Internet Economics in the Middle East "Access Prospective"

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Bahrain Internet Society

AGENDA

- *INTRODUCTION TO ISOC*
- *INTERNET STATISICS*
- *INTERNET ECONOMICS “ACCESS”*
- *CARRIER NEUTRAL FACILITIES*

INTRODUCTION TO ISOC

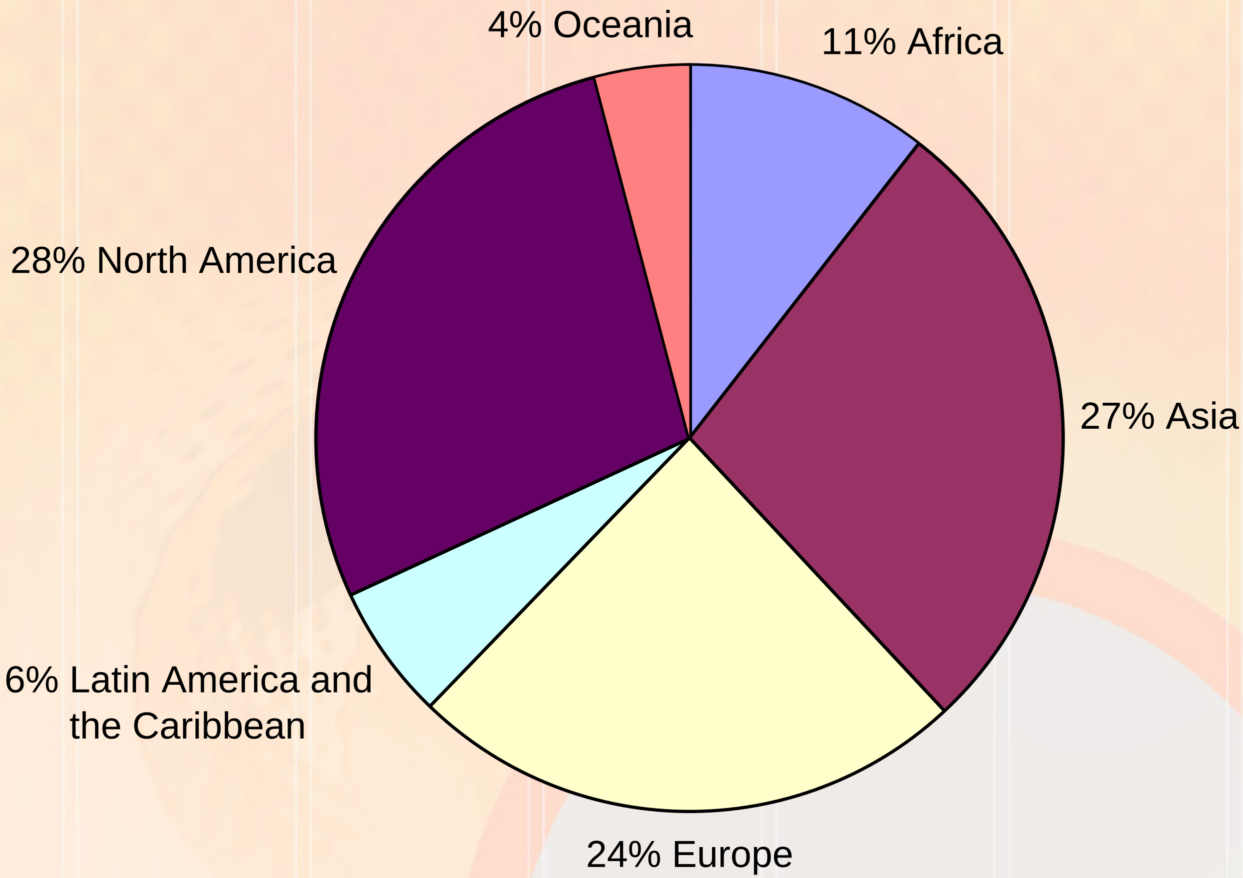
Internet Society

- *Founded 1992 by Internet Pioneers*
- *International, not-for-profit, charitable org. aid development & encourage deployment of the net*
  - *Approx. 100 organisation members*
  - *26,000+ individual members*
  - *81 chapters worldwide*
- *Organisation members & .ORG surpluses fund activities*
  - *Standards, education, policy and membership*

ISOC’s Mission

"To assure the open development, evolution and use of the Internet for the benefit of all people throughout the world."

