Telecom and Energy Working Together

Presentation at ITU Regional Development Forum – 26th April 2017

ICT-based ENERgy Grid Implementation – Smart and Efficient (ENERGISE)

wik Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste

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Sustainable Development Goal 7 – Affordable and Clean Energy

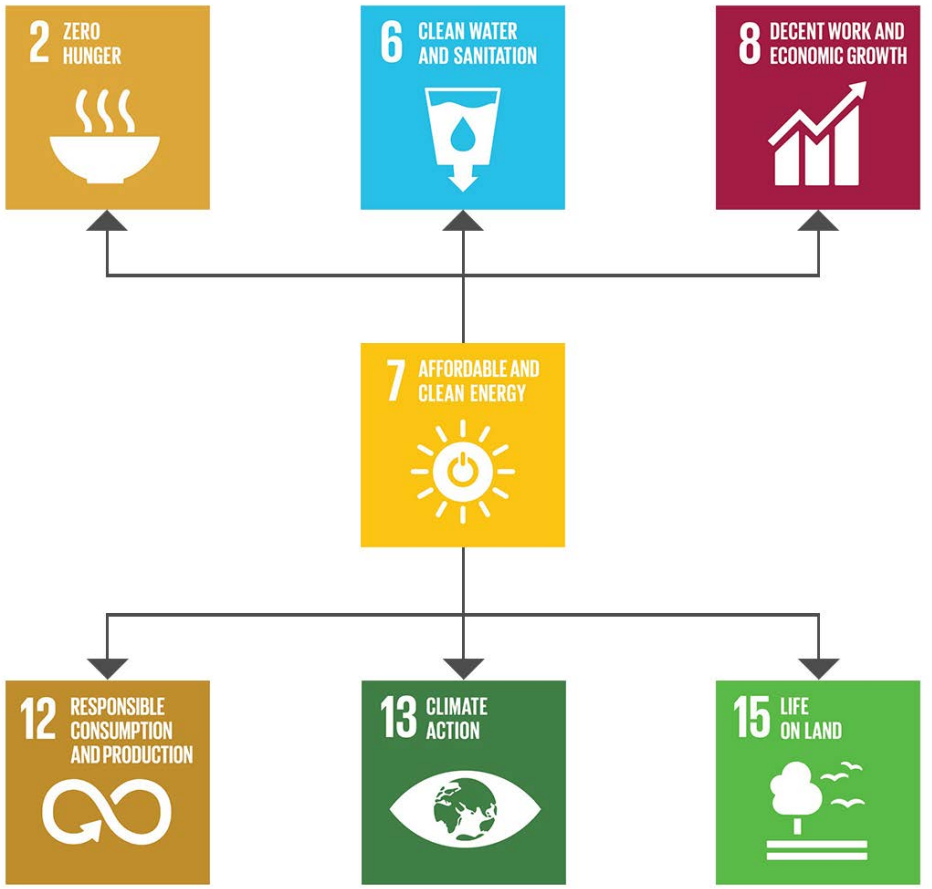
Targets

