



Making the Middle East IPv6 Ready

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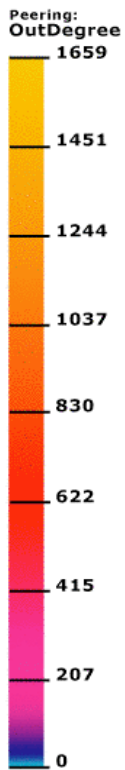
Prologue

- Three years from now, the Internet World would not be the same as it is hitherto.
- “Making Middle East IPv6 Ready”. It is the initiative in MENOG to make our own IPv6 Taskforce, which will be under the wings & guidance of RIPE NCC.
- IPv6 is inevitable and bound to bring a change in the world’s Internet. Rest of the world has already starting building their infrastructure.
- The current picture portrays that Middle East would be just end-user of tangible/intangible products labeled “IPv6-Ready” and we would have to pay a high price to get the products that our customers will need.
- The IPv6 Taskforce will make the regions infrastructure ahead, advanced and absolute; so that we will drive economy and technology and be not driven.

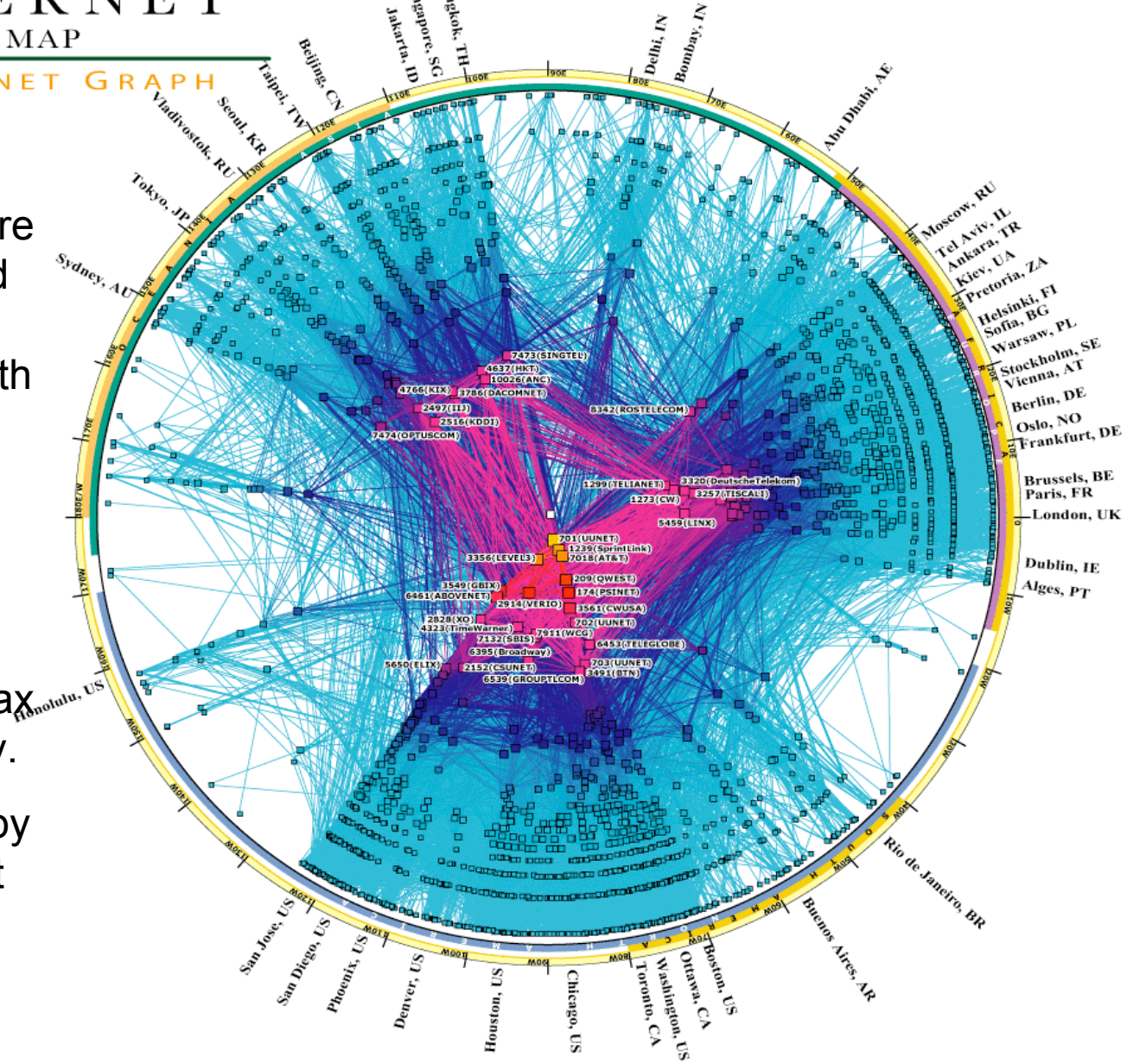
IP v4 INTERNET TOPOLOGY MAP

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AS-level INTERNET GRAPH



- IPv4 connections are highly meshed around a very dense core with MCI/UUNET (now Verizon) at its centre.
- Magenta Regions experience Max Traffic Density.
- The US has by far the highest density of networks.

