Future regulation of Electronic Communications in the Netherlands

Ex ante regulation and its alternatives

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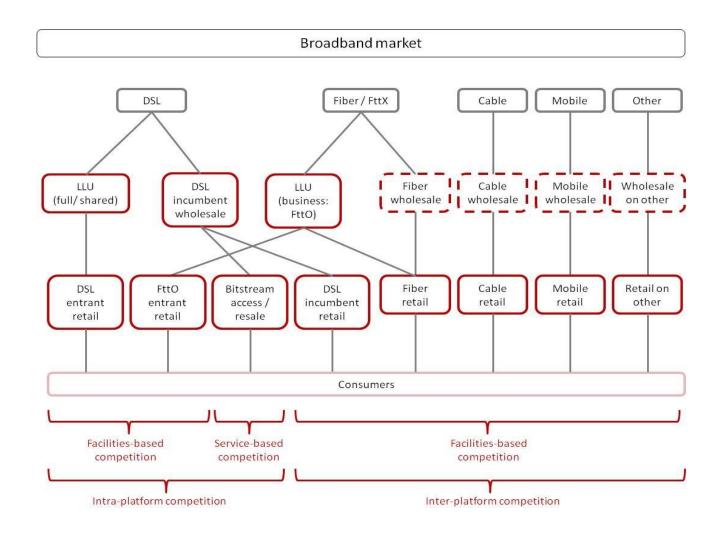
seo economisch onderzoek

A bit of history

Wholesale access to rtv networks ('three criteria test')

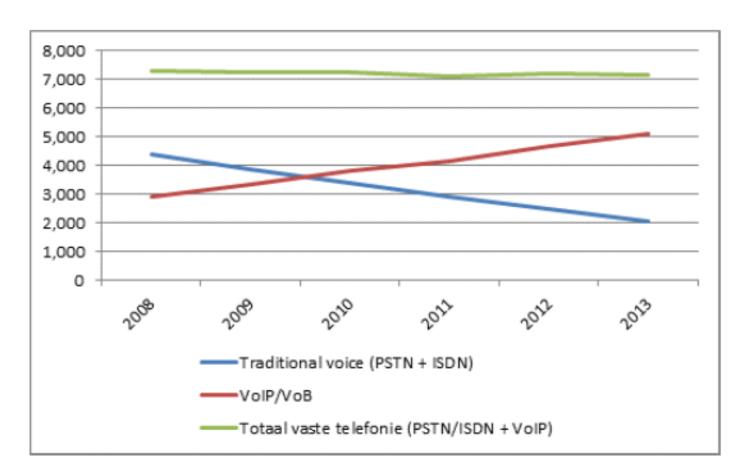
- 2009: OPTA decision to regulate cable networks
 - High barriers to entry
 - No tendency towards effective competition
- 2010: High Court reject OPTA decision
 - Geographical retail market: national rather than regional
- 2011: OPTA "judgement" no regulation needed
 - High barriers to entry but transitory
 - Tendency towards effective competition
- Future regulation ←→ competition

