

Power perspectives on multiplatform PSB – neutral vs differentiated networks

Bergen 26–27 April 2007

Tanja Storsul, Associate Professor

tanja.storsul@media.uio.no

Challenges for public service broadcasters

Digitalisation:

- Multichannel tv
- Multiplatform media

Policy:

- PSB remit redefined
- PSB on new platforms?

Increased competition means risk of marginalisation

All want to be Martini media – but are there limits to what the license fee can finance?



New challenges for multiplatform PSB

Convergence?

When addressing the same audience across platforms – power structures diverge.



Differentiated or neutral networks?

- Broadcasting
- Internet
- Mobile



What are implications for PSBs?

3 > Institutt for medier og kommunikasjon (IMK)

Broadcasting

Terrestrial networks are regulated to prioritise public service broadcasters.

Cable networks must carry public service broadcasters.

Satellite networks not specifically regulated (most countries) – but competes on exclusive channels

Not neutral

- networks are **bottlenecks** and content is therefore **prioritised**



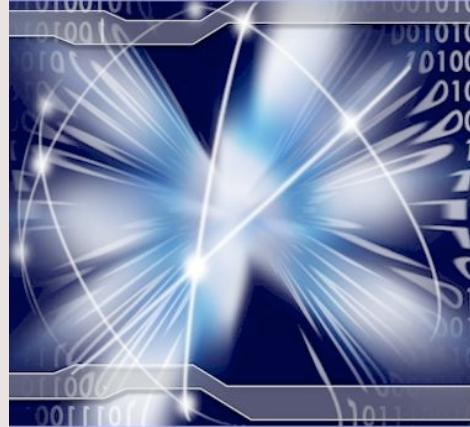
4 > Institutt for medier og kommunikasjon (IMK)



The Internet

Neutral or differentiated?

- The concept net neutrality
- The debate
- The issues
- Implications for PSBs



Net neutrality

The end-to-end-principle:

- networks are not specialised and are platforms for multiple uses

Neutral networks:

- treat all content, sites, and platforms equally.
- carry every form of information and support every kind of application.

A useful way to understand this principle is to look at other networks, like the electric grid, which are implicitly built on a neutrality theory. ... The electric grid does not care if you plug in a toaster, an iron, or a computer.... The electric grid worked for the radios of the 1930s works for the flat screen TVs of the 2000s.

Tim Wu (www.timwu.org)

Net neutrality in the 1990s

Net neutrality not challenged much :

- Low bandwidth services.
- Little money in content.
- Network providers needed content to drive traffic.

(storsul 1999)

1997

2007

Oppdatert: 21. desember 1997 kl. 21:22

Hva er du interessert i? KLIKK HER!

Bondevik seirer på alle fronter

Statminister Kjell Magne Bondevik gjer en bedre jobb enn Thorbjørn Jagland. Selv Ap-velgerne er enig i det.

THOMAS SPENCE

For partiet, personen og politikeren Bondevik inneber dagens meningsmåling en trippel-seir:

Bondevik personlig tar en knusende seir over Thorbjørn Jæland i

LAVPRISKALENDEREN: Den endre veien til de billige billettene

Aftenposten INNENRIKS POLITIKK

Jens i verdenstoppen

Lover kraftige kutt i gassstasjonene

Errat: Mye selvskryt

Blir du med opp?

7 > Institutt for medier og kommunikasjon (IMK)

**After 2000:
Net neutrality questioned**

Three basic developments:

I Content providers started to earn money

“Then the net becomes a real commercial arena. Finally some of the content providers have developed viable business models and some of them earn money. Then the question is turned upside down. Content providers should pay for the transport of signals that gives them this income. In other words: **Network providers want to get paid in both ends. Both from the end users and from those who fill the net with content**” (Eirik Solheim, NRK, 2006)

8 > Institutt for medier og kommunikasjon (IMK)



After 2000: Net neutrality questioned

II Broadband services created capacity problems

III Especially video and live services challenged neutrality:

“As the universe of applications has grown, the original conception of IP neutrality has dated: for IP was only neutral among *data* applications. **Internet networks tend to favor, as a class, applications insensitive to latency (delay) or jitter (signal distortion).** Consider that it doesn’t matter whether an email arrives now or a few milliseconds later. But it certainly matters for applications that want to carry voice or video.” (Tim Wu 2005)



