ENTSOG 2050 ROADMAP ACTION PLAN ►



ENTSOG CONSULTATION RESPONSE ON EC TEN-E REVISION PROPOSAL

ENTSOG welcomes the Commission's proposed revision of the TEN-E Regulation, which brings the TEN-E and CEF into line with the EU's Green Deal objectives. ENTSOG would like to make some comments and suggestions of substance, and some technical observations aimed at improving the effectiveness and functioning of the revised approach:

1. Repurposing and retrofitting of gas infrastructure

The EU Hydrogen Strategy outlines the potentials for hydrogen in Europe, both on production, consumption, transportation, and storage. **The existing gas infrastructure will play an important role in supporting the transition to hydrogen** by repurposing existing gas facilities, including pipeline systems, gas storages and LNG terminals for pure hydrogen transport or retrofitting these facilities for transport of methane-hydrogen blends.

ENTSOG welcomes the addition of 'priority thematic areas' and 'infrastructure categories' for smart gas grids, hydrogen and electrolysers as set out in Annexes I & II of the draft revised Regulation.

Cross-border criteria

However, ENTSOG finds that further clarification will be needed as to how electrolysers, biomethane injection points and other similar projects – which may have clear but indirect cross-border impacts – can possibly meet the cross-border criteria set out in Article 4.

ENTSOG believes that the proposed criteria should consider the level of maturity of the European hydrogen market and be broadened so that any project which is necessary for at least one of the energy infrastructure priority corridors and thematic areas should be eligible for PCI status. In its current form, the proposed cross-border criteria will make it extremely difficult, if not impossible, for projects in Member States which have limited interconnection to demonstrate cross-border benefits from specific projects, despite such projects offering sustainability benefits, which is the central focus of the revision of the TEN-E Regulation.

Framework for repurposing and retrofitting

The proposed TEN-E revision does not in ENTSOG's view sufficiently outline the regulatory framework for repurposing and retrofitting of existing gas infrastructure to enable integration of new clean gases, including hydrogen. The 'smart grid' category in the TEN-E proposal can potentially be interpreted to cover some of such projects. However, ENTSOG finds that a more explicit and clearer regulatory framework for repurposing and retrofitting will be needed on EU-level. The existing gas and the upcoming hydrogen networks will have to be considered, connected, and technically aligned - aiming for developing in a longer perspective an integrated EU hydrogen infrastructure. In order to support the development of new clean gases, the definition of 'smart gas grids' in article 2 (9) should not be limited to digital solutions but broadened to also cover the necessary technical investments to integrate those new gases into the existing infrastructure. ENTSOG does also believe that blending of natural gas and hydrogen will be instrumental in scaling up green hydrogen production capacities, facilitating transport of hydrogen when volumes are not sufficient for dedicated hydrogen systems. Projects which relate to retrofitting of current natural gas infrastructure for transmission of natural gas and hydrogen blends, will be contributing to the foundation for future repurposing of gas infrastructure and should therefore also be eligible for PCI status and related CEF funding..

Role of gas TSOs

The Commission acknowledges in its Hydrogen Strategy that gas TSOs are to be authorised by Member States to own and operate hydrogen pipelines. **Development of the future hydrogen backbone is urgent**, and will be largely based on repurposed pipelines today owned and operated by the gas TSOs. Clarification on the legal aspects of owner- and operatorship of hydrogen infrastructure should be obtained on a European level for the EU energy market – considering that in some Member States decisions on hydrogen networks ownership and operators' roles requires clarification at the level of Gas Directive and Regulation.

ENTSOG suggests that this issue to the extent legally possible is to be dealt within the scope of the TEN-E revision – even though we recognise that this aspect should also be covered by the upcoming revision of the gas regulation.

Eligibility of hydrogen projects to the 6th PCI list

The inclusion of hydrogen projects in the 6th PCI list is necessary to ensure timely investments and the realisation of the European climate and energy targets for 2030 and 2050. The planning process for the Hydrogen Backbone needs to start immediately. If such a change is only legislated for in the upcoming Q4 2021 reform of the Gas Directive, it will not have effect until earliest 2024/2025. ENTSOG has decided to include hydrogen-related projects – including repurposing and retrofitting – in the upcoming TYNDP 2022, anticipating the application of the revised version of the TEN-E Regulation, which should provide for eligibility of such projects starting with the 6th PCI list.

