

**RECOMMENDATION No 02/2019  
OF THE EUROPEAN UNION AGENCY  
FOR THE COOPERATION OF ENERGY REGULATORS**

**of 19 November 2019**

**on the regulatory response to the future challenges emerging from  
developments in the internal gas market**

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators<sup>1</sup>, and, in particular, Article 3(1) thereof,

Having regard to the favourable opinion of the Board of Regulators of 18 November 2019, delivered pursuant to Article 22(5) of Regulation (EU) 2019/942,

Whereas:

**1. INTRODUCTION**

- (1) The completion of the Internal Energy Market (IEM), delivering tangible benefits to European energy consumers, remains a top priority for ACER and for National Regulatory Authorities (NRAs).
- (2) As the gas sector faces numerous challenges in view of the sustainability and decarbonisation objectives of the European Union, the gas regulatory framework should be adjusted to the new energy policy goals. This should happen against a background of an evolving role of natural gas and other types of gases in the future energy system and of the forecasted increased integration of gas and electricity facilities, *inter alia* through power-to-gas. At the same time, a level playing field in which competition can flourish must be ensured and a sound investment climate that is based on a predictable regulatory framework must be provided.

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<sup>1</sup> OJ L158, 14.6.2019, p. 22.

- (3) With this Recommendation, ACER proposes elements of an effective regulatory and policy response to the challenges and trends that the European gas sector faces in the medium-term, *i.e.* beyond 2025.

## 2. SCOPE

- (4) This Recommendation is part of a process in which ACER and NRAs intend to support the European Commission and other relevant European Institutions in the identification of future challenges and appropriate measures for the gas sector after 2025. Starting from the “Clean Energy for All Europeans” Package (CEP)<sup>2</sup>, it proposes measures and practical actions to address the identified challenges.

- (5) This Recommendation builds around two key strategic areas which may call for regulatory action.

(a) Targeted regulation and market functioning. While the European Gas Target Model<sup>3</sup>, where applied, is generally working well, there are some markets where competition is still not effective and consumers’ interests are not well served, or where the current system of gas regulation may need review. This triggers the need for a limited number of amendments to the current gas market design and a sound regulatory framework that addresses the remaining challenges.

(b) Enabling new energy products and enhancing infrastructure governance. A sustainable future requires deep decarbonisation of the energy system and the use of new technologies. However, the current regulatory framework was not designed based on such considerations. Consequently, the absence of appropriate regulation may have unintended consequences, and hinder the development of these technologies. Notably, the existing unbundling rules may need to be applied to new services, while the former natural monopolies are now competing with other services. Such major challenges suggest that a successful energy transition requires adequate regulatory policies simultaneously paving the way for sustainable, secure and affordable energy.

- (6) Some of the proposals contained in this Recommendation have been tested with stakeholders through two public consultations carried out in 2019, by the Council of European Energy Regulators (Consultation Paper on Regulatory Challenges for a Sustainable Gas Sector, from 22 March to 17 May 2019<sup>4</sup>) and ACER (Public Consultation on the Gas Bridge beyond 2025, from 23 July to 9 September 2019<sup>5</sup>).

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<sup>2</sup> <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>.

<sup>3</sup> <https://www.acer.europa.eu/Events/Presentation-of-ACER-Gas-Target-Model-/Documents/European%20Gas%20Target%20Model%20Review%20and%20Update.pdf>

<sup>4</sup> C18-RGS-03-0. Consultation period: 22 March 2019 – 17 May 2019.

<https://www.ceer.eu/documents/104400/-/-/274b3146-afb5-8c96-436e-4056f3636b31>.

<sup>5</sup> PC\_2019\_G\_06. Consultation period: 23 July 2019 – 9 September 2019.

[https://www.acer.europa.eu/Official\\_documents/Public\\_consultations/PC\\_2019\\_G\\_06/The%20Bridge%20beyond%202025%20-%20PC\\_2019\\_G\\_06.pdf](https://www.acer.europa.eu/Official_documents/Public_consultations/PC_2019_G_06/The%20Bridge%20beyond%202025%20-%20PC_2019_G_06.pdf).

(7) Stakeholders' views on the ACER's gas Bridge beyond 2025 consultation document were collected on the following topics:

- 1) Market Monitoring as a basis for action
- 2) Liquidity on balancing platforms
- 3) Administrative and legal requirements
- 4) Oversight of regional entities and market areas
- 5) Transmission tariffs and cross-border capacity allocation
- 6) Institutional and governance arrangements
- 7) Defining new technologies
- 8) Dynamic regulation for new activities
- 9) Governance for infrastructure planning
- 10) Regulation of new networks
- 11) Other issues.

