

# RIPE 59 - EIX WG LISBON

## EURO-IX UPDATE

BY SERGE RADOVCIC  
EURO-IX

RIPE 59 - LISBON, PORTUGAL - OCTOBER 2009

# What is Euro-IX?

- European Internet Exchange Association
- Formed in May 2001
- The association's aim is to further develop, strengthen and improve the Internet Exchange Point (IXP) community
- Since January 2005 Euro-IX has invited IXPs outside of Europe to join the association

# Euro-IX affiliates (1)

- 48 affiliated IXPs:
  - ▶ Europe: 39 (25 different countries)
  - ▶ Africa: 1 in Egypt
  - ▶ Asia: 5 (India, Japan & Nepal)
  - ▶ United States: 3
- 8 affiliated patrons:

Brocade

Cisco

Extreme Networks

Force10 Networks

Glimmerglass

Interxion

Juniper Networks

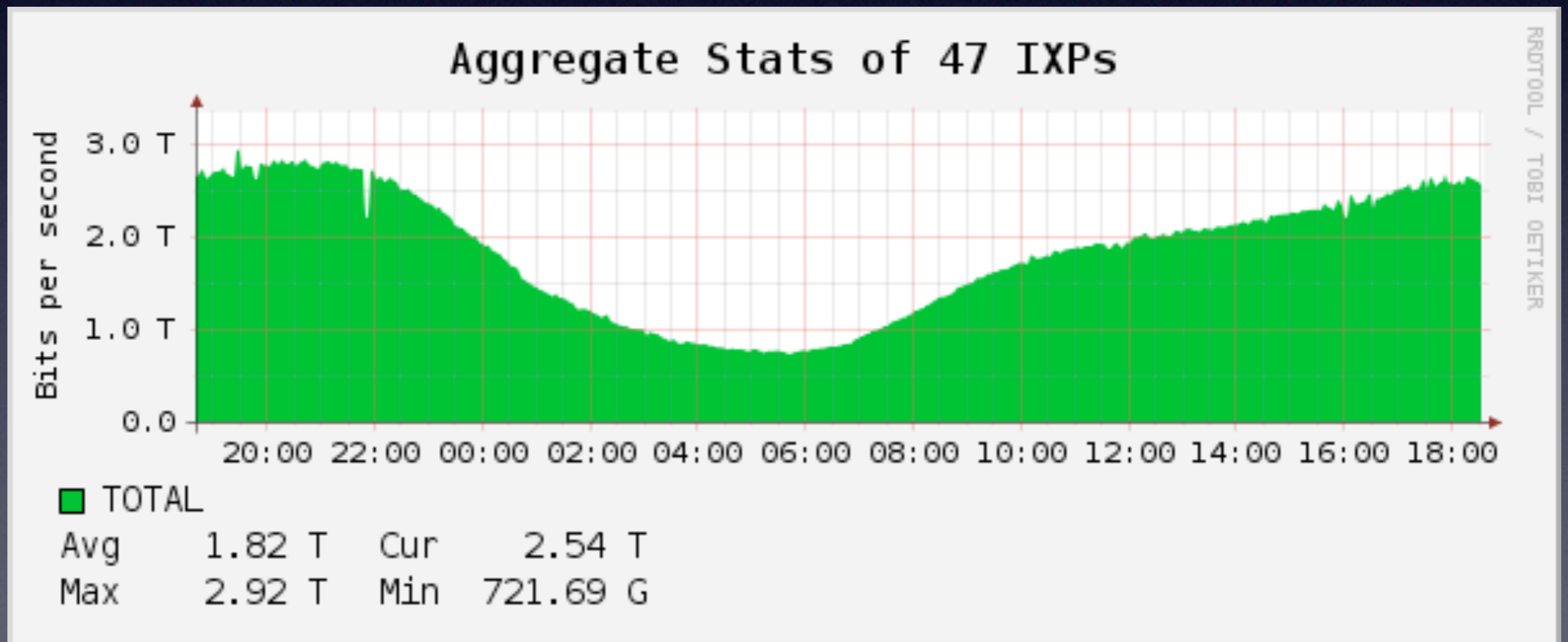
TelecityGroup

# Euro-IX affiliates (2)

- Newest Euro-IX member IXPs
  - ▶ FVG-IX of Udine, Italy
  - ▶ NL-ix of the Netherlands
  - ▶ LU-CIX of Luxembourg
  - ▶ VSIX of Padova, Italy
- Euro-IX now has 6 member IXPs in Italy!