2. Traditional gas projects

The Commission proposes to remove all new traditional gas projects from future PCI status. As a result, notably of previous work under TEN-E and CEF, Member States in the majority of cases will have multiple sources of natural gas when existing projects are completed. **The EU has significantly improved its energy security profile and competitiveness and liquidity of its energy markets**. Stricter screening criteria for traditional gas projects in the scope of TEN-E may therefore to some extent be justified on the grounds of results achieved on the Internal Gas Market and Security of Supply. In this context, it is important to note that **projects already on the PCI list will and should be maintained on the list in order to materialise planned and expected market and security of supply improvements.**

However, ENTSOG believes that the Commission's proposal to exclude traditional gas projects is in fact likely to be counter-productive to its sustainability and Green Deal objectives. Furthermore, although sustainability has become the key objective for EU's energy sector, objectives related to the Internal Market and Security of Supply – ensuring affordable and secure energy supplies to EU consumers – are still important corner stones in EU's energy policies. For some EU Member States, improvements in terms of market integration and the security of supply situations can be obtained by strengthening of gas infrastructure.

Enabling the fuel switch

Natural gas will continue to play an important role in many EU Member States for years to come – and furthermore, gas will play an increasingly important role in most of the coal regions in transition. A fast phase-out of coal, lignite and oil can only be successfully achieved if an intermediate 'transition': switch to natural gas is enabled; given the scale of generation that will need to be replaced over a very short timeframe, renewable electricity capacity in the regions concerned will not be able to increase rapidly enough to cover lost coal-based generation capacity. This can be done through high efficiency and 'hydrogen ready' gas CCGTs and CHPs, combined with growth in renewable energy sources. Failing to provide for this, may result in coalfired generation remaining active far longer than necessary.

Initial indications are that some investments in cross-border gas infrastructure will still be required to ensure that key coal regions can be supplied with adequate, secure and diverse sourced gas necessary to enable this transitional phase. These investments can be made 'hydrogen ready', thereby contributing to effective transport of both methane and hydrogen, following the gas demand transition.

Whilst each project is to be considered on its merits, and appropriate sustainability criteria can be provided for in the Regulation (amortisation of costs by 2050, hydrogen readiness...), removing all traditional gas infrastructure projects from the scope of the TEN-E regulation is, as mentioned above, likely to be counter-productive for EU's Green Deal objectives.

Furthermore, ENTSOG finds it important explicitly to support in the TEN-E regulation that development of gas infrastructure triggered by the development of renewable methane, such as biomethane, should be eligible for PCI status, under the coal/oil-to-natural gas-to hydrogen/biomethane ready infrastructure.

Technology neutrality for a cost-efficient transition

To facilitate achievements of volumes needed, **the TEN-E framework should be technology neutral and support the various types of renewable and decarbonised hydrogen**. Technology neutrality will allow for the development of costefficient solutions which can contribute to substantial emissions reductions early in the transition and are crucial to achieve a rapid market ramp-up of hydrogen technologies for the affordable decarbonisation of various sectors.

A **technology neutral approach** would also allow for the coordinated development of the hydrogen and CO_2 networks as the production capacities of decarbonised hydrogen will develop.

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ENTSOG and its members are aware and fully respect that the status of projects, including traditional gas projects, under the TEN-E regulation should be based on political decisions. **In any case, ENTSOG is ready to contribute to further discus**-

sions on elaboration of relevant eligibility criteria for gas infrastructure projects securing hydrogen-ready gas infrastructure during the transition as well as supporting the long-term objectives of the EU energy and climate policies.

3. Role of ACER and the Commission in TYNDP scenarios process

The Commission's proposal introduces a greater level of oversight over the preparation of TYNDP scenarios by both the Commission and ACER.

It is proposed that Framework Guidelines are to be developed by ACER for the joint scenarios prior to the start of the process, combined with strengthening stakeholder involvement and the final approval of the joint scenarios by the Commission. ENTSOG understands that this has been considered necessary by the Commission because of the perceived risk of conflict of interest of TSOs in the process and the need for more scrutiny and independent validation in order to enhance trust.

ENTSOG acknowledges the importance of objectivity and transparency in the process during the Energy Transition, and that additional measures could be appropriate.

ENTSOG welcomes the proposal that the Commission must formally approve the joint TYNDP scenarios as proposed by the ENTSOs, which together with the suggestion of ENTSO-E and ENTSOG on a Joint Stakeholder Forum for Scenarios will significantly improve transparency and stakeholder involvement and should be seen as an improvement of the stakeholder involvement of ENTSO-E and ENTSOG.

