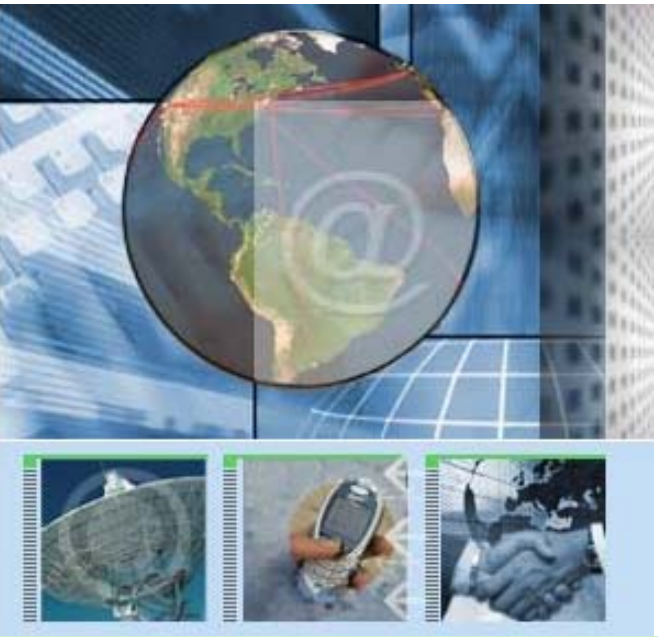
Remarks on Regulatory Holidays for the DTAG VDSL Network?



Arnold Picot

ASSOCIATION OF COMPETITION ECONOMICS
4TH ANNUAL CONFERENCE
Mannheim
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Regulatory Holidays? §9a TKGE

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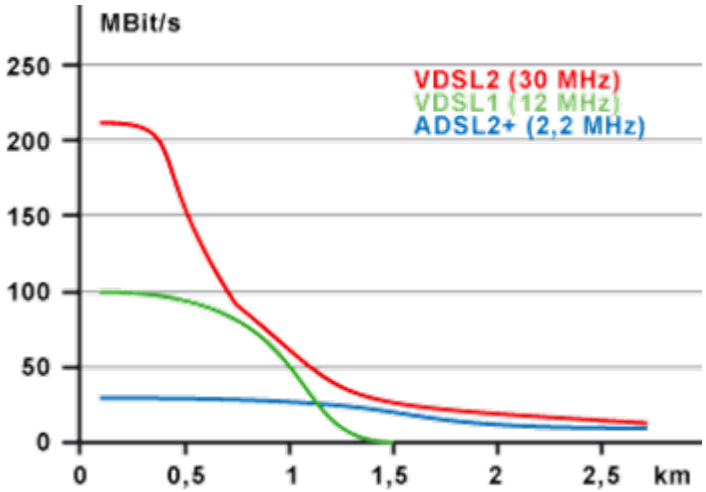
DTAG will offer up to 50 MBit/s high-speed internet access for approximately 26 % of German population in 2007

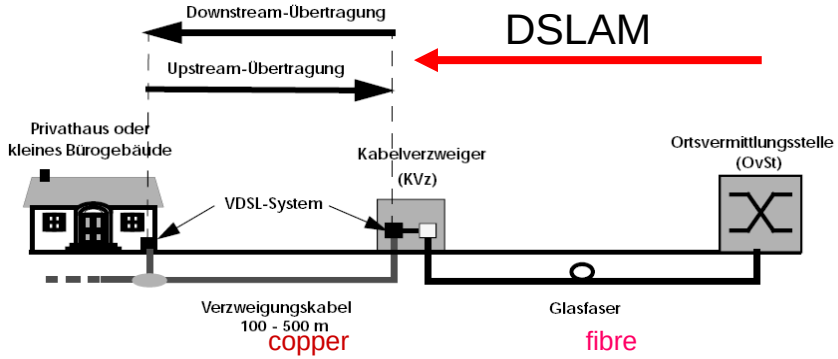
T-Home: Delivering IPTV

VDSL Bandwidth Increase



- VDSL increases bandwidth capacity only significantly, if the distance between DSLAM and modem is less than 1 km
- Highly effective below 500 meters distance

Infrastructure Upgrade



- KVZ (Cabinet) upgrade via new fiber connection from HVT (OvSt = Switch)
- Additional hardware required at KVZ
- DSLAM is moved from HVT to KVZ to reduce average distance between DSLAM and residential DSLmodem below 500 meters
- New piece of fibre network connected to fibre backbone; new network topology

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New Markets, Innovation and Regulatory Holidays – Overview