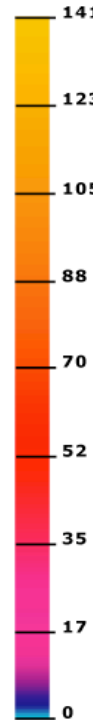


IPv6 INTERNET TOPOLOGY MAP

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AS-level INTERNET GRAPH

Peering:
OutDegree

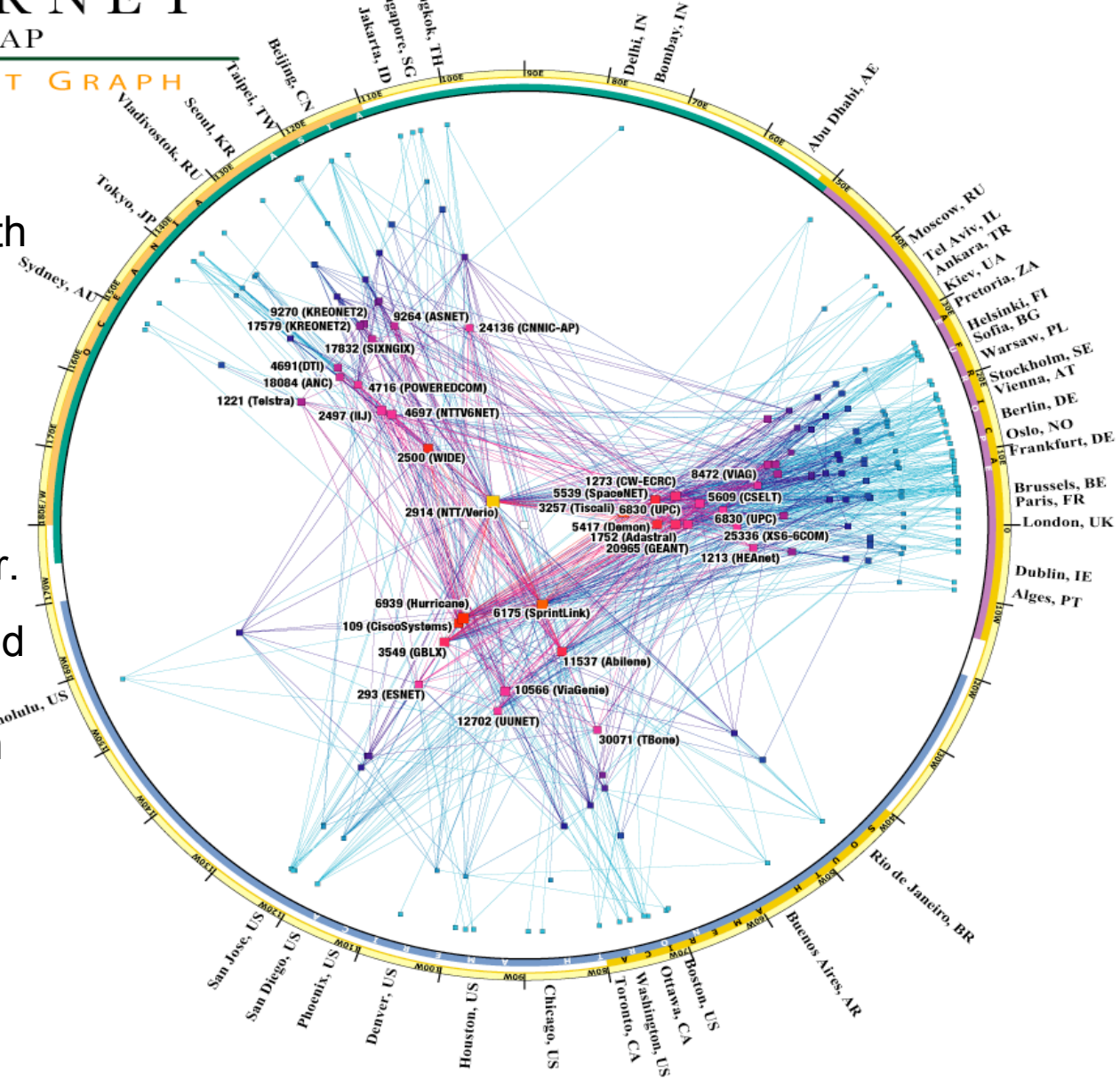


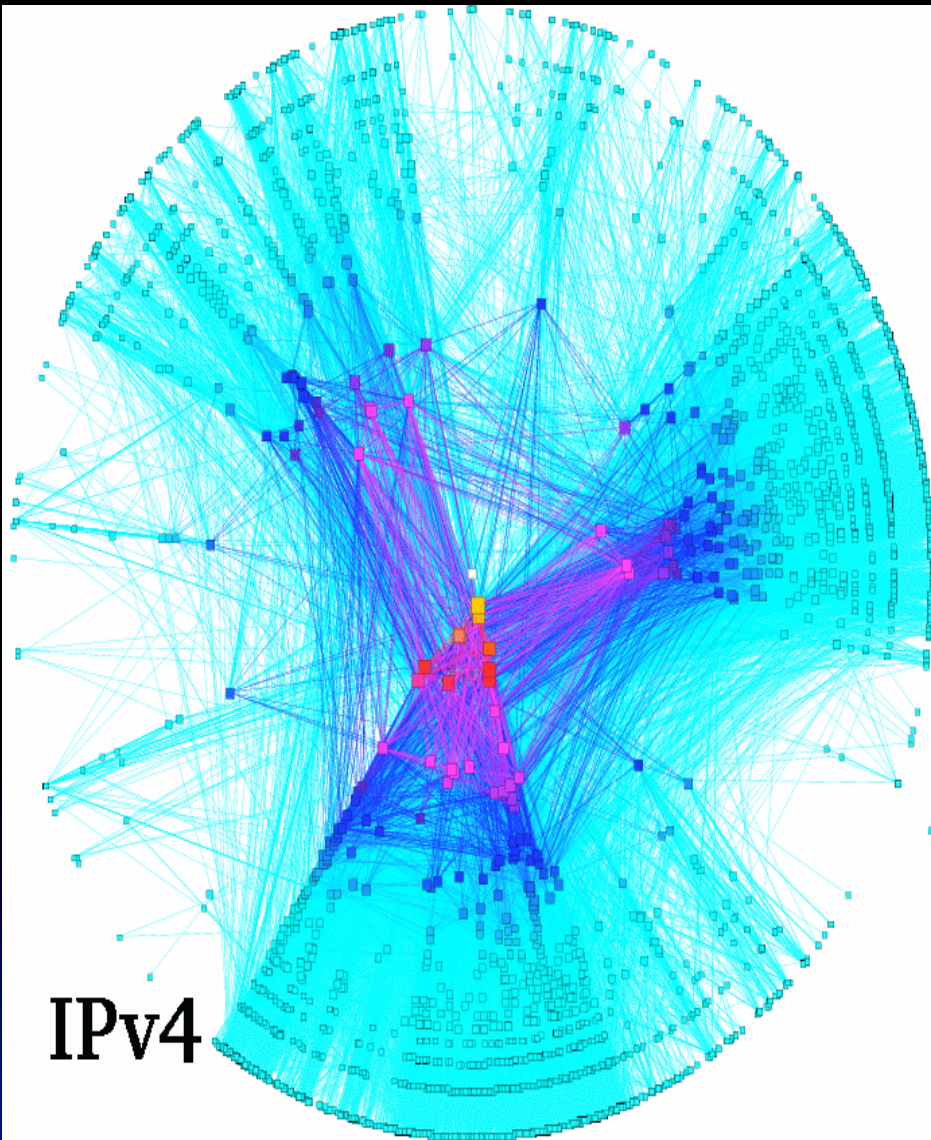
- IPv6 graph is much sparser with drastically fewer nodes.