However, the proposal to give ACER the responsibility to draw up Framework Guidelines for the joint scenarios to be developed by the ENTSOs may in our view be unnecessary and will in any case reduce the effectiveness and risk the timeliness of the scenario development process. This proposal has been drawn mirroring the procedure for the development of Network Codes, where ACER has this role reflecting their technical and regulatory-specific nature.

The TYNDP Scenarios are a completely different process and nature, requiring expertise on modelling and scenarios that lies with the ENTSOs and the TSOs rather than ACER. Experience with the Network Codes demonstrates that the proposed procedure risks considerable complications and delays, which ENTSOG wishes to avoid, whilst maintaining the same level of oversight and transparency as proposed by the Commission. ENTSOG finds that the suggested positioning of ACER into a policy orientated role to develop TYNDP Scenario Framework Guidelines is questionable, including considering which criteria ACER should build on and how to ensure alignment amongst the NRAs. This role has in practice been – and should continue to be – taken care of by the Commission.

Furthermore, considering the already tight timelines of the bi-annual TYNDP cycles, ENTSOG finds it problematic within the given two-year TYNDP cycle to include further complications such as the suggested Framework Guideline process.

ENTSOG would therefore suggest an equivalent but more efficient approach, notably that Framework Guidelines are indeed provided for, but **that the Guidelines are to be adopted together with the TEN-E Regulation in an annex to the Regulation**, in the same manner as is proposed regarding the procedure for the update of the cost-benefit analysis in Annex V.

The objective of such Framework Guidelines would be to specify the underlying assumptions that must underpin the TYNDP Scenarios (compatibility with the Green Deal, RES, EE targets, use of defined data sources/projections for future gas demand etc). These foundations for the TYNDP Scenarios are already known and can be included in the Regulation, with the Commission being empowered to update them if and when necessary. In addition, ACER together with all stakeholders would participate in the transparent consultation process through the Joint Stakeholder Forum for Scenarios by ENTSOG and ENTSO-E. ACER would provide an Opinion to the Commission on the proposed TYNDP Scenarios, which only are adopted once the Commission has approved them.

Such an approach would better ensure an efficient approach, thus avoiding delays, and better respect the institutional roles and responsibilities of the different actors in the process.

4. CO₂ transmission projects are included, but not storage.

ENTSOG supports maintaining the eligibility of CO_2 pipelines in the scope of the TEN-E.

However, we find that the exclusion of CO_2 storage facilities other than buffer storage is inconsistent with the need for the development of 'full-chain' carbon capture and storage technologies. ENTSOG does not see any obvious justification for this exclusion of CO_2 storage facilities, notably if other storage facilities for electricity, hydrogen and even buffer storage of CO_2 is included. Therefore, an inclusion of CO₂ storage facilities in the scope of the TEN-E Regulation can positively support the development of hydrogen transportation systems as well as CCS technology: ensuring that hydrogen pipelines are developed in parallel to adequate safe storage sites.

5. Technical improvements

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Energy system wide cost-benefit analysis

The proposed revision of the Regulation reinforces oversight of the CBA process, with a rather classical approach involving early stakeholder consultation, the opinion by ACER and the final approval by the Commission. ENTSOG welcomes this proposal.

However, in relation to only incremental changes to the CBA, where the full approval process is not required, the proposal introduces a 'double' process. First, the approval of the incremental changes by ACER takes place, followed by a justification of their incremental nature to the Commission, which can override the assessment of ACER, ENTSOE and ENTSOG and request the application of the full procedure. ENTSOG considers that is administrative and unnecessarily time-consuming, given the objective.

Therefore, ENTSOG suggests that the Commission should only be involved in case of disagreement of the incremental nature of the proposed changes between ACER and the ENTSOs.

Offshore grid planning procedure

The new chapter proposed by the Commission dealing with offshore grids for renewables integration has focus on the development of an integrated offshore network development plan and the specific cost-benefit and cost-sharing methodology for electricity only.

However, hydrogen pipelines and gas production facilities will potentially play an important role in the development of offshore networks, in line with the EU's Energy Sector Integration strategy. ENTSOG suggests that this provision is reconsidered to determine how best this can be taken into account, in order to ensure an effective and integrated planning and investment procedure for the wider offshore grid for both electricity and hydrogen.

More about the ENTSOG 2050 Roadmap: https://www.entsog.eu/roadmap-action-plan

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