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ACER-CEER white paper on H2 network regulation

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- EU hydrogen (H₂) strategy
 - **key role for pure H₂** in achieving the green transition
 - the hydrogen sector will be **EU-wide integrated**
- The development of H₂ infrastructures raises questions about how to regulate it
- Current EU gas regulation does not cover **transport of pure H₂**
- This white paper presents **6 main recommendations on H₂ network regulation** that regulators have agreed upon
- Very different situation from that when EU regulation for gas and electricity networks was introduced: gas and electricity networks were already in place, while the **H₂ sector still need to be fully developed**

- Consider a gradual approach to the regulation of H2 networks in line with the **market and infrastructure development**
- The H2 development is at **an early stage**: regulatory intervention will depend on how the H2 sector will evolve
- Economic principles calling for regulation in case of:
 - **Natural monopoly/essential facility**
 - **Risk of abuse of dominant position**
- Regulation should address the actual risk of **market foreclosure**
- Risks depend on how **demand and supply develops** (number of players, volumes, routes) and how **networks can accommodate** them
- Member States will face different H2 development paces: need of **flexible and gradual** EU-wide regulatory regime

- NRAs need to monitor the **evolution of H2 sector**
 - Market structure and statistics (volume, prices, etc.)
- National monitoring based on **indicators developed at EU level**
 - Consistency checks on monitoring results at EU level
- Based on them, NRA should decide when intervention should kick in
- Get inspired by **existing flexible models**
 - E.g. telecoms: adapting regulatory measures (from a set of tools) according to the market situation (informed by monitoring)

- Stable environment for investments through the application of **regulatory principles**:
 - Third party access (TPA)
 - Transparency
 - Non-discrimination
 - Unbundling
 - Consumers' protections
 - NRA monitoring and oversight
- How to apply those principles to the H2 sector will depend on **how the H2 develops**
- If the developments of the H2 sector will have characteristics like those of natural gas, the **experience from EU gas regulation can be used**
- **Not simply copy-paste of the current gas regulation**:
 - There are technical and market differences between natural gas and hydrogen
 - Additional challenges can come from applying these principles in an integrated energy system perspective

- Business-to-business networks can be temporary **exempted** from regulation, avoiding that point-to-point pipelines are unnecessarily impacted
- **Temporary exemptions until** there are no signs of discrimination or abuse of market power
- If market conditions change and the network infrastructures becomes essential facility, exemptions should be revoked
- Need to find the **right balance** between **flexibility** to foster H2 sector development, while at the same **avoiding foreclosure**

- EC H2 strategy relies on **repurposing** CH4 pipelines
- Need for a **balanced consideration** between constructing new H2 pipelines versus the repurposing of existing gas infrastructure
- Identifying which part of the gas network could be used for H2 by using **cost-benefit analysis CBA methodology**
 - considering all aspects including decommissioning costs, and Security of Supply, etc.
- Including repurposing the in **national development plans (NDP)** and in **EU Ten-Year Network Development Plan**
- The above process is part of broader infrastructure development and planning
 - need for a **coherent approach across sectors** for infrastructure planning

- **Avoiding cross-subsidisation between the gas and H2 network users**
- In the context of an actual integrated energy system, the implementation of **this principle might require adaptations** if the benefits of the use of a network become cross-sectoral
- In case of repurposing gas network assets, **unbundling rules** should be applied:
 - at least **separation of activities, RABs, and costs** (accounting unbundling) between the entities that own and operate the H2 infrastructure and the gas infrastructure
- Repurposed gas assets should be valued based on their specific value in the RAB at time of transfer