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

7.3 By 2030, double the global rate of improvement in energy efficiency

Sustainable Development Goal 7 – Affordable and Clean Energy



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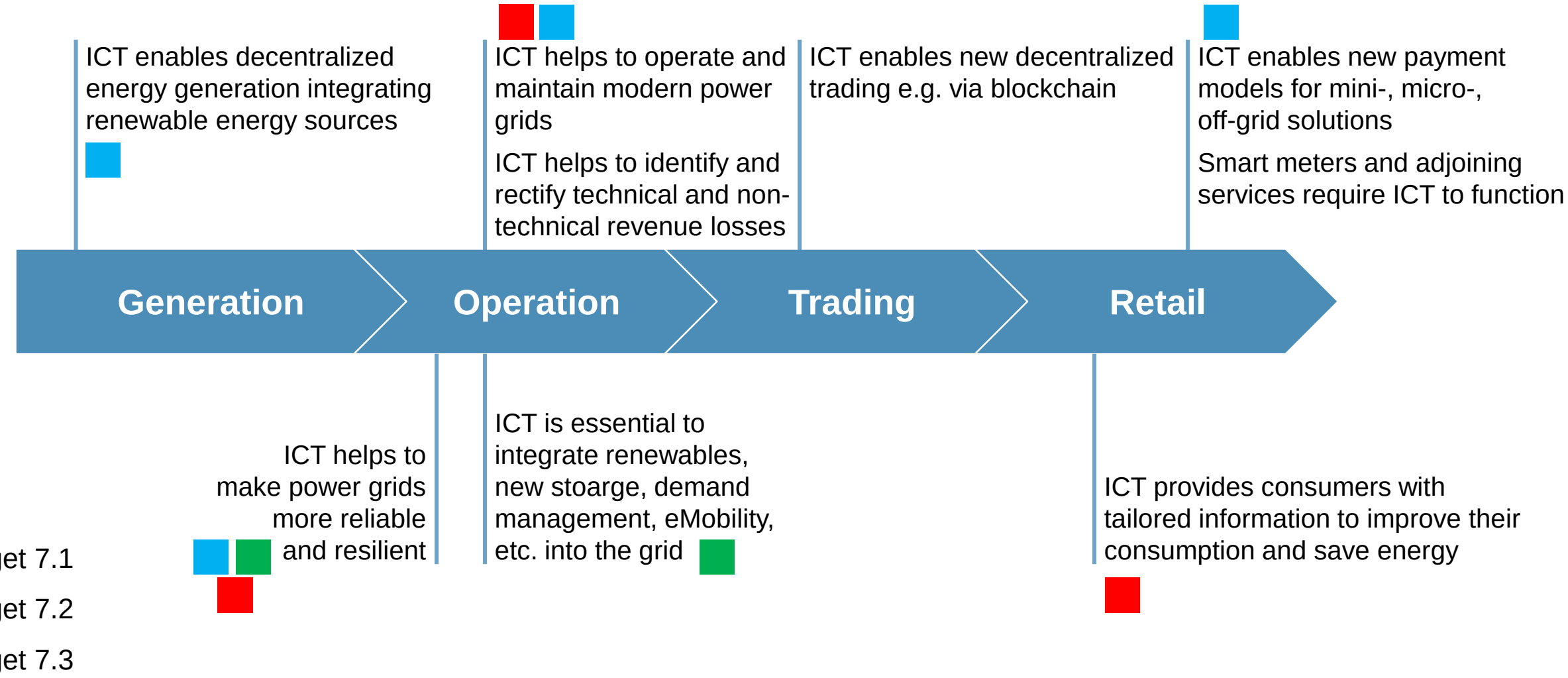
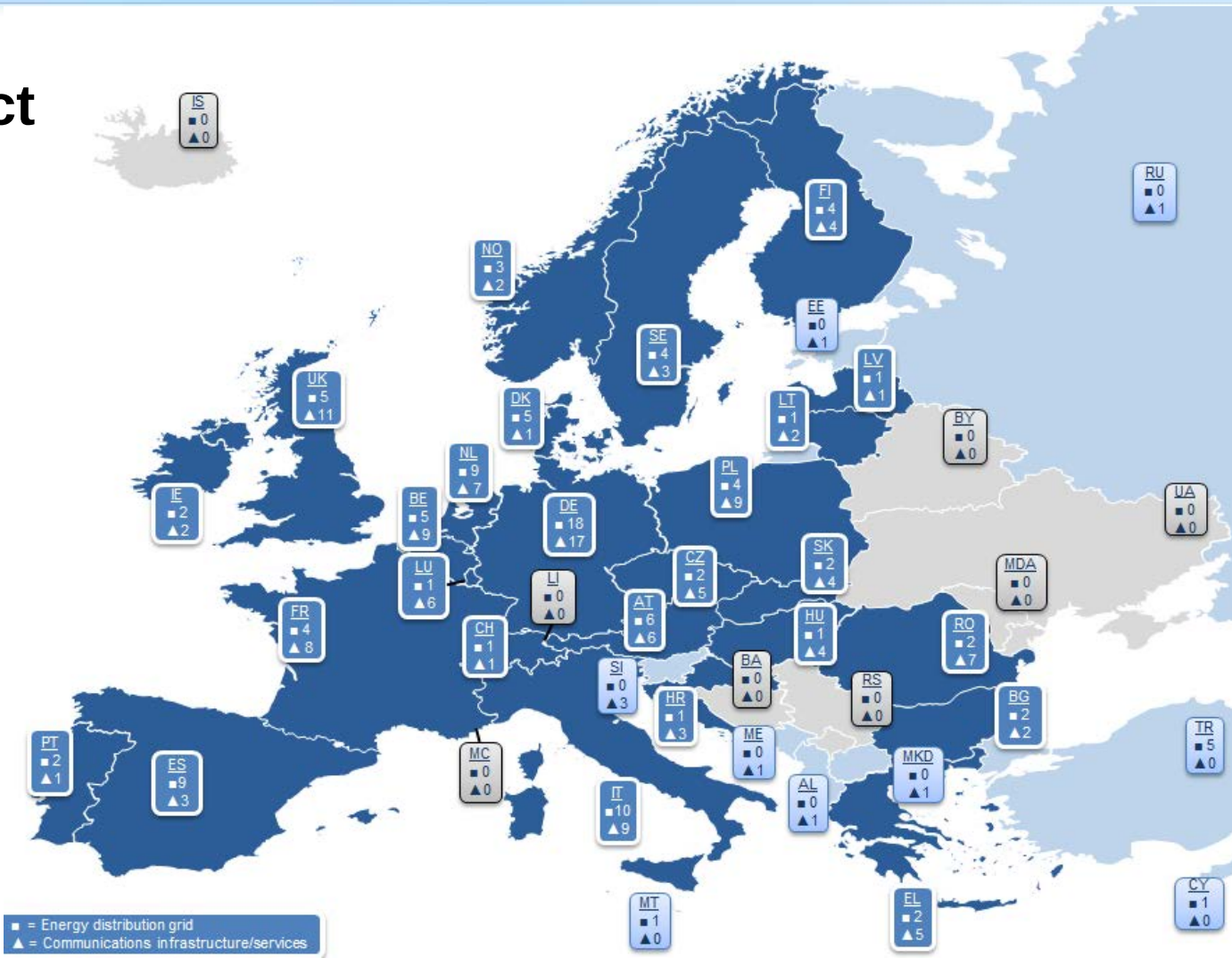
Role of ICT in the Energy Value Chain and Its Link to SDG 7 Targets



