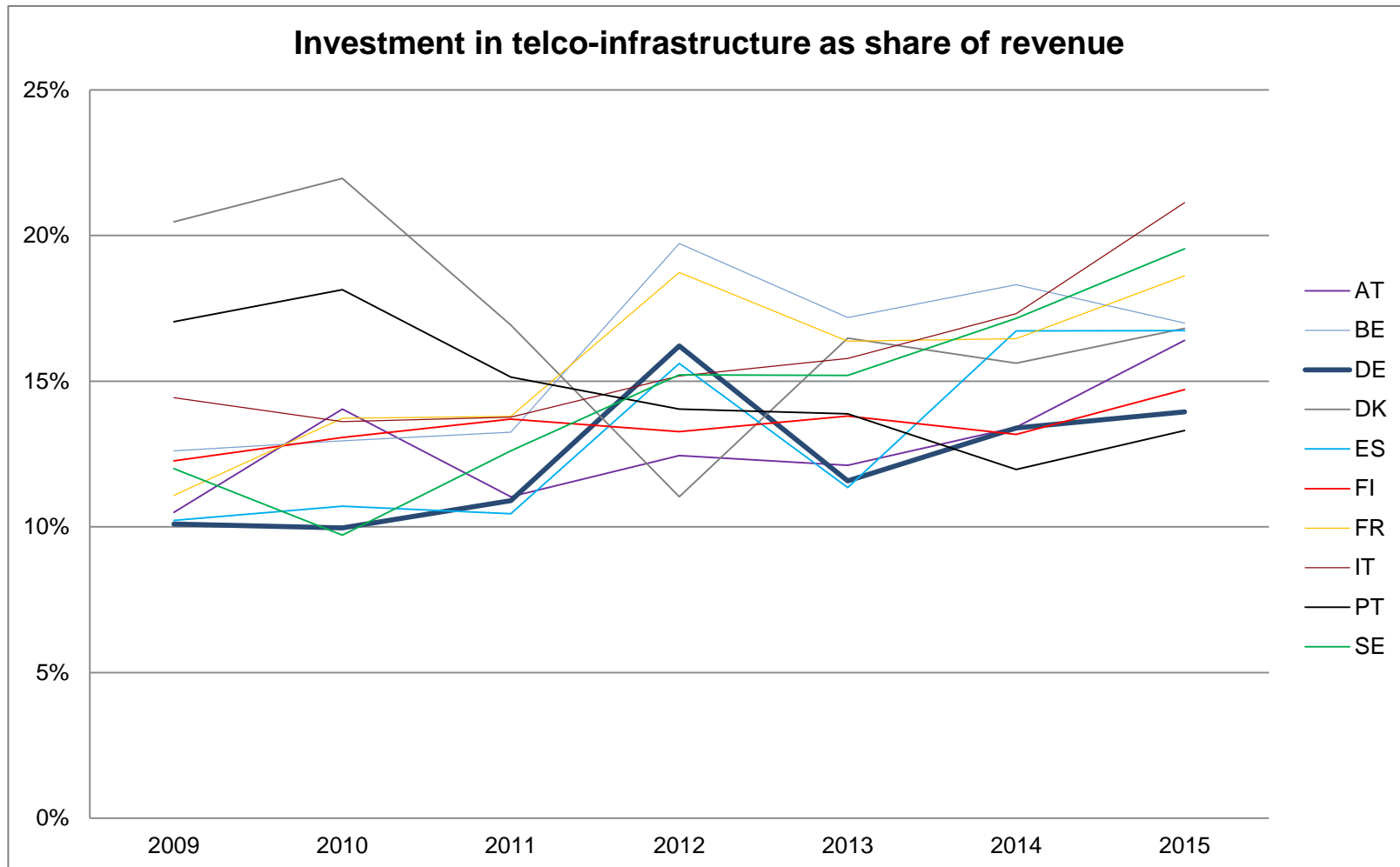


Investment, Investment, Investment – Investment 4.0 – Di²

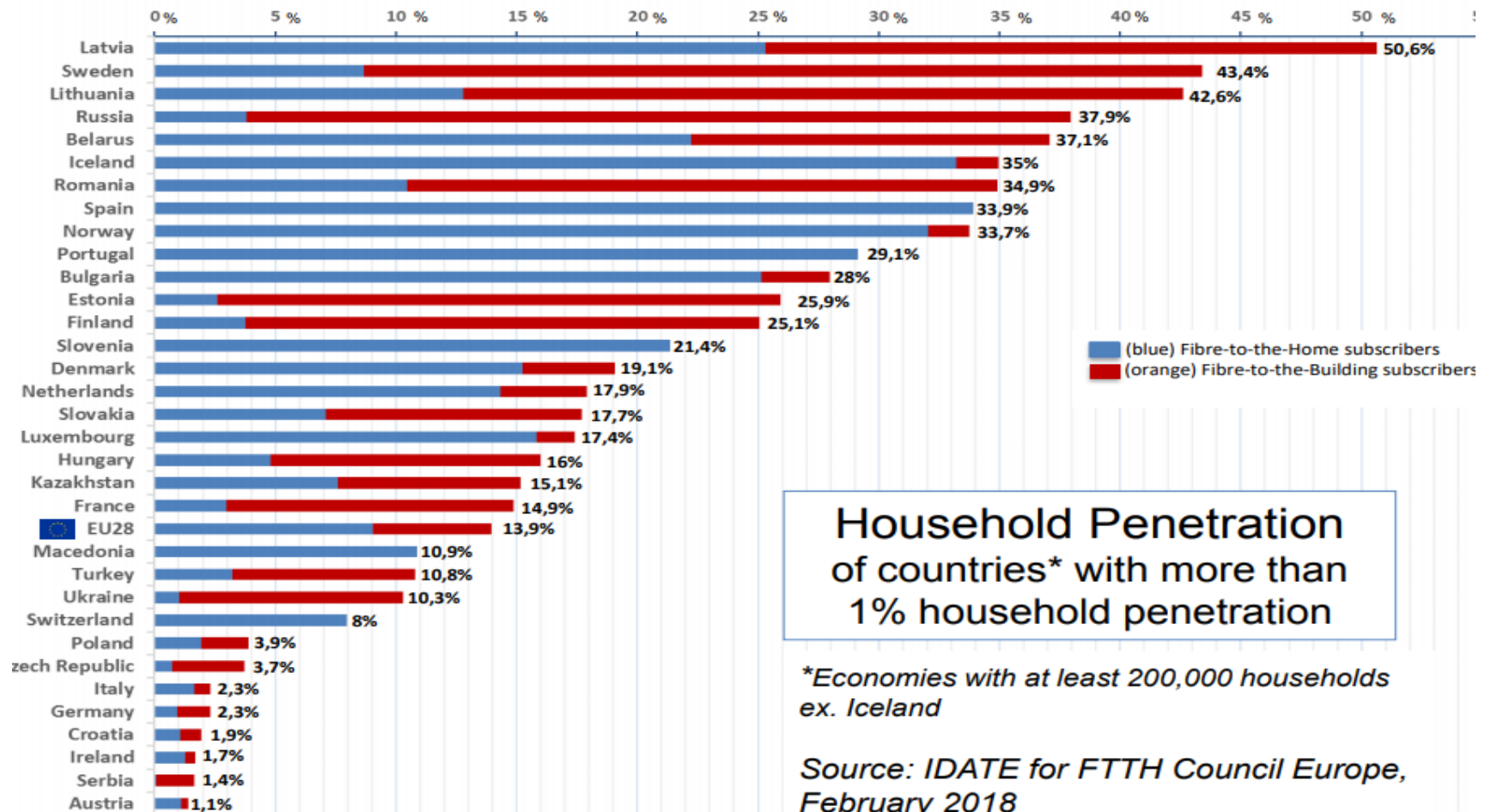
The Di² SUMMIT
12 March 2018
Frankfurt
Dr. Iris Henseler-Unger
General Manager WIK GmbH



Quelle: European Commission, Digital Agenda for Europe, Scoreboard.