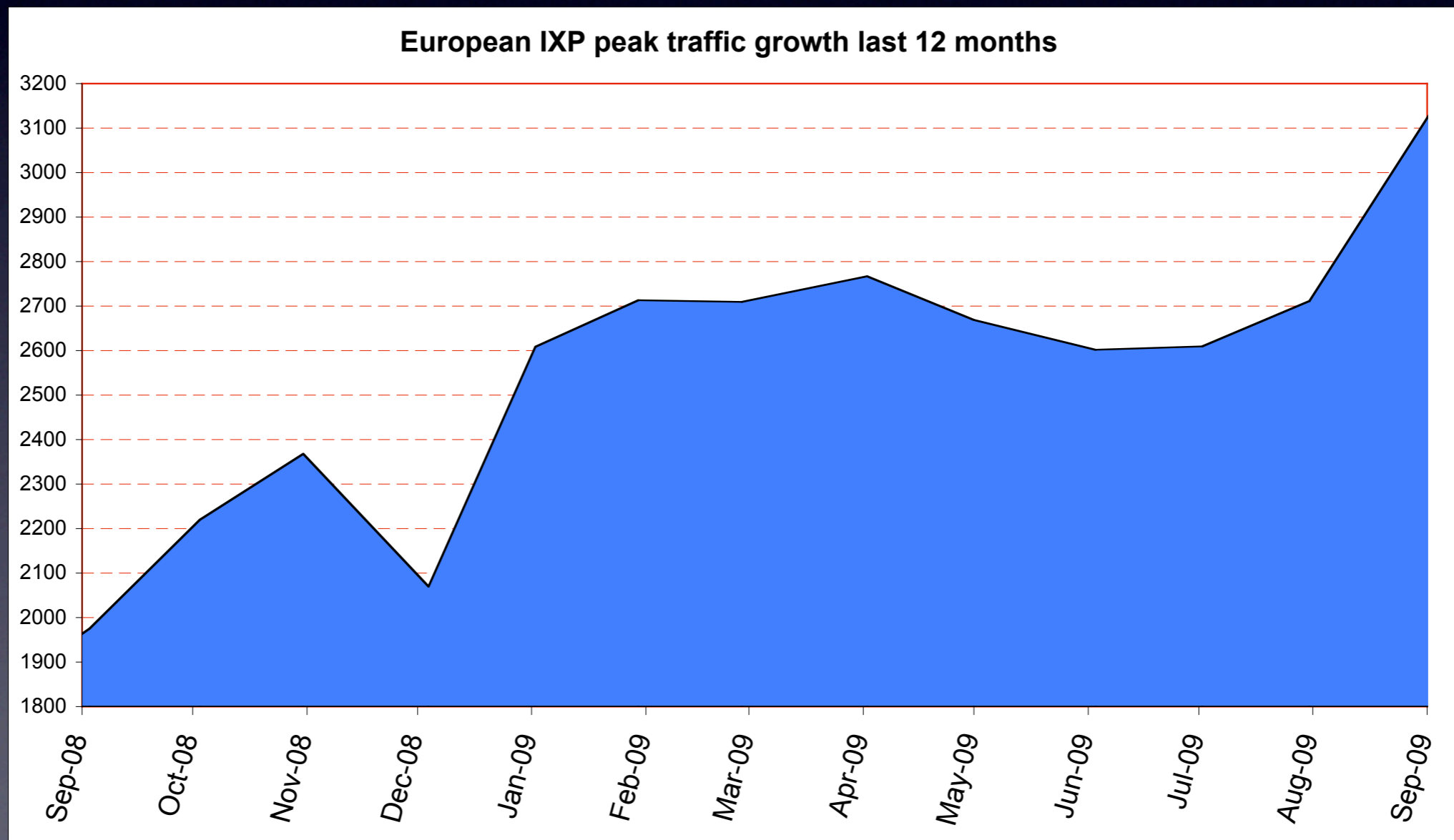
# Euro-IX IXP traffic

- Real time European member statistics
- Makes up over 90% of all European IXP traffic
- Weekday: Peak at 21:00 CEST; low at 05:45 CEST

