

## **DENOG6 – Peering Challenges Today**

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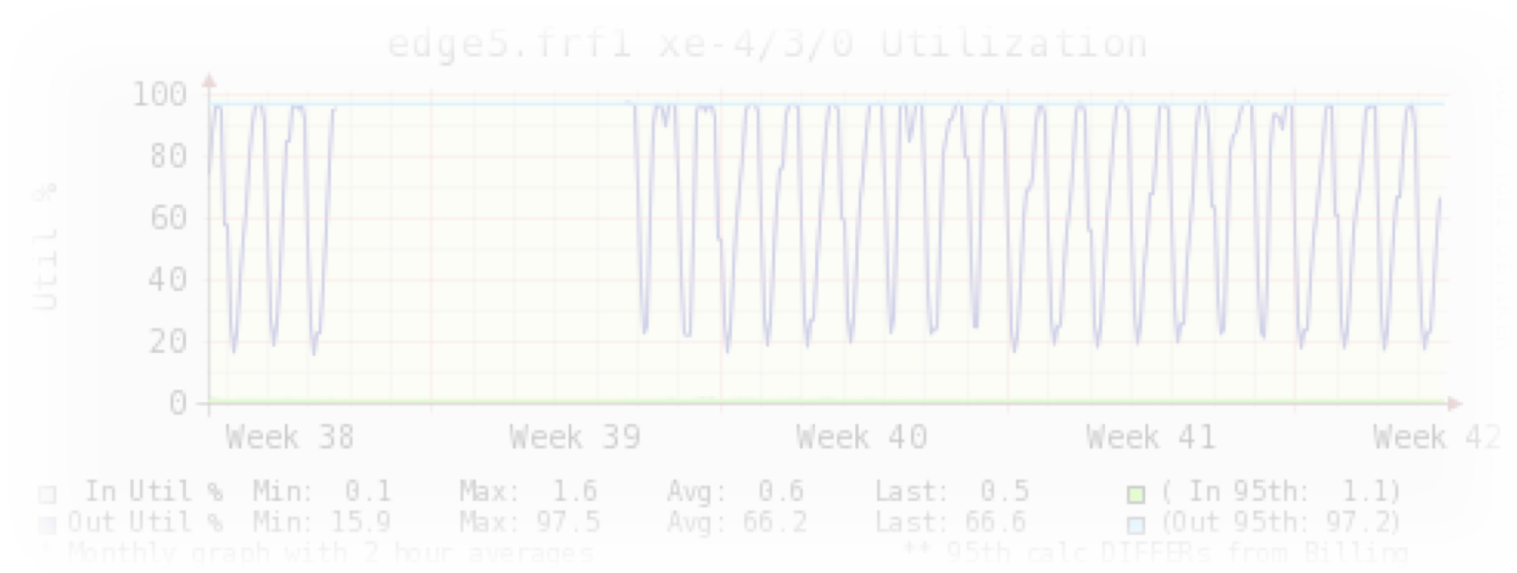
**Director of Interconnection Strategy, EMEA**

**Darmstadt, 20th November 2014**

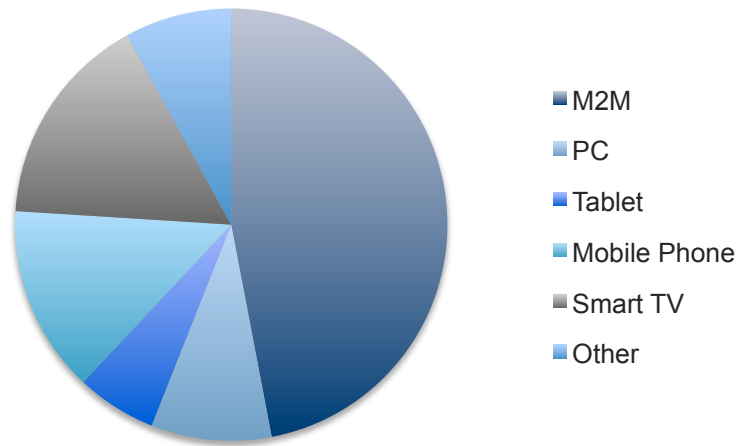
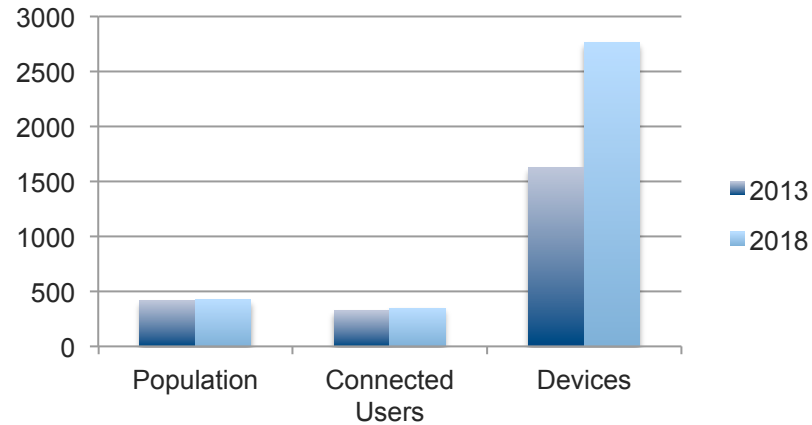
# If it's a joke, it's not funny...



“... a football match, a streaming video service and a software release walk into a bar...”



# Polarisation of the Internet



- 1.2bn networked devices to come on line within next 60 months
- Almost 4bn Internet end-users by 2018
- Average broadband speed to reach 42 Mbps by 2018
- IP video will represent 79% of all traffic by 2018

# Time to re-evaluate our peering prejudices?

**Value contribution** vs. dogma

- “This is how we always did it”

**Data** vs. instinct

- “You know, I *know* this stuff”

**Pragmatism** vs. passion

- “This thing from ten years ago”

<http://www.level3.com/en/legal/ip-traffic-exchange-policy/>

# Localise, localise, localise and localise



## Since last time we spoke...

- Delivered Internet Localisation
  - IP Transit + cache
- Delivered DEC
  - Cache
- Delivered edge connect
  - L2/3 connection direct to Level 3 CDN
- Peering in more new locations
- We're back on the road to meet our peers
  - NANOG, EFP, AMSIX, LINX, RIPE, SWINOG, DENOG
- Moved to a forward-looking proactive mode for peering forecasts
- Learning to demonstrate **Transparency** because we want to build **Trust**

# Do we need regulatory intervention?

## Changes observed

- Polarisation of network purpose, breaking traditional interconnect model
- Leveling off of fixed-line broadband growth
- Continued explosion of content growth
- Consolidation of access providers
- Walled gardens by some access providers

## Activities of Level 3

- Discussions of markets at local regulator level
  - Participation in mandatory activity
  - Participation in knowledge sharing
- Discussions of market at EU Commission level
  - Contribution to market surveys
- Change in own peering policy
  - Increased transparency
  - Move to bit-mile model
  - Hybrid IP/CDN peering model



# Keeping the pioneering spirit alive...

- Be part of the peering community
- Be more open where we can
- Be more predictable
- Be seen and have conversations
- Becoming more proactive
- Increase **Transparency**
- Build **Trust**
- Keep talking, keep learning



**Thank you !**

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