Potential Demand

FTTH/B European Ranking – Sep 2017



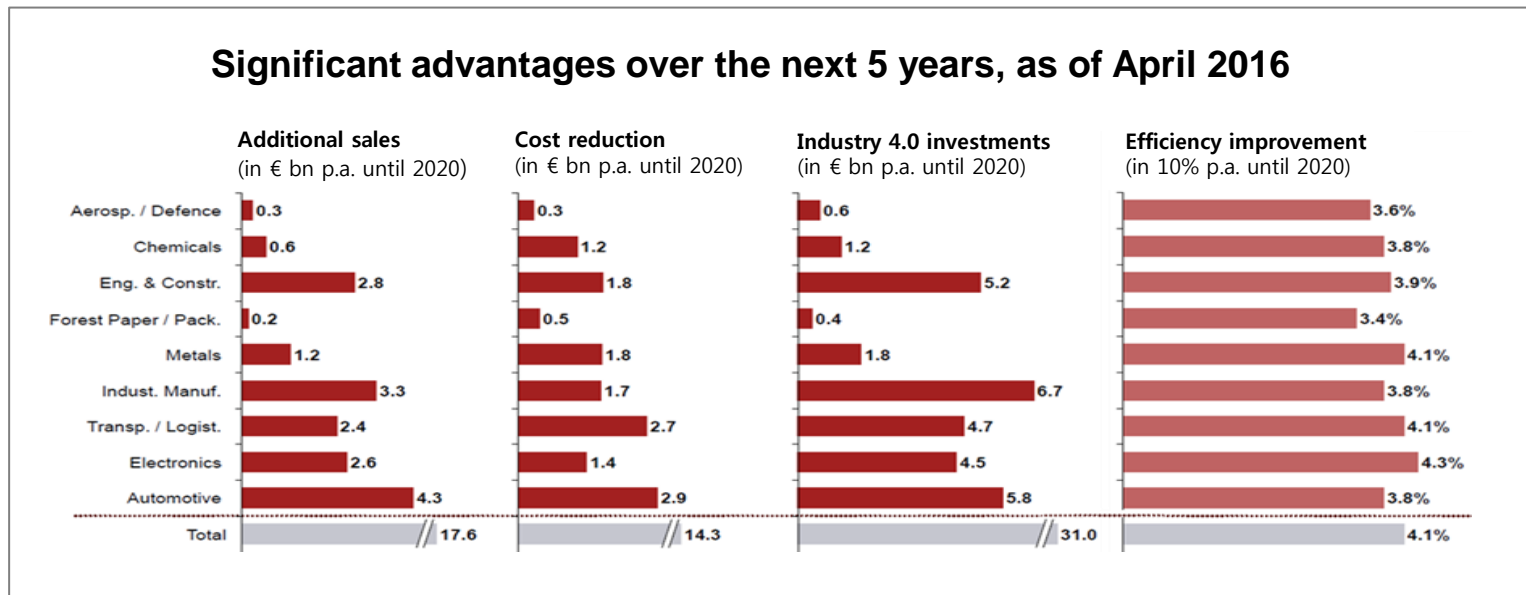
Household Penetration of countries* with more than 1% household penetration

