Future regulation of Electronic Communications in the Netherlands

Ex ante regulation and its alternatives

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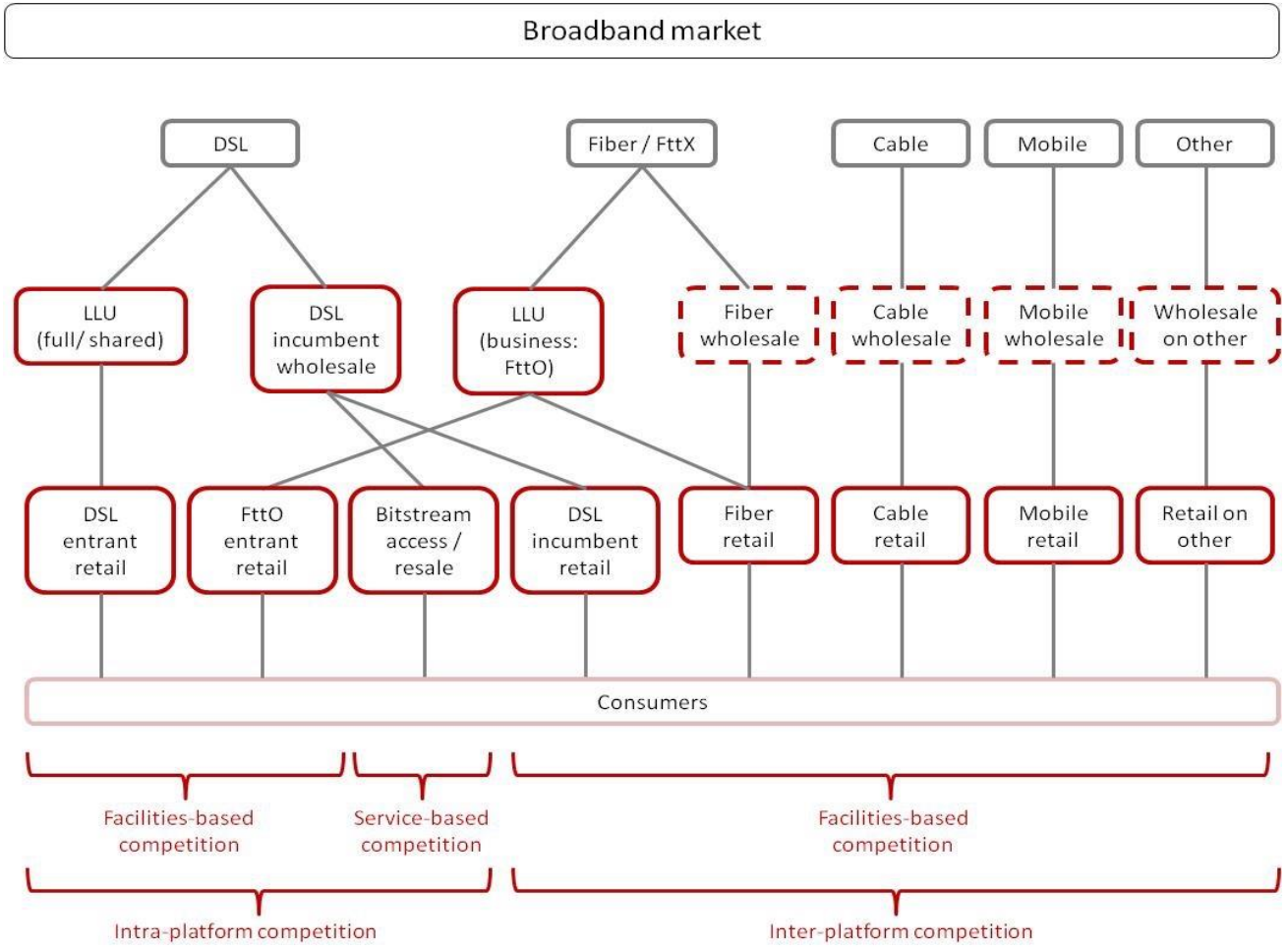
seo economisch onderzoek

