

BACKGROUND PAPER

Infrastructuresharing and co-deployment in Europe: good practices based on collaborative regulation

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Agenda

- Scope of the Paper
- European Landscape
- Case Study I: Infrastrukturatlas (Germany)
- Case Study II: Inhouse cabling (Portugal)
- Case Study III: Codes of Practice and standardised contracts (Poland)
- Collaborative Regulation
- Conclusions

Scope of the Paper

- Provide overview of European regulatory framework
- Case studies to show practical impact and different collaborative approaches
- Limitations: Not intended to benchmark countries

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European Landscape

- Strategic Framework
- State Aid Guidelines
- Cost Reduction Directive
- European Electronic Communications Code

Strategic Framework

Digital Agenda for Europe (2010)

- 100 % household coverage with basic broadband by 2013
- 100 % household coverage with 30 Mbit/s or more (downstream) by 2020
- 50 % of households subscribing to 100 Mbit/s or more (downstream) by 2020

Connectivity for a European Gigabit Society (2018)

- 100 % household coverage with 100 Mbit/s by 2025 with possibility to upgrade to much higher capabilities
- All socio-economic drivers (e.g. schools, universities, research centres, hospitals, public administration, enterprises relying on digital technologies) should have gigabit connectivity by 2025
- Uninterrupted 5G coverage in all urban areas and all major terrestrial transport paths by 2025

State aid guidelines

- State aid considered market distortion and thus to be avoided
- State aid programs must be evaluated to comply with a certain set of rules (especially detected market failures)
 - Primarily funding for „white areas“ (no 30 Mbit/s coverage available or to be expected within three years)
 - „Step Change“ provision allows for funding in „grey areas“ or even „black areas“
 - Upcoming state aid interventions might focus on grey areas and a threshold of <1 Gbit/s

Cost Reduction Directive

Purpose of the Cost Reduction Directive

- Establishing a market for infrastructures
- Foster cross-sector cooperations
- Grant further rights to access seekers
- Enhance exchange of data and coordination of civil works
- Set up procedures for dispute resolution and single information point

European Electronic Communications Code

- Extensive update to the national telecommunications acts, partly also other legal areas (e.g. consumer protection, competition, finance)
- Over the top communications services regarded as telecommunications services
- Roll-back of regulatory remedies in case of division of (SMP) incumbents into retail and wholesale arm
- Article 22: survey regarding current coverage (mapping), predictions for further network deployment

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Case Study I: Infrastrukturatlas (Germany)

Data to be supplied by

- Network operators
- Public sector
- TelCos

Data accessed

- On request
- Project specific
- Temporarily limited



Figure 3 Example 'Infrastrukturatlas' on large scale (Bundesnetzagentur, 2020)

Case Study I: Infrastrukturatlas (Germany)

- Steadily increasing number of users and projects
- More than 1,000 additional data suppliers this year

