



Fair Share / Sending Party Network Pays

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Agenda

- Netnod short background
 - Values and where we stand in general
- Public Policy 101
 - Which tools are available for actors with public policy / regulatory intent?
- Netnod view on SPNP / Fair Share



Netnod background

A neutral organisation with more than 25 years working at the core of the Internet

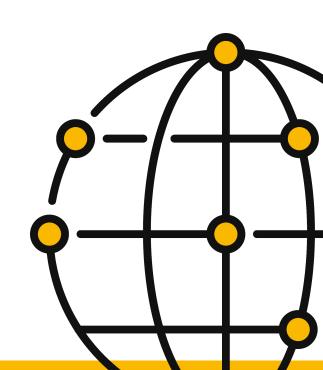
- Operates the largest Internet Exchange (IX) in the Nordics
- Manages I-root, one of world's 13 root name DNS servers
- Provides DNS services to enterprises and some of the largest Top Level Domains in the world
- Develops Time and frequency services with the highest levels of accuracy and security





Netnod: working for the good of the Internet

- Netnod is a neutral organisation formed and fully owned by the non-profit Stiftelsen för Telematikens Utveckling (TU-Stiftelsen).
- We are focused on contributing to the development of the Internet by:
 - providing rock solid, best-in-class services at the core of the Internet
 - ensuring full redundancy and the highest level of service availability
 - playing a role in standards and governance activities important for Netnod's services and customers





Tools available to legislators

Legislators are not limited to legislation!





Public policy 101

- The public policy toolbox (in most cases) consists of two main tools:
 - Regulation
 - Rules that must be followed
 - ex ante legislation describe what is allowed / not allowed explicitly
 - ex post regulation focus on management of liabilities after events has occurred, such as competition / anti-trust after market failure
 - Financing
 - Direct financing of functions / infrastructure / services / ...
 - Procurement of services

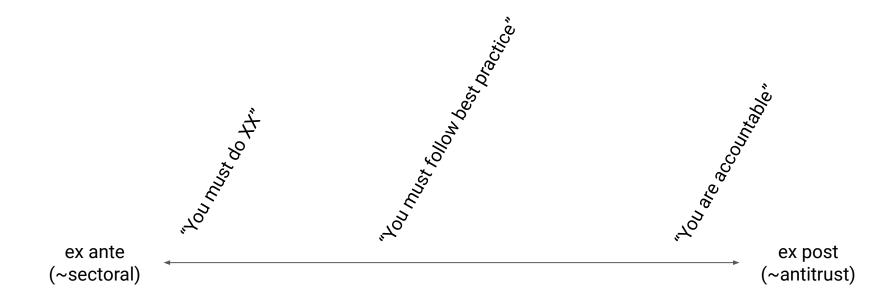


Public policy: Regulation

- ex ante legislation
 - Describes what needs to be done
 - Liability without damage caused
 - "Content provider shall reimburse network provider by the amount of XX per YY data sent"
 - "Manufacturer of products with digital elements shall certify products by the method of ZZ"
- ex post legislation
 - Describes accountability in case of damages
 - Not applicable (in general) before damage is caused
 - "Organizations are liable by the terms of their contracts"
 - "Such agreements between companies that have the purpose or effect of preventing, restricting, or
 distorting competition in the market in a noticeable manner are prohibited."



Legislation: Not black and white



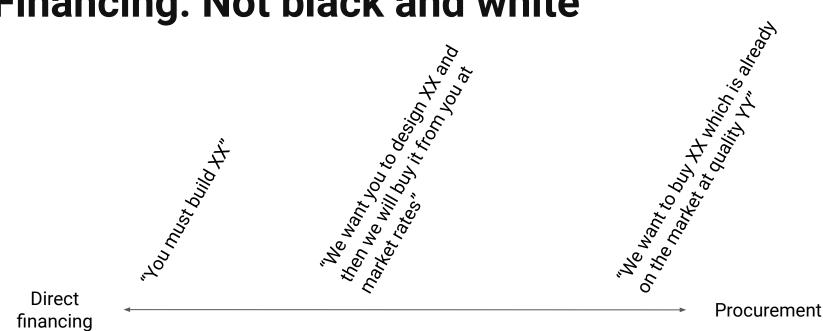


Public policy: Financing

- Direct financing
 - The public directly finances a known want
 - Examples
 - Finance fiber optical infrastructure between X and Y
 - Finance research for BGPsec development and standardization
 - Research grants, infrastructure projects, etc
- Public procurement
 - The public takes a market position by buying services of wanted quality
 - Examples
 - Public agencies are required to only procure redundant and IPv6 enabled Internet access services
 - Public agencies are required to ensure that products of procured software development services is available as open source
 - Procurement directives, government standardization of services, etc



Financing: Not black and white





Netnod opinion on SPNP

"Regulate less! Procure better services!"





Netnod opinion on SPNP

- There is no empirical evidence suggesting that there is a market failure
 - Cf. ex post regulatory requirements of shown market failure for antitrust law to be applicable are not met
- The suggested solution is an ex ante normative suggestion, where actors are required to reimburse each other according to regulation rather than market terms
 - Market logic is a better solution, use ex post legislation such as antitrust to ensure market function instead
- The suggested solution further vertically integrate network and traffic
 - The Internet-model is built on the notion that network and traffic are separated, bundling them would lead to a completely different network. **WARNING: very dangerous path!**
- The opinion of BEREC is seemingly ignored
 - The EU has a way of functioning in which the opinions and wants of decentralized agencies should carry some weight. In this case the suggested SPNP approach is directly contrary to the opinion of the decentralized competent agency. **WARNING: very dangerous path!**

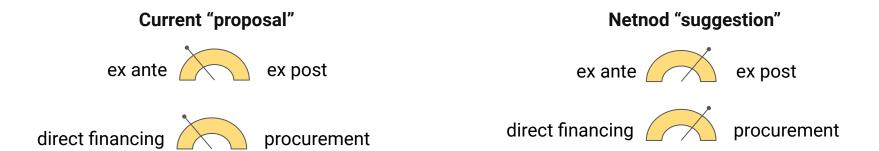


Netnod suggested high-level solutions

- At a general level, replace most of the EECC* (and co-legislation such as the Gigabit infrastructure act) with small portions of highly specialized ex ante formulation, and leave the general working of the market to be handled by ex post antitrust law with small amounts of symmetric sector specific ex ante legislation, if necessary led by public procurement and to a lesser extent financing by public agencies
 - Suggested ex ante formulation concerns Internet access and symmetrical regulation, while leaving the larger workings of the interconnection of networks to the "market".
 - This means that public procurement needs to address PPDR issues, such as negotiating and procuring societal infrastructure robust enough to handle national crisis (and ultimately war)
 - The public can directly finance the construction of infrastructure to allow operators to build and market robust services on top of that infrastructure



Comparison



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infrastructure act) with small portions of highly specialized (symmetric) ex ante formulated
legislation, and leave the general working of the market to be handled by ex post antitrust law
and mostly public procurement and to a lesser extent financing by public agencies