- The geographical patterns of the graphs also differ.

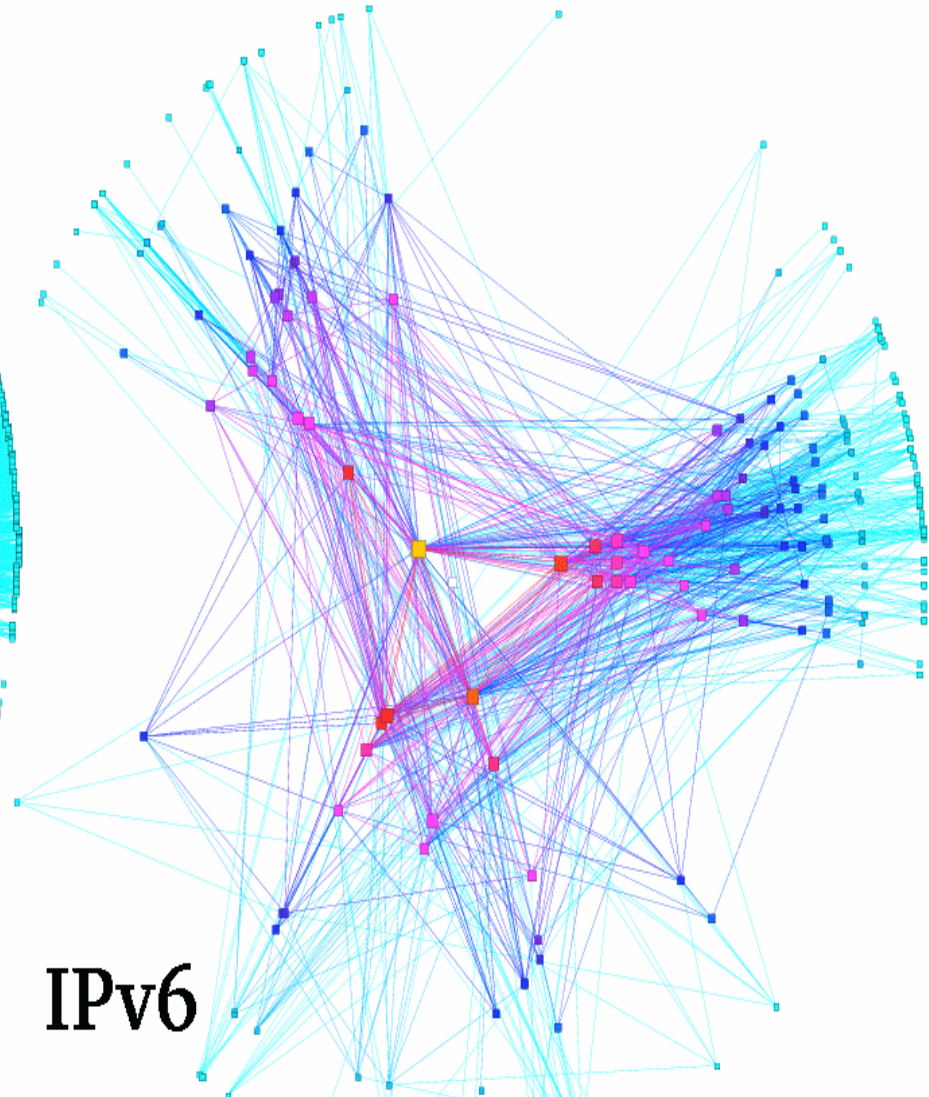
- Richest observed IPv6 peering is headquartered in Japan.

