

FNB Gas Position

On the set of proposals adopted by the European Commission on common rules for the internal markets in renewable and natural gases and in hydrogen

Short title: "Gas Markets Package"

COM(2021) 803/ COM(2021) 804

About FNB Gas:

The Berlin-based association Vereinigung der FernleitungsnetzbetreiberGas e.V. (FNB Gas) was founded in 2012 by the German gas transmission system operators (TSOs), i.e. the network companies operating the major supra-regional and cross-border gas transportation pipelines. One key focus of the association's activities is the Gas Network Development Plan, which has been drawn up annually by the TSOs since 2012. The association also acts as a central point of contact for policymakers, the media and the general public on behalf of its members.

The members of the association are: bayernets GmbH, Fluxys TENP GmbH, Ferngas Netzgesellschaft mbH, GASCADE Gastransport GmbH, Gastransport Nord GmbH, Gasunie Deutschland Transport Services GmbH, GRTgaz Deutschland GmbH, Nowega GmbH, ONTRAS Gastransport GmbH, Open Grid Europe GmbH, terranets bw GmbH and Thyssengas GmbH. Between them, they operate a pipeline network totalling some 40,000 kilometres in length.

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1 INTRODUCTION

In principle, the gas transmission system operators welcome the fact that the EU Commission wants to create the urgently needed regulatory framework for the ramp-up of the hydrogen market in the EU by adopting a set of legislative proposals for a Gas Markets Package. In particular, the transmission system operators believe that the envisaged integration of the rules governing the regulation of the future hydrogen infrastructure into the existing legal framework for gas is the right thing to do. For reasons of cost and time efficiency, the EU's hydrogen infrastructure will largely consist of repurposed gas pipelines. It is therefore logical that the regulatory framework for gases (methane and hydrogen) should provide consistent rules and clear guidance for the infrastructure operators' conversion process.

The transmission system operators welcome the EU Commission's basic approach of giving Member States more flexibility during a transition period so as not to slow down the market ramp-up through excessive bureaucracy. Therefore, we believe it to be reasonable not to deal with the design of the detailed technical regulations on network access as part of this legislative package, but only in subsequent network codes that will be based on this legislation. Whether and to what extent such network codes will come into force by 30 December 2030 should be decided depending on the market maturity achieved at the time.

It should be noted that the EU Commission's proposals were drawn up before the war in Ukraine began and therefore do not take into account the current geopolitical effects on the German and European energy markets. Given the current situation, efforts to develop a hydrogen economy and diversify energy supply sources should be stepped up in terms of scope and, above all, timeline. For both, the gas infrastructure will play a crucial role. It would therefore be all the more important to examine whether the EU Commission's proposals adequately take account of the need for a rapid energy market transformation in terms of security of supply and climate protection, especially against the background of the new situation. From the transmission system operators' point of view, this is currently not the case. In particular, the fundamental separation between methane and hydrogen networks envisaged by the proposed rules on unbundling, financing, cost determination and tariffication, as well as network development planning, will create considerable hurdles and risks for the development of hydrogen transmission infrastructure and prevent or at least significantly delay a rapid market ramp-up for hydrogen. The attached assessment provides basic approaches for more speed and efficiency.

This document only examines the EU Commission's legislative proposals for the development of a hydrogen infrastructure. The drafts on security of supply and the recording of methane emissions, which were also submitted by the EU Commission as part of the Gas Markets Package, will be reviewed separately.

2 VERTICAL UNBUNDLING REQUIREMENTS FOR HYDROGEN NETWORK OPERATORS

In order to achieve its ambitious climate protection goals and to decarbonise energy-intensive sectors, especially industry, the EU is rightly relying largely on hydrogen as an energy carrier. Hydrogen is not only well suited for the seasonal storage of renewable energies, but also allows efficient transportation over long distances, especially if existing infrastructure is used for this purpose. Recent studies and analyses have shown that the cost of converting existing gas pipelines to hydrogen is only about 20% of the cost of a new pipeline.¹ Accordingly, the continued use of the well-developed European gas pipeline network as part of the energy transition would be economically advantageous and make sense for the entire European Union.

Many gas network operators have already presented detailed plans for what a future gas network in Germany and the EU could look like. What is still needed for these plans to be put into practice, however, is a clear regulatory framework that sets out the rules for the conversion processes and stimulates the ramp-up of the hydrogen market. From the transmission system operators' point of view, it would be both efficient and sensible to follow the existing rules for the electricity and gas markets and thus to provide for a separation between the competitive activities of production and supply on the one hand and the non-competitive activities of transportation on the other. Uniform unbundling rules for the three aforementioned energy systems would make it possible for network operators to plan investments in hydrogen infrastructure and enable the efficient use of synergies.

