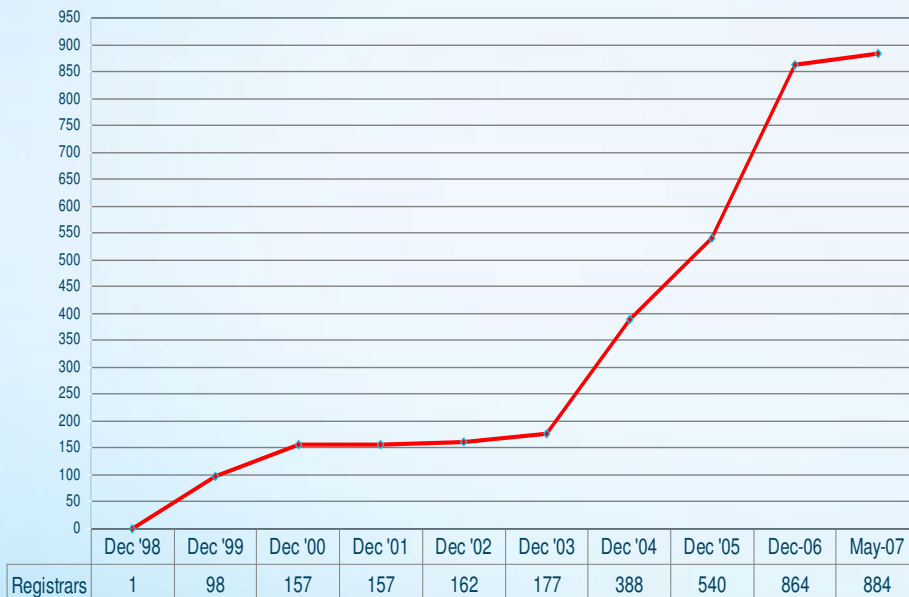
1. Contribute to stability and security of the unique identifiers system and root management
2. Promote competition and choice for registrants and other users
3. Forum for multi-stakeholder bottom-up development of related policy
4. Ensuring on a global basis an opportunity for participation by all interested parties

