

IPTV - New Internet Driver for Capacity Demand on the Czech Market

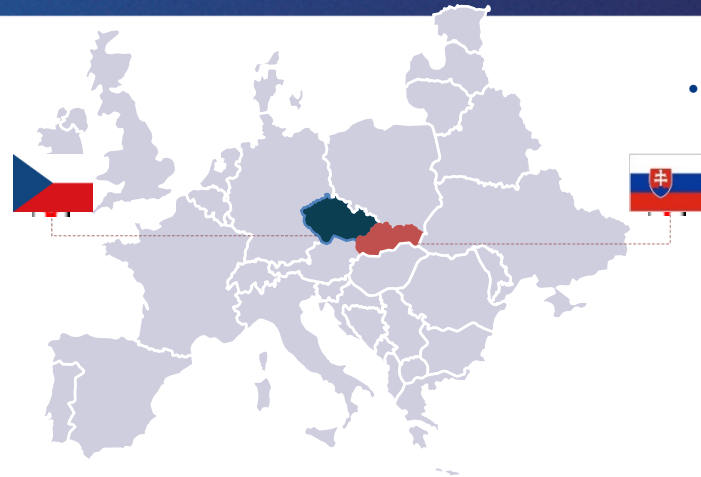
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O2 presentation

- 4,945k Mobile
- 883k fixed voice lines
- 799k xDSL
- 188k IPTV



- 1,711k Mobile

- Leading fixed/mobile operator
- Fastest growing Pay TV provider
- Leading fixed BB provider
- No. 3 mobile (25% m.s.), the fastest growing
- Voted “Operator of the Year” for the 5th consecutive year by customers
- Revenues +14%, EBITDA +20%

1.6.2015 O2 Czech Republic completed a separation of service and infrastructure businesses with the following goals:

- Vertically integrated O2 CR incorporates two different businesses: digital economy enabler (“O2”) and infrastructure unit (“CETIN”)
- Each requires a different management approach and set up of goals
- Different investment policies and horizons to be followed to maximize the shareholders value

O2 History and Milestones

- Founding member of NIX.CZ with an open peering policy
- Till 2014 ISP with biggest download in NIX.CZ with minor upload needs
- today NIX and Transit exclusively via 100G ports:
 - controllability
 - flexibility
 - cost
- Since 2014 content distributor of Czech national TV channels
- Since 2015 O2TV OTT provider