Evaluation of the Commission's proposals:

The time limit of the ITO model for hydrogen network operators would de facto exclude a large part of all existing European transmission system operators from the hydrogen transportation business and would thus be an existential risk for the realisation of a European hydrogen backbone. The ITO model is well established across the European gas sector and is currently used by about 20 transmission system operators – 11 of which are German transmission system operators. None of these ITOs has been found to be in breach of the unbundling rules by the EU or national regulatory authorities since the Third Package came into force. On the contrary, experience from the gas sector shows that the ITO model is working well and is in no way less effective than ownership unbundling. In a report on the ITO model, the EU Commission itself concluded in 2014 that *"most requirements related to the ITO model seem to work in practice and are usually sufficient and adequate to ensure effective separation of the transmission business from generation and supply activities in the day-to-day business."*² The regulatory authorities also came to a very similar conclusion. In a 2016 report, the Council of European Regulators (CEER) concluded that *"no major obstacles*

¹ Cost assessment made as part of the European Hydrogen Backbone (2021) https://gasforclimate2050.eu/wp-content/uploads/2021/06/European-Hydrogen-Backbone_April-2021_V3.pdf

² European Commission (2014), *Report on the ITO Model* (available [here](#)).

*have been identified that could affect the independence of the ITO*³. There is therefore no objective evidence suggesting that the ITO model does not work effectively in practice and would therefore not be appropriate for hydrogen network operators in the long term.

The time limit of the ITO model for hydrogen network operators deprives existing gas transmission system operators certified according to the ITO model of the opportunity to reform their undertaking as part of the energy transition and to align it in a climate-neutral and sustainable way. Most of these network operators have shareholders involved in energy generation and supply activities who are therefore unable to unbundle ownership of the hydrogen infrastructure part of the undertaking. These companies would only have two options when the ITO model can no longer be used for hydrogen network operators. Either they sell their hydrogen infrastructure, which would mean losing the synergies of being the joint operator of methane and hydrogen infrastructure, or the shareholders of the network operators sell their stakes in energy production and supply activities. Both alternatives would be a severe infringement of ownership rights and a clear disincentive for any investment in hydrogen infrastructure.

The ISO model for hydrogen network operators proposed by the EU Commission (as an alternative), which would in any case only be applicable if network operators already own hydrogen networks at the time the directive enters into force, is not an option for transmission system operators in actual practice. The ISO model would require a transmission system operator to lease the future hydrogen network – including all repurposed pipelines – to an entity that meets the requirements of ownership unbundling. It would be required to finance (or allow third-party financing of) network expansions that the independent entity and regulator deem necessary and to assume the operational risk that it would be unable to limit or control. Existing gas ITOs own their infrastructure and have the necessary technical staff and expertise to ensure safe operation. If the ISO model were to be implemented, these companies would be obliged to transfer the network to another undertaking, which would make it impossible for them to operate both infrastructures in an integrated way and benefit from the synergies. Moreover, this would not be an incentive for transmission system operators to transfer repurposed pipelines and would be an impediment to further development of the network. Furthermore, the actual identification of a network operator to whom the future hydrogen network could be leased would not be obvious and would at least take considerable time before the necessary legal and commercial arrangements are in place. Such an activity could only be carried out by an ownership-unbundled hydrogen network operator. The fact that the ISO model is problematic due to the imbalance between the rights and commercial liability risks of the owner has also been clearly demonstrated in both the electricity and gas sectors. The few cases where it has been applied are exclusively state-owned companies that have preferred this model to ownership unbundling for structural reasons, or small individual pipeline companies that do not have their own operational business. It can thus by no means be assumed that the ISO model would represent a real alternative for VIUs.

³ CEER (2016), Status Review on the Implementation of Transmission System Operators' Unbundling Provisions of the 3rd Energy Package, p. 30 (available [here](#))

Another aspect to be taken into account is that many existing ITO transmission system operators are owned by international financial investors and/or insurance companies, which are usually seen as vertically integrated companies for the purposes of unbundling because their diversified investment portfolios also include stakes in companies worldwide that are involved in energy generation and supply. Without an ITO model for hydrogen network operators, these financial investors would in fact be excluded from acquiring a stake in hydrogen network operators and from contributing to the development of a hydrogen infrastructure through private-sector funding. Given the EU Commission's plans to mobilise 1 trillion euros from private and public funds to finance the energy transition as part of the Green Deal, this exclusion would not be expedient.

Moreover, the exclusion of the gas ITOs from the hydrogen transportation business is not only a business problem for the relevant companies. The Member States of the ITOs concerned have historically made a conscious decision in favour of a privately organised energy infrastructure and would be at a clear disadvantage compared to other Member States if the ITO model for hydrogen grid operators were to be discontinued. Prohibiting Member States from the ITO model would not be compatible with the EU Treaty's legal requirements of proportionality and subsidiarity and would also raise issues of ownership rights and investment protection as well as de facto discrimination.

The principle of proportionality requires that legal acts adopted by the EU do not exceed the limits of what is necessary and proportionate to achieve the objective they pursue. The EU authorities therefore have to use objective criteria to determine whether measures are appropriate to achieve the objective pursued and justify their negative consequences. If there are several means, they must choose the one that least restricts certain rights and interests.