*Economies with at least 200,000 households ex. Iceland

Source: IDATE for FTTH Council Europe, February 2018

Economic implications of IoT

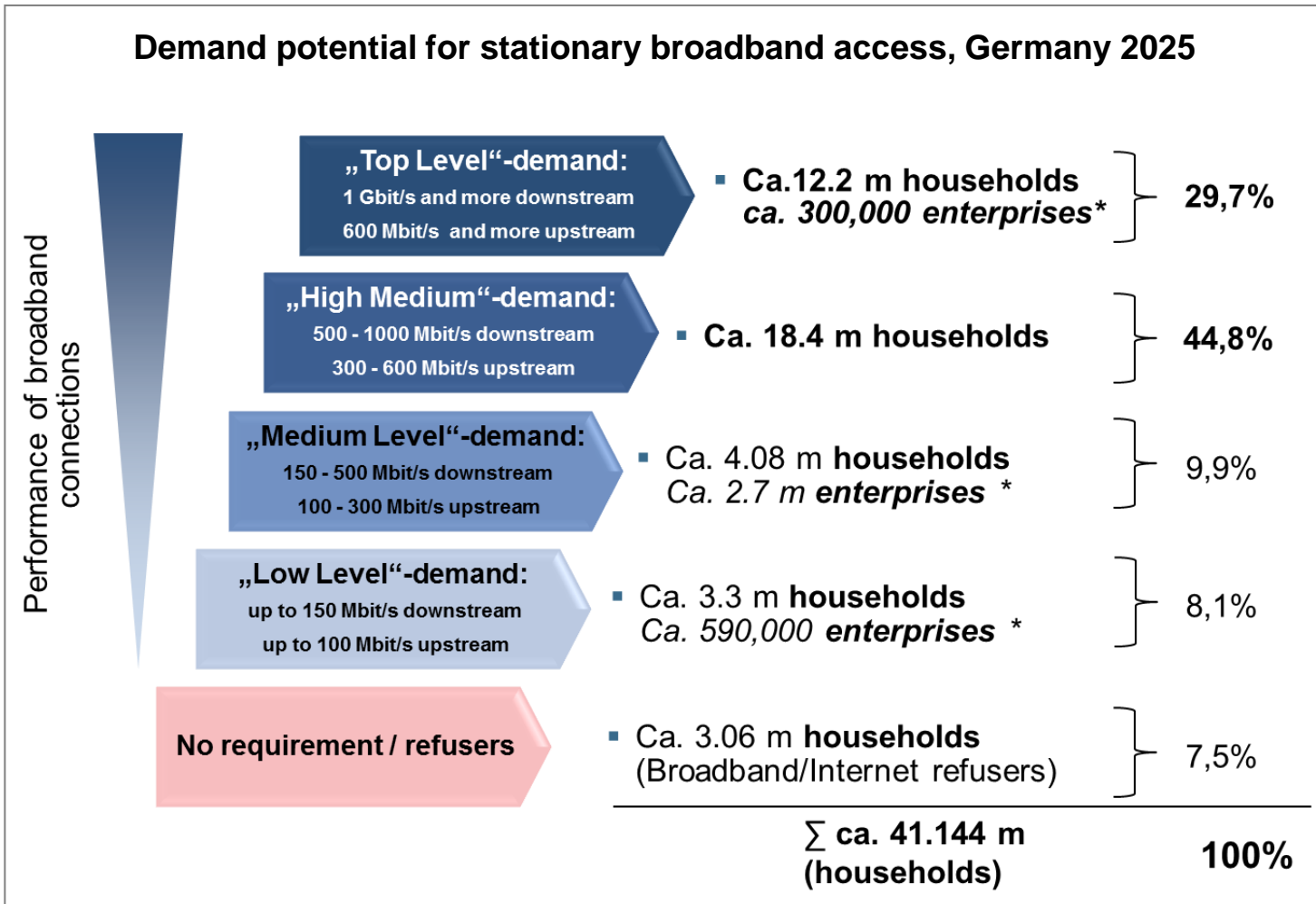
- Roland Berger: Until 2025 additional annual value added of 250 bn. € in Europe
- Cisco: Additional annual German growth of 2% in the next 10 years
- PwC: Investment plans of annually 31 bn. € for the next 5 years



Source: In accordance with PwC (2016).