Emerging debate in Norway

“Today’s business model with fixed price on broadband does not encourage telecom operators to invest in increased network capacity, because increased capacity does not mean increased income. **The solution can be to divide network capacity into different quality categories at differentiated prices. The customer [content provider] may then choose quality level and price, and will know what it pays for.**” (Berit Svendsen, Telenor in DN 28.08.2006)



Case I: Canal Digital limits file sharing

2006: Canal Digital reduced speed for P2P-traffic during rush-hour

Canal Digital struper fildelingstrafikk

Av Ida Østebro,
fre 22. sep 2006 kl. 15:45

Internettleverandøren Canal Digital nedprioriterer P2P-trafikk i rushtiden. Dette før at de få ikke skal få pødeleggje for de mange, sier talmann Thomas André Larsen.

Det Telenor-eide kabel-TV-selskapet Canal Digital er også i ferd med å bli store som nettleverandør. Nå kutter de hastighetene på fildelingstrafikk i rushtiden.

Ingen fildeling etter Dagsrevyen

80 prosent av traffikken i Canal Digital sitt nett er fildelingstrafikk. Nå ser selskapet seg nødt til, som det første i Norge, til å strupe P2P-trafikken i tidsrommet mellom 17 og 23 til fildelingstrafikk blir nedpriorert i forhold til vanlig surfing, web-TV og IP-telofi. Canal Digital ansår at bare 0,2 prosent av deres kunder vil få problemer som følge av dette.

- Fildeling er greit om natta

Førlemping har hastighetsredusjonen kun blitt gjennomført som en prøve i enkelte nett, men Canal Digital sier at den positive responsen fra kundene er så entydig at de mest sanntsynlig vil videreføre prosjektet til hele sitt nett.

- Vi tar gjerne imot fildelere som kunder, men de må legge denne aktiviteten til nettene og formiddagen. Vi har som mål å ha så mange formydede kunder som mulig, og dette sikrer de resterende 99,8% en best mulig tjeneste. Aktiviteten er ubegrenset resten av døgnet, sier Systemansvarlig for Internett, Thomas André Larsen i Canal Digital til iTavisen.



STRUPER FILDELING: Canal Digital slenger fildelingstrafikken mellom kl. 18 og 23.

Relaterte artikler

- » Dieselørke ga svensk nettkaos
- » Telenor sorterer kunder
- » 18 000 over bredbånd
- » 120 Mb i TV-kablene
- » Slutten på norsk nettnøytralitet

Tips en venn om denne saken

Abonner på vårt daglige nyhetsbrev

11 > Institutt for medier og kommunikasjon (IMK)

Case II: NextGenTel limits NRK

June 2006: NextGenTel (NGT) reduced transfer capacity from NRK.no to customers of NGT



Foto: MONTASJE

Lav NRK-kvalitet for NextGenTel-kunder

NextGenTel har redusert kapasiteten på nettrafikk fra NRK for sine kunder.

ANDERS HAGEN

Først publisert: 29.09.06 | Oppdatert: 29.09.06 kl. 16:50

Siste 100 artikler

Skriv ut Tips en venn

“The reason is that we cannot increase the capacity of our lines in accordance with NRKs provision of free services. Tippeligaen [Norwegian Premier League] is a pay service, and then we get pay for transferring the services to our customers. That covers our investments. When a content provider, like NRK, provides content for free, we do not have the same motivation to invest.”

Morten Ågnes, NextGenTel
to Aftenposten 29.09.2006

12 > Institutt for medier og kommunikasjon (IMK)

UNIVERSITETET I OSLO
DET HUMANISTISKE FAKULTET

The issues I: Quality of service

Free services:
annoying when services don't work.

13 > Institutt for medier og kommunikasjon (IMK)

UNIVERSITETET I OSLO
DET HUMANISTISKE FAKULTET

The issues I: Quality of service

Pay services:

- services must have a certain quality or people will not pay

DU HAR BREDBAND FRA TELENO

Med din nettilkobling kan du se video i inntil 1300 kbit/s. Det gir deg normalt god TV-kvalitet.