A bit of history

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

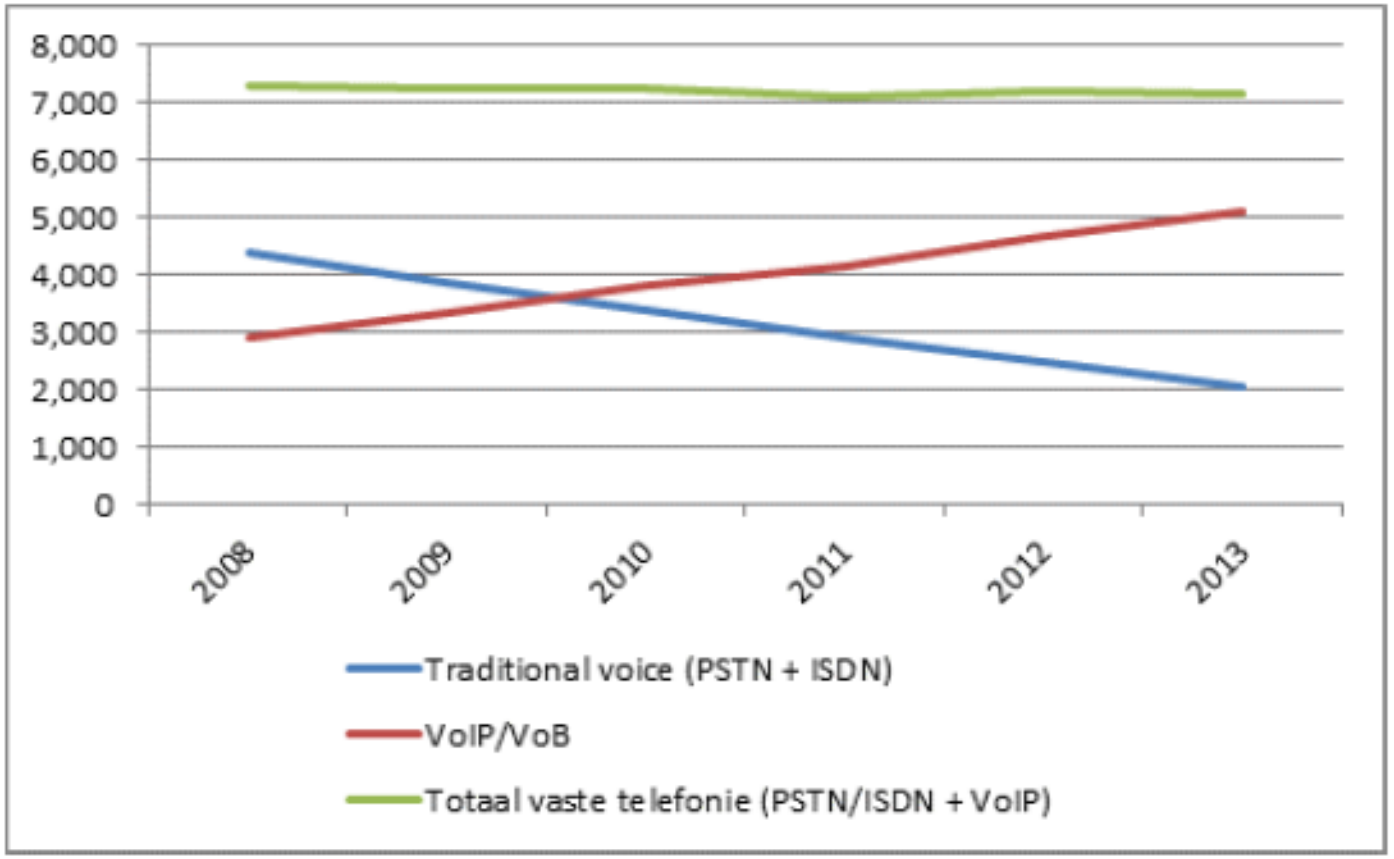
- **2009: OPTA decision to regulate cable networks**
  - **High barriers to entry**
  - **No tendency towards effective competition**
- **2010: High Court reject OPTA decision**
  - **Geographical retail market: national rather than regional**
- **2011: OPTA "judgement" no regulation needed**
  - **High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

