

The Economics of Next Generation Access

Results of a study for ECTA

- Regulatory policy conclusions and recommendations -

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Regulatory policy conclusions and recommendations

- (1) NGA fibre roll-out (FTTH as well as FTTC) needs substantial investment
 - FTTC in Germany for 37% of population: 4,8 billion €
 - FTTH in France for 7% of population: 3,4 billion €
 - Nationwide NGA roll-out not profitable in any of the six countries

- (2) Incumbents benefit from lower costs and are better placed than entrants to make these investments on a large scale
 - Investment savings by dismantling MDF's and better use of passive infrastructure
 - Further asymmetries: Larger subscriber base (80 – 90% of local loop), 50% of retail broadband subscribers compared with 10 – 15% of leading competitor and lower cost of capital

Existing competitive structure

	DSL market share	Retail market share incumbent	Incumbent Retail + Resale + Bitstream
Germany	94%	46%	64%
France	95%	47%	62%
Italy	97%	64%	75%
Portugal	64%	67%	46%
Spain	79%	56%	62%
Sweden	62%	38%	40%

Regulatory policy conclusions and recommendations

- (3) Without regulatory intervention, degree of replicability of NGA even for one operator rather limited
- Under rather optimistic assumptions: Second mover FTTC (VDSL) in Germany: 13,7% of population at the maximum; 2,4% for two or more entrants
 - Replicability of FTTH in France only in case of infrastructure sharing/regulated access
 - NGA in Sweden is only profitable in urban areas which account for 8% of potential customers. FTTH is not replicable

Regulatory policy conclusions and recommendations

- (4) Regulatory intervention and proper access products needed for a competitive NGA market
- Duct and dark fibre access increase replicability, but not sufficient for viable competition
 - Fibre full local loop unbundling (at Metro Core Locations) and sub-loop unbundling (at OSDF) increase scope for competition significantly
 - Fibre LLU and SLU generate replicability wherever a first mover rolls out FTTH
 - Bitstream access remains relevant for rural areas and provision of services to businesses

Regulatory policy conclusions and recommendations

(5) NGA will require a change in regulatory paradigms:

- So far: How to provide access to existing network elements?
- NGA: How to structure new network elements for efficient access opportunities so as to enable and not to foreclose competition?
- Example: Total invest for new street cabinets: Ex ante 115% for two operators. Ex post: 200%
- NGA architecture of P2P more consistent with open network principle than PON architecture

(6) Risk of NGA investment, different costs in regions and ladder of investment concept can only be coped with if alternative operators can choose between different access opportunities

Regulatory policy conclusions and recommendations

- (7) Incumbents can reduce their own risk and cost of rolling out NGA by sharing infrastructure with or provide access to alternative operators
- (8) Open NGA networks expand the scope for investment in NGA
- (9) Many areas remain unviable without subsidy; in case of subsidies effective tender process and regulated open access vital
- (10) Our quantitative results are in line with other study outcomes, support strongly the recommendations of the OECD for competition in NGA and for the first time we model the impact of regulatory measures



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