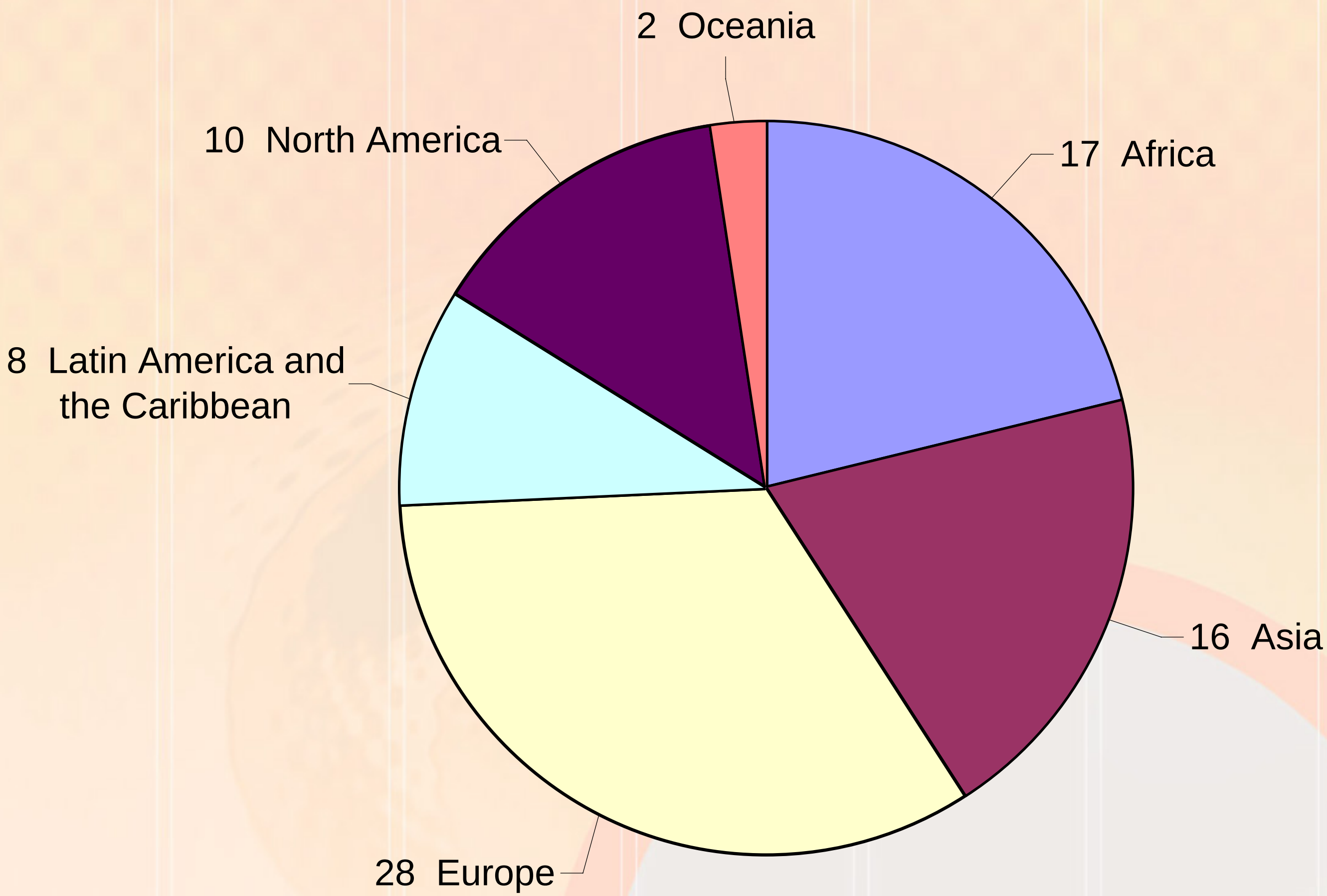
ISOC Membership



Chapter Development

- *Chapters support ISOC's mission and goals*
  - *Extend reach and influence of ISOC by acting **locally***
- *Serve interests of local community*
  - *Organise activities/events/education locally*
  - *Provide services in local language*
  - *Act as forum for 'networking'*
- *Inform ISOC policy making*
  - *Chapters inform ISOC of local/regional issues*
  - *Provide input on global issues to the ISOC Secretariat*
- *Operate as not-for-profit entities*
  - *Mostly run by volunteers*

Where are the Chapters ?