Market for broadband internet



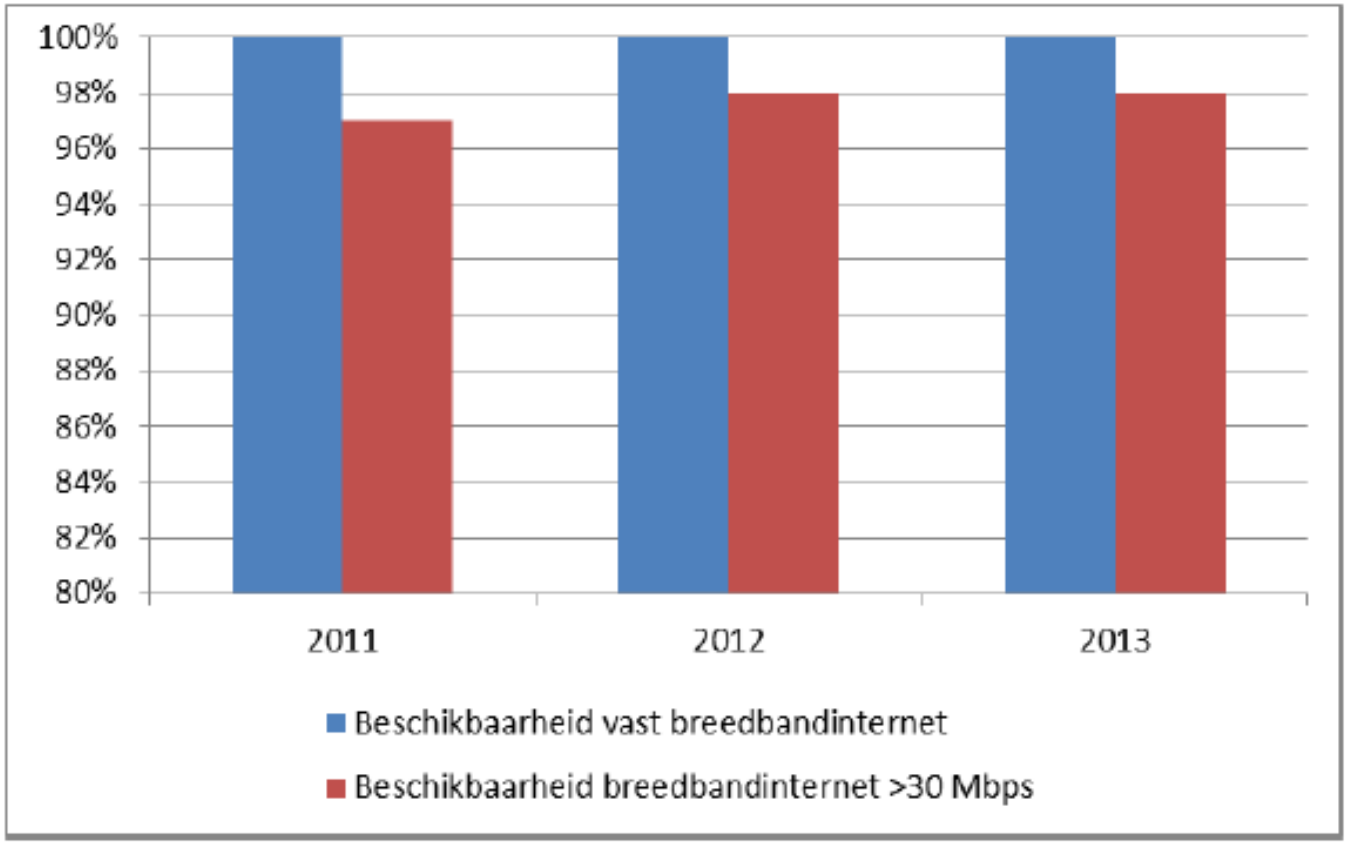
A few trends

- **The demise of traditional “voice” telephony**



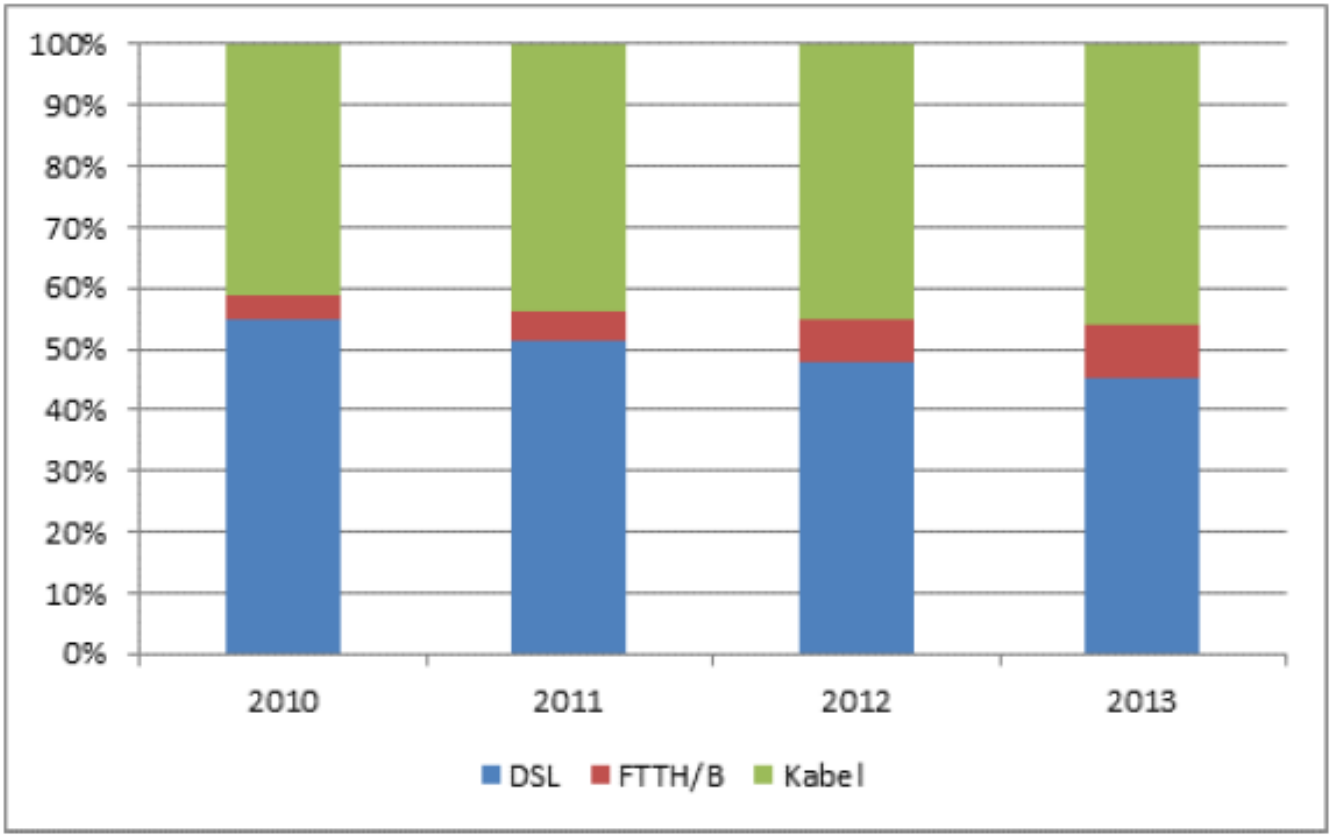
A few trends

- **We all have fixed broadband internet**



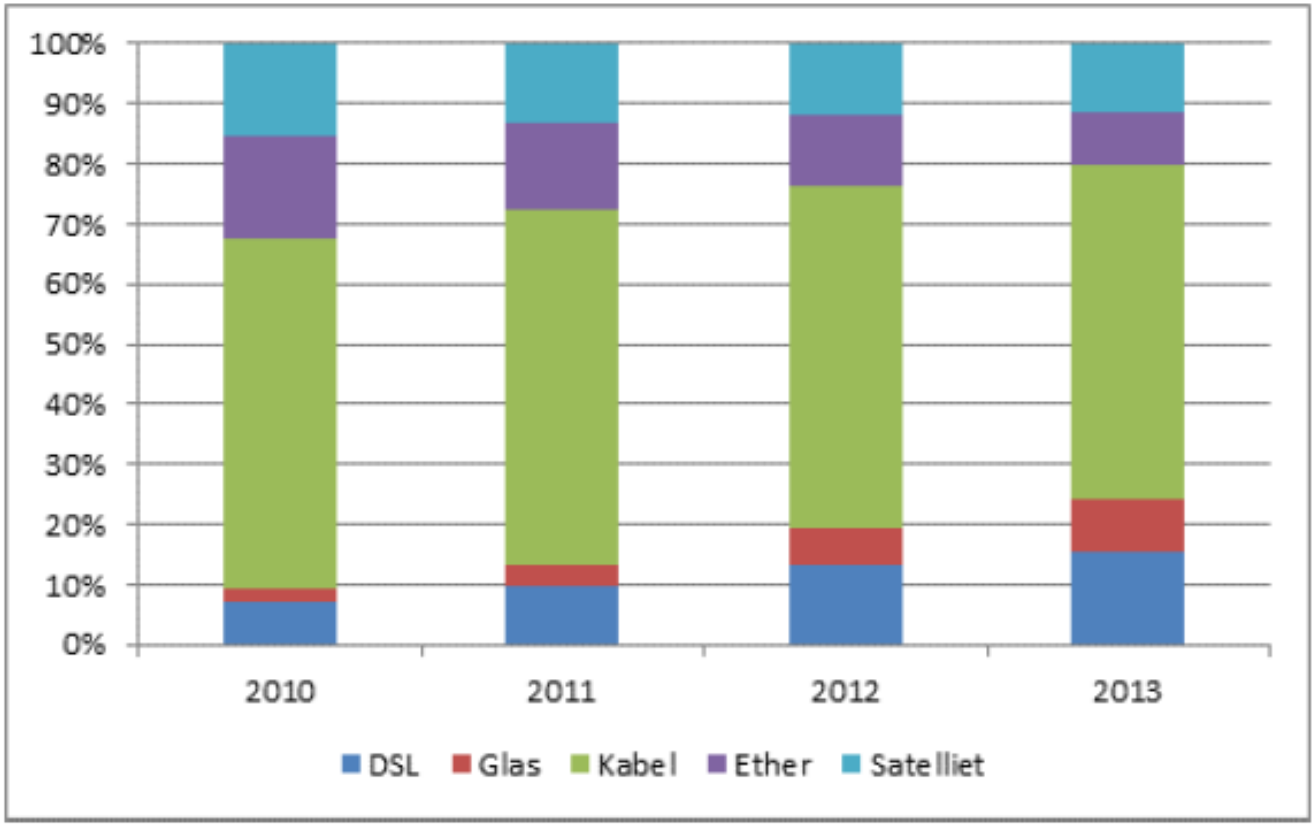