Market for broadband internet



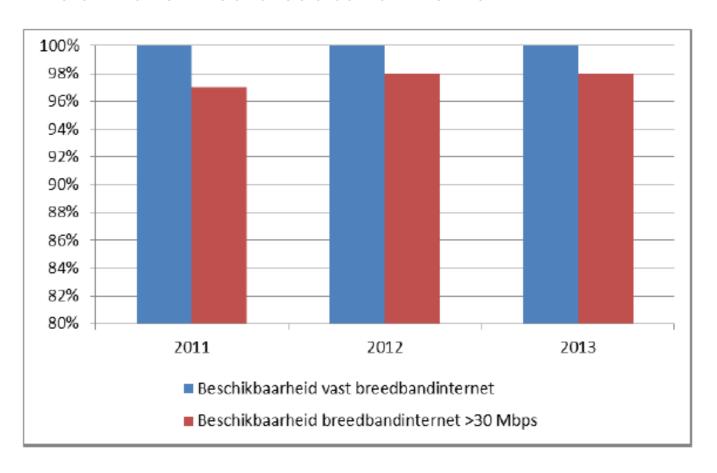
A few trends

The demise of traditional "voice" telephony



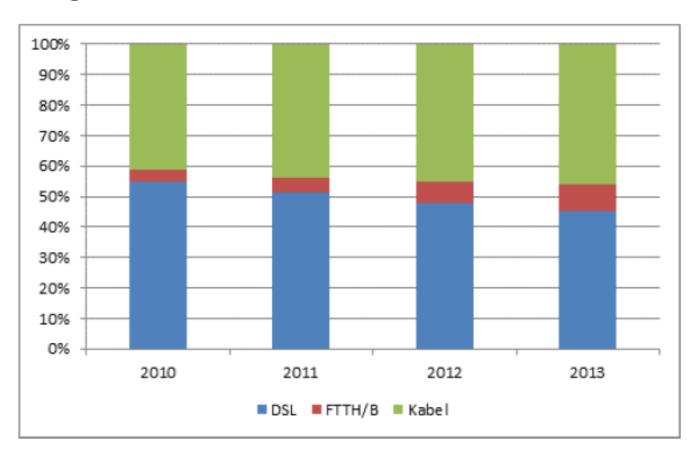
A few trends

We all have fixed broadband internet



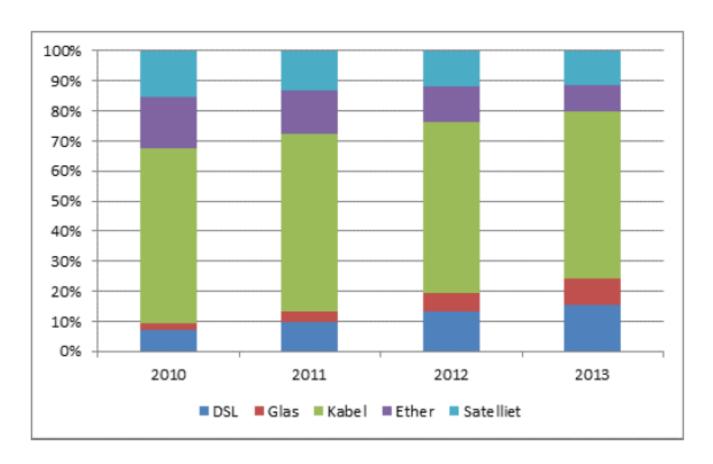
A few trends

Cable gains market share in broadband...



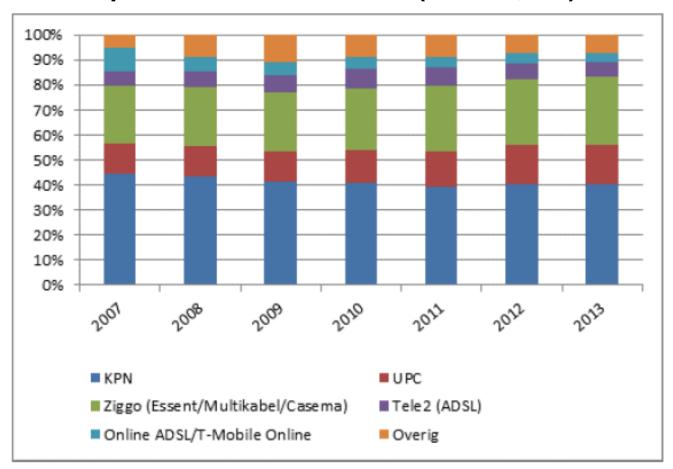
A few trends

...but loses ground in the television market



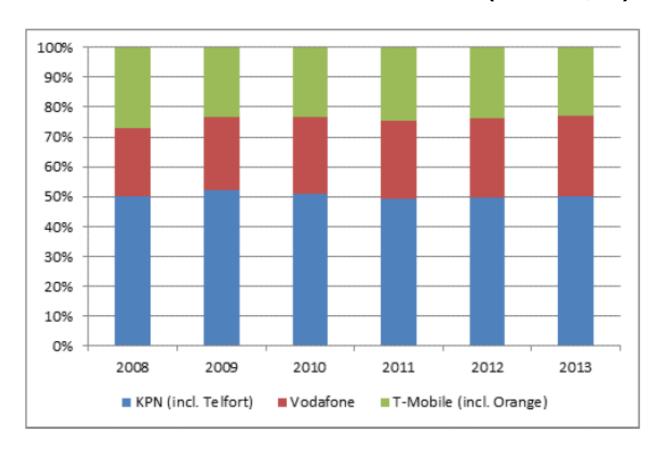
Competition

Two main providers of broadband (HHI = 0,401)