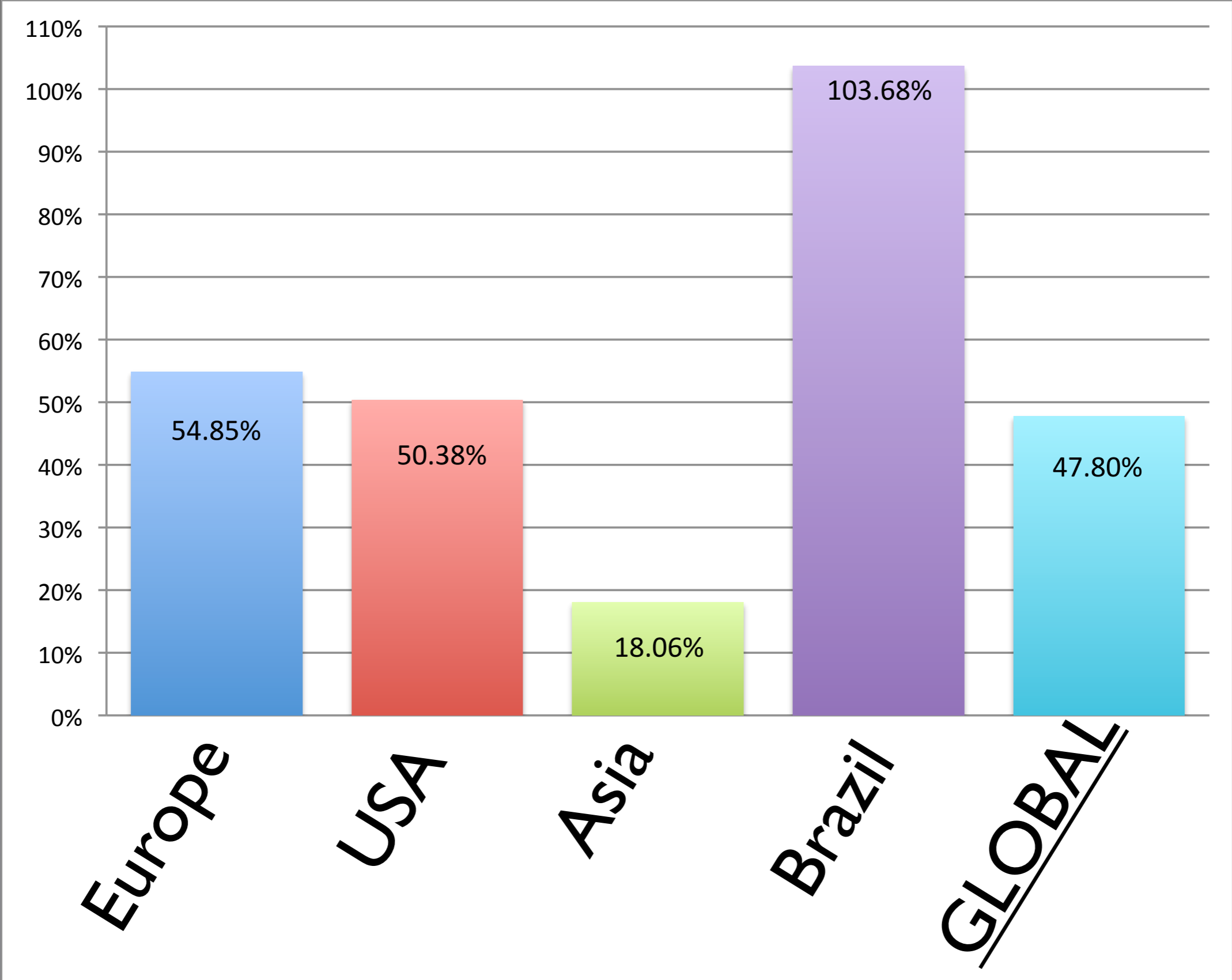


# European IXP traffic

- Combined European IXP peak traffic has risen from:
  - 1.975 Tbps end Sept '08 to 3.149 Tbps end Sept '09
  - 1.174 Tbps or 60% increase in the past 12 months

