Balancing system ambitions & Customer affordability

a regulators view

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- Regulation should facilitate all desirable system developments and not stimulate specific (smart grid) solutions
- Regulation should be both flexible towards future scenarios and predictable for network investors
- All actors should disseminate lessons learned and report on progress

Introduction

- **CEER** - **C**ouncil of **E**uropean **E**nergy **R**egulators
  CEER is a “not-for-profit association” constituted by 29 independent national regulatory authorities (NRAs) aiming to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market that works in the public interest

- **Friso Koel**

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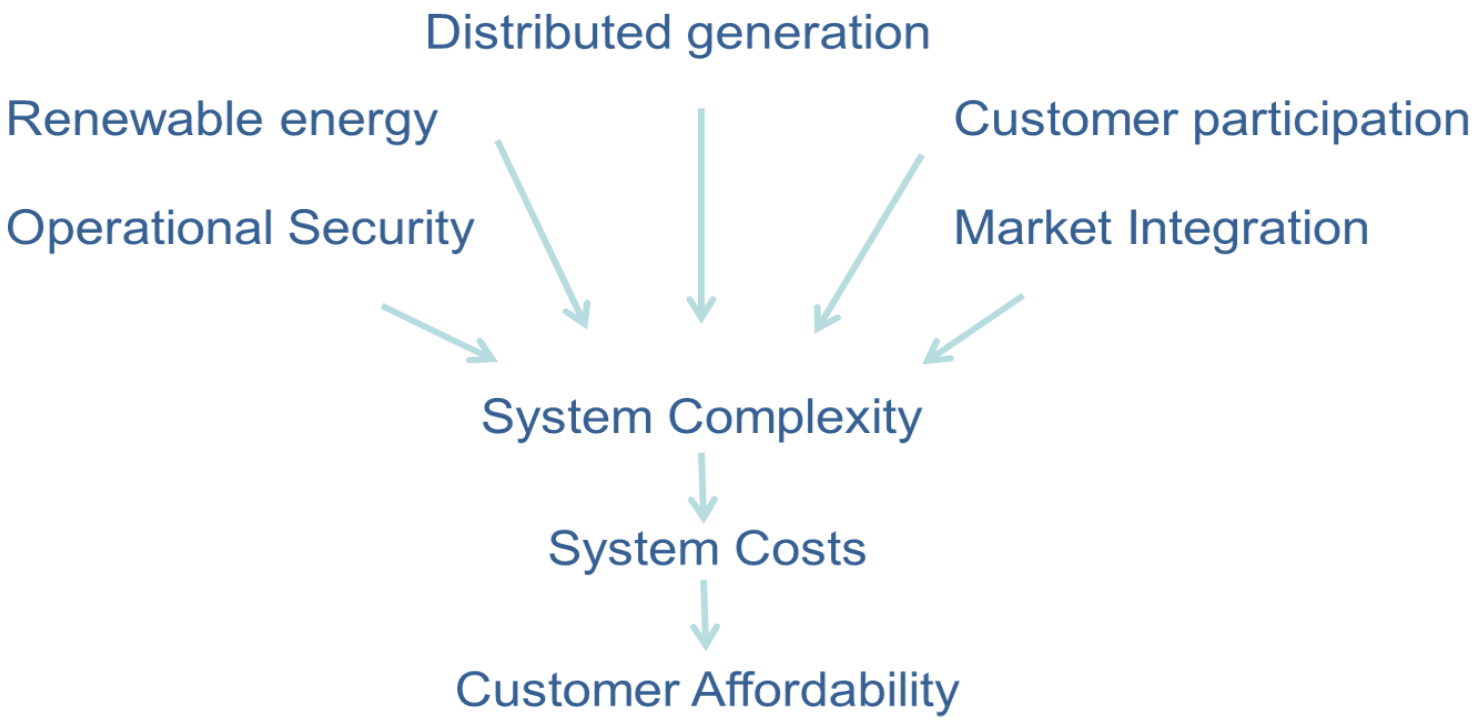
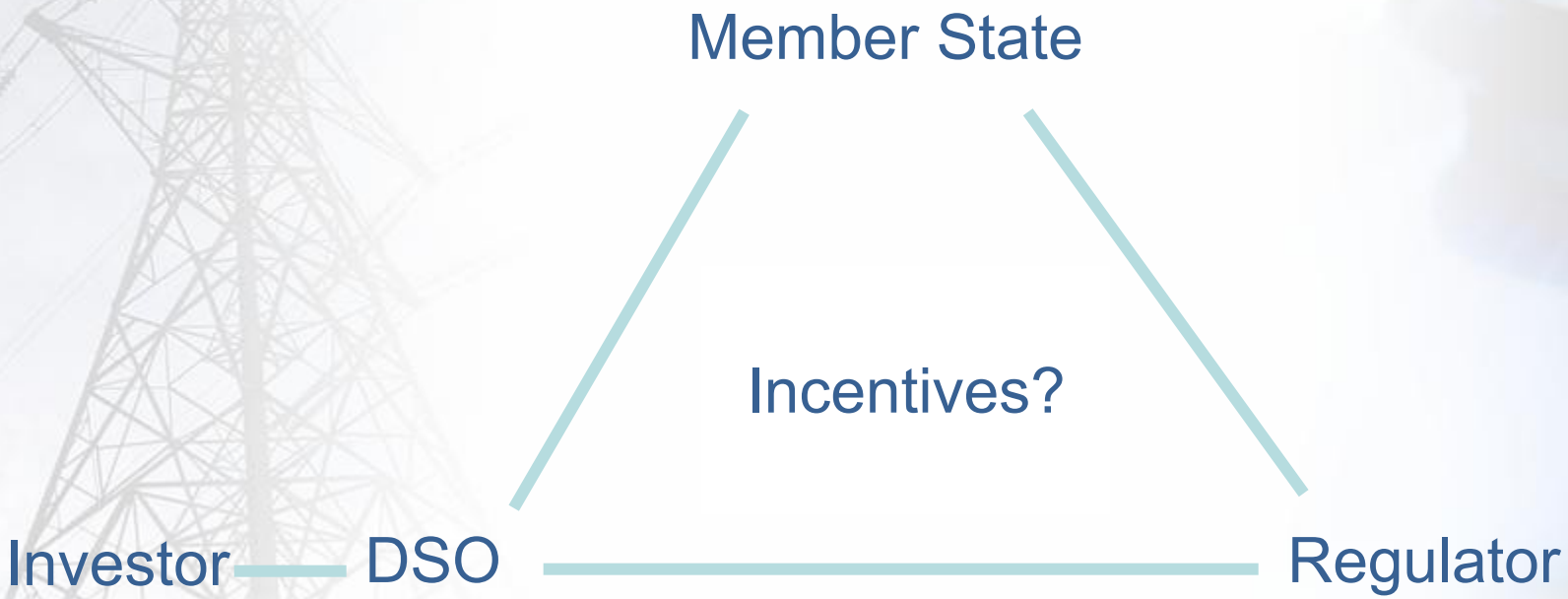
Regulating sustainable ambitions…