- The largest cluster of high degree IPv6 AS nodes is in Europe.





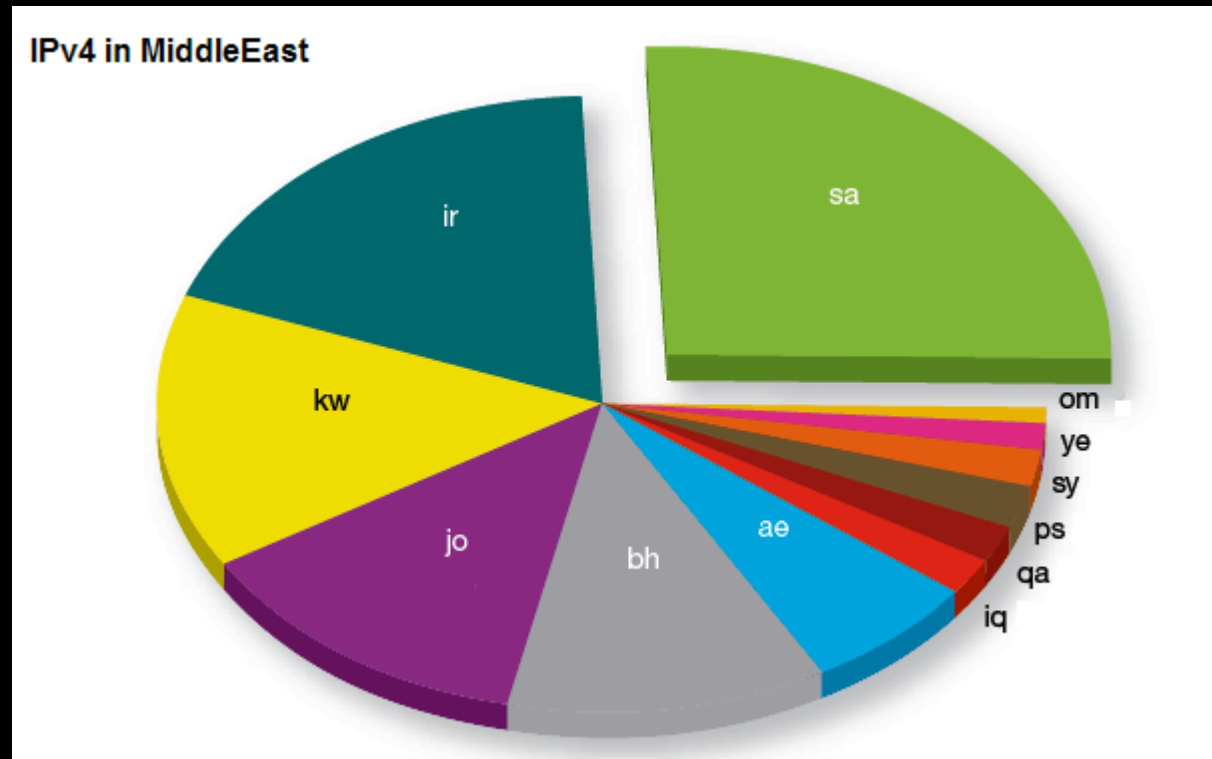
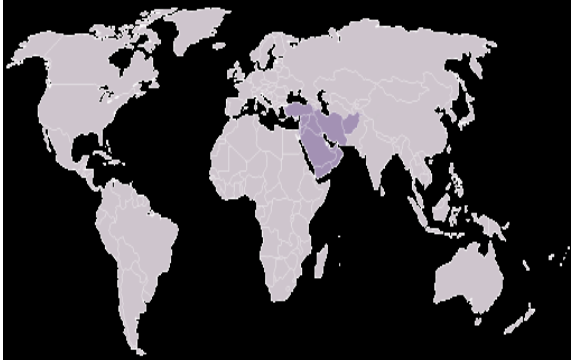
IPv4