A few trends

- **Cable gains market share in broadband…**



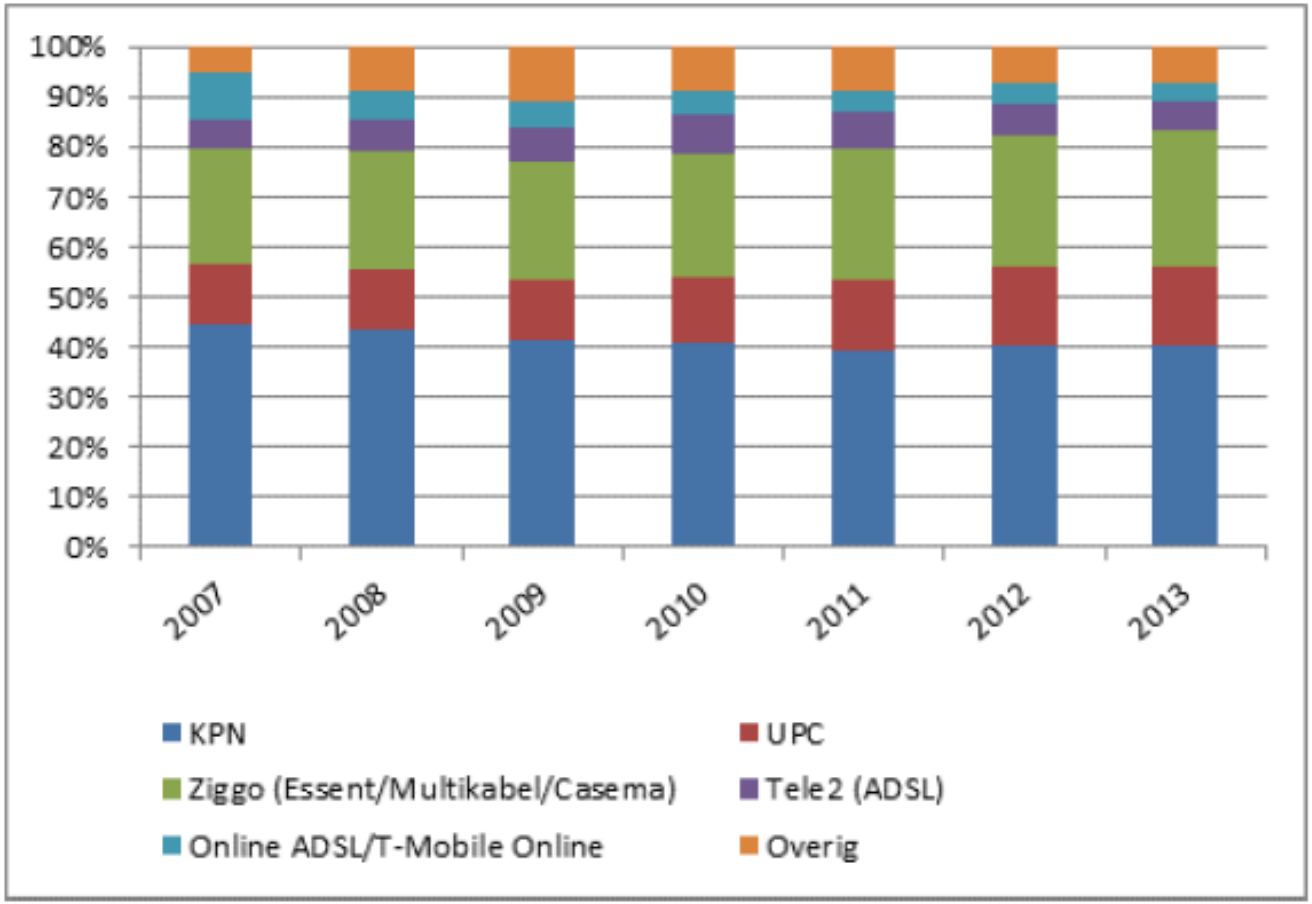
A few trends

- …but loses ground in the television market



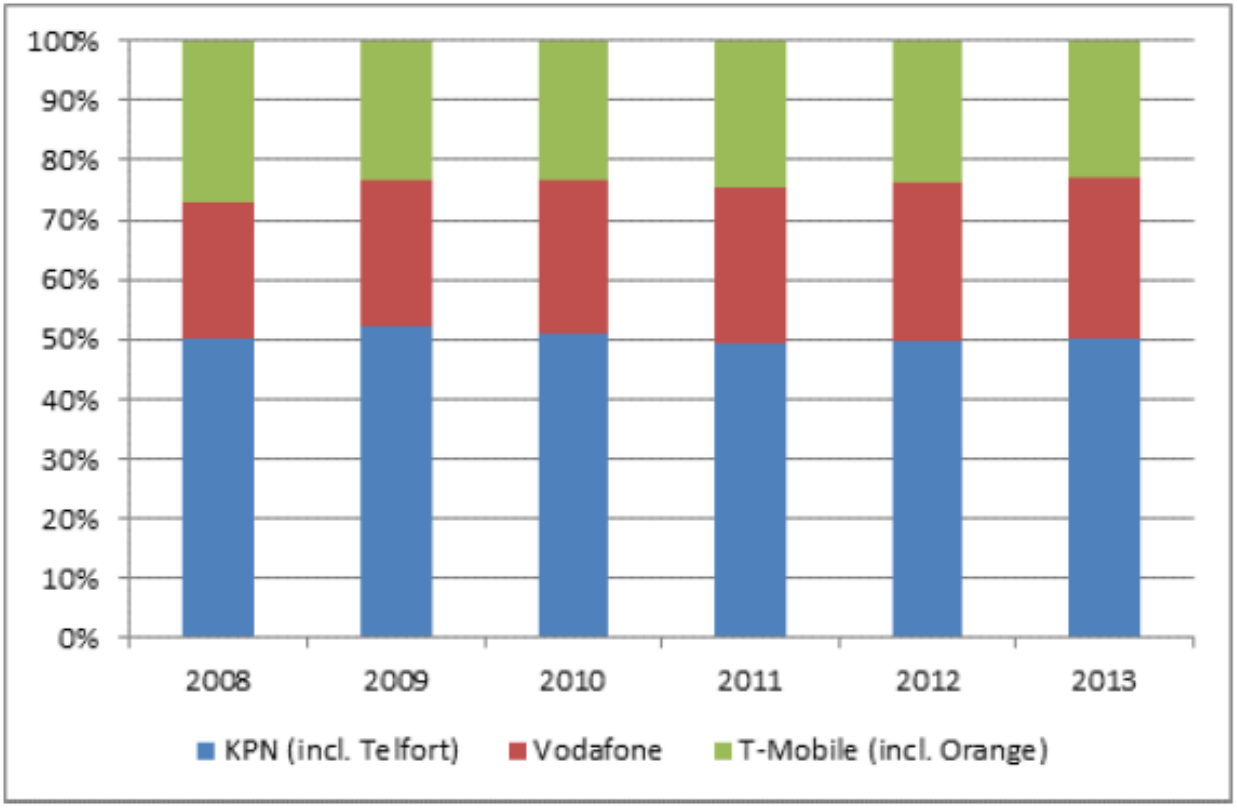
Competition