ISOC Priorities for 2007

- *EDUCATION*
- *POLICY*
- *ORGNIZATION MEMBERSHIP*
- *MEMBERSHIP*

www.isoc.org

Bahrain Internet Society

- *It is the Bahrain ISOC Chapter.*
- *Established as a Bahraini Entity Dec 1999.*
- *Charted as an ISOC Chapter July 2001.*

BIS Society Mission

To make Bahrain Internet Society (BIS) the leading non-government organization providing platform for information users from all segments of the society to have their say in the development of the global internet in general and in the region in particular

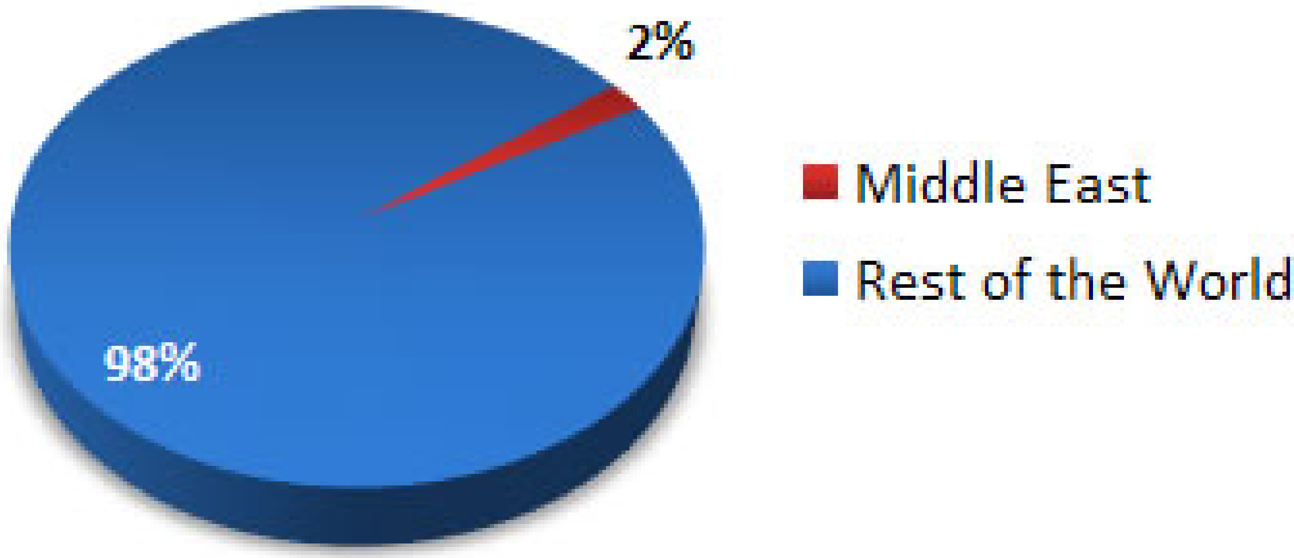
INTERNET STATISTICS

INTERNET USERS IN THE MIDDLE EAST AND IN THE WORLD

MIDDLE EAST REGION	Population (2007 Est.)	Pop. % of World	Internet Users, Latest Data	% Population (Penetration)	Usage % of World	Use Growth (2000-2007)
Total in Middle East	193,452,727	2.9 %	19,424,700	10.0 %	1.7 %	491.4 %
Rest of the World	6,381,213,690	97.1 %	1,094,849,726	17.2 %	98.3 %	206.1 %
WORLD TOTAL	6,574,666,417	100.0 %	1,114,274,426	16.9 %	100.0 %	208.7 %