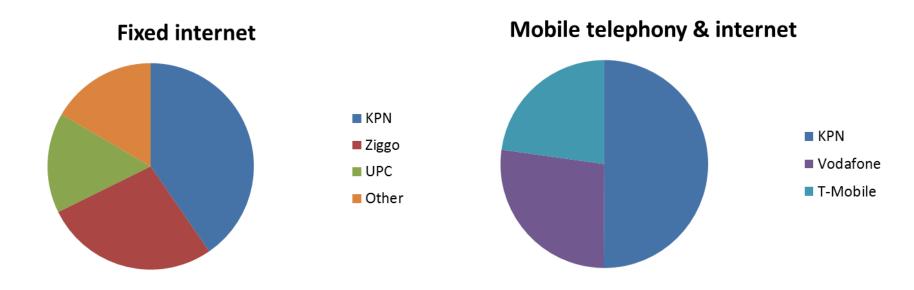
Competition

KPN still dominates the mobile market (HHI = 0,21)



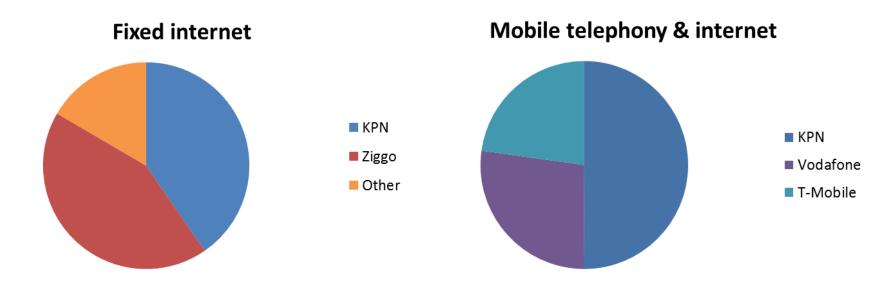
Consolidation Dutch telcos

Before the merger of Ziggo en Liberty Global (UPC)



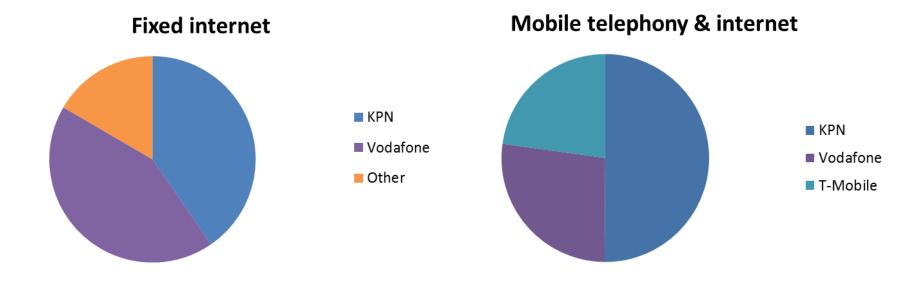
Consolidation Dutch telcos

After the merger of Ziggo en Liberty Global (UPC)



Consolidation Dutch telcos

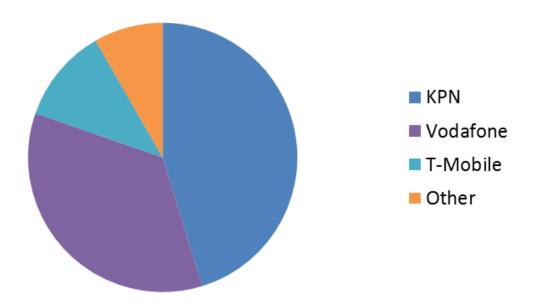
After the potential merger of Vodafone and Liberty Global



Consolidation Dutch telcos

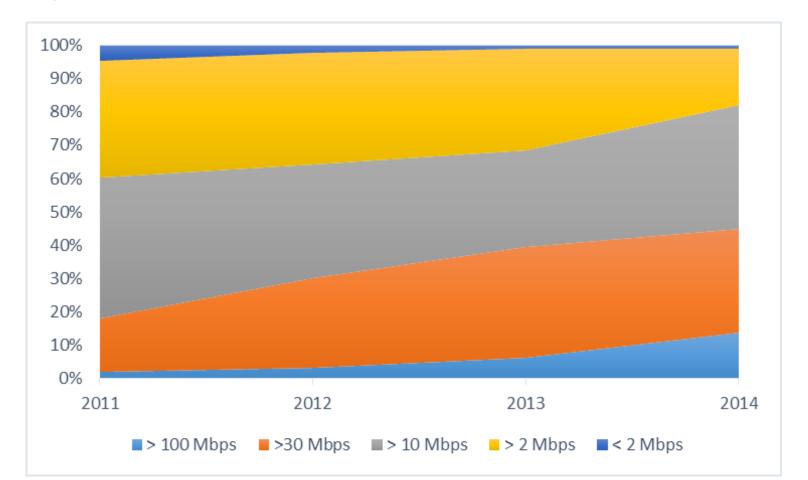
After convergence of fixed and mobile internet

Fixed & Mobile internet (50-50)



Future developments: Demand...