- DTAG justifies claim for regulatory holidays with jobs and investment conditions
- New government includes the claim into its program, promises amendment of TKG
- TKGE discussed in Bundestag
- §9a TKGE should serve the DTAG to justify regulatory holidays regarding their VDSL network
- Vehicle: Mentioning of new or emerging markets in EU regulatory framework as means for freeing bottle neck infrastructure from regulation
- Show Case of successful lobbying in business-government-relations ➔ prototypical *reverse* example for Stigler's economic theory of regulation (*„regulation is acquired by the industry and is designed and operated primarily for its benefit.“)*

Definition of "New Markets" in general

- Separation of "New Markets" from old markets rather difficult
- Lack of criteria in §9a TKGE*) and also in EU Framework
- Experimenting with new product offerings and related conditions essential for functioning of competitive markets
- Thus, a certain level of "newness" would have to be defined, where such a development creates a "new market"
- New markets cannot be defined ex ante; only after some time it can be assessed whether a "new" market creates a sustainable and differentiating market postion
- Securing a "new market" against competitors today would mean that the justification of this measure can only be assessed tomorrow
- ➔ Risk of establishing markets without access rights, although the market conditions (bottle neck, SMP) would require regulatory action

*) most recent draft of the amendment (November 21) contains a definition with a couple of soft criteria

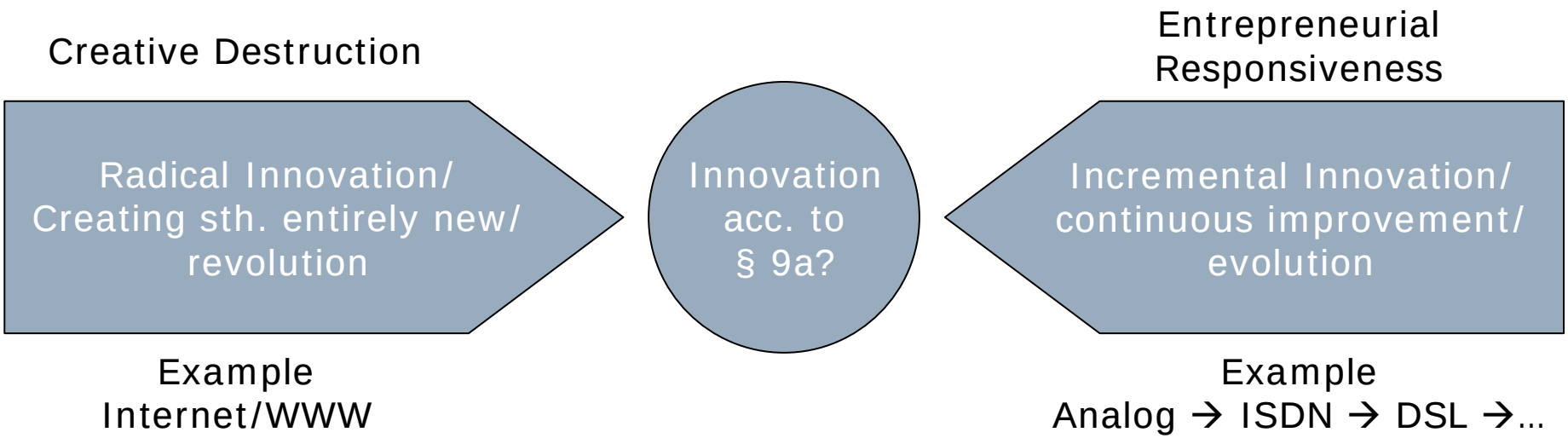
Regulation, Innovation and Investment

- §9a TKGE implicitly assumes that regulation slows down and impedes investments in new infrastructure and, thus, would harm innovation
- However:
  - If adequately applied, regulation encourages alternative infrastructure investments e.g. by regulating access prices (ladder of investments)
  - Innovative investment in infrastructure requires in some cirdumstances regulatory guidance (mobile networks / city networks)
  - The (re-)discovery of something “new” and the implementation of innovations in existing markets is driven by the functioning market mechanism itself - on wholesale markets as well on retail markets
  - Where regulation opens the market for competitors and wokable competition, regulation also serves the innovation process itself
  - The European regulatory framework represents with the postulation of technology neutrality an intrinsic motivation for innovation
  - Various research studies show that there is no or even a slightly positive correlation between regulation and investment
- Already, according to § 14 TKG, the regulatory authority is able to intervene in markets, based on the actual market legal framework; a couple of other provisions of the law demand that the regulator has to consider incentives for infrastructure investment and innovation.