The European Experience on ICT / Energy Cooperation

ENERGISE – A Horizon2020 project

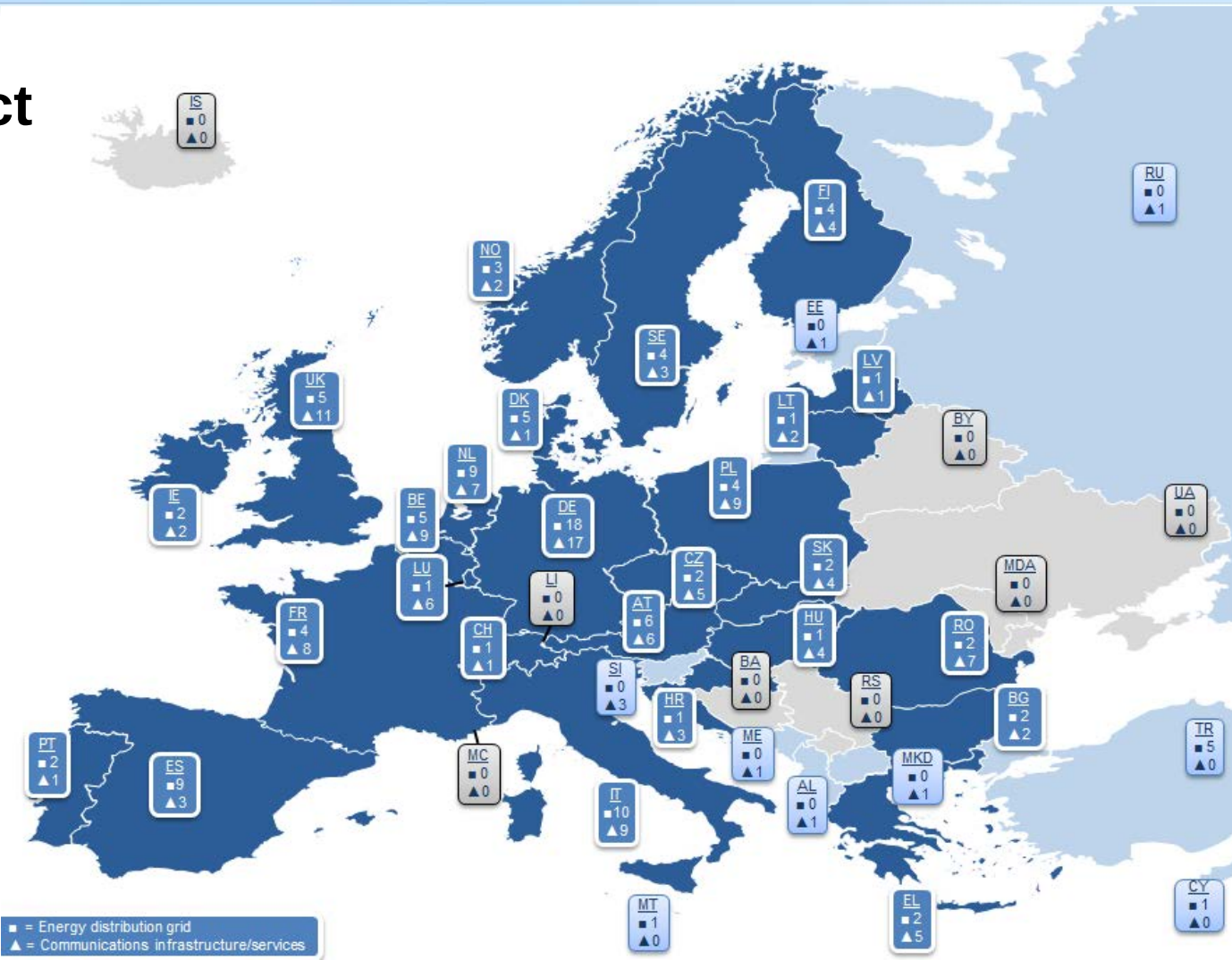
- Funded by the European Commission
- Largest study on cooperation between telecommunications and energy providers in the EU so far
- Methods:
  - Quantiative data collection
  - Qualitative Interviews
  - Workshops
  - On-site visits
- Key outcome:
  - Decision-making toolkit