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



Competition

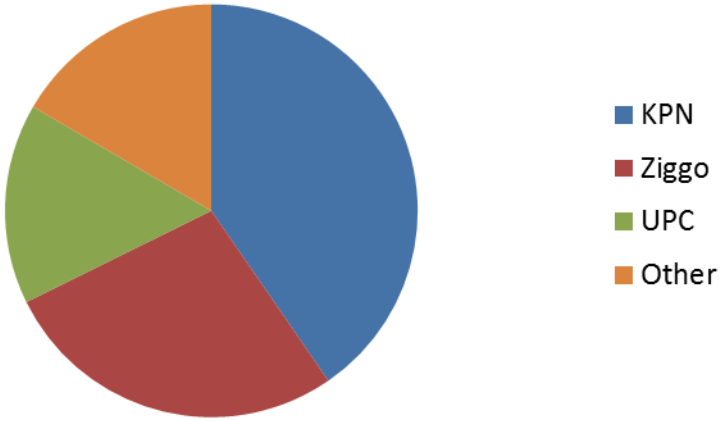
- **KPN still dominates the mobile market (HHI = 0,21)**



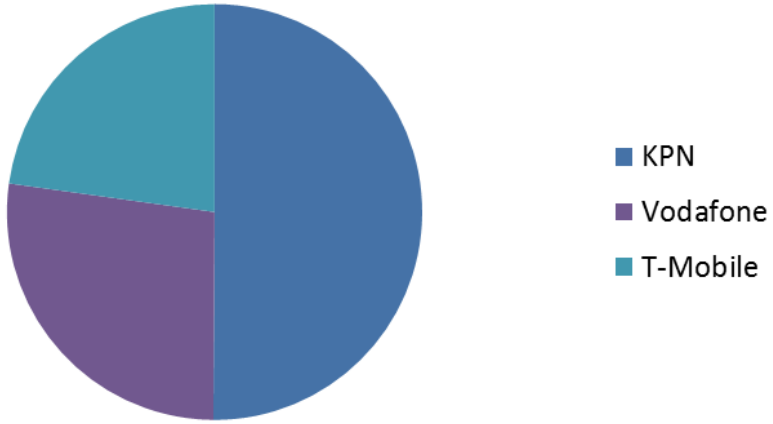
Consolidation Dutch telcos

Before the merger of Ziggo en Liberty Global (UPC)