Smart grid *is an electricity network that can* ***cost-efficiently*** *integrate the behaviour and actions of all users connected to it in order to ensure economically-efficient, sustainable power systems with low losses and high levels of* ***quality*** *and* ***security of supply*** *and* ***safety***

…towards a cost efficient system

- **Sustainability ambitions increase hand-in-hand with other system expectations. At the same time affordability and reliability maintain important goals for the energy sector. Smart grids are key to combine all interests and ambitions. Are incentives to deploy the smart grid required and if so who must provide these incentives?**



Challenges for NRAs

- In 2011 CEER analyzed the main challenges for NRAs:
  - How to encourage network operators to choose innovative solutions
  - The inadequacy (or lack) of existing standards on smart-grid-technology
  - the need to enhance the definition of national objectives and policies on a political level
- This work will continue in 2013 review on **regulatory approaches to smart grids**

Policy and Regulation

- Smarter energy systems require debate on the roles and responsibilities of market actors
  - Who provides the smart meter, who owns data?
- Smart energy systems pose questions for demarcation free market vs regulated domain.
  - Who benefits from demand side management potential?
- Innovation policy entails more than regulation of tariffs
  - National regulators have diverging mandate
- National regulatory and regional market conditions may require dedicated solutions

Smart solutions require an integrated view

- Customers **The energy system delivers services for customers**. All costumers including domestic and small and medium firm consumers, play an important role as potential provider and beneficiary of distributed energy resources
- Network operators, the designated providers of infrastructure services
- Market parties, provide services to exploit the full potential of smart systems

- *Policy makers* set the rules and can decide on optimal trade-offs between sustainability, reliability and affordability
- *Network owners* have to raise sufficient capital to be able to realise the desirable investment programs
- Regulators have to set the right incentives for regulated network operators and boundaries for their activities

Smart regulation → outputs

- A key principle of regulation is a focus on outputs of the regulated entity and effects of a given activity while grid stability and quality is still their core business

- Smart grid regulation is about facilitating system developments that are needed to deliver the desired output. Network operators and customers are best equipped to determine what these developments should be

- Regulation of outputs can be done by:
  - **direct regulation**, i.e. minimum requirements for certain parameters
  - performance-based **incentive regulation** providing monetary rewards and penalties related to some parameters
  - benchmarking and comparative **publication of performance results**