Consumer demands faster internet



....and supply

- This requires:
 - More capacity
 - New technology (DOCSIS 3.0, Vectoring, fiber)
- Building high speed capacity is expensive (mobile and fixed)
- Firms experience uncertainty
 - Market uncertainty
 - Regulatory uncertainty
 - Political uncertainty
- Scale and network effects will become more dominant
 - Still more concentrated markets

Access regulation promotes competition

- European Framework and Access directives: curtail significant market power (SMP) in the relevant wholesale markets
 - Forward looking cost-oriented access regulation
 - Ladder of investment: from services-based competition to infrastructure competition
- But: will Regulation 2.0 fit Telecom 3.0? (cf. Eli Noam)

More than 10 years of experience

- Empirics: ladder of investment had little effect on and potentially even lowered investment incentives of entrants
- Intra-platform competition lowers investment incentives.
- Inter-platform competition affects investments in fiber glass according to an inverted U-shape form.
- Inter-platform competition increases broadband penetration more than intra-platform competition.

Kocsis, De Bijl, van der Noll, Tieben (2015). Reconsidering ex ante regulation in the Dutch electronic communication markets. *Communications & Strategies, no. 98, 2nd Q.*

Future regulation

- Policy and supervision can be better focus on maximizing social welfare:
 - Stimulating investments in high-speed networks and
 - ⇒ Adoption of access to fast networks, new services and content (OTT market).
- The caprice and unpredictability of market developments require more room for dynamics present in the market:
 - Market players can discover themselves what they need (demand side);
 - How they can optimally anticipate this, or respond to market demand (supply side).
- Static vs Dynamic Efficiency: Is two enough?

Alternative regulatory models

Model	Level of regulation
Free wholesale price setting	Deregulation
Voluntary Open Access Model (self regulation)	Deregulation
Co-investment with negotiation: fully private or public-private-partnership	Deregulation
Negotiated access with a stick (access regulation or vertical separation) if negotiation fails	Deregulation
Differential access pricing e.g. based on fiber rollout	Regulation
Uniform prices	Regulation
Ex post competition policy	Ex post

- Evaluation is based of the effects on static and dynamic efficiency
- So far mainly theoretical evidence exists

Analysis of alternative models

- Free wholesale price setting
 - UK experience since 2008
 - Local deregulation if number of competitors for BT >4 and market share of BT < 50%
 - Empirical research: in medium term local deregulation has positive effects on infrastructure investments of both incumbent and competitors

Analysis of alternative models

Model	Static efficiency	Dynamic Efficiency
Co-investment with negotiation, fully private	 (+) cost reduction (+) first best for CS (-) potential tacit collusion (-) contracts can be used to avoid competition (+) lower incentives in non-price discrimination 	 (+) risk-sharing to coop with uncertainty; it is seen as the social optimum for investments (+) increases coverage and penetration if there is demand expansion (+) decreases duplication (-/0) strong incentives for closed cooperatives (+) anticipating innovation in OTT-market (demand-side spillovers)
Negotiated access with a stick (access regulation or vertical separation) if negotiation fails	 (+) stick is effective in preventing foreclosure (-) if further consolidation occurs, negotiation may not be effective (+) lower incentives in non-price discrimination 	(+) stimulates investments more than access regulation; not yet know how it relates to other models (?) effects on innovation is unknown

Reconsidering the role of access regulation

- Differential access pricing
 - Theory: differentiated prices are superior
 - Uniform prices but differentiated costs lowers incentives to invest in fiber
- Symmetric vs. Asymmetric regulation
 - Asymmetric regulation lowers incentives in investment
 - Theory: symmetrical regulation provides better incentives only if its combined with some form of deregulation

Conclusions

- More room for market forces; diverse and new business models
- Further development of complementarity and convergence
- Room for development from adjacent IT sectors (cloud) and service sectors (OTT)
- Attention to regional differences
- Attention to cost differences between legacy network and NGN
- Growing public interest concerning privacy and security
- Simple and clear conditions with less intervention at a detailed level
- Active role of the government in areas where investment in local access networks lags behind

Regulation vis-à-vis Competition

- "Science and Ideology", AER 1949
- Science requires <u>Vision</u>
 - Preconceived idea of how the economy operates
- What is our Vision of market development in the telecom industries? → future regulation



Joseph Schumpeter (1883-1950)

Thank you for your attention!

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