

Regulatory Challenges for a Sustainable Gas Sector

Fostering energy markets, empowering consumers.

Markus Krug
30 April 2019



Background

- FROG study by consultant DNV GL for CEER in April 2018
- Follow-up work based on FROG study
 - Deliverable: CEER vision on the future role of gas from a regulatory perspective (Conclusions paper)
- Madrid Forum tasks
 - Avoid unintended interactions between regulated and contestable activities
 - Cross-border and security of supply impacts of potential decommissioning of gas infrastructures
- Consultation process ongoing and closing on 17 May
 - Presentation of preliminary findings in Madrid 5-6 June



Renewable gases

- We define renewable gases as
 - Gases which energy content comes from renewable energy sources, e.g. biomethane, hydrogen and synthetic methane from renewable electricity (power-to-gas)
 - Import of renewable gas from more low-cost production regions using existing infrastructure to be considered as well
- What about low-carbon gases?
 - Aim is to achieve a climate-neutral Europe by 2050
 - "Blue hydrogen" and low carbon gases to be part of the solution



Structure of consultation document



Regulatory challenges for renewable gases



Infrastructure Investments and Regulation



Adapting the Gas Market Design





Scope of Network Operator Activities

- Unbundling is a fundamental pillar for achieving the objective of a well-functioning internal gas market
 - Network operators shall act as neutral market facilitators
- CEP reinforces this concept
 - Network operators principally should not own, develop, manage or operate energy storage facilities and recharging points for EV
- Current legal framework for gas leaves some "grey areas"

CNG/LNG fueling infrastructure

- involvement of network operators not prohibited but
- case-by-case examination necessary to ensure that involvement is limited to the technical operation of the CNG/LNG fueling infrastructure

Power-to-gas infrastructure

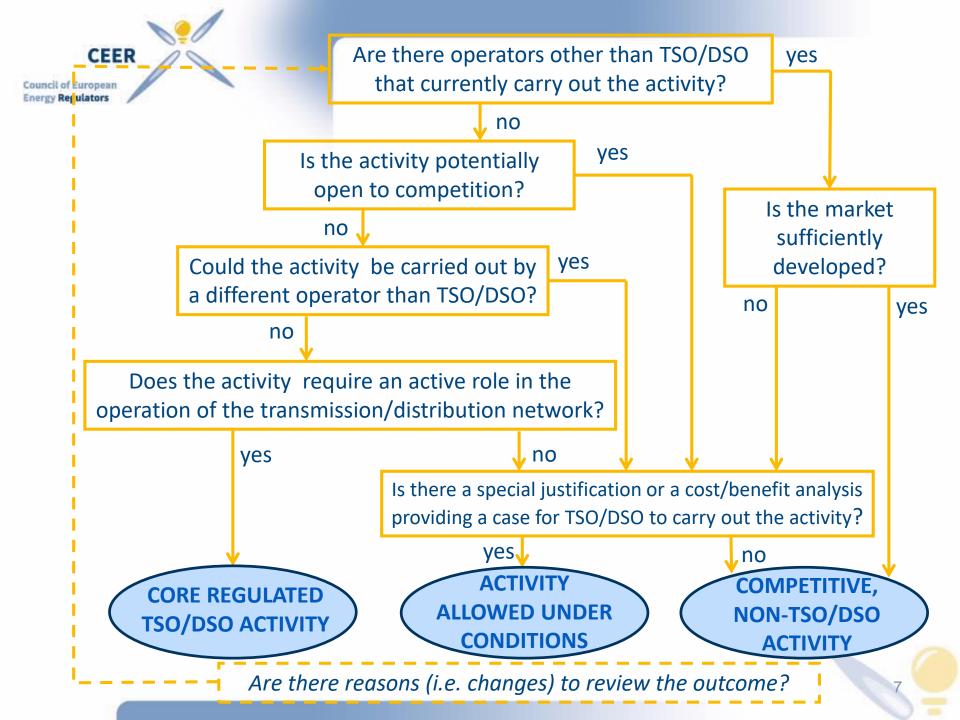
- power-to-gas plants are usually classified as gas production plants and
- network operators may not operate any gas production plants





Scope of Network Operator Activities

- Involvement of network operators in new activities could be assessed based on a conceptual tool
- Basic logic of this tool is to categorise the range of activities
 - Core regulated activity
 - Activity allowed under conditions and with justification
 - Not allowed, competitive non TSO/DSO activity
- Activities under conditions should be subject to a special justification or CBA
 - Do they bring net benefits to future and/or existing customers?





