



Verband der deutschen Internetwirtschaft e.V.

**The Market – What can we expect from the Internet
of Things?
A Provider Perspective**

EURO-NF Workshop

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Agenda

- **What is different with the Internet of Things?**
- **The influence on the infrastructure of todays Internet.**
- **The impacts on existing business models**
- **The challenge of new business models**
- **Risks**

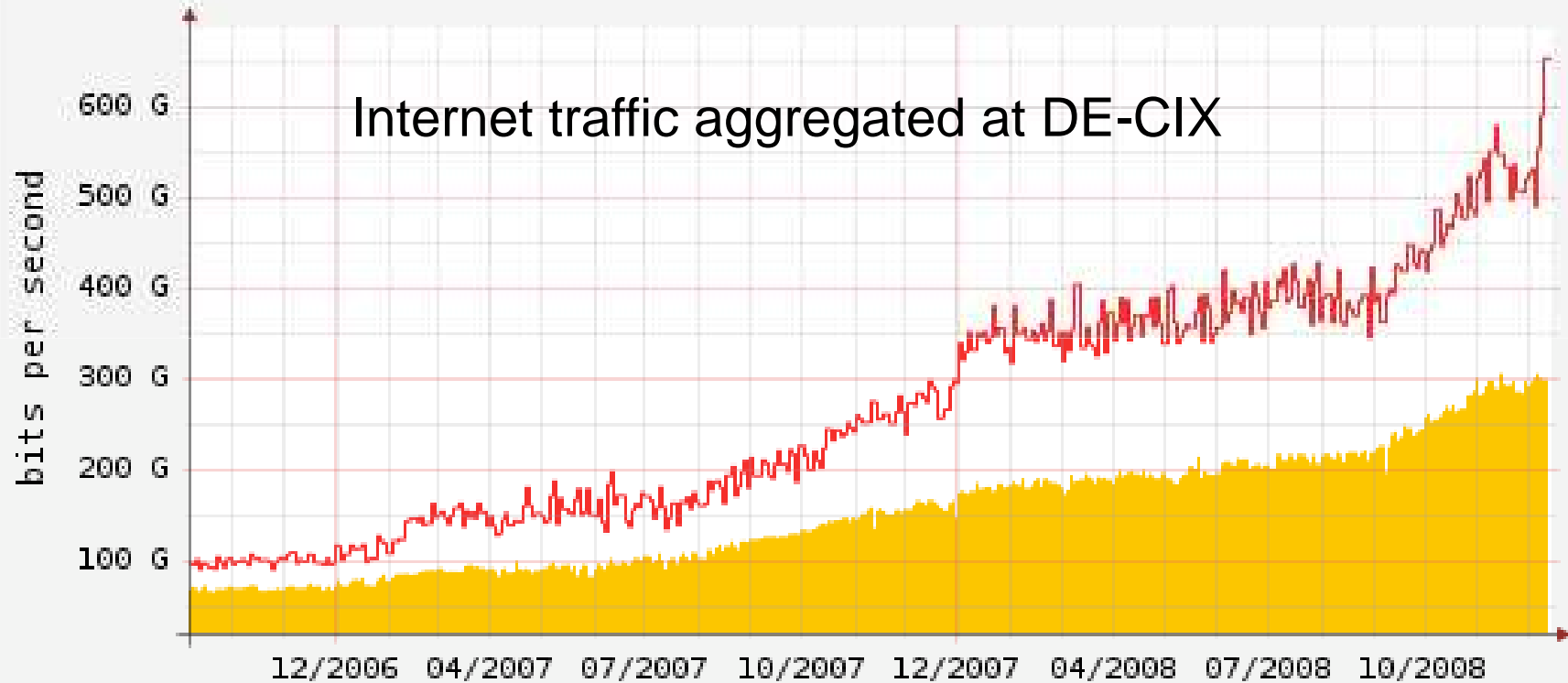
What is different with the Internet of Things?

- Technically nothing different or new!
 - Principal architecture of Internet remains untouched
 - Communication over the Internet without direct human involvement seems to be natural to the approach
 - ONS was first introduced in 199X as a replacement for the ISBN notation by Tim Berners-Lee

The influence on the infrastructure

- We need more and sufficient coverage of Internet access in Europe
 - fixed, wireless
 - no real bandwidth problem
- It might be clever to virtually separate the flow of data
- We need adequate user devices
- New cost models for usage

