



Post- og teletilsynet

Network Neutrality

– the Norwegian Approach

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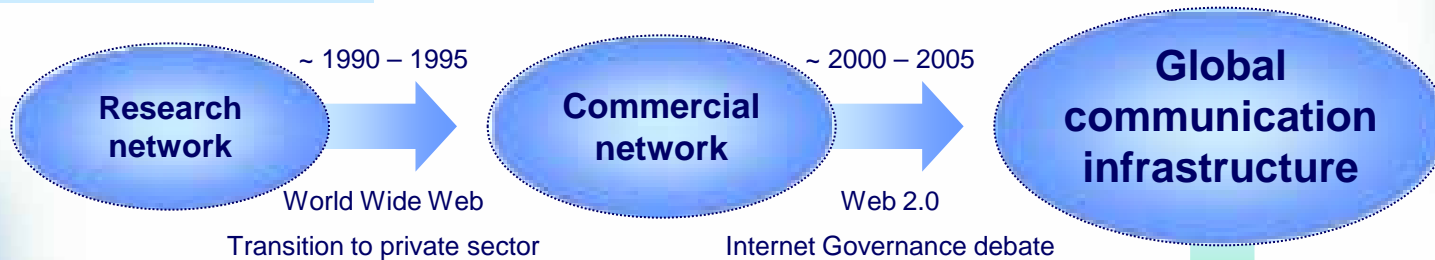
EuroDIG Meeting in Geneva

14th September 2009



Why Network Neutrality?

Internet evolution:



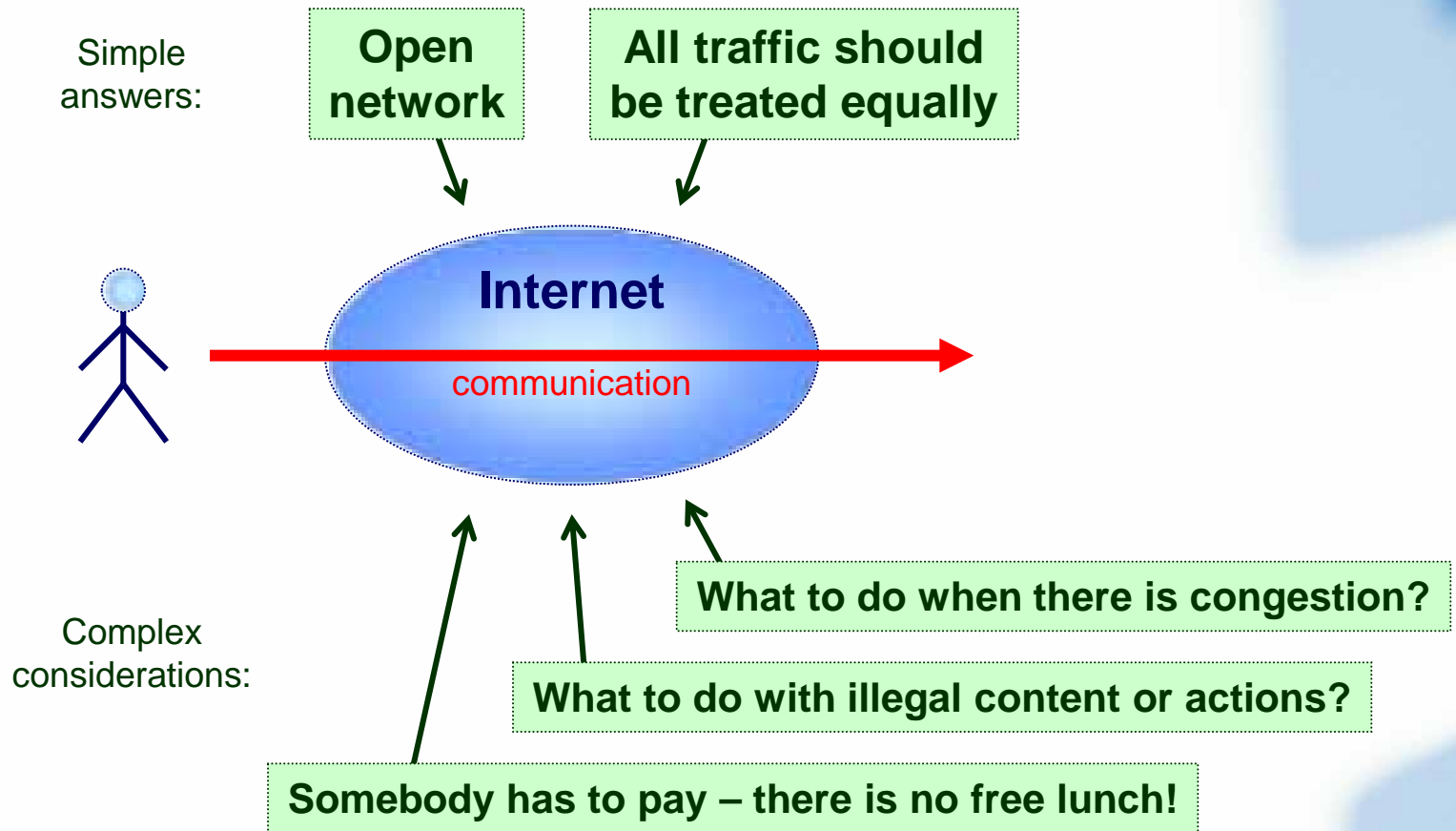
Why Network Neutrality?
Preserve the Internet an open and non-discriminatory platform for all types of communication and content distribution.