Potential Demand

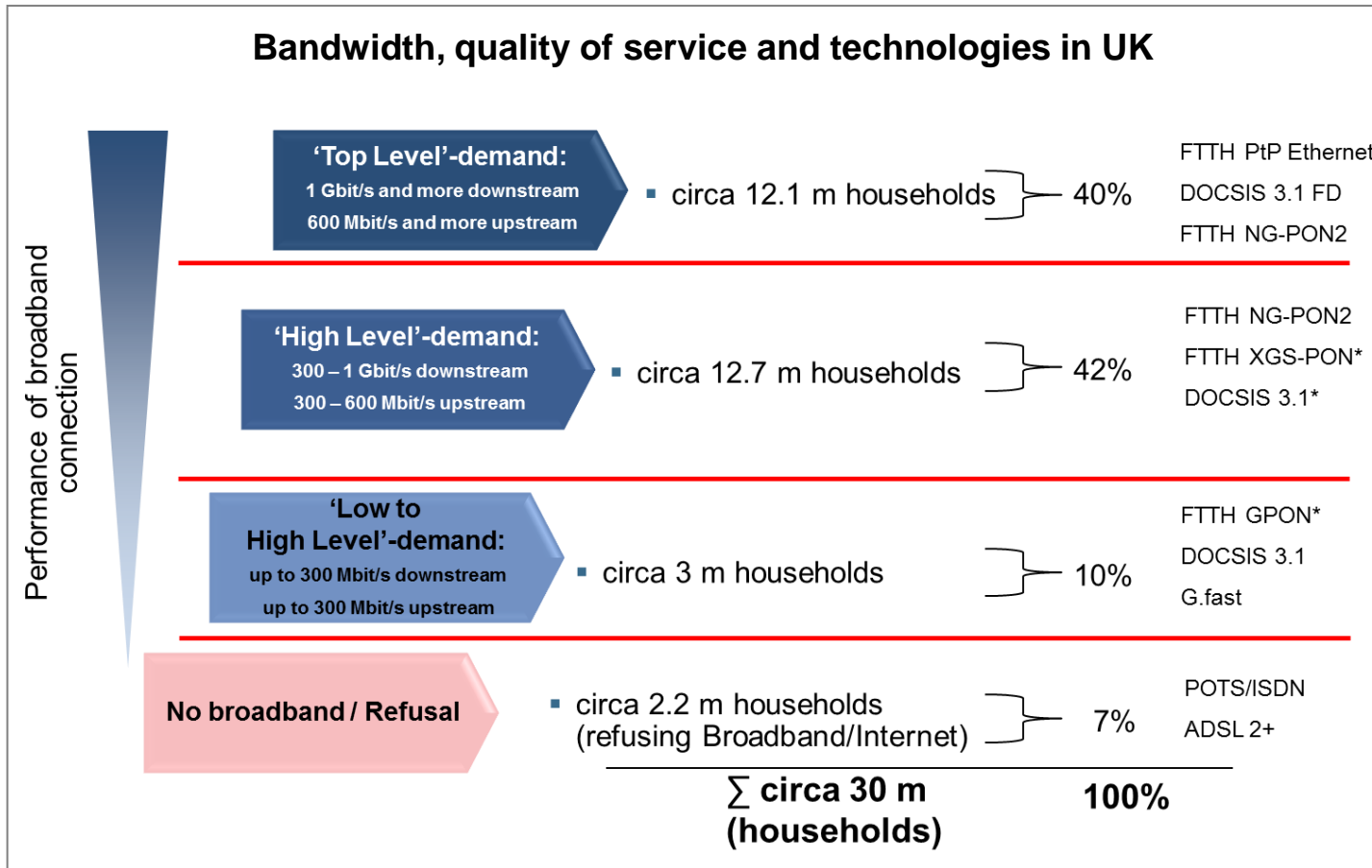
Demand potential for stationary broadband access, Germany 2025



Source: WIK-Market Potential Model.

* Demand estimates for business have not been updated, but have been integrated into the results of household updates without new calculations.

Potential Demand



Source: WIK market potential model 2015.

* Capacity strongly depends on sharing/splitting factor and user behavior during busy hour.

Potential Demand

Representative survey of Swedish consumers conducted between 29 September 2017 and 2 October 2017

- FTTH users do more online:
 - On average FTTH users are 11% more active online
 - +7% information
 - +15% entertainment
 - +15% social interaction
 - +10% local services
- FTTH users are more satisfied with their choice of infrastructure:
 - 83% of FTTH users
 - but only 52% of DSL and 72% of cable users

FTTH-deployment as a focus of politics:

- Boon or bane?
- Blessing or curse?

Answer:

- Yes and no!

Sweden:

- Early political commitment to fibre in 2000
- Societal strategy

Switzerland:

- Organised compromise by NRA for fibre deployment model

Australia:

- High flying government plans
- Intervention (structural separation) to realise a national broadband plan
- Failure