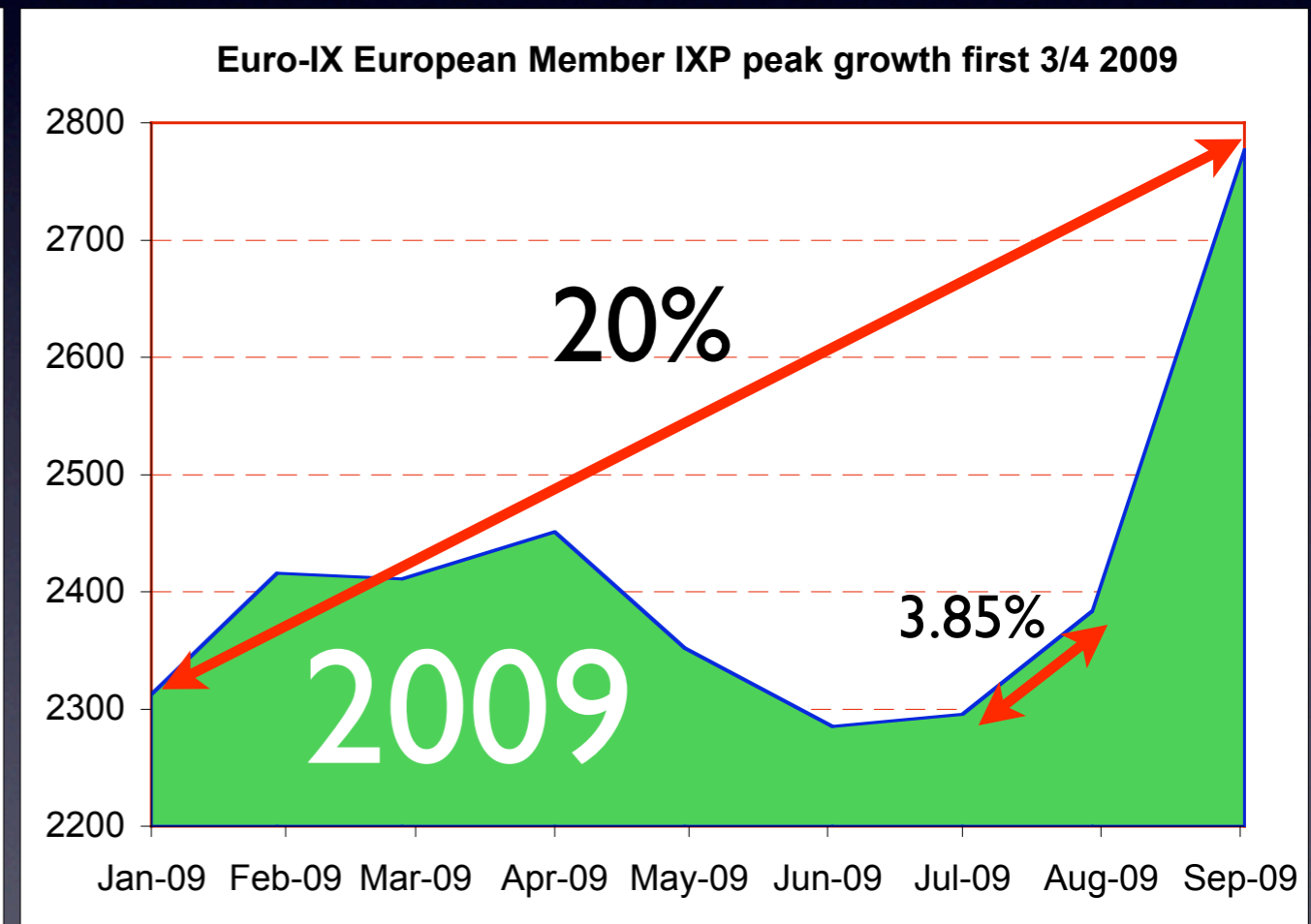