The European Experience on ICT / Energy Cooperation

ENERGISE – A Horizon2020 project

- Key learnings:
  - Main barriers to collaboration:
    - Unclear regulatory frameworks
    - Lack of trust and mutual understanding
  - Five types of cooperation:
    - Network operation
    - Smart meter roll-out
    - Infrastructure sharing
    - Joint deployment
    - New products and services



Requirements for Successful Collaboration

Unclear regulatory frameworks

- Integration / cooperation of regulatory authorities
- Clear regulation even across sectors
- Balanced approach to data flows in smart grids and similar ICT-enabled infrastructures

Lack of trust and mutual understanding

- Points of knowledge exchange
- Community building
- Best practice showcases
- A common language

ENERGISE ITU Collaboration

Joint Expert Workshop (Feb 2017)

- 18 experts from the ITU, regulatory authorities and other relevant associations
- Key outcomes:
  - Regulators need to cooperate and coordinate more intensively
  - Major future challenges:
    - Frameworks for data collection, access and exchange
    - Cybersecurity in ICT-enabled utilities
  - New platforms are needed to build communities and mutual understanding among ICT and energy stakeholders
  - Even within Europe there are major differences depending on the specific country‘s regulatory framework
  - Consumer empowerment as a new focus requires new insights

RDF Draft Working Paper

- A wider discussion of relations between ICT and Energy to identify future areas of action for various stakeholders including ITU-D:
  - Regulatory team
  - ICT applications team
- Key chapters:
  - Role of ICT for achieving SDG 7
  - Incentives for cooperation
  - Collaboration in practice – the European experience
  - Requirements for successful collaboration
  - Outlook
- Launched for comments online
- submit your comments to eurregion@itu.int before 11 May 2017

Setting Targets

Type of cooperation	Corresponding strategic goals in…	
	developed countries	developing countries
Smart metering	Achieve significant take-up of smart meters by private households and businesses alike	Use smart metering technology to promote mini-, micro- and off-grid solutions
Network operation	Set appropriate frameworks that allow data collection and analysis to improve network performance and facilitate predictive maintenance of network infrastructure	Leverage ICT to monitor network performance and identify technical and non-technical losses
Infrastructure sharing	Implement policy measures that facilitate infrastructure sharing to reduce costs and increase speed of deployment e.g. infrastructure mapping, cost reduction directives	Implement policy measures and set standards for infrastructure sharing where this is appropriate
Joint deployment	Implement policy measures that foster the deployment of empty ducts with every other utility	Build common frameworks, coordination capacity and knowledge exchange to foster integrated deployment of ICT and energy infrastructure
Development of new products and services	Support innovation strategies by local enterprises	Build fora to disseminate and exchange knowledge about the advantages of integrated ICT and energy solutions to offer new forms of payments or ownership

Thank you for your attention!

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