



Smart Grid Task Force EG4 Infrastructure Development

CEF – a common infrastructure fund to
deploy smart interconnected transport,
energy and digital networks

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BB Infrastructure financing needs

Investment needs: Up to €270 billion to bring ultra-fast broadband to all households by 2020. Without the stimulating effect of CEF the market plans to invest no more than €50 billion by 2020.

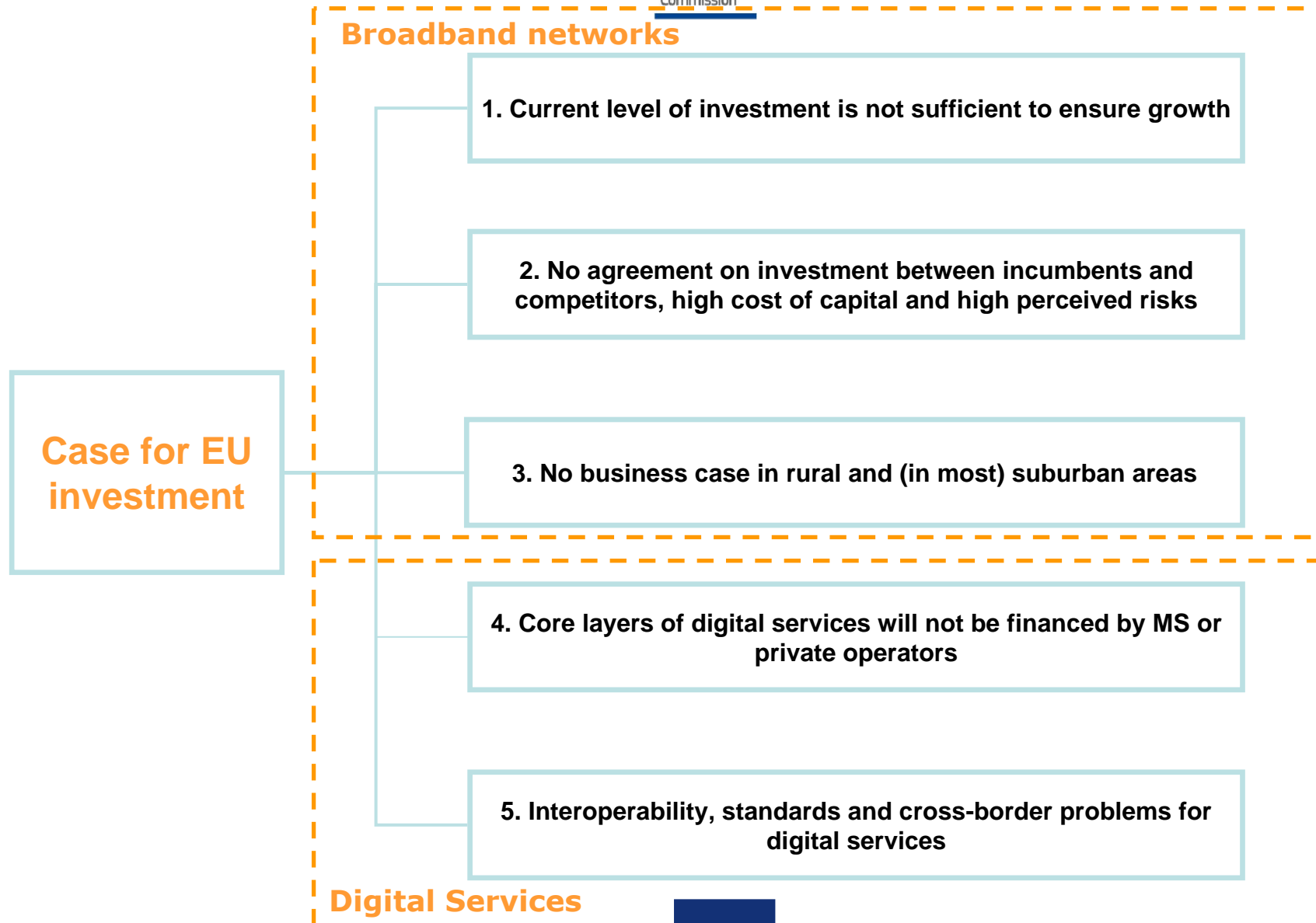
Budget envelope: 9.2 BL € in the field of telecommunications