The abovementioned eleven topics were then categorised into five macro-thematic groups, as shown in Table 1 below.

**Table 1: Thematic grouping of the issues in the Bridge consultation document**

Thematic group	Consultation topics
A. Access and market monitoring	1 + 2 + 3
B. Governance of infrastructure and oversight of existing and new entities	4 + 6 + 9
C. Dynamic regulation for new activities and technologies	7 + 8 + 10
D. Transmission tariffs and cross-border capacity allocation	5
E. Others	11

(8) It seems clear that a sustainable future needs decarbonised gases and new technologies (such as power-to-gas), but the current regulatory framework was not designed with these activities in mind. The potential lack of regulation for these areas may have unintended consequences, acting as a barrier or hindrance to their development.

(9) As the Network Codes are implemented, in some markets particular issues relating to cross-border tariffs or capacity allocation are emerging, for example as long-term bookings decrease, which need to be assessed for targeted action.

### 3. CONCLUSION

(10) The conclusions drawn by ACER and NRAs from the process described in the previous recitals are presented in the Conclusions Paper "The Bridge beyond 2025" published by ACER and the Council of European Energy Regulators on 19 November

2019<sup>6</sup>. On the basis of these conclusions, ACER is able to formulate recommendations for actions and possible legislative proposals, in particular related to the gas sector.

HAS ADOPTED THIS RECOMMENDATION:

**On access and market monitoring**

1. The system of having ACER track Gas Target Model indicators to measure market performance should be incorporated in EU law, while the choice of metrics needs to be capable of change in line with evolving market conditions. Therefore, legislation should only specify the process, enabling the Agency to update the metrics after the usual public consultation. Threshold values for these metrics could be specified by the Agency in advance and then used to indicate (as a screening mechanism) cause for concern on market functioning grounds in the gas wholesale market.
2. If the market indicators do not meet the thresholds, this would indicate market functioning concerns. A process set out in legislation should establish a trigger to require the concerned NRA(s) to undertake a more detailed analysis of the situation, taking into account also other market circumstances and aspects, properly defining the market (e.g. national or multi-national), ascertaining the underlying causes and considering whether any of the options available from a “regulatory toolkit” would be likely to provide the necessary improvements.
3. If the problem were confirmed by the analysis, the NRA or the relevant decision maker (depending on who is responsible for the appropriate action), following consultation with all market participants, would then have to decide on the action to take. Any proposed major action should be subject to a cost-benefit analysis (CBA), to ensure that benefits outweigh the costs. Where decisions had cross-border relevance and fell on NRAs, if they could not agree within a prescribed period of time, the decision would be transferred to ACER<sup>7</sup>.
4. Alongside the market metrics, sustainability metrics, albeit not part of the GTM, are needed to give a fuller picture of the extent to which the sector is successfully contributing to the wider decarbonisation effort.
5. A system of mutual recognition for wholesale market authorisations/licences (or an equivalent mechanism) should be introduced across the EU. Once a wholesale supplier/trader is authorised or licensed in one Member State, based on well-defined standardised minimum requirements, including in relation to the reliability and financial solvency of the entity, this should automatically be recognised in any other Member State that requires a licence or authorisation for wholesale trading. The

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<sup>6</sup>[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/SD\\_The%20Bridge%20beyond%202025/The%20Bridge%20Beyond%202025\\_Conclusion%20Paper.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/SD_The%20Bridge%20beyond%202025/The%20Bridge%20Beyond%202025_Conclusion%20Paper.pdf)

<sup>7</sup> In line with ACER competences as provided in the ACER Regulation

relevant authorities should agree on the potential minimum standards and on an enforcement system in which action can be taken without undue delay.

6. To ensure that arrangements for mutual recognition do not increase risks, a counter-balancing system of mutual warning should be established among the entities responsible for registration, authorisation or licensing. This would imply a combination of sensible ex-ante and ex-post checks by the TSO and/or the NRA/competent authorities. Factual information on the creditworthiness of trading parties should be appropriately shared across the EU. In the extreme, in rare cases when energy trading companies were convicted of fraud or found to be in breach of their licences, it should be possible for all Member States to exclude them from trading in their markets. This could be implemented through an EU-wide “blacklist”, where companies found to be in breach of the relevant licence or authorisation conditions are listed and the relevant authorities are then permitted to exclude them from operating in their markets. The same could apply to board members and subsidiaries of convicted companies. There would also be a process for removal of companies and individuals from the blacklist, where appropriate.