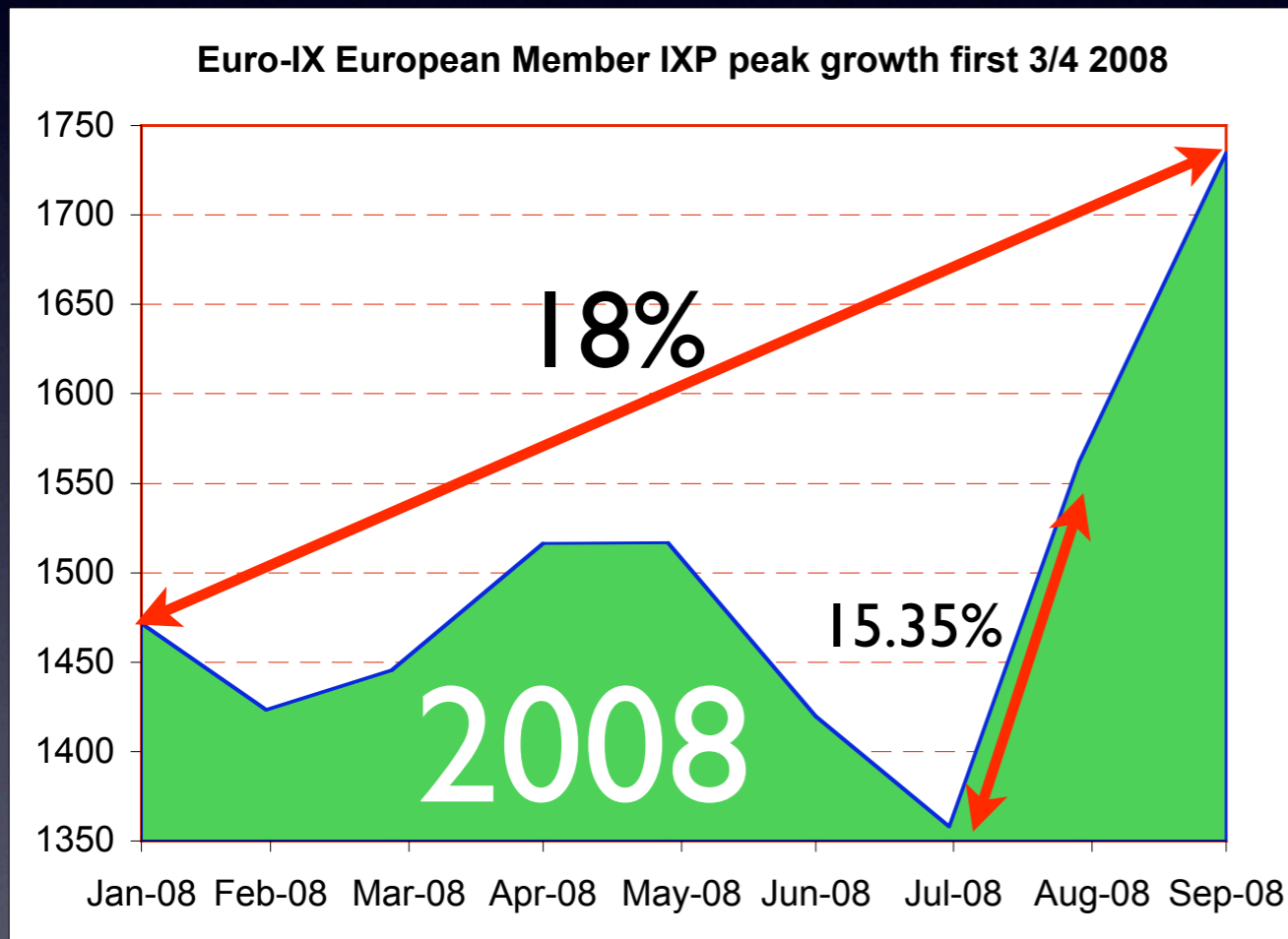