Today: Global dependence

**Future: Universal Service Obligation?
– A human right**

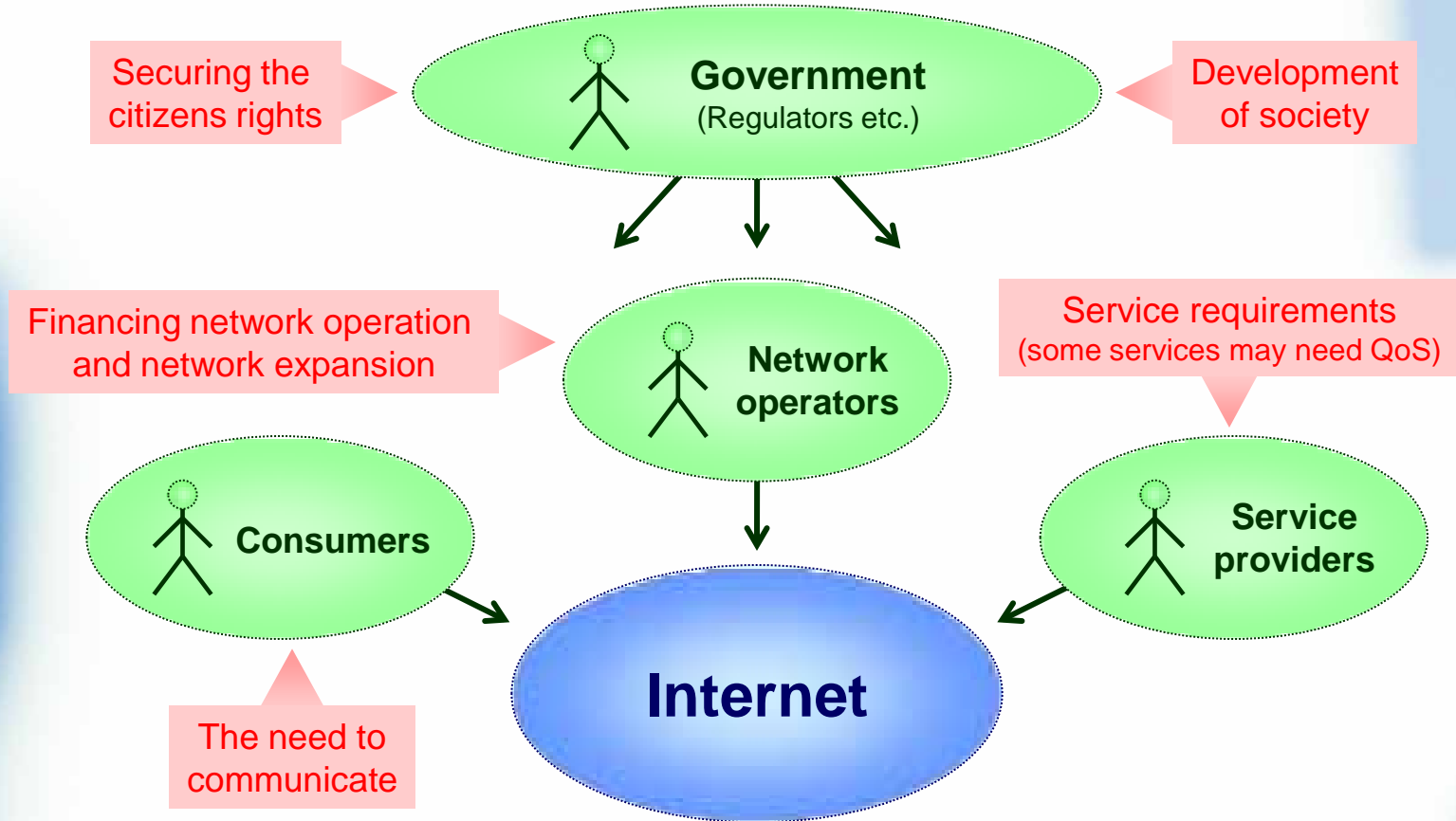


What is Network Neutrality?





A balanced view on NN



- **Cooperation between lawyers, economists and engineers**



Is NN really threatened?

May be, may be not – it depends on who you ask

- Real world NN cases:
- Europe: VoIP in mobile networks
 - US: Blocking of BitTorrent p2p
 - US: Madison River – The classic case

Competition *should* take care of this problem

- But what if you can't choose another provider? (e.g. fiber access)
- And how easy is it to change? (implies change of e-mail address etc.)
Ref. number portability in telephone networks

Does the ISPs have incentives to break NN?

- Threatens traditional sources of revenue (telephony, television)
- Advertising revenue from prioritized content on servers
- Segmenting of the market (e.g. VPN for business users)



The Norwegian Approach

- **Soft regulation**
- **Collaboration with the Internet industry**
 - Internet service providers (ISPs)
 - Service/content providers
 - Industry organizations
 - Consumer protection agencies

The ISPs argued

“There is no net neutrality problem in Norway today, so why do we need guidelines on net neutrality?”

NPT questioned back

“If there is no problem, why can't you commit to net neutrality?”

The Norwegian Guidelines were released Feb. 2009

Ars Technica: **“Norway gets net neutrality - voluntary, but broadly supported”**

Forbrukerportalen (Consumers' Portal): **“Historic agreement on net neutrality”**

www.npt.no  [g Services](#) [g Internet](#) [g Guidelines for network neutrality](#)



Extras

Principles for Network Neutrality



Principle 1 – No degradation

A touch of EU

The Internet users are entitled to an Internet connection with a predefined capacity and quality.

This means that

1. The capacity and quality of the Internet connection is to be clearly specified.
2. If the physical connection is shared with other services, it must be stated clearly how the capacity is shared between Internet traffic and the other services.