#### **On governance of infrastructure and oversight of existing and new entities**

7. The overall governance arrangements in gas should be brought into line with those recently updated for electricity in the CEP (especially in a context of sector coupling and a holistic system view in the future). This alignment will involve changes to the gas legislation in relation to the Network Codes, the Agency’s powers, enforcement of the compliance of the European Network of Transmission Operators for Gas (ENTSOG) with its obligations, and exemptions and planning obligations for distribution systems. In particular, the revised governance for the relationship between the Agency and the European Network of Transmission System Operators for Electricity (ENTSO-E) set out in the CEP should equally apply to ENTSOG, where ENTSOG has not always taken sufficient account of the Agency’s opinions to date and further issues are increasingly likely in the future as decarbonisation increases the risks of conflicts of interests for Transmission System Operators (TSOs).
8. ENTSO-E and ENTSOG (collectively, ENTSONs) should submit their annual work programme and their sufficiently detailed budget for approval to the Agency. The Agency should have the ability to request an amendment if it deems the annual work programme or the budget to be insufficient to cover the ENTSON's legal obligations, as well as if it considers the budget to be too generous. Such oversight of the Agency needs to be coordinated with the NRAs overseeing their TSONs’ contributions to the respective ENTSON.
9. To avoid weakening the regulatory oversight, a clear legal requirement should be introduced to the effect that TSONs can only delegate or mandate legally required tasks if there is at least the same degree of regulatory oversight over the new entity. How this regulatory oversight is shaped can be left to lower-level legislation or regulation.
10. There is a need for a coherent approach across multiple sectors, including integration of power-to-gas, and with energy management services for households, transport,

services and industry. Scenarios need to be driven by the National Energy and Climate Plans established in Regulation (EU) 2018/1999 on Governance of the Energy Union, to ensure that they are in line with the wider policy objectives. This may be facilitated by establishing, at European level, consistent definitions, criteria and policy scenarios, such as the speed of decarbonisation in different sub-sectors, the extent of technological innovation and energy efficiency improvements, and trends in demographic and economic factors. In order (later) to test the robustness of proposed solutions, energy-sector scenarios or sensitivities should be defined, to be used to develop alternative, realistic pathways which take into account and promote the availability of efficiently produced “green” gases, properly defined, and to identify the related system needs. The choice of these scenarios and needs can materially influence the choice of investments, so should not be left to promoters of those investments. Therefore, energy-sector scenario development and needs identification at EU level, as a basis for the TYNDP, should be at least subject to approval by ACER.

11. On the basis of the identified needs, and taking into account the supply of decarbonised gases, multiple solution providers (including TSOs and flexibility providers) could come forward with ways to meet those needs, which could be network-based or not. Where possible, these alternatives would compete either in the market or for the market via market tests. At EU level, the assessment of the available options and pathways should be supported by the availability of the necessary fundamental data, with ACER having stronger oversight of the operational planning activities undertaken by the ENTSOs.
12. Analysis needs to test how robust each proposed infrastructure investment is under various scenarios and pathways. These should consider both total and peak demand, and the effects of these on the transmission capacity needs. ACER should be conferred the power to approve the ENTSOs’ TYNDPs and require amendments by the relevant ENTSO, with due justification, when the plan is deemed non-compliant with the objectives in the relevant regulation. Alternatively, ACER should be given the power to prescribe binding guidelines for the TYNDP development, and check the draft TYNDP against those guidelines, similar to the Framework Guidelines – Network Codes development process. Whichever approach is adopted, this should not overwrite national approvals of the NDP.
13. Since currently not all NRAs have the power to approve the NDPs, this should be changed. In this way, consistency between the EU and national regulatory approval could be ensured through collaboration between the Agency and NRAs.
14. The CBA methodology needs to be adapted to ensure that sustainability (including climate) effects of new investments are properly taken into account. In this respect, ACER should be given the power to prescribe binding guidelines for the CBA methodology and have the power to require ENTSOs to amend the methodology where necessary and to document any models used in the CBA in a way that allows third parties to run the analysis independently. The CBA methodology should include a full assessment of decarbonisation effects and its monetisation. It should also be applicable to cases of decommissioning of assets, including consideration of repurposing of natural gas assets for use in a decarbonised future (which could include transportation of hydrogen or carbon dioxide for use or long-term storage). Through

this approach, decommissioning should be subject to due consultation of neighbouring authorities and stakeholders where their markets may be affected.