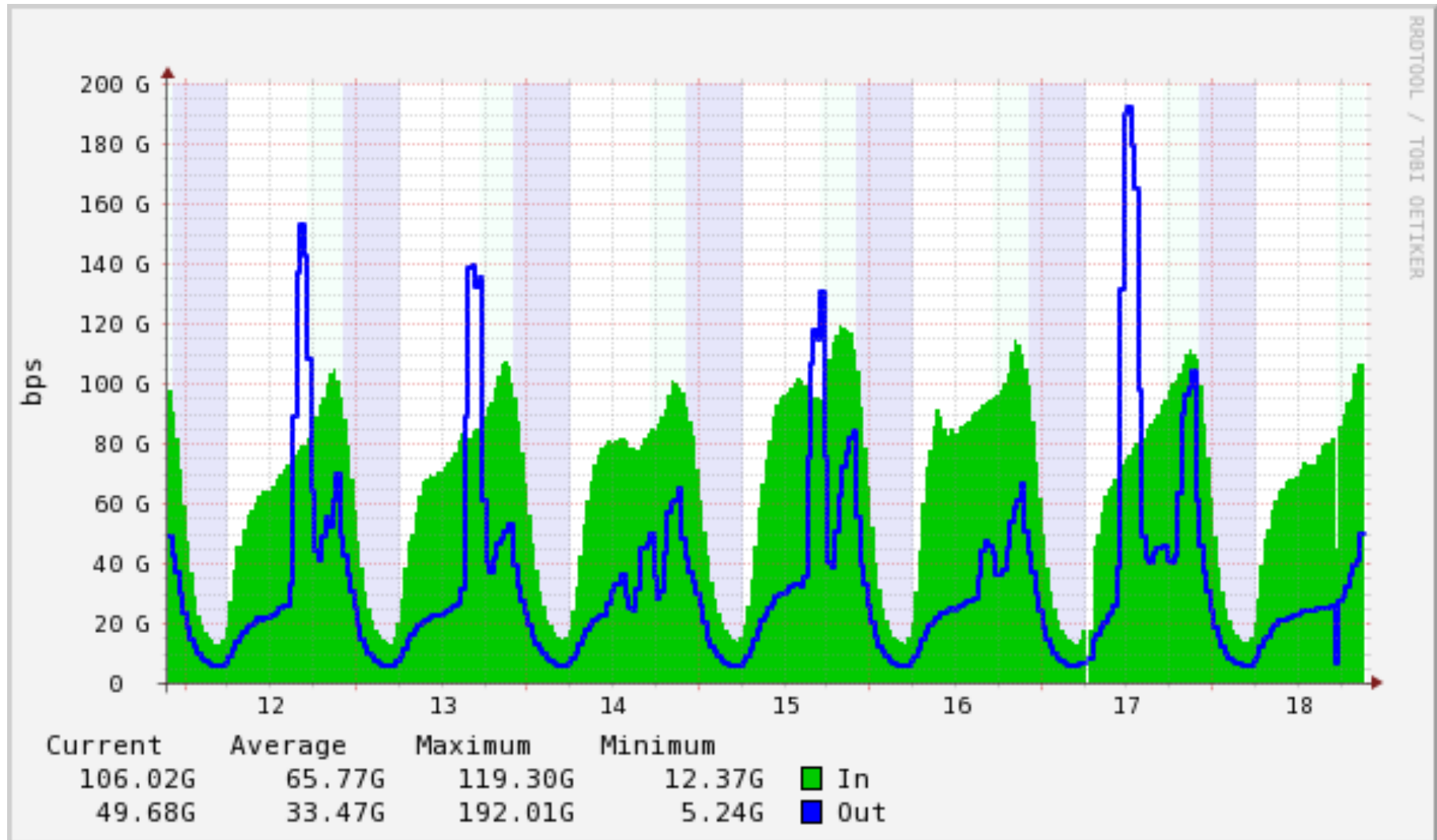
Czech IPTV/VoD Market

- All major Czech TV channels (CT, Nova, Prima) with the IPTV/VoD paid/free platform
- Dozen of thematic channels and IPTV streams:
 - no legal obligation
 - low cost content production
 - national environment limiting foreigner competition (Netflix, Apple TV)

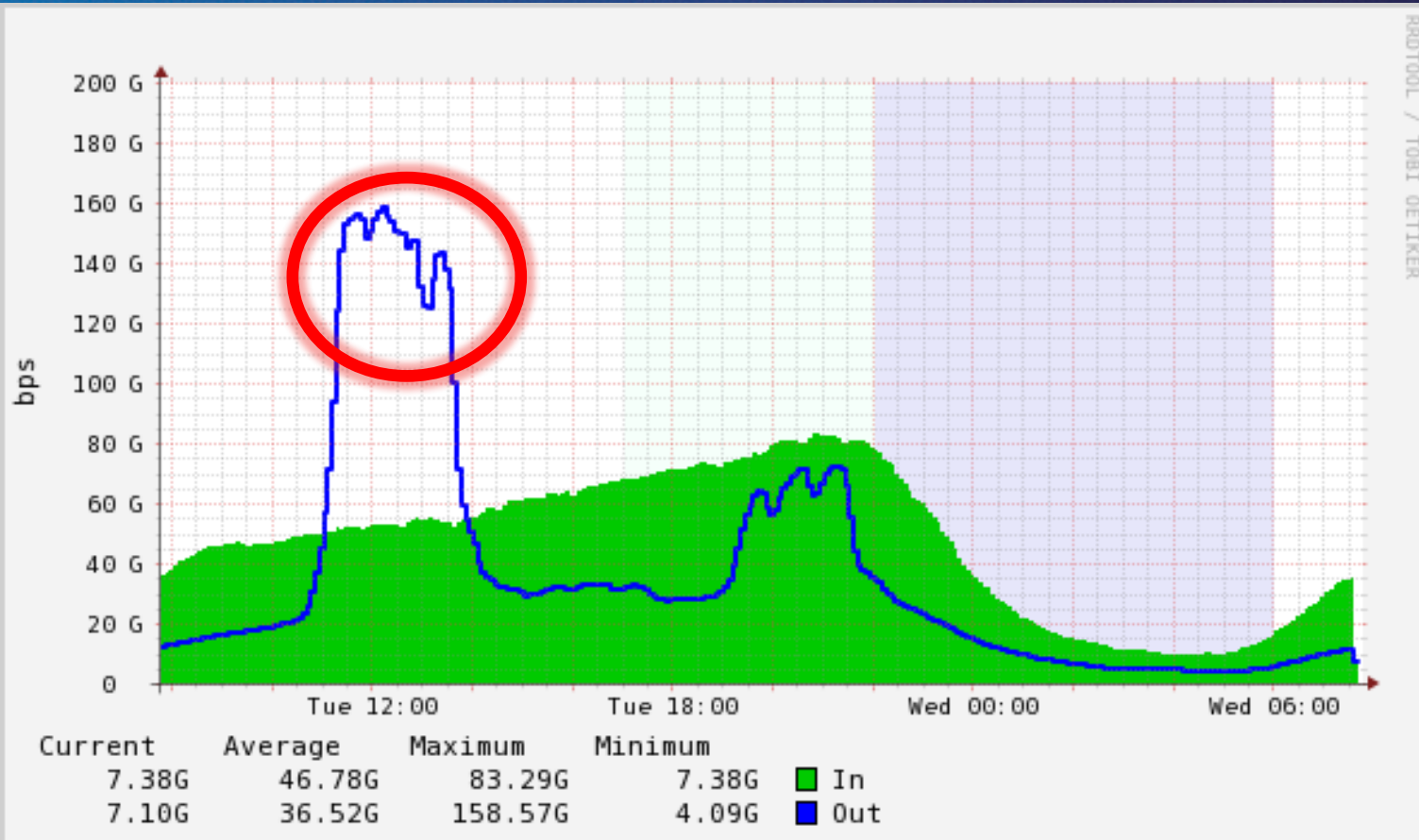
Our country is a leader in 2 areas



National Peerings - May 2016 Hockey Championship



O2 - NIX.CZ - Afternoon Match CZ - CH



- 158 Gbit/s in NIX (240 Gbit/s total)
- 8x growth
- Turning out/in rate
- Unpredictable peak
- Simple network quality evaluation (Adaptive streaming)

Challenges

Capacity peek

Quality On-net

Peering capacity

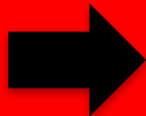


Move from 50/70/100 % use rules to +50% of spare capacity.

**Cooperation with NIX and other key direct peers
2 x 100Gbit/s “spare” capacity stand by**

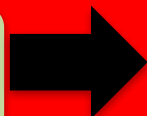
Peers capacity

Other networks



O2 without any influence

Transit connectivity



No issue for specific case

Thank you very much for your attention

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