Fixed internet



Mobile telephony & internet



Consolidation Dutch telcos

After the merger of Ziggo en Liberty Global (UPC)

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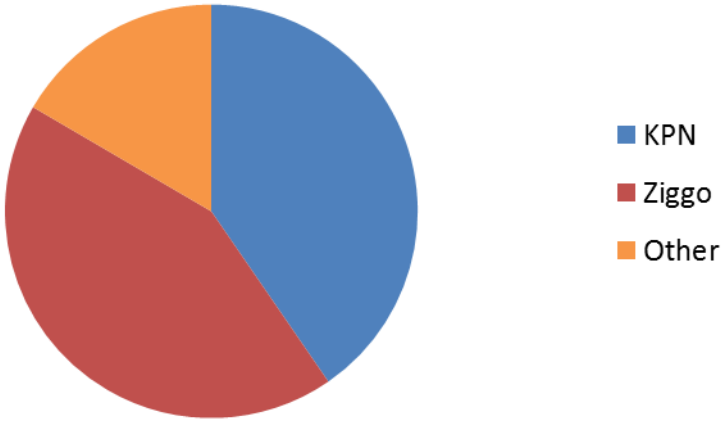
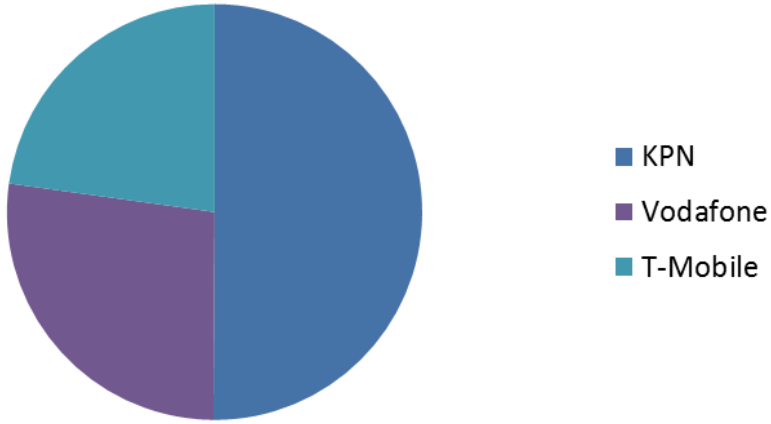


