Net neutrality in Europe
– Regulation and guidelines

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Understanding Net Neutrality

Net neutrality belongs to the network layer of the Internet. Content/applications are decoupled from the network layer.

“Over-the-top” Content and application layer

Net neutrality belongs to the network layer of the Internet.
Net neutrality timeline

**U.S.**
- Tim Wu
- Policy Statement
- Notice of Proposed Rulemaking
- Report and Order
- Verizon v. FCC
- NPRM
- Report and Order

**Norway**
- Nkom study
- Report
- Norwegian Guidelines on Net Neutrality

**Europe**
- Net neutrality objective
- Regulatory Framework
- Proposed Regulation
- NN Regulation

Timeline:
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
The aim of the European NN rules

• Safeguard equal and non-discriminatory treatment of traffic
• Protect end-users (– who are end-users?)
• Guarantee the continued functioning of the internet ecosystem as an engine of innovation

• Existing regulatory framework aims to promote the ability of end-users to access and distribute information or run applications and services of their choice.
• A significant number of end-users are affected by traffic management practices which block or slow down specific applications or services
• Require common rules at the Union level to ensure the openness of the internet and to avoid fragmentation of the internal market
Commercial practices / zero-rating

• Neither prohibited per se, nor accepted per se

• Some practices will clearly infringe
  ➢ e.g. all applications blocked except the zero-rated application(s) when the data cap is reached

• Others practices less clear – to be assessed based on criteria set out in the Guidelines
  ➢ circumvention of general aims of Regulation
  ➢ market position of ISPs and CAPs involved
  ➢ any effects on end-user rights of consumers/businesses
  ➢ any effects on end-user rights of CAPs
  ➢ scale of practice and availability of alternative offers
Traffic management of IAS

1. “treat all traffic equally”

2. reasonable traffic management
   …based on objectively different technical QoS requirements of specific categories of traffic. Such measures shall not monitor specific content…

3. shall not block, slow down etc. – with three exceptions
   (a) compliance with other laws, (b) preservation of integrity and security, and (c) congestion management measures.
   • In contrast to network-internal blocking put in place by the ISP, terminal equipment-based restrictions put in place by the end-user are not targeted by the Regulation.
   • NRAs should consider that in cases when application-agnostic congestion management is not sufficient, congestion can be dealt with according to Article 3(3)(c).
Specialised services

Examples that may be considered specialised services:

• VoLTE (high-quality voice calling on mobile networks)
• Linear broadcasting IPTV services with quality requirements
• Real-time remote health services

Specialised services must meet requirements of:

• Necessity – are specialises services necessary to meet requirements for a specific level of quality?
• Capacity – is network capacity sufficient that quality of internet access services is not degraded?
• No substitution – are specialised services usable or offered as a replacement for IAS?
Transparency requirements

ISPs shall ensure that contracts specify at least the following:

(a) Impact of traffic management measures
(b) Impact of volume limitation, speed etc.
(c) Impact of any specialised services on IAS
(d) download and upload speed of IAS

• fixed networks:
  minimum, normally available, maximum and advertised speed

• mobile networks:
  estimated maximum and advertised speed

ISPs shall also publish the information
Supervision and enforcement

NRAs shall closely monitor and ensure compliance with Art 3 & 4

- **Information-gathering**
  - Transparent information from ISPs, published/contractual
  - ISPs shall make information available at request of NRAs

- **Technical measurements**
  - BEREC NN QoS Regulatory Assessment workstream

- **Assessment of practices in the market**
  - BEREC fostering exchange of experiences by NRAs

- **Annual net neutrality report**
  - Published by 30 June for the period 1 May – 30 April

- **Enforcement**
  - NRAs may e.g. impose requirements on ISPs
Discussion

• Distinguish Regulation from Guidelines

• End-user rights and end-user control
  ➢ “Equal” treatment of traffic
  ➢ Run applications of their choice
  ➢ Protect the freedom of expression

• Innovation on the edge and in the core
  ➢ CAPs are protected as end-users
  ➢ Compatible with Internet technology evolution
  ➢ Compatible with 5G development and deployment

• Where will zero-rating lead?
Summary

• Objective: Protect the value of the Internet
• European NN at the beginning of a new era
• Where did we come from?
• Where are we now?
• Where are we heading?
• Global outlook