Innovation and "New Markets"

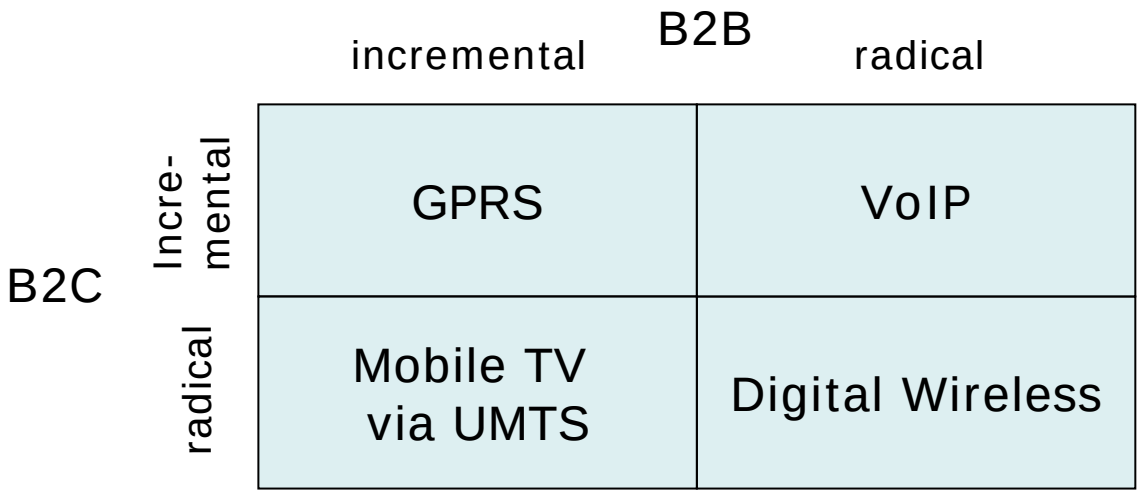
- Innovation
  - "unprecedented" change of existing products, processes or services, on wholesale as well as on retail level
  - May occur within "old" markets
  - New Markets do not necessarily imply innovation

- What kind of innovation?



Incremental vs. Radical Innovations on Different Market Levels

- Characteristics of Innovations
  - Innovations can emerge on any market level (B2B, B2C) and may have impact on the same level or/and on up- or downstream markets
  - Innovations on different market levels do not develop simultaneously and thus do not have to show the same characteristics
  - Therefore, an innovation and temporary monopoly on the B2C level does by itself cause a necessity for exclusivity on the B2B level and vice versa
  - A B2B-innovation may cause various B2C-innovations



Identification of Market Failure on Retail and Wholesale Markets

- Generally, competition law aims at the definition of relevant consumer markets by means of testing demand- and supply substitutability
- This also takes place as regards market definition and analysis within the European Framework for Electronic Communications
- However, the discussion on DTAG's VDSL network predominantly deals with wholesale markets; in this respect, those measures seem inappropriate as new infrastructure is rarely rolled out for the exclusive use of a specific downstream service only, but for a variety of existing or new services
- Consequently, NRAs should analyze the potential bottleneck character of the respective infrastructure. If they state a bottleneck, they should enable non-discriminatory access for competitors

Incentives for Investments and Regulation – International Comparison

- Countries with higher broadband penetration rates than Germany such as Japan, the Netherlands or the UK have obliged incumbents to offer regulated access to “big” (fibre-based) broadband infrastructure
- At the same time, volume of planned investment in infrastructure upgrade and changeover to all-IP-networks is comparable or even higher in those countries than in Germany
- E.g., the British incumbent BT maintains its plans to invest 10 Bn Pound for its IP-based 21st century network, despite or (due to) the functional separation of its service and access divisions with the establishment of Open Reach
- Further, experiences from abroad show that regulated prices (expec. costs of capital) reflecting the risk of an investment in new infrastructure prove that an appropriate regulated incentive for innovative investment is favorable as long as regulation is required.

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- The 2004 German Telecommunications Act (TKG) already sufficiently contains clues and clauses to further innovations and investments
- The planned section aiming to exempt DTAG's VDSL infrastructure is therefore neither necessary, nor feasible (will cause a lot of extra litigation), nor technically convincing
- Instead, the German Regulator (BnetzA) should regulate competitive access to VDSL infrastructure and consider risks associated with the investment in its calculation of ROCE thereby granting adequate profitability and ensuring efficient utilization of the new network.
- As soon as the bottleneck is overcome and infrastructural alternatives are reasonably available regulation should be lifted.