gTLD Registrars Competition

Over 880 registrars now compete in the domain name market



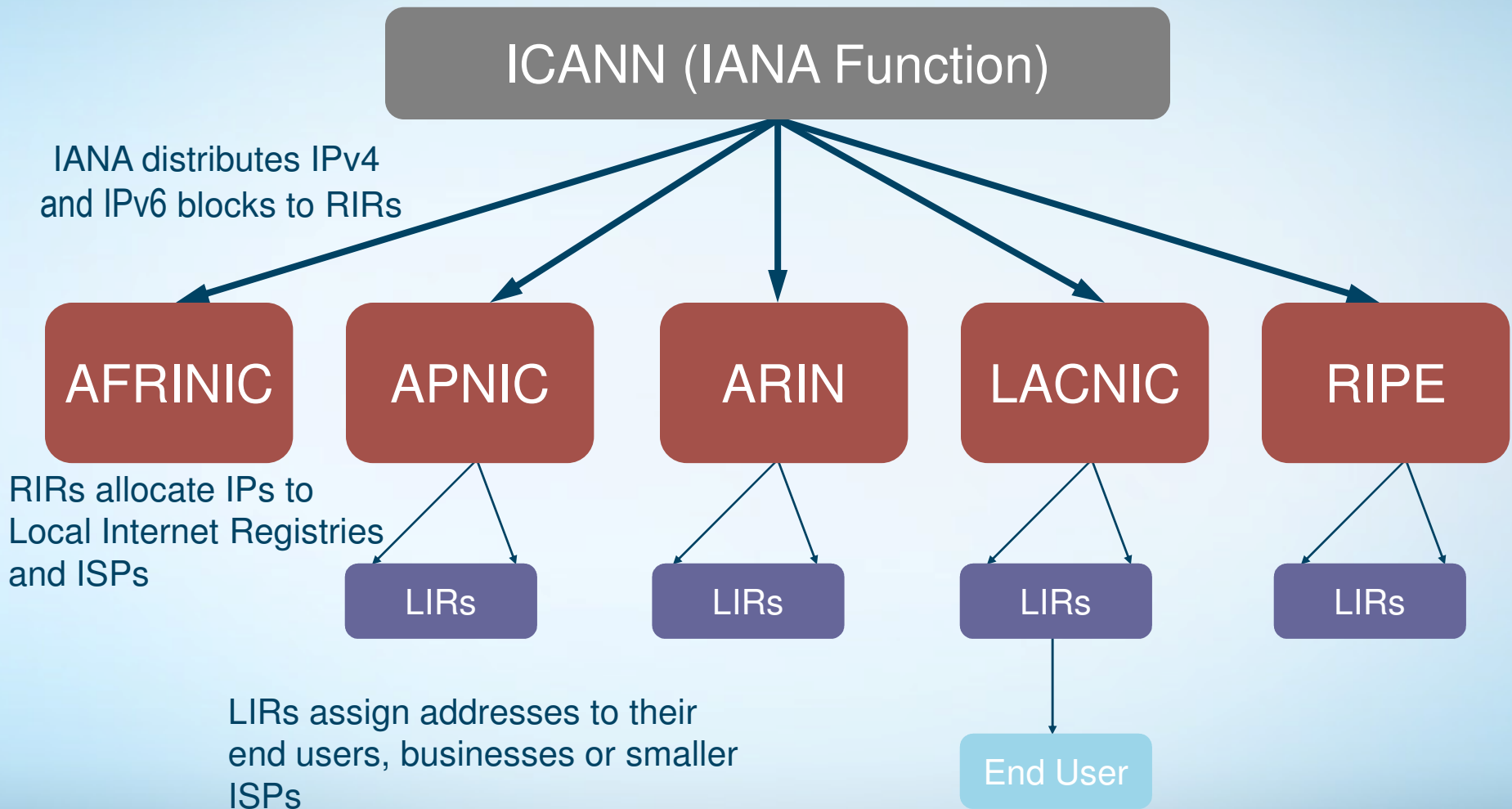
- Reducing prices
- Enhancing services
- Creating new business models