Telenor har avtale med TV 2 som skal sikre kvaliteten frem til deg. Dersom du likevel opplever problemer med videoavspilling (bilde/lyd hakker) ta kontakt med Telenor direkte.

Telenor har avtale om å levere video i inntil 1300 kbit/s. Din linje er målt til ca 2500 kbit/s.

FORTSETT » MÅL PÅ NYTT

VARE SAMARBEIDSPART

- Agder Energi
- Leverandører som samarbeider med E
- BKK
- Hafslund Telekom
- Catch
- Enova Bredbånd
- Enivest
- iConnect
- Lyse
- Mimer
- NextGenTel
- Salten
- Telenor
- Workzone

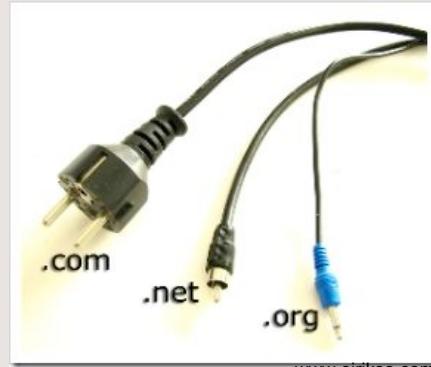
14 > Institutt for medier og kommunikasjon (IMK)



The issues II: Future structure of the Internet

Slow lane:

Free Internet based on end-to-end principle.



Fast lane:

Content providers pay for guaranteed QoS.

Where should PSB go?



Diverging interests

Network providers

Increased traffic

vs

New sources of revenue + handle capacity challenges

What stimulates innovation?

Content providers

Free and equal transmission

vs

Guaranteed quality of service

What should PSBs do?



If differentiated web: Implications for PSBs

PSBs must:

- pay for quality of service
- negotiate and sign contracts with each network provider (lawyers full employment...)

Martini Media
is expensive



Financing Martini Media

- license fee for web tv?
- pay per services?



Mobile

Different degrees of differentiation:

US: Cable TV model:

Access a package from mobile operator.

Norway: Differentiated web model:

Paid content usually available across networks, but specific QoS agreements.

Følg Tippeligaen på mobilien

Telenor og TV 2 tilbyr nå en unik mulighet til å følge Tippeligaen på mobil-TV. Du kan se kampene direkte, få scoringene på sms underveis og se heydepunkter etter kampene.



Biletten er en 3G-mobiltelefon og et Telenor-abonnement.

TOPPSAKER.NETTAVISEN

Summing up...

Different power structures in different networks

Broadcasting networks:

- Priority in the networks has been a key to PSB regulation

Internet:

- So far: non-priority in the networks was the key
- Possible future: priority to those who pay – not to promote PSB

Multiplatform PSB

- Free broadcasting services + pay services on new tv-platforms?
- What happens to PSB when media usage shifts towards less broadcasting and more web-tv?

But – bigger challenge for independent actors

Contrast to US debate

Join the Fight for Internet Freedom!



The Annenberg Center Principles for Network Neutrality

The goal of the Annenberg Center Principles for Network Neutrality is to provide a simple, clear set of guidelines addressing the public Internet markets for broadband access.

1. Operators and Customers Both Should Win: It is important to encourage network infrastructure investment by enabling operators to benefit from their investments. It also is important to ensure that customers have the option of unrestricted access to services and content on the global public Internet.

2. Light Touch Regulation: Any regulation should be defined and administered on a nationally uniform basis with a light touch. Regulations should be aimed primarily at markets in which it has been demonstrated that operators possess significant market power. The emphasis should be on prompt enforcement of general principles of competition policy, not detailed regulation of conduct in telecommunications markets.

3. Basic Access Broadband: Broadband network operators should provide "Basic Access Broadband," a meaningful, neutral Internet connectivity service.* Beyond providing this level of service, operators would be free to determine all service parameters, including performance, pricing, and the prioritization of 3rd party traffic.

4. Transparency: Customers should receive clear, understandable terms and conditions of service explaining how any network operator, internet service provider or internet content provider will use their personal information and prioritize or otherwise control content that reaches them.

5. Encouraging Competitive Entry: Government policy should encourage competitive entry and technological innovation in broadband access markets in order to help achieve effective network competition and make available high speed Internet access to the