Practicing incentive regulation

- ACM applies yardstick regulation for DSOs
- Yardstick applies to DSOs output and is equal to average total costs (TOTEX) per output for all DSOs
- DSOs therefore have the incentive to deliver their output as efficiently as possible
- Where innovation is required to deliver new demand for energy transport in the most cost efficient way, **DSOs have the incentive to innovate.**

Practicing incentive regulation- Review and innovation

- In ACM public consultation on innovation, DSOs argued that additional innovation funds are a good idea. The consultant study however suggested that yardstick regulation delivers sufficient incentives for regular innovation

- ACM did not introduce additional incentives, to prevent overinvestment and lower affordability

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However…

- Possibility has been created for DSO to receive extra remuneration for extraordinary investments
- Requires substantiation why a specific investment is necessary and is not rewarded through the yardstick regulation

- **DSOs have an important task and regulation should enable them to deliver on this**. Regulation should not choose a specific technique by specific stimulation

- Regulation should facilitate all desirable network developments and not stimulate specific smart grid solutions
- Regulation should be both flexible towards possible future scenarios and predictable for network investors
- Both regulators and DSOs should report on their progress and share the lessons learned

Thank you for your attention!

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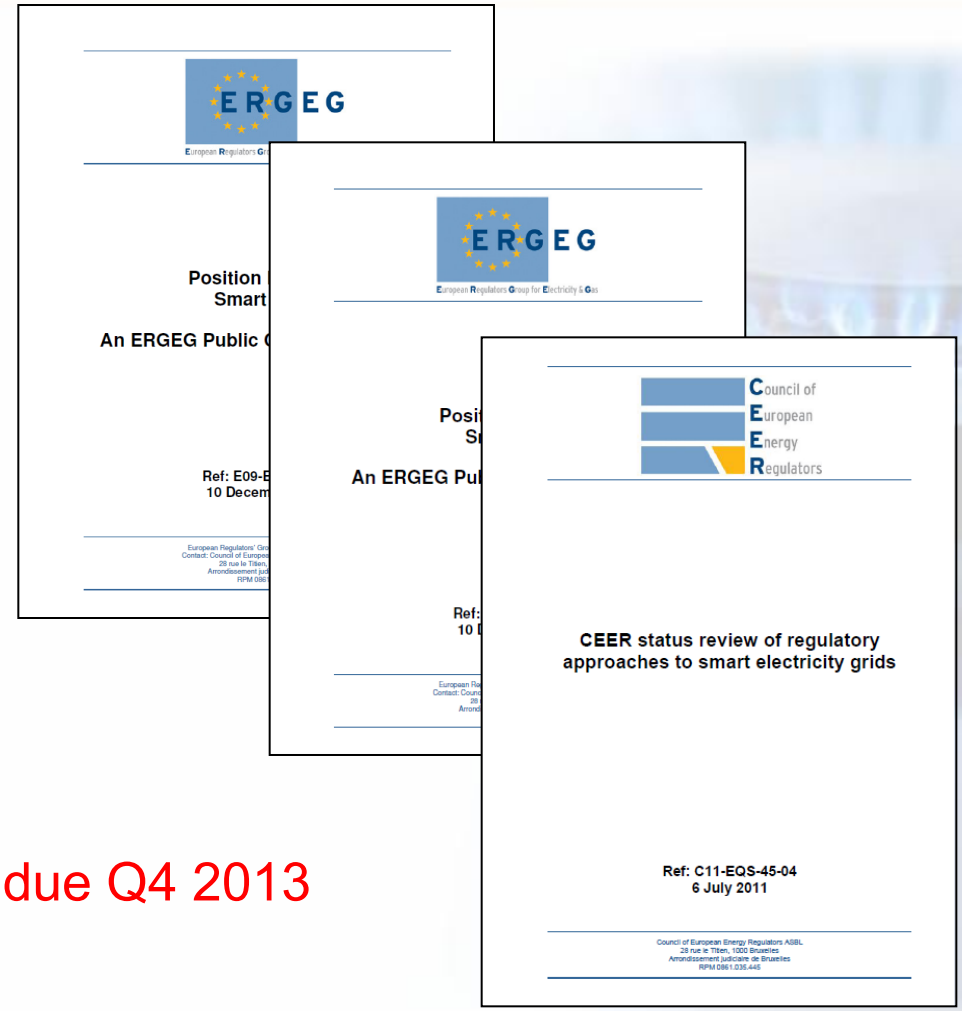
CEER/ERGEG publications on smart grids

- Position paper on Smart grids for public consultation in 2009
- Conclusions paper published in 2010 (50! contributions)
- Status review of regulatory approaches to smart electricity grids published Sept. 2011



- Deliverable on Smart regulation due Q4 2013