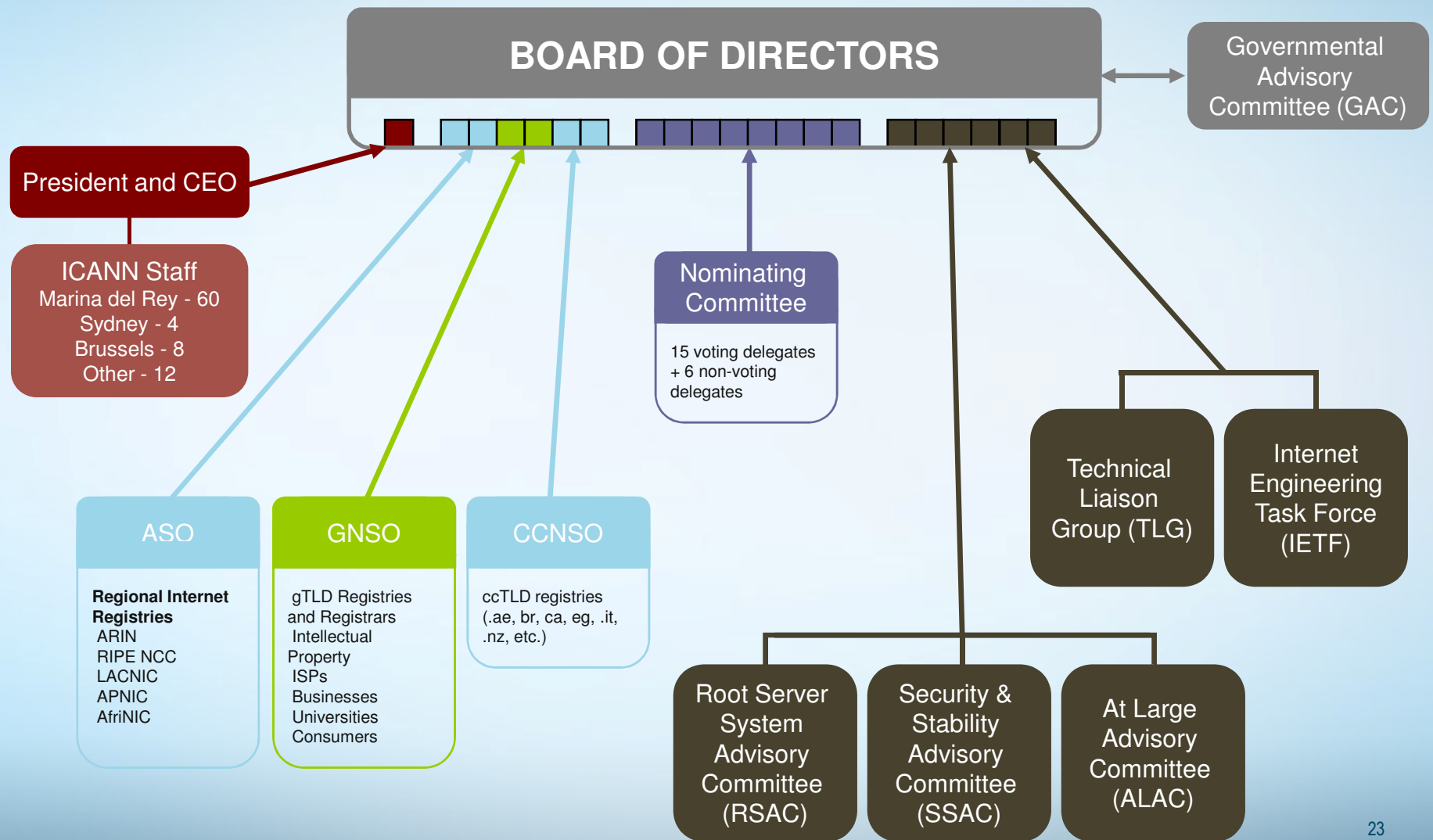
Generic Top Level Domains - gTLDs

- In the 1980s
 - *com, net, org, edu, gov, mil, int*
- 2001-02
 - *info, biz, name, pro, coop, aero, museum*
- 2005-06
 - *cat, jobs, mobi, travel, tel, asia*