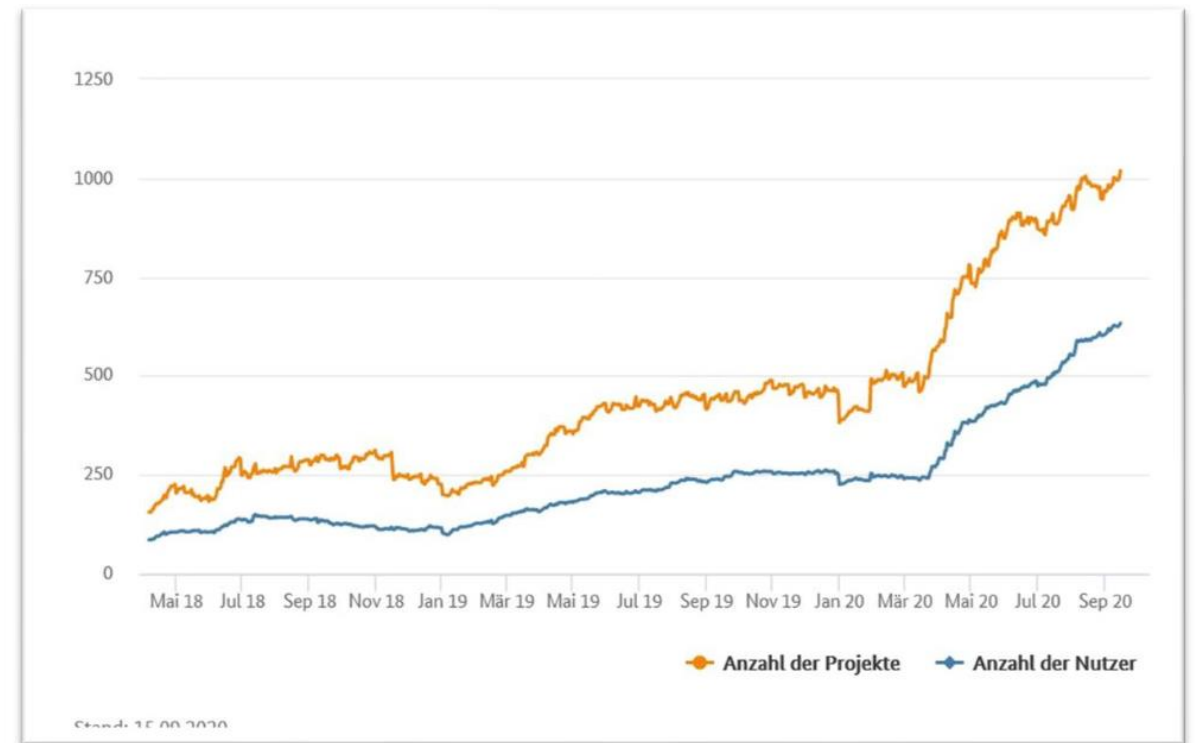


Figure 4 Number of projects and users over time (Bundesnetzagentur, 2020)

Case Study I: Infrastrukturatlas (Germany)

- Use cases
 - Co-deployment
 - Infrastructure Sharing
 - State aid application
 - Strategic documents (federal and state level)
- Costs are estimated to be 0,001% of the max. benefit

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Case Study II: Inhouse cabling (Portugal)

Regulatory key aspects

- Early duct access based on SMP (2004)
- Standardising inhouse-infrastructure

Case Study II: Inhouse cabling (Portugal)

- Building Standards (Infraestruturas de Telecomunicações em Edifícios)
- Symmetric Access Regulation
- Technology neutrality

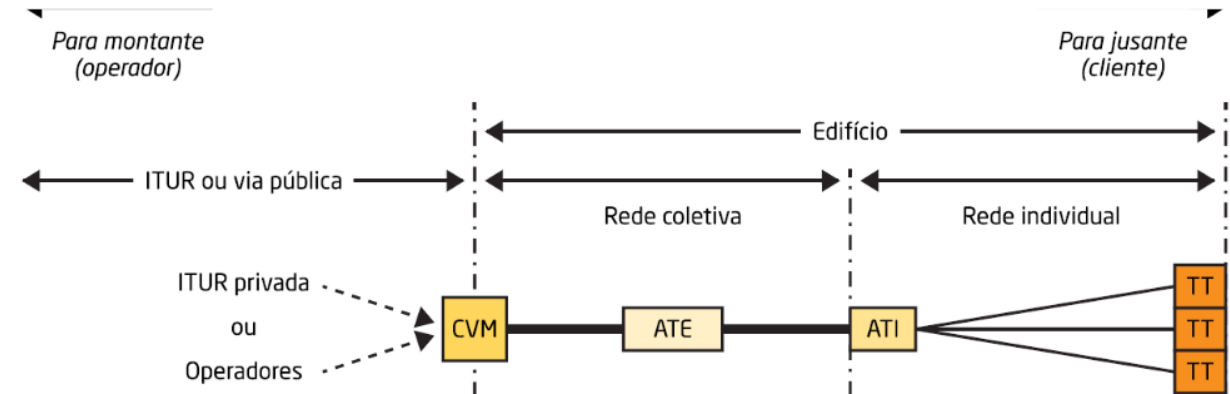


Figure 6 ITED Network Architecture with multiple Customers (ANACOM, 2020)

Case Study II: Inhouse cabling (Portugal)

- Example of a Multi-dwelling unit
- Shared infrastructure until the ATI
- Cost based remuneration