# Global IXP growth August 2008 – August 2009



# 2008 compared to 2009 IXP traffic

- The increase in peak traffic from the end of January 2008 to the end of September 2008 was **18%**
- In 2009 this increase was **20%**

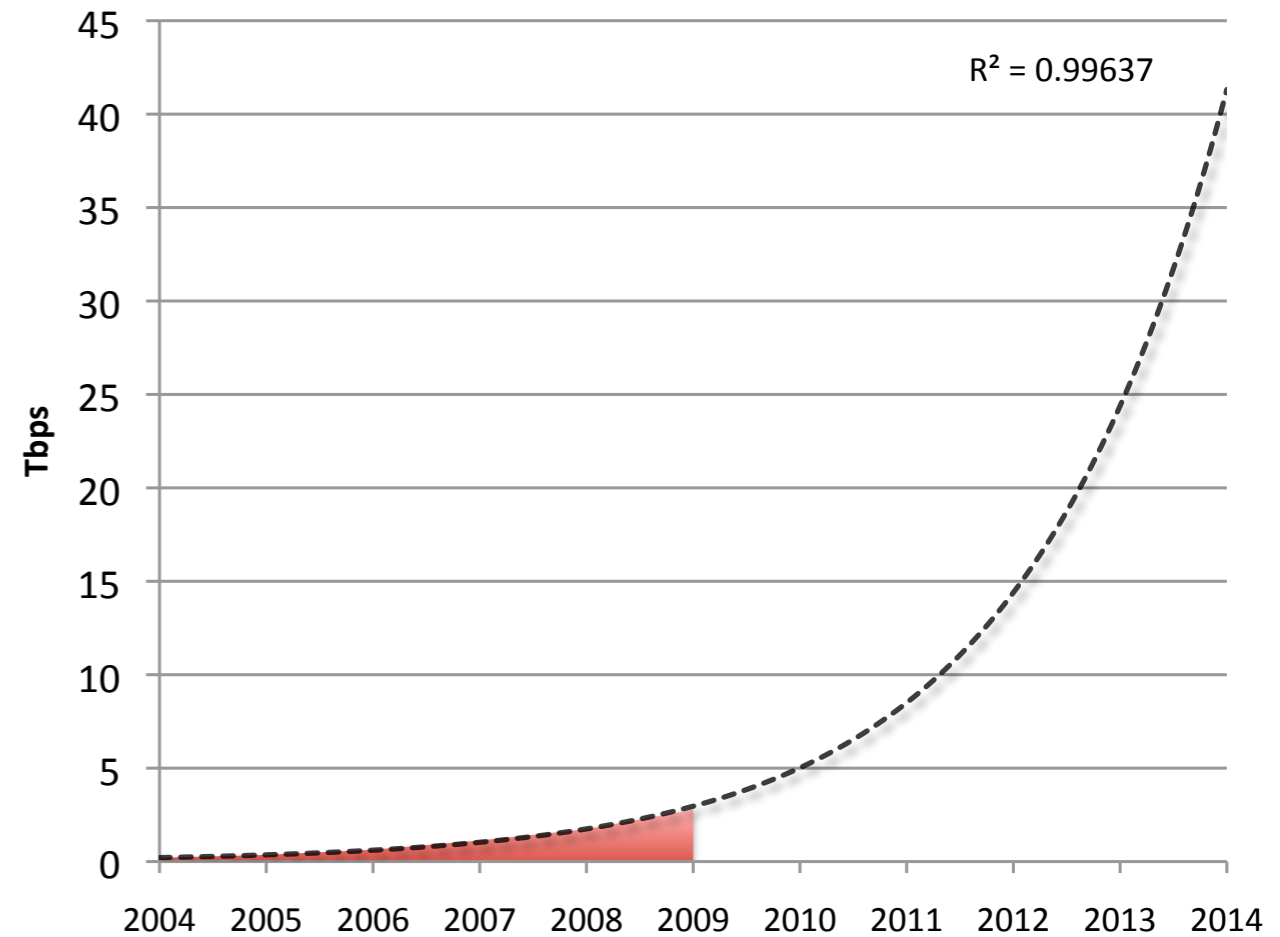
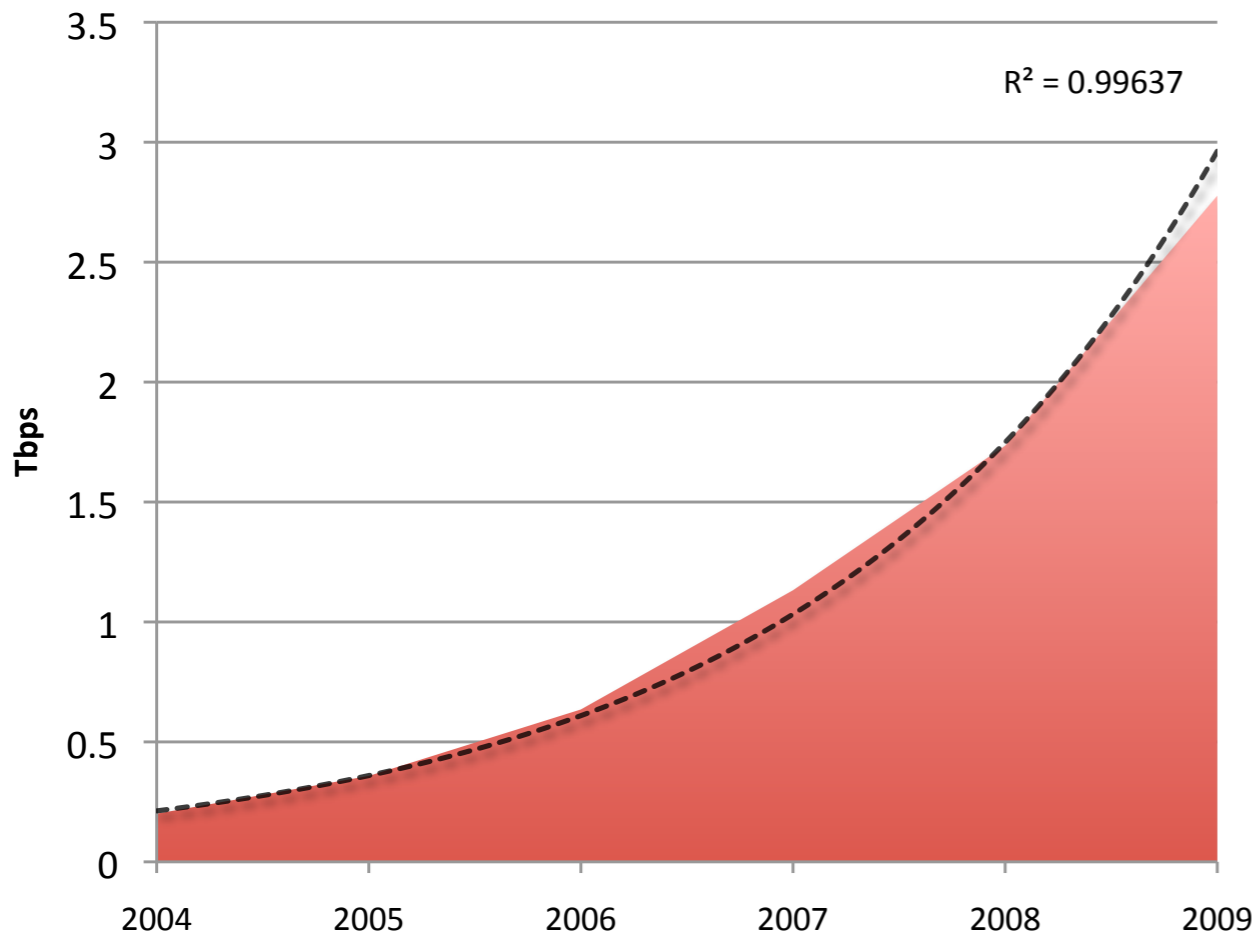