Source: Internet World Stats March 10, 2007

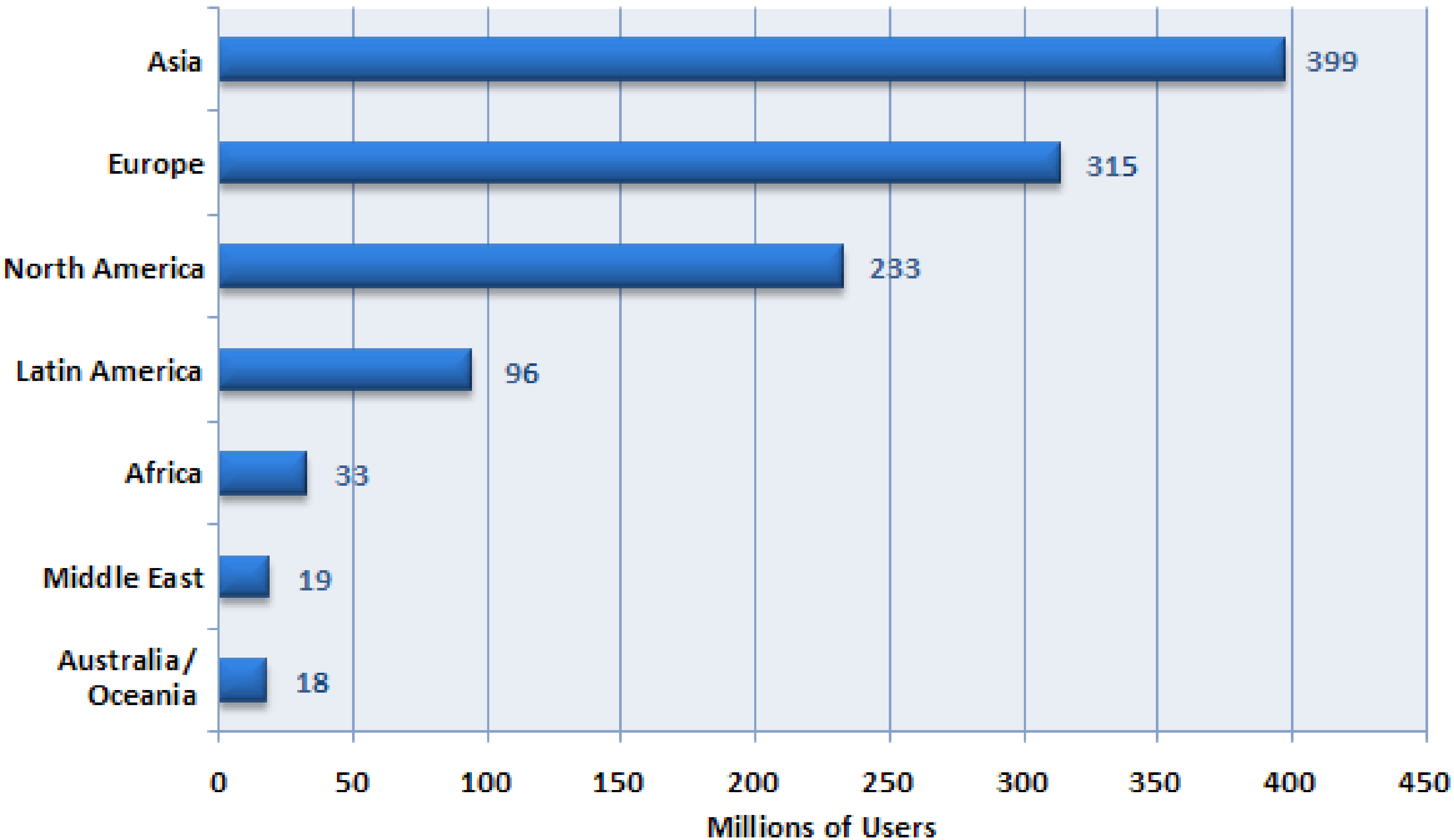
Middle East Internet Users



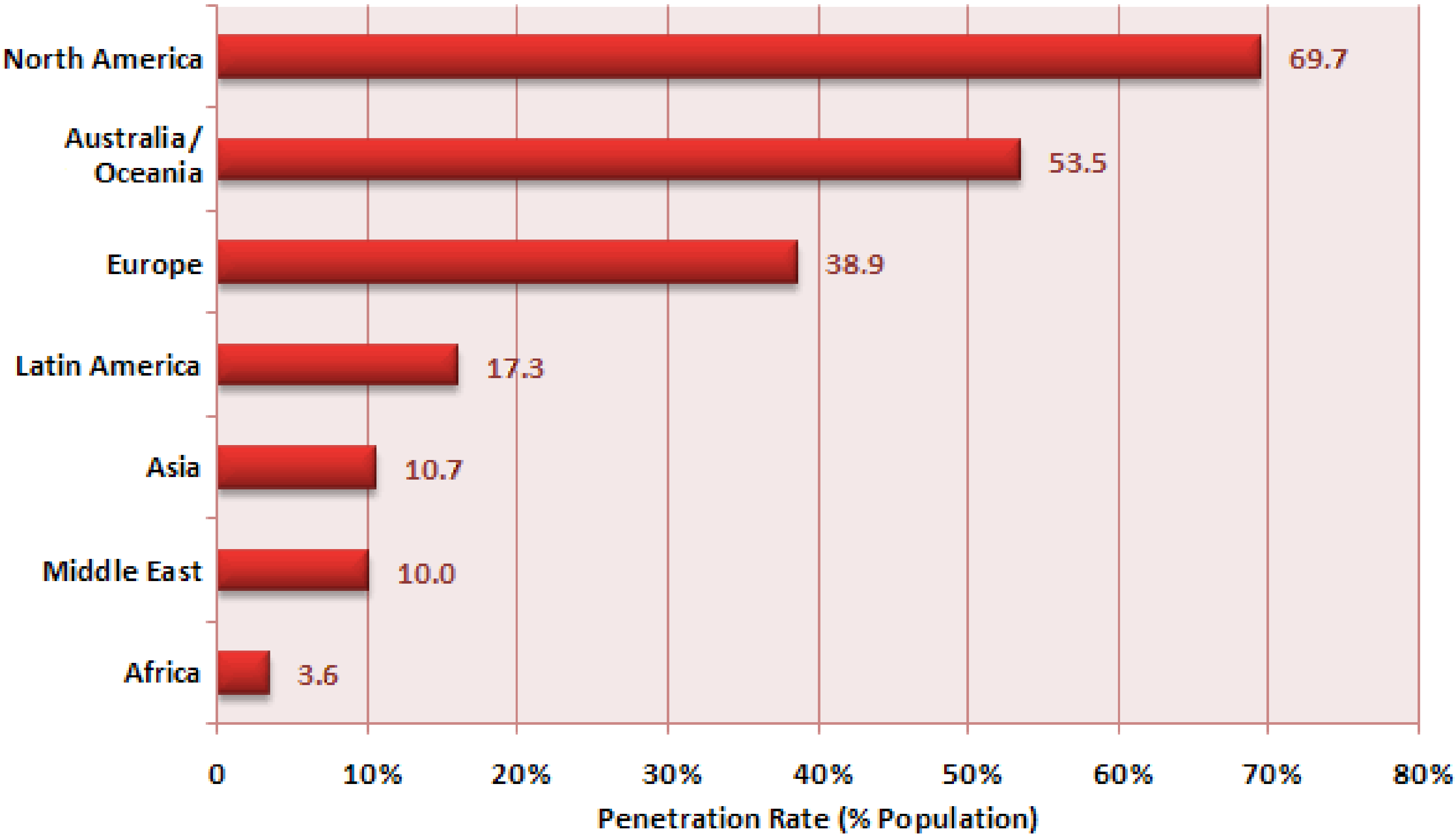
Middle East Internet Usage and Population Statistics

MIDDLE EAST	Population 2007 (Estimated)	Usage Dec/2000	Internet Usage, Latest Data	%Population (Penetration)	%	Use Growth (2000-2007)
Bahrain	738,874	40,000	**155,000**	% 21.0	% 0.8	% 287.5
Iran	70,431,905	250,000	**7,500,000**	% 10.6	% 38.6	% 2,900.0
Iraq	27,162,627	12,500	**36,000**	% 0.1	% 0.2	% 188.0
Israel	7,237,384	1,270,000	**3,700,000**	% 51.1	% 19.0	% 191.3
Jordan	5,375,307	127,300	**629,500**	% 11.7	% 3.2	% 394.5
Kuwait	2,730,603	150,000	**700,000**	% 25.6	% 3.6	% 366.7
Lebanon	4,556,561	300,000	**700,000**	% 15.4	% 3.6	% 133.3
Oman	2,452,234	90,000	**285,000**	% 11.6	% 1.5	% 216.7
Palestine (wbank)	3,070,228	35,000	**243,000**	% 7.9	% 1.3	% 594.3
Qatar	824,355	30,000	**219,000**	% 26.6	% 1.1	% 630.0
Saudi Arabia	24,069,943	200,000	**2,540,000**	% 10.6	% 13.1	% 1,170.0
Syria	19,514,386	30,000	**1,100,000**	% 5.6	% 5.7	% 3,566.7
UAE	3,981,978	735,000	**1,397,200**	% 35.1	% 7.2	% 90.1
Yemen	21,306,342	15,000	**220,000**	% 1.0	% 1.1	% 1,366.7
TOTAL	**193,452,727**	**3,284,800**	**19,424,700**	**% 10.0**	**% 100.0**	**491.4**