Instruments: market based (financial) instruments and grants

Leverage effects: 6-7x in ICT (permits to reach eg 45 million households with BB)

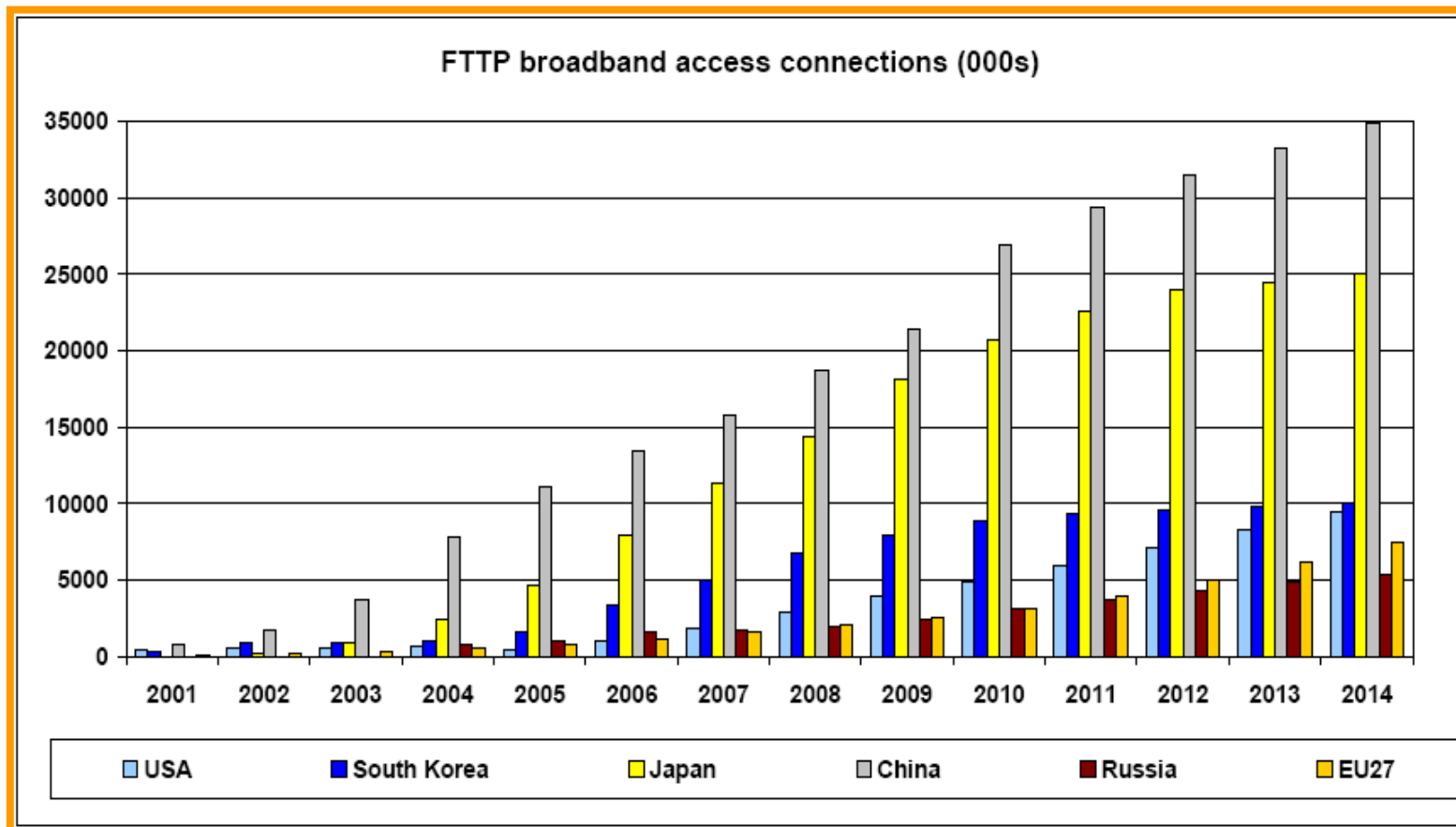


Problem definition: Why investing in digital infrastructure ?