15. Investments geared solely towards fossil fuels should be compliant with decarbonisation goals. Investments in gas infrastructure should be future-proof, meaning they should also be useful for “low-carbon” or “green” gases, properly defined.
16. TSOs, storage operators and LNG operators, as well as Distribution System Operators (DSOs) above a size threshold, should be obliged to measure and report their methane emissions according to a standard methodology, with sufficient granularity to allow the identification of the highest emitters. The data should be publicly available through a European Methane Emissions Observatory, as well as in the audited annual reports of the operators, which should also cover other sources of methane emissions. The measurements should be followed by an action plan at system operator level to address emissions. NRAs should recognise the efficiently incurred costs of emission reduction for regulated entities. Once emission data are sufficiently robust, tradeable permits or taxes on actual emissions could be introduced.

### *On dynamic regulation for new activities and technologies*

17. In general, a market-based approach to new activities and technologies should be preferred, where conditions allow this. Regulation should be neutral between technologies and support efficient outcomes and investments. In particular, and in a sector-coupling context, there should be a review of market rules across gas and electricity, as they affect power-to-gas assets, to ensure no undue distortions.
18. Where a market-based approach is not suitable, technologies are still developing and their future role is rather uncertain, a dynamic regulatory approach, based on consistent principles at European level, should be preferred to the inclusion of detailed rules in legislation.
19. This will need to be supported by effective definitions and monitoring. Definitions and criteria should unambiguously determine the different types of decarbonised gases and classify them according to the extent to which each can be regarded as “green” or “low carbon”. It is also necessary that such a classification be general enough to include new gases/technologies that may emerge. While the Renewable Energy Directive is helpful in establishing Guarantees of Origin (GOs) for renewable gas injected into natural gas networks, further consideration is needed for decarbonised gases more generally and to ensure that a consistent approach is taken into account. A harmonised framework based on common standards and definitions of different types of gas could also ensure interoperability of different national GOs systems and thereby facilitate their cross-border trading.
20. Principles and methodologies should be developed at European level for the regulatory treatment of the blending of hydrogen in gas networks. As long as national and regional conditions differ, any EU-wide thresholds for hydrogen admixture should not prevent significant development of blending in regions where this can proceed

quickly, nor require excessive investment in other regions where flows of hydrogen remain marginal.

21. For the proper regulatory assessment of the impact of decarbonised gas production on the sector, including transmission system development patterns and trading, reliable fundamental data on gas production assets, in place and planned, should be systematically collected from TSOs, DSOs and GO issuing bodies, and should be available at European level.
22. As regards the development of new technologies and activities for gas, barriers for genuine, first-of-a-kind or small-scale pilots, should be avoided. An “EU umbrella” for a sandbox approach should be established, allowing time-limited derogations for very small scale initiatives, with the view to generate information that is useful in the public interest and where there is no significant risk of a material impact on the wider market. The resulting lessons should be shared between NRAs to avoid the need to replicate the pilots in each Member State, to stimulate cross-fertilisation and to accelerate decisions on whether regulation or legislation needs to be adapted.
23. In terms of the role of TSOs and DSOs, a parallel can be drawn with the approach for electricity storage and recharging stations for electric vehicles adopted in the CEP. This could be formulated as a confirmation of how the existing approach to unbundling applies to new activities. In general, TSOs and DSOs should be precluded from investing in potentially competitive activities. Where the market is not bringing forth the needed investment, the next course of action should be to utilise competitive tenders. If this fails, then following careful analysis of the cost and benefits of the proposed investment and of the effect on competition, it should be possible to grant limited exemptions to TSOs and DSOs to allow them to invest in order to get the market started. Additional restrictions could be considered, such as requiring investments to be through a separate, but related, company for greater transparency, and requirements to divest once the market is ready to take over. Unbundling of regulated and non-regulated activities must be ensured. Care would need to be taken not to allow TSO/DSO-operated assets to foreclose the market for the services these assets provide, to use their inside information to secure the best sites or to cross-subsidise the new projects putting the TSO/DSO in an unduly favourable position. This would likely include requirements for regulated third party access for all assets developed by TSOs or DSOs.
24. Existing tools, such as the TEN-E Regulation, should be amended to include investments promoting decarbonisation in the TYNDP and possibly as Projects of Common Interest (PCIs), where this would facilitate increased efficiency in supporting the energy transition in the best interests of energy consumers.
25. Where new infrastructure, such as power-to-gas or biogas plants, are developed by the market, there is a need to coordinate with network availability and development. This starts with the TSOs (and DSOs, where relevant) being required to publish information on relative ease of accommodation of new assets. Economic efficiency is likely to be best served if this is backed up through a price signal, such as connection charges, but in any event appropriate processes will need to be put in place to ensure that there is a level playing field. Where it is clear that network operators cannot invest in such

assets themselves, it should be possible to achieve effective coordination so that networks can accommodate solutions provided by the market.