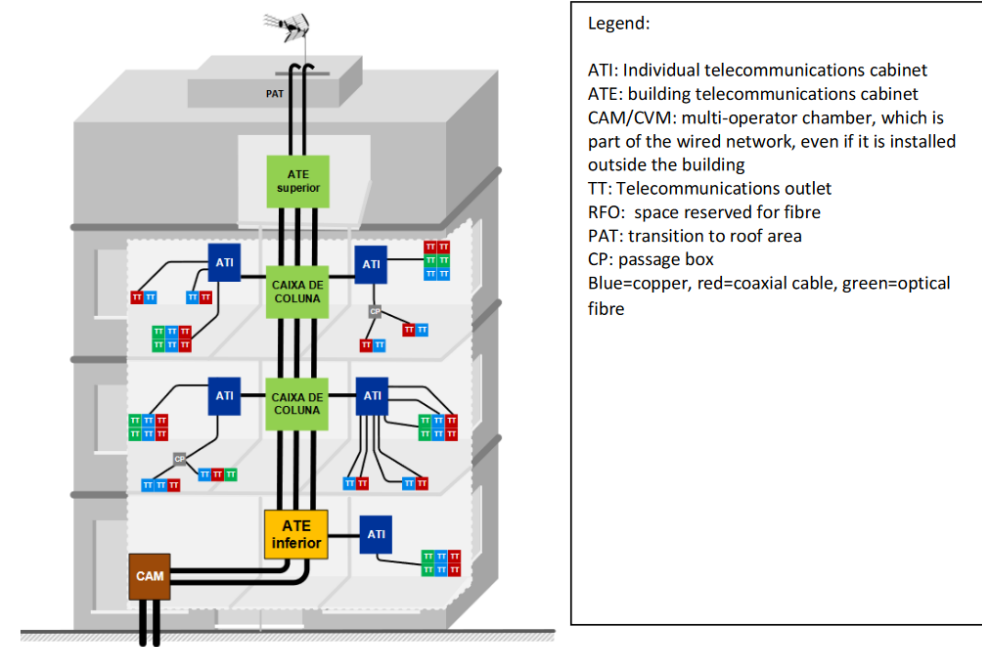


Figure 7 ITED Infrastructure in a multi-dwelling unit (ANACOM, 2020)

Case Study II: Inhouse cabling (Portugal)

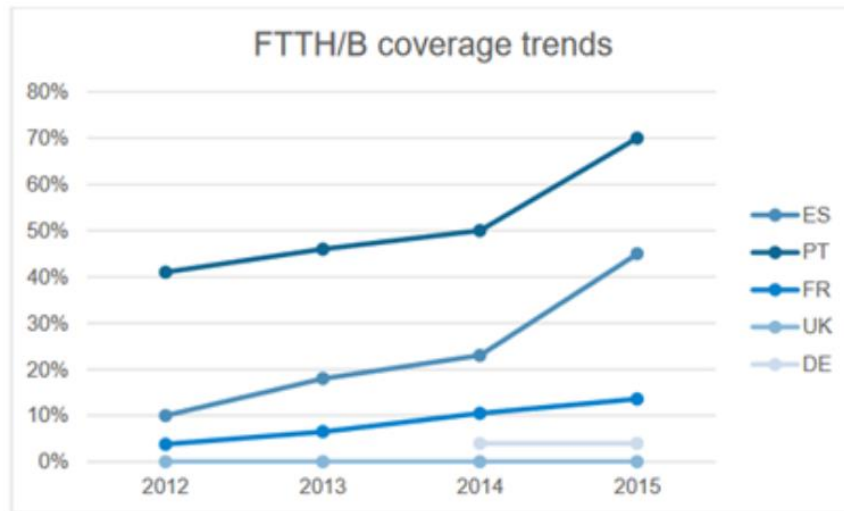


Figure 9 FTTH/B coverage in some European Countries (WIK consult, 2017)

- Spike in FTTB coverage since 2014
- Similarities to Spain with similar regulatory approach

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Case Study III: Codes of Practice and standardised contracts (Poland)

- Polish government recently established several support and capacity building initiatives
 - Codes of practice
 - Standardised contracts for cooperation between municipalities and network operators
 - Capacity building for municipalities

Case Study III: Codes of Practice and standardised contracts (Poland)

Codes of Practice

- Explain co-locating in non-legal terms
- Designed to support e.g. the use of mast foundations of electrical infrastructures, the deployment along roads
- Define roles and responsibility
- Reduce potential for disputes
- Explain the application of the 'Mega Act'

Standardised Contracts

- For cooperation between local authorities and network operators
- Municipality forfeits fees for right of way to incentivise network deployment
- Reduces information imbalance
- Reduces time needed for tendering and processing

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Collaborative Regulation

- Digital transformation is a game changer – especially in “the new normal” amid the current global pandemic
- The new digital world needs a new take on regulation
- Holistic and harmonised approach can deliver greater impact
- Development and inclusion have become a primary focus of regulation

→ ITU's G5 as a road to collaborative regulation

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Conclusions

- Several EU Member States leading the way to collaborative regulation
- EU important factor to harmonise the regulatory framework and environment
- Importance of collaboration to unlock investments

Thank you for your attention