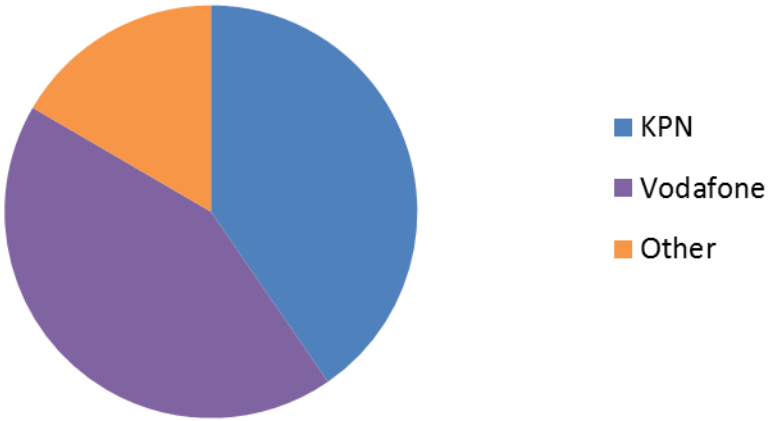
Mobile telephony & internet



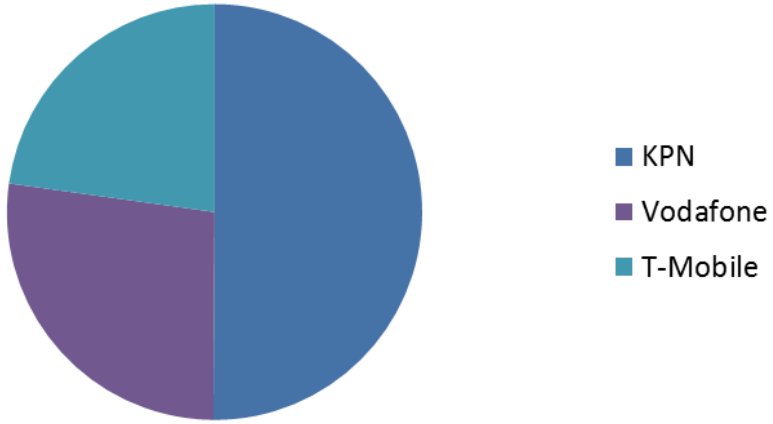
Consolidation Dutch telcos

After the potential merger of Vodafone and Liberty Global

Fixed internet

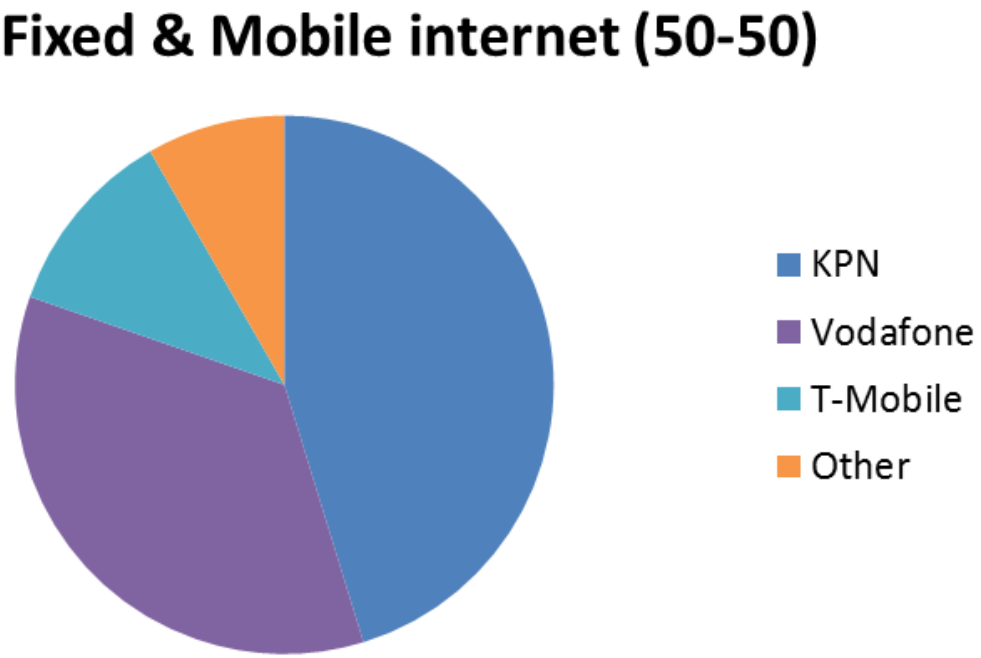


Mobile telephony & internet



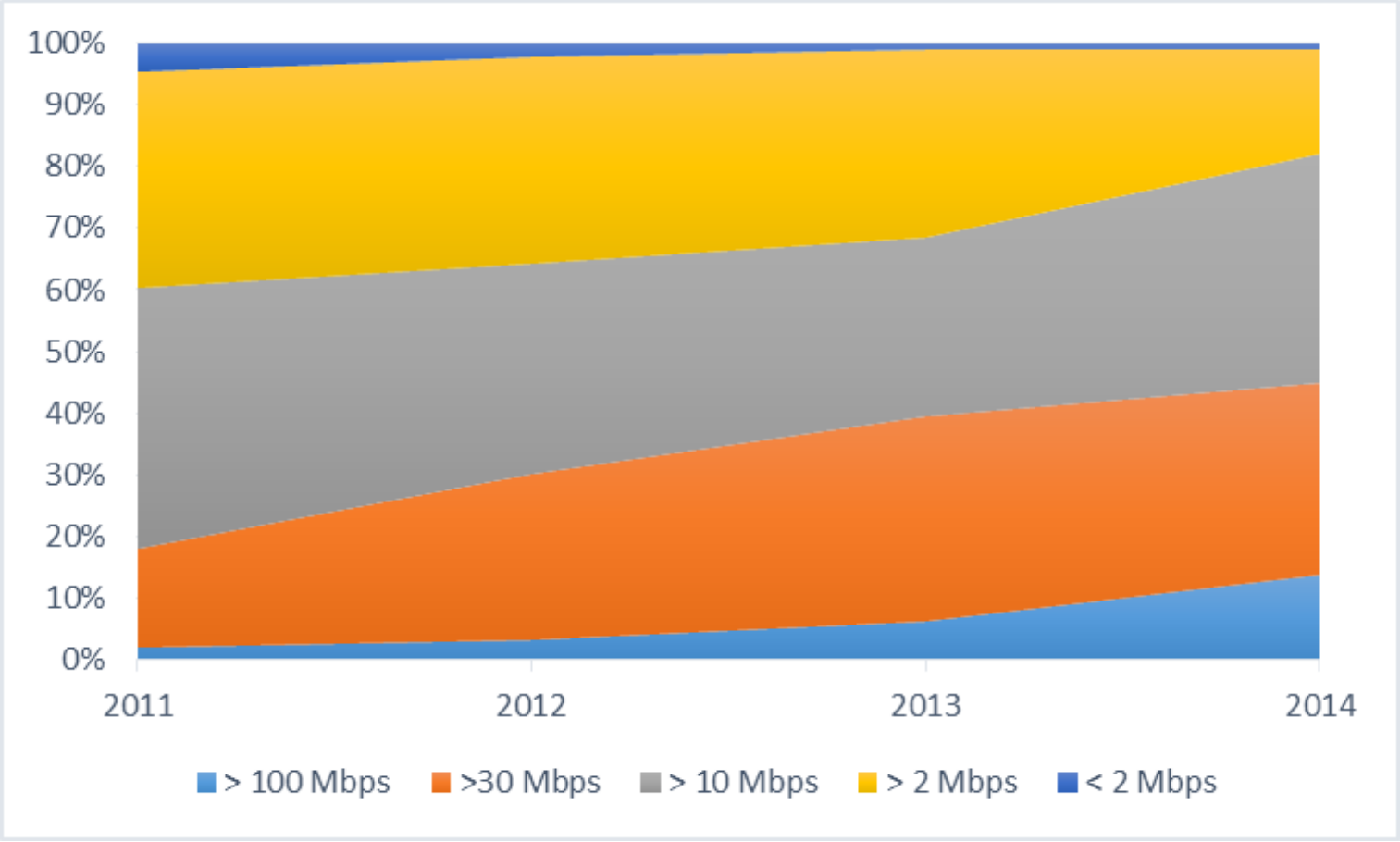
Consolidation Dutch telcos