26. To ensure that the DSOs' views are part of the EU deliberations when developing new measures, it would be useful to bring gas DSOs into a European DSO entity with clearly defined tasks and objectives to support new technologies. This could assist in the development of a new Network Code governing decentralised injection of decarbonised gases. With respect to an EU DSO entity, it will be important to recognise that (as with TSOs and market participants) DSOs generally have vested interests in promoting their own business model and their own assets, so their views should be considered alongside those of other stakeholders.
27. Consideration should be given to a regulatory framework for a pure hydrogen network, since uncertainty over future regulation could hamper (and delay) the initial investments in decarbonised gases. Some principles, such as third party access, could potentially be set at EU level before investments are made. Just as it is important to ensure effective regulation of networks, so it will be important to avoid unnecessary regulation of competitive activities. For example, where hydrogen is piped to a single industrial user, it is unlikely to be appropriate to impose significant regulatory requirements. But should hydrogen networks become widespread, and where blending of decarbonised gas increases in existing networks, there would be real value in leveraging the liquidity of existing markets and the understanding of existing rules and regulations. This could be achieved by extending the existing Gas Directive and Regulation to apply beyond natural gas to include decarbonised gases, with clear carve-outs for direct pipes to individual (or small clusters of) industrial users where additional regulation is unwarranted.

### *On transmission tariffs and cross-border capacity allocation*

28. The basis of the current gas market design needs to be anchored more firmly in EU legislation. In particular, the definition of the entry-exit system and of harmonised capacity products (firm, interruptible and conditional) in the context of an entry-exit system is currently lacking and needs to be accurately developed, taking into account the topology of the network, flow patterns and the potential for physical congestion. Such a definition needs to include rules indicating if and when deviations are allowed and to explain whether and how capacity constraints apply when using these products.
29. At present, tariff design does not appear to be causing major issues at a pan-EU level, and therefore the implementation of the Tariffs Network Code as well as monitoring its effects on the gas market in order to assess whether further measures are needed shall remain a priority. However, there are concerns in some regions and legislative changes can unlock better regulatory tools to address any instance where cross-border tariffs become a barrier to trade and where there is a risk of foreclosure of cross-border capacity. A possible response could be to allow the reserve price in cross-border capacity allocation to be reduced, on the basis of an agreement between the concerned NRAs, supported by ACER in a mediating role where needed. The implementation of such a measure at regional level may also provide relevant experience in case the

issues now detected in some regions were to become more pervasive and an EU-wide solution were to be needed.

30. If an Inter TSO Compensation (ITC) mechanism is implemented, for example to accompany the merger of different entry-exit zones, additional transparency requirements are needed, in particular covering the calculation and value of the allowed revenue, respecting confidentiality requirements. In order to foster the implementation of ITC mechanisms at regional level, clear principles are needed, along with an appropriate institutional framework setting out the roles and responsibilities of each entity. In order fully to address the issue in those circumstances where an ITC mechanism is in use, the calculation of a TSO's allowed revenue to be considered in the ITC mechanism should follow a set of common criteria.
31. To address sector coupling issues, regulators should be tasked with reviewing the substitutability of gas and electricity assets and ensuring that network charges provide a level playing field between gas and electricity. In order to ensure such a level playing field and promote economic efficiency, the tariffs applied to these assets should reflect the costs they impose on the network. These, and other similar assets, should not be within the scope of consumption levies and taxes.
32. Where there is a risk of a dominant party, in a given market area, securing most long-term capacity, particularly in markets which are highly concentrated or illiquid, additional measures of intervention should be elaborated as part of targeted regulation to allow for urgent response to possible risk of market foreclosure

**On the necessary resourcing of ACER**

33. Some of these recommendations may lead to additional tasks for ACER. As evidenced by the draft budgets approved by ACER's Administrative Board in recent years, ACER is already facing serious resource restrictions. In case new tasks were given to ACER, it would be essential that they are accompanied by sufficient additional human and financial resources to ensure their effective implementation.

This Recommendation is addressed to the European Parliament, the Council and the European Commission.

Done at Ljubljana, on 19 November 2019.

***-SIGNED-***

*For the Agency*  
*Director ad interim*  
Alberto POTOTSCHNIG