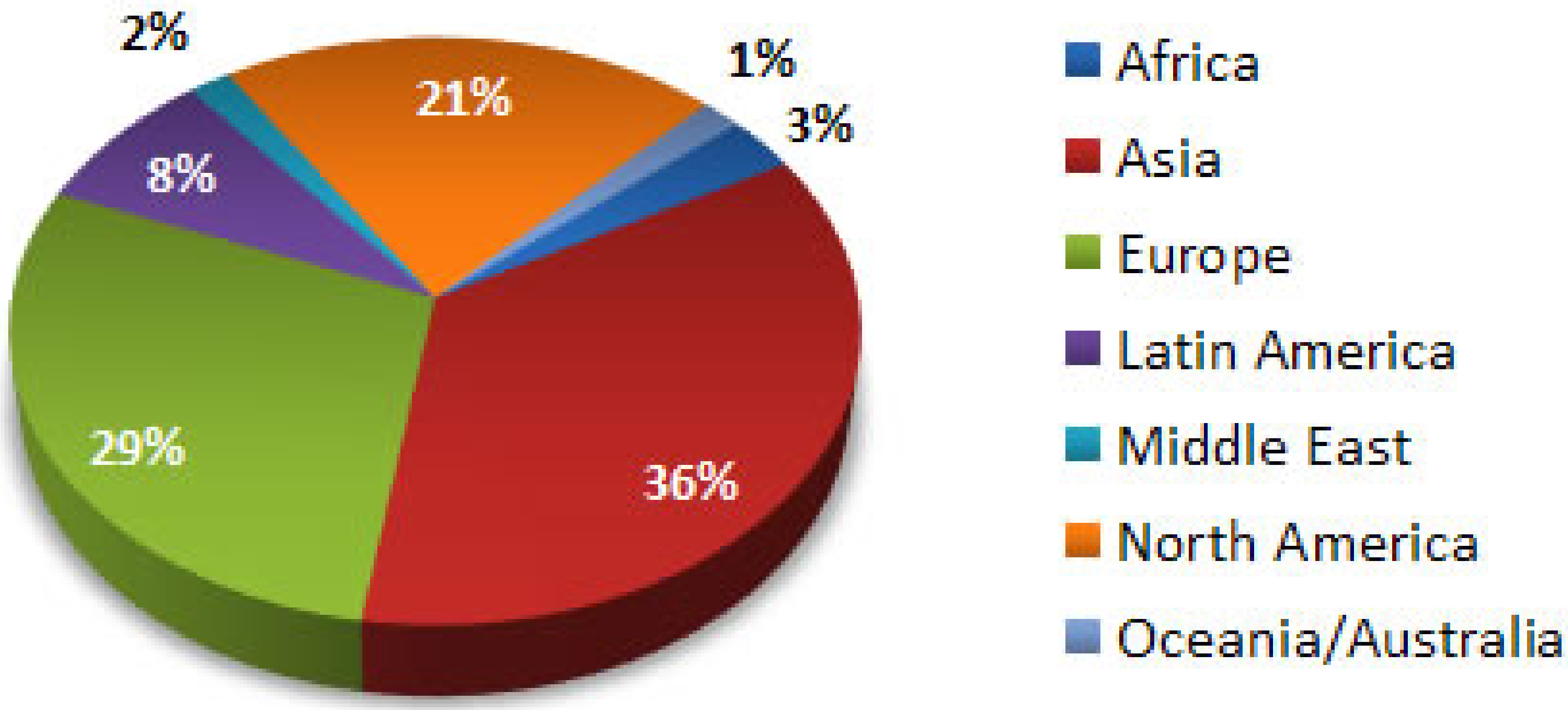
Internet Users by World Region



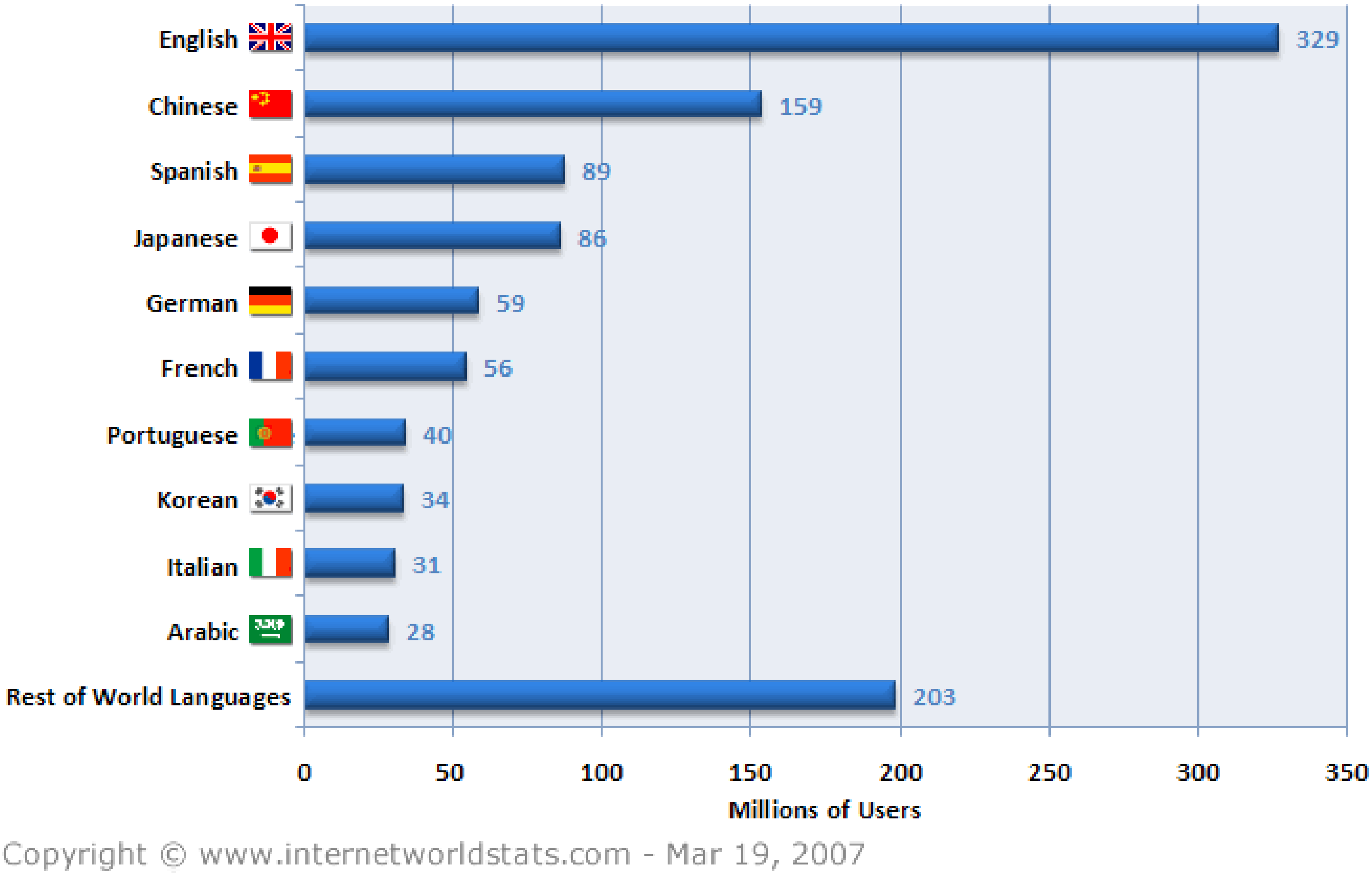
Internet Penetration by World Region



World Internet Users



Internet Top 10 Languages



INTERNET ECONOMICS

Internet Economics

- Internet economics is becoming more important to all; Business, Technical, Users Communities.
- New applications such VOIP have made the Internet important to all.
- Current policies and regulations need to be up to speed to match the expanding role of the internet.

Internet Economics "ACCESS"

- *Should the Governments pay partial costs of the Internet access ?*
- *Should access to the Internet be free ?*
- *Should access cost be based on a flat rate ?*
- *Should users access be controlled by a CAP?*
- *Should customers pay for Internet access when the network is congested?*
- *Or should the market decide ?*

Broadband Access - Who Pays?

- Users pay ISPs for access to the Internet.
- ISPs pay backbones for access to Internet.
- ISPs pay per month for a pipe of a certain bandwidth, according to their expected use.
- Sometimes ISPs over provide: Higher Cost.
- Sometimes ISPs under provide: Congestion

Middle East Access Challenges

- ***Monopoly / Government control of access.***
  - *Dominate access cost & decide Quality of Service.*
  - *ISPs have little impact on cost and quality of Internet backbone.*
- ***Internet US centric***
  - *Higher price of ISP Backbone Bandwidth*
  - *Low cost of hosting WebPages*
  - *Proximity to the Internet Community*
- ***Low availability of Local Content.***
- ***Lack of Infrastructure in certain locations.***