IPv6

IPv6 has very large Address Space but the emergence of new Technologies will cause an Avalanche Effect;
A traverse shift from IPv4 into IPv6.

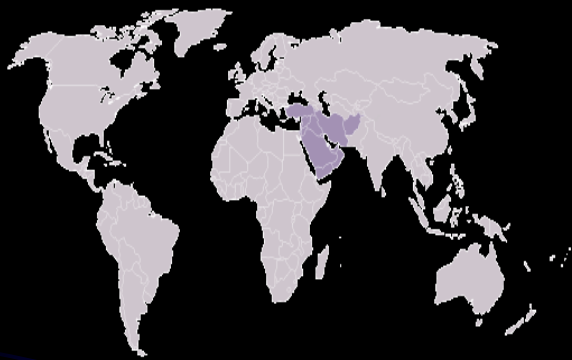
IPv4 Allocation Outlook in Middle East



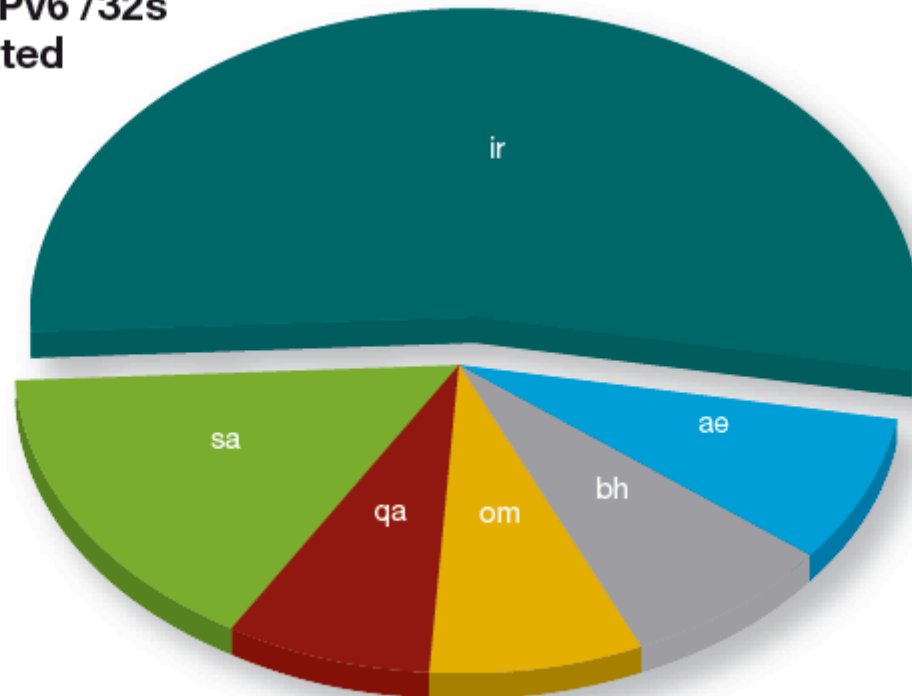
- Considering Metropolitan size and Economic growth, the IPv4 distribution is fairly equal.
- Customer Market demand is balanced.