After convergence of fixed and mobile internet



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**

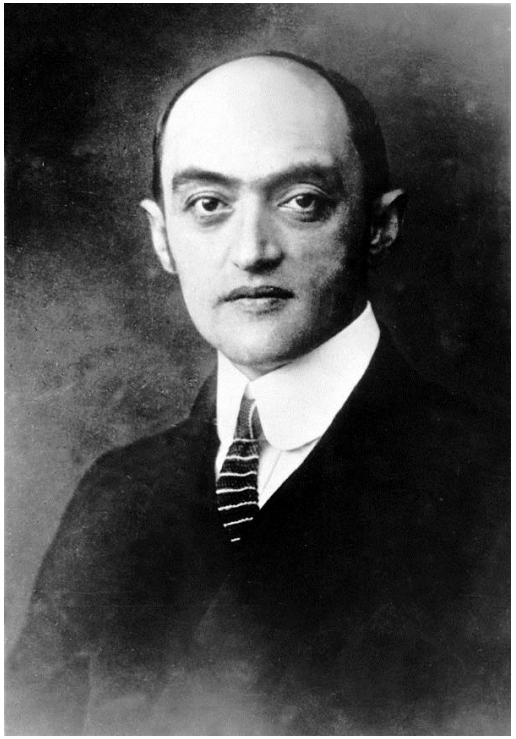
Conclusions

- 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 Vision
  - 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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