Potential supply gap

...EU well behind





Priorities for Projects of Common Interest (PCI)

- *Actions allowing to achieve synergies and interoperability between different PCI:*
 - in the field of Telecommunications
 - concerning different types of infrastructures, including Transport and **Energy**
 - in the field of Telecommunications and projects supported by Structural and Cohesion funds
 - relevant research infrastructures.
- *Support to core service platforms in the field of digital service infrastructures*





Projects of common interest for broadband infrastructure:

*Exploitation of potential synergies between the roll-out of broadband networks and other utilities networks (energy, transport, water, sewerage, etc.) **in particular those related to smart electricity distribution.***





ICT Services of public interest

- Trans-European high-speed backbone connections for public administrations
- Cross-border delivery of eGovernment services (eID, eHealth, eProcurement, network of registers)
- Enabling access to public sector information and multilingual services
- Safety and security
- Deployment of ICT solutions for **intelligent energy networks and for the provision of Smart Energy Services**





Actions contributing to the project of common interest

Digital service infrastructures shall contribute to the realisation of digital single market by removing existing bottlenecks in terms of service deployment.





PCI for smart energy services infrastructure:

- **Core Service Platform** – deployed by utilities in partnership with telecom operators
 - Monitoring of assets, control for power management, automation and data management
- **Generic Services** – delivered by wide range of new and innovative actors
 - Smart metering infrastructure – to measure and communicate information on energy consumption
 - Software agents able to decide when:
 - to buy/sell energy
 - to switch on/off appliances in function of price signals from the energy provider, whether forecast information, data management and communication, ...



Roll-out of high speed networks - stakeholders

Infrastructure promoters

- incumbents
- newcomers
- utilities
- public authorities
- Partnerships, including PPPs

Regulators/Commission/BEREC

Financial sector

- Banks
- Equity funds
- Pension funds/insurance companies (project bonds)
- Investors (representing shareholders)





Spectrum aspects on Smart Grids

Radio Spectrum Policy Programme (RSPP):

- **Art. 8(2) of the RSPP refers to the potential of wireless technologies for improving energy saving and efficiency of smart energy grids and smart metering systems;**
- **RSPP is to be formally adopted next week (as a Decision of the EP and the Council), and once it enters into force (~April) it will provide a legal basis for:**
- ***An initiative on **Spectrum for more efficient energy production, distribution and usage:*****
 - > *Public Consultation ongoing: 23 Jan - 18 Apr 2012;*
 - > *Impact assessment will follow (until autumn 2012);*
 - > *Possible way forward, depending on IA conclusions:*
 - **~mid 2013: Commission Communication, including:**
views on useful future actions w.r.t. spectrum for Smart Grids; guidelines on measures, if any, that should be taken; ...
 - **In 2013: If necessary, further work could be done in the Radio Spectrum Committee together with the EU MS.**