[Statistical Source RIPE NCC 2006]

IPv6 Allocation Outlook in Middle East



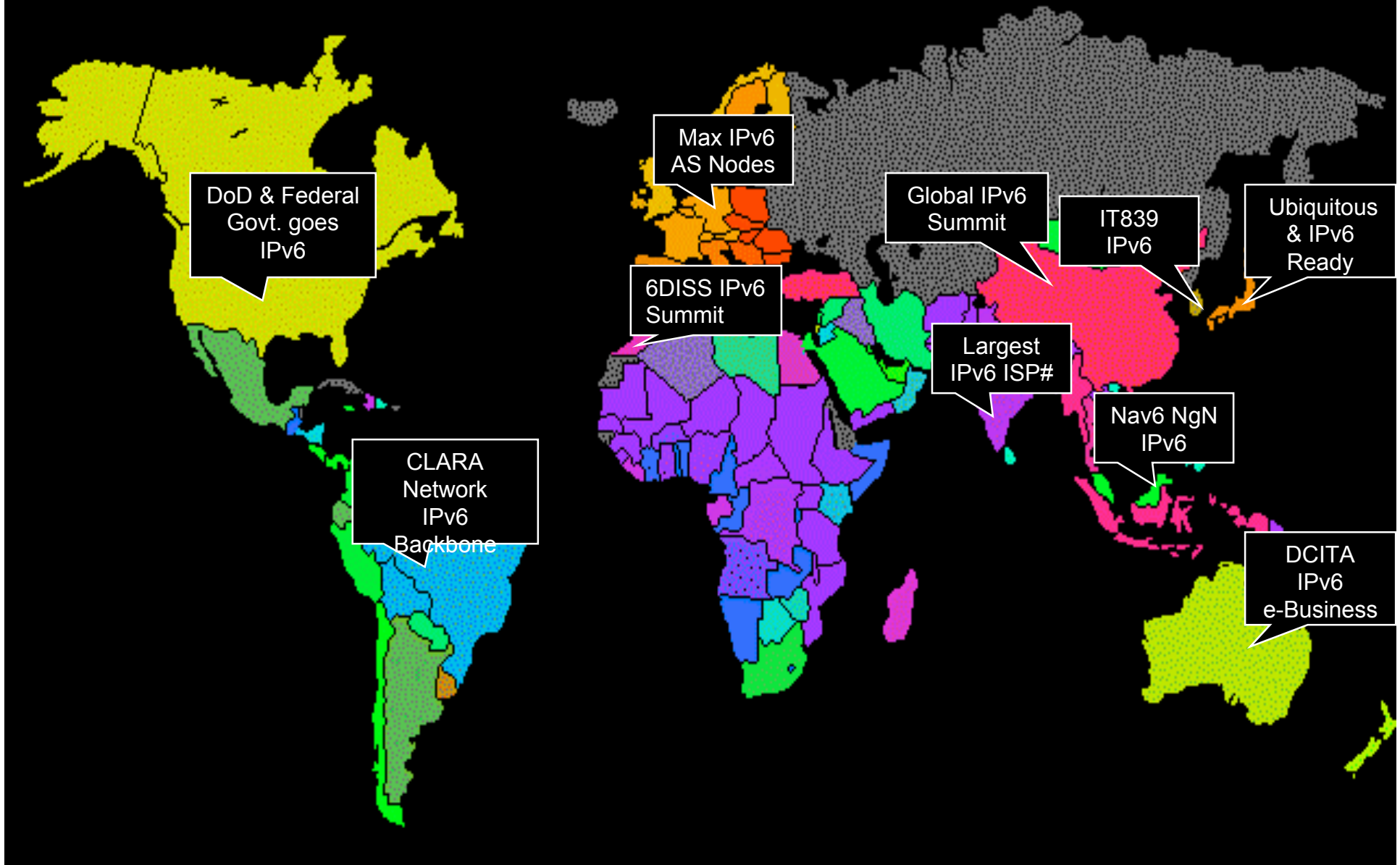
Total IPv6 /32s
Allocated



- IPv6 pie-distribution shows non-linear growth, some ME countries are not active.
- Someone in the region is preparing for Tomorrow.