Scope of Network Operator Activities

- Limited involvement of TSOs and DSOs may be beneficial to "kick-start" the development of new technologies
- Conditions should limit the level of engagement, e.g.
 - Up to a critical size (e.g. MW of installed capacity)
 - For a certain period of time
 - Subject to transparency requirements

- The regulatory framework should be technology neutral but allow for flexibility in order to develop pilot and demonstration projects
- Apply similar provisions of the CEP regarding conditions under which an new activity may be performed by TSOs/DSOs



Regulation of hydrogen networks in the future

- In most MS, existing hydrogen pipelines are mainly owned by companies which produce gases for industrial purposes
- CEER supports ongoing efforts to facilitate the increase of hydrogen blending in existing gas networks
- Full conversion: regulation to kick-in if market analysis shows risks of abuse of market power, e.g. refusal of TPA
 - If hydrogen were to be developed on a large scale, it could be appropriate to define a regulatory framework for hydrogen infrastructure

Proposal

 A flexible and dynamic approach is necessary to ensure that regulation can kick-in once the economic characteristics require regulation



Role and Tariffication of Power-togas Infrastructures

 Most of the national electricity and gas tariff systems do not acknowledge any specific role to power-to-gas assets

- MS/NRAs should ensure that their national regulatory frameworks do not create distortions to the efficient deployment and use of this technology which actually serves sector coupling
- If installations are effectively used as electricity storages, they may be subject to provisions similar to those applied to the other electricity storage technologies



The Strategic Importance of TYNDP Development

 Given the significant uncertainties on the evolution of the gas sector in the long run, new investment decisions shall be carefully assessed

Proposal

 Stronger oversight by ACER and NRAs of ENTSOG TYNDPs, CBA methodology and underlying scenarios



Ensuring a Sound Assessment of Projects' Value

Lack of coherence in some areas of EU legislation regarding infrastructure development

Proposal

 Better coordination between the CAM NC incremental capacity approach for new investments (based on market tests) and the PCI processes (based on CBA)



Potential Decommissioning of Gas Network Infrastructures

- Most NRAs do not see a reason to act in the near future
- At national levels, a range of tools to deal with reduced capacity in regulatory frameworks exist
 - No universal solution exists but a balanced and case-by-case approach is necessary
 - It is important to consider the repurposing of gas infrastructure
 - CEER work to be published until 2020 on stranded assets at DSO level



Potential Decommissioning of Gas Network Infrastructures

- At EU-level, cross-border coordination is important
 - Affected adjacent MS should have the possibility to demonstrate that an asset in the other MS has a benefit to them (e.g. for SoS)
 - Benefitting MS should be offered the possibility to cover a fair level of the costs to maintain the asset alive
- Building on existing processes
 - TYNDP process for planning changes in capacity levels
 - CBA and CBCA for sharing decommissioning costs

- NRAs could consider designing regulatory tools to deal with the risk of stranded assets
- A coordinated EU framework for the decommissioning of cross-border assets might be needed



Regulation of Access to Infrastructures

- The decrease of demand and termination of long term contracts may justify amending network tariff designs
 - In some areas, the market could be less liquid and more fragmented
 - If not compensated by supply diversification and competition, price spreads could increase and incorporate the cost of transmission
 - In entry-exit zones, the decrease of flows could lead to tariff increases and, possibly, issues of cost-recovery

- A careful bottom-up approach would be appropriate
- Some interconnection points could be eliminated, which could require implementing inter-TSO compensations (ITCs)
- But ITCs are complex



Next steps

- Public consultation (22 March 17 May 2019)
- Presentation of consultation document and preliminary findings from the consultation at 32nd Madrid Forum on 5/6 June
- Evaluation of responses and CEER conclusion paper until end of Q3/2019