1. This lays the foundation for the capacity regulated by principles 2 and 3.
2. Internet access shared with services with QoS (e.g. IPTV, NGN services)

• **NEXT PRINCIPLE: The network itself should be transparent, it is not sufficient that the conditions are transparent**

Inspired by the Annenberg Center Principles for Network Neutrality, 27th March 2006 and Proposal in “Telecom Packet”, presented by the Commission, COM(2007) 698 final, 13th November 2007



Principle 2 – No blocking

A touch of US

The Internet users are entitled to an Internet connection that enables them to

- send and receive content of their choice
- use services and run applications of their choice
- connect hardware and use software of their choice that do not harm the network.

However,
this does not mean that the principle can be used to legitimize unlawful or harmful actions.

Examples on unlawful or harmful actions:
IPR violations, child pornography, spam etc.

- **NEXT PRINCIPLE: It is not sufficient that communication is non-blocked, it must also be non-throttled**

Inspired by the Federal Communications Commission Policy Statement, 23th September 2005



Principle 3 – No throttling

A touch of Japan

The Internet users are entitled to an Internet connection that is free of discrimination with regard to type of application, service or content or based on sender or receiver address.

This means that there shall be no discrimination among individual data streams that use the basic Internet service.

Exceptions:

- block activities that harm the network (e.g. denial-of-service attack),
- comply with orders from the authorities (e.g. laws or court decisions),
- ensure the quality of service for specific applications that require this (e.g. real-time applications like VoIP and IPTV)
- deal with special situations of temporary network overload

The measures of this type shall be published and disclosed to users.

Inspired by Report on Network Neutrality from the Japanese Ministry of Internal Affairs and Communications, September 2007