[Statistical Source RIPE NCC 2006]

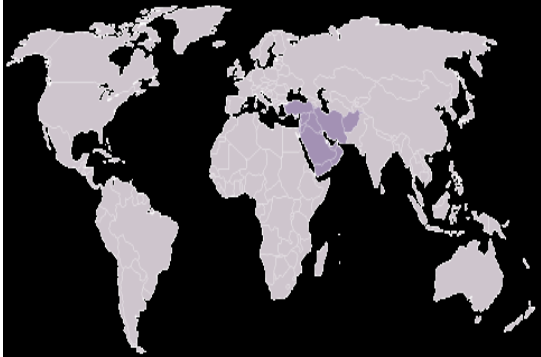
World Watch



World Watch

- Japan: Mar 06, “u-Japan” (Ubiquitous Japan) Ubiquitous access, connecting everyone and everything.
- Korea: Feb 01, IT839 selecting 8 new services, 3 infrastructures and 9 growth engines.
- Australia: May 06, Department of Communications, Information Technology and Arts approved funding for industry stimulation project IPv6 E-Business.
- Malaysia: Mar 07, IPv6 Forum joined hands with National Advanced IPv6 Centre of Excellence in it's Next Generation Networks symposium.
- China: April 07, Global IPv6 Summit , CNGI (China Next Generation Internet) project has already finished its core networks.
- India: Mar 05, Has one of Largest numbers of ISPs employing IPv6.
- Germany: Mar 05, Largest Cluster of High Degree IPv6 AS Nodes.
- Morocco: Mar 07, IPv6 TaskForce held symposium and training with European 6IDSS.
- Latin America: Aug 05, Cooperación Latino Americana de Redes Avanzadas- IPv6 Wide R&D Network a.k.a RedCLARA.
- USA: Jun 03, Announced that DoD will go IPv6 and by 2008 all Federal Infrastructure to be IPv6 Ready.

IPv6 Forum Chapters:



Middle Eastern
Chapters are Scarce

- Australia
- Austria
- Belgium
- Brazil
- Bretagne
- California
- Canada
- China
- Colombia
- Cuba
- Denmark
- Egypt
- Europe
- Finland
- France
- Hong Kong
- India
- Ireland
- Israel
- Italy
- Japan
- Korea
- Latin America
- Luxembourg
- Malaysia
- Malta
- Mexico
- MidAtlantic IPv6 TF
- Morocco
- Nepal
- Netherlands
- North America
- Pacific Islands
- Pakistan
- Peru
- Poland
- Portugal
- Russia
- Senegal
- Spain
- Switzerland
- Taiwan
- Thailand
- Tunisia
- UK
- United Arab Emirates

The Need For MENOG IPv6 TaskForce

IPv6 will shape the following business
arenas in future:

- **Communications**
Internet, Telephone, Mobile (3GPP) etc
- **Media**
Video Streams, HDTV, Satellite Programs etc
- **Industry**
Commercial, Travel, Logistics etc
- **Economy**
Corporate Banking, Stock Markets, Financial Harbors etc
- **Defense**
Army, Navy, Air Force etc
- **Technology**
Consumer Electronics, Networking, Innovations etc

MENOG IPv6 TaskForce

- Our NOG ISP's will not be just Service Providers but Surface Providers
 - Providing People the Platform to engage in their business endeavors. A strong surface to stand on and exchange services.
- We will no longer be considered as Internet companies, but will drive all business arenas.
 - Be the Torch Bearer and guide people in all Business Sectors

IPv6 TaskForce Steps to Success:

Making Middle East IPv6 Ready

- M: Market -> Know Trends
- E: Education -> Generation Technology
- N: Network -> Virtual City
- O: Organization -> Strategic Management
- G: Guidance -> Customer Lifestyle

Epilogue

- MENOG IPv6 TaskForce will make Seamless Transition from IPv4 to IPv6.
- The IPv6 Taskforce will make the region's infrastructure ahead, advanced and absolute; so that we will drive economy and technology and be not driven.
- It will make Middle East an enriched region and will anticipate all the features and functionalities that IPv6 offers. We will be prepared for the change and make the difference.



We Can and We Will make a Difference

So, let's
Get
Set
Grow

