# **EU Commission IPv6 Update**

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## European Commission adopted Action Plan in May 2008

- Strategic objective: EU should have made a significant step by 2010 -25% objective
- Stimulation of IPv6 reachable content, services, and business applications
- Timely preparation of the introduction of IPv6

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- Public sector procurement
- Monitoring security and privacy implications



### How do we see the situation?

- 32 /8 IPv4 blocks in IANA pool
- Adoption of IPv6 is still very low
- However some indicators such as IPv6 BGP entries, AS numbers participating in IPv6 BGP, traffic at IXs, show relative increase compared to IPv4
- Hardware and software vendors are introducing IPv6 pro-actively, yet still problems with features and support
- Content providers do not offer much on IPv6, one exception Google

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• With a few exceptions (e.g. Freenet) Home Users do not have native IPv6

## IPv6: only more addresses?

- In the past IPv6 features over-hyped
- IPv6 no new services, so the obvious answer is yes
- However, the huge address space offers some advantages that might be underestimated
- IPv6 key to a flexible architecture
  - Many network interfaces per device
  - IPsec in IPv6 connects end points (not only border routers)
  - Positive user experience and agile business
- Every private household can have a permanent address (space)
- IPv6 makes it easier (and cheaper) for users to
  - operate their own home server and network, including sensor networks
  - offer content on their own website
  - collaborate directly (without server)

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## **Current activities at EU level**

#### **Discussion with Member States**

- Council on 27 November 2008 and now followup discussions
- Swedish Presidency will be important
- Study to measure IPv6 deployment throughout the EU just launched
- Two recent FP7 projects:
  - http://www.6deploy.eu/
  - http://www.efipsans.org/
- Various outreach activities
  - One big task: How to motivate popular
    Websites to be IPv6 reachable
- Preparatory work to introduce IPv6 in
  - Commission's network

sevent International Co-operation



## Outlook

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## Speed of IPv4 exhaustion not clear

- Today we expect sometimes in 2011
- But market reactions to rationalise the use of addresses may come
- The dilemma remains:

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- Great benefits for users and society
- Little incentives for individual actors;
  IPv4 exhaustion not felt as an immediate problem; wait and see mentality
- IPv6 is no longer an awareness
  issue: It is about doing it