IP Address Allocations and Assignments



ICANN's Community



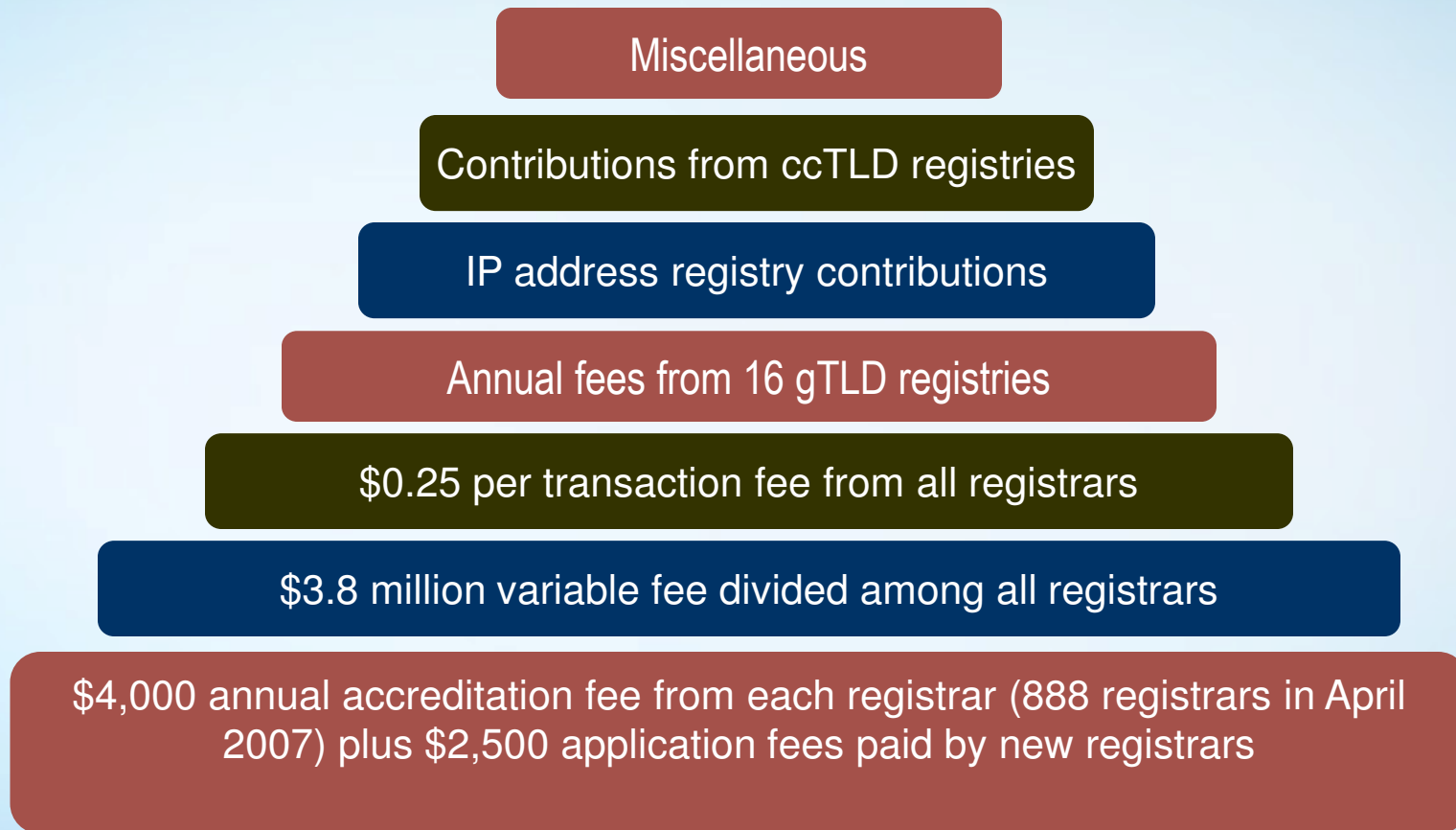
Diverse Representation & Open Participation

- ICANN maintains diverse representation in its Board of Directors
- ICANN's Supporting Organizations and Advisory Committees maintain the same diversity in their Councils
- Bottom-up technical policy development and consensus-based decision making
- Participation in ICANN is open to all who have an interest in ICANN's mission of technical coordination for Internet names and numbers
Many online forums which are accessible through ICANN's website, and the Supporting Organizations and Advisory Committees have active mailing lists for participants
- Public meetings are held three times each year – each time on a different continent
- Remote participation is also available: <http://public.icann.org/>

What does ICANN stand for?

- Ensuring a single, interoperable Internet
- Security of the network is maintained to ensure confidence in the model
- Stability of the experience for application development and consumer experience
- Efficient deployment of resources in support of a global network
- All can access all others
- All can express their own language and identity
- All relevant stakeholders have a voice and role
- Encouraging innovation, particularly at the edge of the network

How is ICANN funded?



Ongoing Work at ICANN

- Whois database service
- New gTLDs introduction in the root
- Internationalized Domain Names (IDNs) testing
- Accountability frameworks with ccTLD managers
- Review of ICANN accountability and transparency
- Comments sought for 2007 - 2010 Strategic Plans
- ICANN - proposed 2007-08 budget
- Registrar data escrow services
- Registry failover plan

Fellowships Programme

- The programme aims at providing financial scholarships to individuals from developing countries to facilitate participation in ICANN meetings
- Priority will be for:
 - Low, lower-middle and upper-middle income economies, according to the World Bank Group country classification
 - governments, ccTLDs and non-profit sector not associated with ALAC
 - Participants from the ICANN region in which the meeting is taking place, participants from adjacent regions, and overseas participants, in that order
- Application forms will be made available online to be completed and submitted by applicants
- Fellowships Committee (FC) will be responsible for qualifying and selecting applicants and will also advise ICANN staff on how the programme could be improved