End of summer take up was later than in 2008



# 5 year peak IXP traffic projection

- Increase in member peak traffic from the end of Sept. 2004 to the end of Sept. 2009 was 14 fold
- Exponential trend line suggests 41 Tbps+ by 2014



# IXP participants

- 5.200 participants at 121 IXPs across Europe
  - ▶ *15% increase over the last 12 months*
- 3.090 of these have unique ASNs
- 780 ASNs present at > 1 IXP in Europe
  - ▶ *18% increase over the last 12 months*
- 29 ASNs present at 10+ IXPs in Europe

# Euro-IX ASN DB

## Search the Euro-IX ASN Database

Enter an ASN, IXP or organisation name:

Query

AS2686

Search

Your search returned 18 results

<u>Organisation</u>	<u>AS number</u>	<u>IXP</u>
<a href="#">AT&amp;T Global Network Services Hellas</a>	<a href="#">2686</a>	<a href="#">AIX</a>
<a href="#">AT&amp;T Global Network Services</a>	<a href="#">2686</a>	<a href="#">AMS-IX</a>
<a href="#">AT&amp;T Global Network</a>	<a href="#">2686</a>	<a href="#">BIX</a>
<a href="#">AT&amp;T</a>	<a href="#">2686</a>	<a href="#">BNIX</a>
<a href="#">AT&amp;T EMEA</a>	<a href="#">2686</a>	<a href="#">CIXP</a>
<a href="#">AT&amp;T GNS Deutschland</a>	<a href="#">2686</a>	<a href="#">DE-CIX</a>
<a href="#">AT&amp;T</a>	<a href="#">2686</a>	<a href="#">Equinix</a>
<a href="#">AT&amp;T GNS</a>	<a href="#">2686</a>	<a href="#">ESPANIX</a>
<a href="#">AT&amp;T Global Network Services Oy</a>	<a href="#">2686</a>	<a href="#">FICIX</a>
<a href="#">AT&amp;T GNS</a>	<a href="#">2686</a>	<a href="#">LINX</a>
<a href="#">AT&amp;T Global Network Services</a>	<a href="#">2686</a>	<a href="#">MIX</a>
<a href="#">AT&amp;T</a>	<a href="#">2686</a>	<a href="#">Netnod</a>
<a href="#">AT&amp;T Global Network Services</a>	<a href="#">2686</a>	<a href="#">NIX</a>
<a href="#">AT&amp;T CR</a>	<a href="#">2686</a>	<a href="#">NIX.CZ</a>
<a href="#">AT&amp;T GNS - EMEA</a>	<a href="#">2686</a>	<a href="#">PARIX</a>
<a href="#">AT&amp;T GLOBAL NETWORK SERVICES</a>	<a href="#">2686</a>	<a href="#">SFINX</a>
<a href="#">AT&amp;T</a>	<a href="#">2686</a>	<a href="#">TOP-IX</a>
<a href="#">AT&amp;T</a>	<a href="#">2686</a>	<a href="#">VIX</a>

## Search the Euro-IX ASN Database

Enter an ASN, IXP or organisation name:

Query

KPN

Search

Your search returned 21 results

<u>Organisation</u>	<u>AS number</u>	<u>IXP</u>
<a href="#">KPN EuroRings B.V.</a>	<a href="#">286</a>	<a href="#">DE-CIX</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">VIX</a>
<a href="#">KPN Global Carrier Services</a>	<a href="#">N/A</a>	<a href="#">AMS-IX</a>
<a href="#">KPN International</a>	<a href="#">286</a>	<a href="#">LONAP</a>
<a href="#">KPN Mobile The Netherlands B.V.</a>	<a href="#">64595</a>	<a href="#">AMS-IX</a>
<a href="#">KPN Telecom</a>	<a href="#">286</a>	<a href="#">LINX</a>
<a href="#">KPN Telecom B.V. (ISP Infrastructuur)</a>	<a href="#">8737</a>	<a href="#">AMS-IX</a>
<a href="#">KPN Wholesale Service &amp; Op.</a>	<a href="#">286</a>	<a href="#">AMS-IX</a>
<a href="#">KPN Nederland</a>	<a href="#">1136</a>	<a href="#">BNIX</a>
<a href="#">KPNQwest Italia</a>	<a href="#">5602</a>	<a href="#">MIX</a>
<a href="#">KPN</a>	<a href="#">1136</a>	<a href="#">PARIX</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">FreeIX</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">INXS</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">INXS</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">N-IX</a>
<a href="#">KPN Eurorings</a>	<a href="#">286</a>	<a href="#">NL-IX</a>
<a href="#">KPN TELECOM BV</a>	<a href="#">286</a>	<a href="#">SFINX</a>
<a href="#">KPN Telecom</a>	<a href="#">286</a>	<a href="#">NDIX</a>

# Euro-IX News (I)

- 15th Euro-IX Forum - Rome 2 & 3 November
  - ▶ Hosted by NaMeX of Rome
  - ▶ Expecting around 40 IXPs to attend
- Resources [[www.euro-ix.net/resources/](http://www.euro-ix.net/resources/)]
  - ▶ 2009 Report on European IXPs (end Oct.)
  - ▶ Euro-IX IXP BCP - Now public
  - ▶ Asia-Pacific IXP list: currently 69 IXPs
    - Open to additions if you have them!

# Euro-IX News (2)

- *“Plans” to make Euro-IX even more global - this is to be further discussed by our membership, so stay tuned for developments!*
- *Euro-IX Route Server initiative making progress*
- *Euro-IX Film competition: [The Internet Revealed](http://www.euro-ix.net/film/)*  
*[[www.euro-ix.net/film/](http://www.euro-ix.net/film/)]*

# EUROPEAN INTERNET EXCHANGE ASSOCIATION

[HTTP://WWW.EURO-IX.NET](http://www.euro-ix.net)

[SERGE@EURO-IX.NET](mailto:SERGE@EURO-IX.NET)