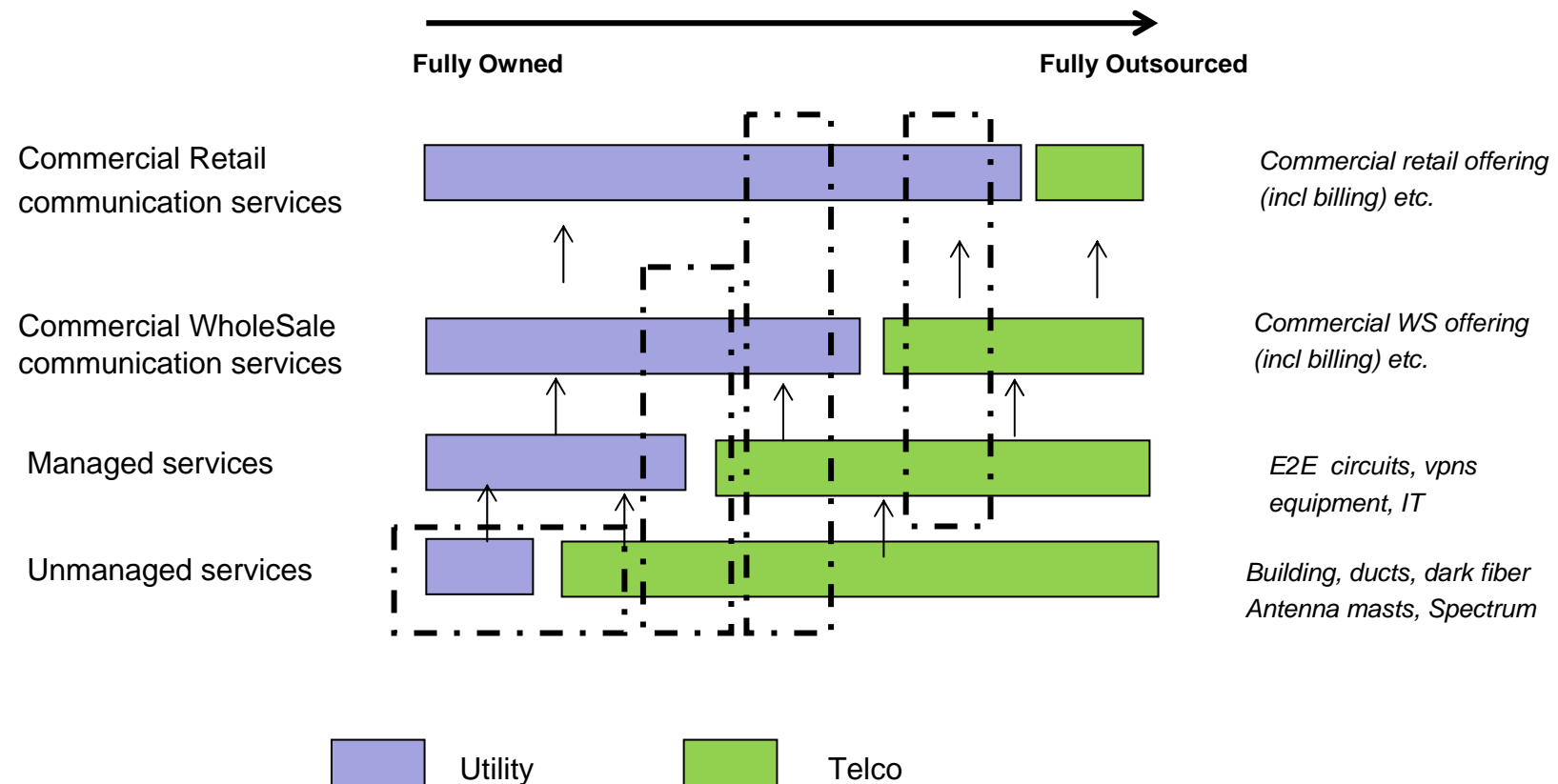
Working Group with Electricity Utilities and Telecom Companies

A number of potential areas for collaboration between DSOs and Telcos, for which the CEF could be a source of funding:

- scale, design, scope and eventual stakeholders of the collaborative projects between the DSOs and Telcos
- exploitation of BB networks or their eventual roll-out in cooperation with the roll-out of smart grid networks
- smart metering services over last-mile connection ("broadband for everyone")
- sharing of common infrastructure – e.g. poles and ducts
- cost sharing – civil engineering, ground works etc
- DSOs deploying fibre for network operation (effectively a back-haul network) on which Telcos build access networks.



Co-operation models (examples)



Source: EUTC

Thank you for your attention

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