Last update: Sun Dec 14 15:00:01 UTC 2008



■ average traffic in bits per second
 ■ peak traffic in bits per second

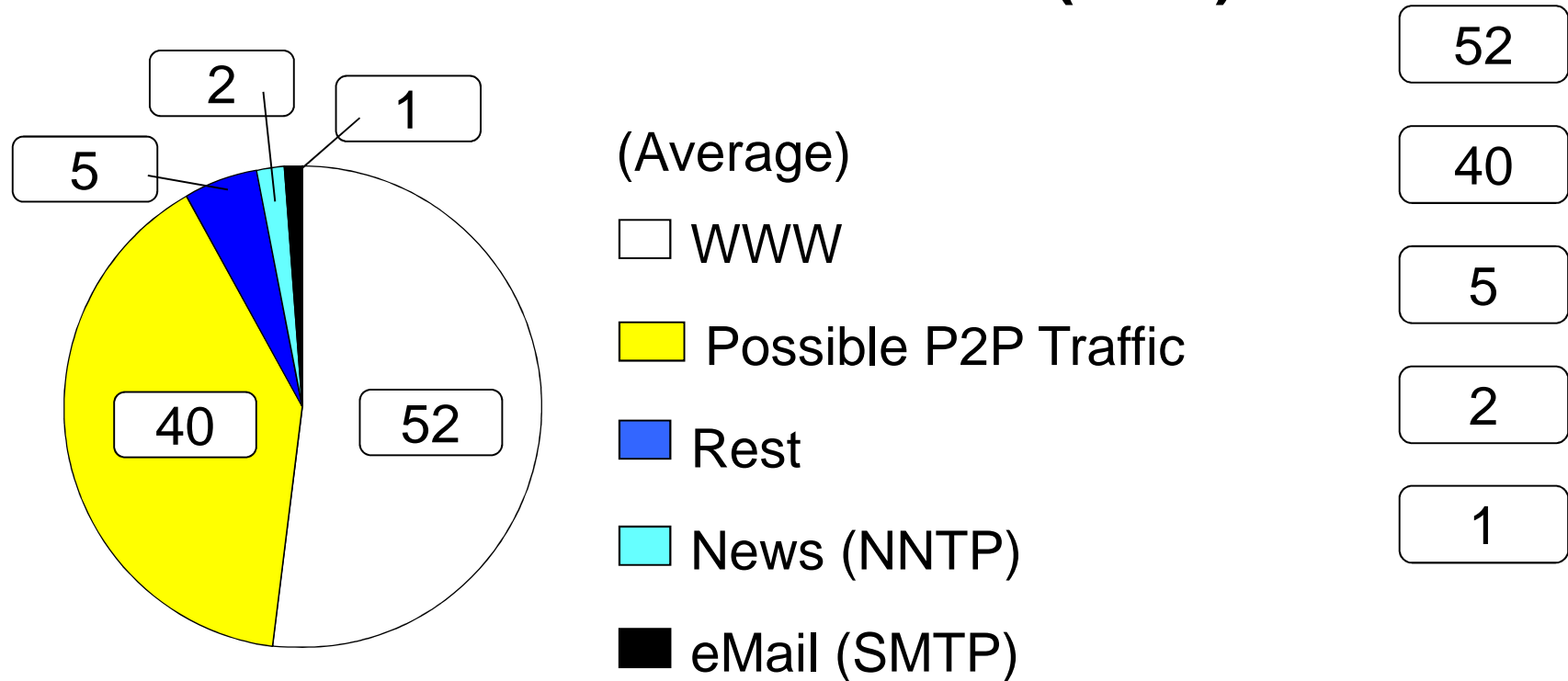
Averaged 151.6 G

Peak 653.9 G

Current 289.2 G

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DE-CIX: Classes of Internet traffic (in %)



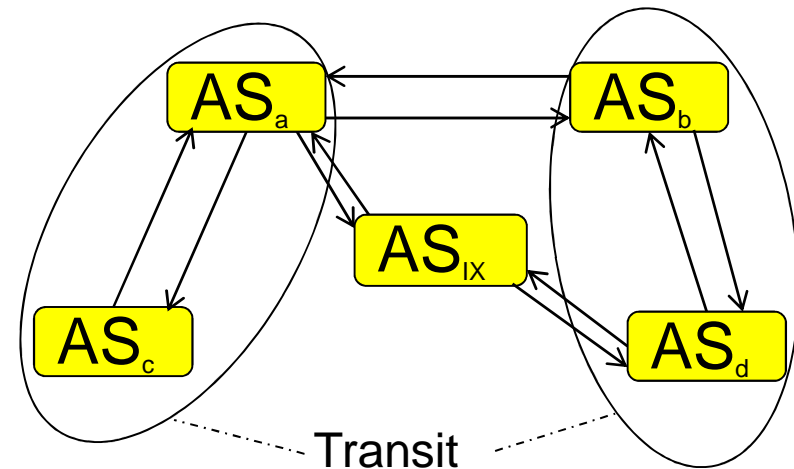
- Majority of traffic: Multimedia Content
- eMail only 1%
- VOIP not provable

The impacts on existing business models

- Content industry
 - more multimedia cross concepts
 - user friendly content
 - trust / security awareness
- Service provider
 - need to specialize
 - products
 - infrastructure
- Carrier
 - rollout partner for the big ones

The challenge of new business models

- Virtualize the Internet of Things
 - VLAN Technology
 - Multiple /alternative ONS Server
 - X-Route Server



AS = Provider network

IX = Internet Exchange Network

Risc

- Pest and Cholera of the Internet
- Privacy and security
- User acceptance not machine compatibility
- Open innovation and no monopolisation



Verband der deutschen Internetwirtschaft e.V.

Vielen Dank!

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