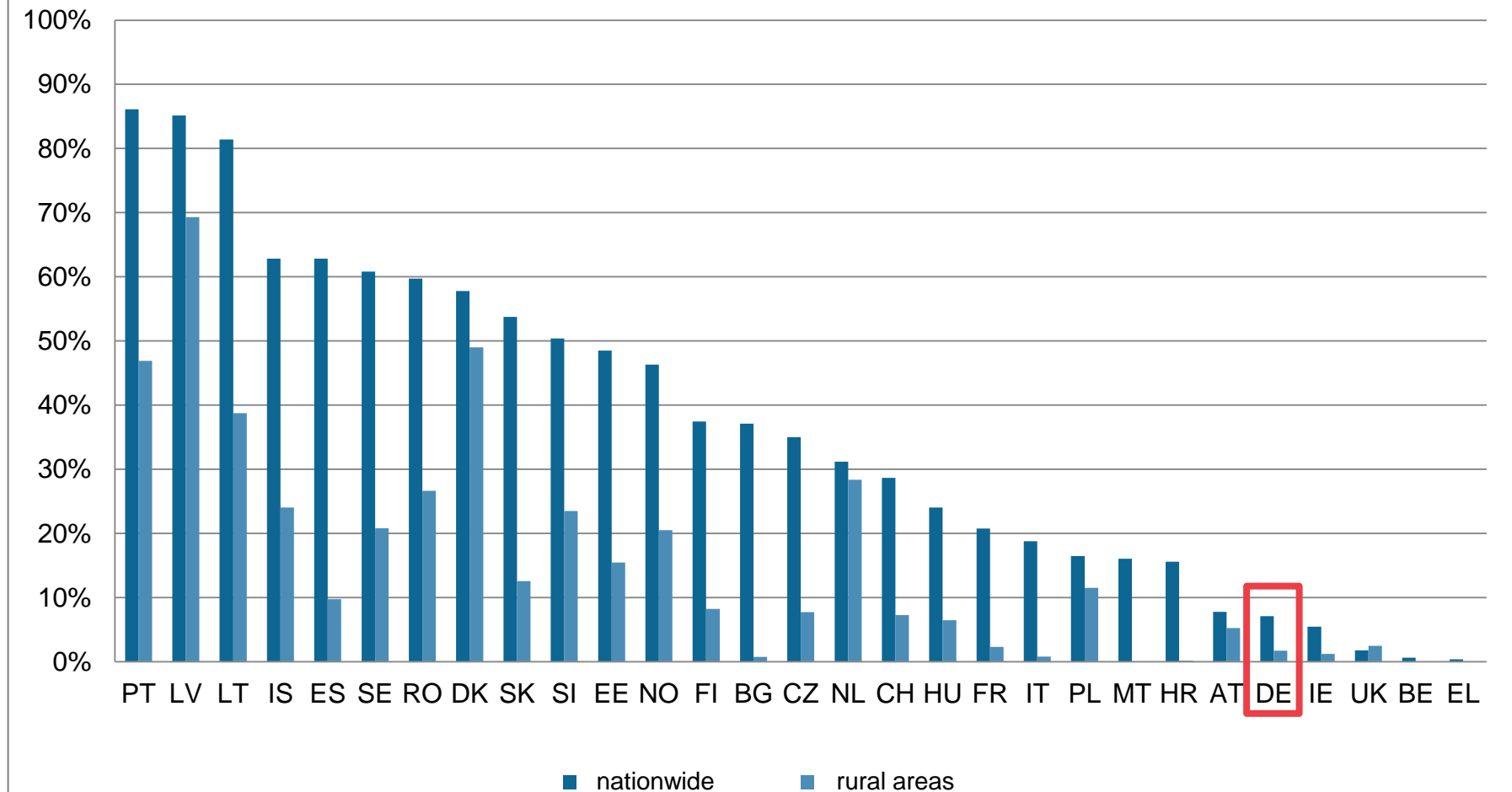
German strategy:

- Late commitment to fibre in the coalition agreement of 2018
 - Subsidies via a gigabit investment fund up to 12 bn € till 2021

Caveat:

- Spending tax payers money
- Crowding out of private investment
- Risks to investors, as framework can change
- State driven technology mix as starting point (VDSL instead of fibre)
- Driving deployment cost inflation for subsidised and private investment

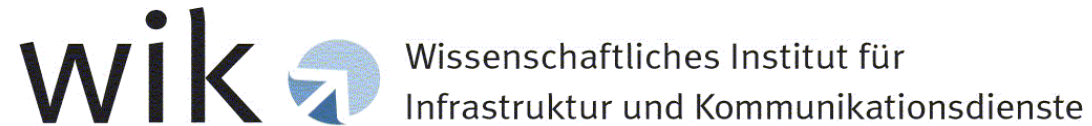
FTTP-coverage nationwide and in rural areas, 2016



Source: European Commission (2017).

Conclusions

- Growing demand for very high capacity networks creates business chances
- State intervention no king's road to fibre
- Rural areas stay problematic
- Looking for an attractive environment for private investment:
 - Simple, understandable business cases (wholesale-only?)
 - Calculable risks (e.g. commitment by regulators?)
 - Stable conditions over the entire term (open access?)
 - Pragmatic solutions (co-investment, cooperations without discrimination?)



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