Remedies In Progress

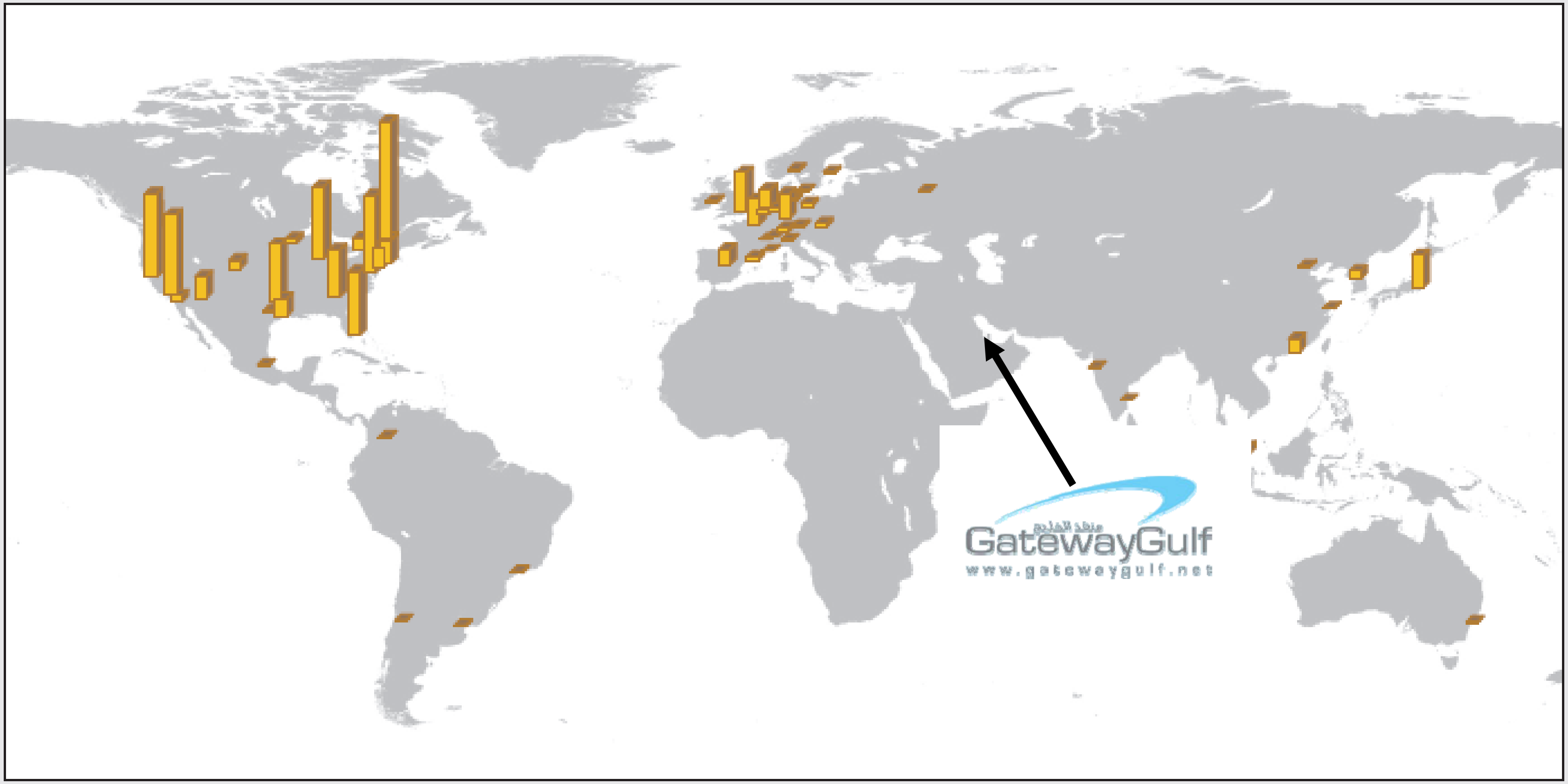
- *Growing Infrastructure in Europe and Asia.*
- *Efforts toward building Local Content.*
- *Wider Market Deregulation.*
- *Local Infrastructure Buildup and improvements taking place.*
- *Buildup of Neutral Facilities*

Carrier Neutral Facilities

Carrier Neutral Facility Features

- *High availability Facility: Power, Contingency, Cooling, Connectivity, etc…*
- *Regional Internet Exchange point*
- *International Traffic Aggregate*
- *Regional Meeting Place.*
- *Maximum number of International and regional carriers and operators under one roof.*

Figure 1. Gross Floor Space in Major Metropolitan Markets



Source: TeleGeography research

Gateway Gulf Facility

Carrier Neutrality

- *The Gateway Gulf datacenter is entirely carrier-neutral.*
- *Carrier neutrality means that the datacenter is not affiliated with any data carriers, telephone, or service providers, and does not have rules regarding who may connect to who, or at what price.*
- *Carrier neutrality is a critical feature of colocation facilities since it ensures a fully-competitive market for the layer-1 and layer-2 carrier services needed to move traffic to and from colocated servers.*
- *Carrier neutrality brings liquidity to the carrier transport and Internet transit markets.*

Conclusion

- *ISOC needs to be more Active Regionally.*
- *Internet in the Middle East has a great growth potential.*
- *Better understanding of Internet Economics and its Impact on market regulation.*
- *Regional Carrier Neutral facilities will be critical in improving costs, quality, and reliability of Internet services in the Middle East.*

THANK YOU