Next ICANN Meetings

- San Juan, Puerto Rico, 25-29 June 2007
- Los Angeles, California, USA, 29 Oct – 2 Nov 2007
- Asia Pacific, 10-15 Feb 2008
- Europe, 22-27 June 2008
- Africa, 2-7 Nov 2008

- ICANN calls for proposals to host 2008 meetings
 - <http://www.icann.org/announcements/announcement-23may07.htm>

Challenges and Opportunities

- In developing the strategic objectives for the years ahead, the ICANN community identified a number of challenges and opportunities:
 - Increased globalization of the Internet
 - Increased threats to stability and security of the Internet
 - The need to engage with a broader range of international entities
 - The need to be closer and more responsive to all stakeholders
 - The need to design appropriate structures and processes in completing the transition of technical coordination of the Internet system of unique identifiers

Global Partnership

- The Global Partnership Strategy has been designed to help meet these challenges through the deployment of a Regional Liaison network
- The role of the Regional Liaisons is to engage proactively with their respective stakeholders and end-user community in their respective regions and respond to the needs of the Internet community and ICANN staff

Regional Liaisons Team

- Have different expertise and are tasked to liaise with the Internet community around the world
- Current Liaisons are:
 - Africa: Anne Rachel Inné, annerachel.inne@icann.org
 - Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan: Veni Markovski veni.markovski@icann.org
 - Australasia/Pacific Islands: Save Vocea, save.vocea@icann.org
 - Canada & the Caribbean: Jacob Malthouse jacob.malthouse@icann.org
 - Latin America: Pablo Hinojosa, pablo.hinojosa@icann.org
 - Middle East: Baher Esmat baher.esmat@icann.org
- Vacancies
 - Manager, Regional Relations – Europe
 - Manager, Regional Relations – East Asia
 - Manager, Regional Relations – South Asia

Business Plan and Reporting

- Each regional liaison develops a yearly plan in accordance with the ICANN Strategic and Operating plans
- Business plans are reviewed and adjusted to reflect needs that may have emerged from community
- Reporting on various activities versus the ICANN's strategic objectives

Regional Liaisons Activities

- Engage proactively with all stakeholders and members of the Internet community in the regions and respond proactively to their needs
- Provide information to stakeholders on how to participate in policy development processes and identify where appropriate how policy development can be improved to address needs and concerns of various stakeholders in regions
- Facilitate the dialogue by explaining ICANN's function, processes and future developments, and provide feedback to ICANN on regions views
- Act as help-desk on any domain names and IP issues (e.g. registries, registrars, ccTLDs, At Large, Governments, participation, etc.)
- Strengthen relationships with organizations which have expressed an interest in participating in the ICANN multi-stakeholder environment
- Conduct outreach activities in support of ICANN strategic priorities

Middle East Perspective

- Encourage active participation in ICANN structures and processes
 - Members of ccNSO and GAC to provide input to issues of interest to the region (i.e. IDNs, ICANN Regions, etc.)
 - Invite individuals, groups and organizations to join the ICANN community (Emirates Internet Group got accredited as ALS, .ly joined ccNSO)
- Formalize relationship with .ly
- Approve MOU signing with UN ESCWA
- Join AKMS's Multilingual Internet Committee of Jordan
- Organize workshops in cooperation with other stakeholders
 - Registrar Workshop, Cairo
 - IGF IDN workshop with UNESCO and the Egyptian Government, Athens
 - ccTLD Workshop with ISOC and UAEnic, Dubai
- Participate in the Arab IDN working group meetings and provide update on IDN developments

Middle East Internet Community in ICANN Lisbon Meeting

- Discussed ways of effective participation to the ICANN process
- Addressed issues pertaining to ccTLDs, GAC, At-Large, IDNs, etc.
- Mailing list: <http://mail-list.aratld.org/mailman/listinfo/arabicann>



your participation will make a change...

www.icann.org

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