The reasons provided by the EU Commission do not allow the conclusion that the unbundling options should be limited to ownership unbundling and the ISO model to allow the efficient development of a hydrogen network. When it comes to meeting the requirements of the Third Package, the ITO model has proven to be as effective in protecting competition as ownership unbundling. To deny Member States the ITO option would lead to significant disadvantages in terms of the development and costs of the future hydrogen network. Requiring all hydrogen network operators to operate under an ISO or ownership unbundling model would not be in line with the principle of proportionality.

The subsidiarity principle requires the EU to limit its actions to those objectives that cannot be sufficiently achieved by the Member States and can be better achieved at EU level. With regard to the unbundling rules, there are objective arguments why Member States should retain the ITO model for hydrogen but there are no compelling reasons why Member States should not have this option. Moreover, there are clear advantages associated with applying the ITO model and disadvantages associated with not applying the ITO model. Prohibiting the use of the ITO model for hydrogen networks as part of an EU directive is therefore incompatible with the subsidiarity principle.

With regard to ownership rights, as explained above, if Member States were deprived of the ITO option, they would either have to impose ownership unbundling or revert to the less appropriate ISO model. Ownership unbundling would require either (i) the TSO to sell its pipelines to third parties for conversion, (ii) the TSO's shareholders to divest their shares in energy generation and supply, or (iii) the shareholders to divest their shares in the TSO and the hydrogen network operator. This approach would raise fundamental questions about the removal of rights.

In terms of disadvantages, a Member State that has opted for the ownership unbundling option of gas retains largely unrestricted ability to have a joint network operation for gas and hydrogen. A Member State applying the ITO model would not have this option in practice.

As regards the disadvantage, a Member State that has opted for ownership unbundling of gas transmission networks retains, largely without restriction, the option of joint gas and hydrogen network operation. A Member State applying the ITO model would not have this option in practice.

In summary, an approach that would deny Member States the use of the ITO unbundling option for their future hydrogen network would not be compatible with the fundamental principles of EU law and would pose an existential threat to the realisation of the European hydrogen network.

Proposed solutions:

- The expiry date for the application of the "integrated hydrogen network operator" model provided for in Article 62 (4) of the draft Gas Directive in accordance with the regulations for the ITO model needs to be deleted to allow this unbundling model to be applied on a permanent basis.
- Furthermore, there needs to be a solution for the distribution networks that enables the development of a hydrogen infrastructure at this level as well, for example by also applying the unbundling rules for gas distribution network operators already in place today to local and regional hydrogen distribution networks.

3 HORIZONTAL UNBUNDLING BETWEEN HYDROGEN AND GAS TRANSMISSION SYSTEM OPERATORS

FNB Gas understands and supports the objectives behind creating transparency as mentioned in the recitals of the draft directive (recitals 68 and 70), which the EU Commission would like to achieve by introducing horizontal unbundling between hydrogen and transmission system operators. Transparency with regard to the financing and costs of regulated activities as well as information on the use of network access tariffs will create acceptance among shippers as well as end users. The transmission system operators fully share the EU Commission's assessment that the joint operation of hydrogen networks and gas or electricity networks can create synergies and should therefore be permissible (recital 68). ACER and CEER also share this view in their joint position paper on regulatory requirements for the decarbonisation of the gas market. However, the two positions differ significantly in the choice of means. While the draft directive calls for legal unbundling and unbundling of accounts, ACER and CEER consider the common objectives to be already met by the obligation to have unbundled accounts along with regulatory supervision.⁴ The gas transmission system operators share this view. In order for the transition from natural gas to hydrogen to be successful, however, it will be important to not only focus on transparency and network tariff formation, but to also take the efficiency aspect into account when it comes to costs and availability of skilled personnel as well as the effectiveness and speed of pipeline conversions and newbuild projects. In addition to transmission infrastructure, the network operators have decades of experience and technical expertise in pipeline-bound energy supply as well as the specialist personnel. They should also be efficiently deployed for the construction and operation of the hydrogen network as this would be in the interest of all shippers and consumers. Informational and hence organisational unbundling, which according to the transmission system operators' interpretation is included in the draft directive, should therefore be rejected for the same reasons in order that synergies may be used for the benefit of the entire market.

⁴ [ACER-CEER Position Paper on the Key Regulatory Requirements to Achieve Gas Decarbonisation, December 2021:](#)

Horizontal unbundling rules: *allow gas network operators to also become hydrogen network operators, subject to NRA approval and mandatory separate balancing between gas and hydrogen infrastructure and activities in order to ensure transparency and efficient tariff-setting*

Evaluation of the Commission's proposals:

The transmission system operators support the EU Commission's objectives to create transparency with regard to the financing and costs of regulated activities and the use of network access tariffs. However, the transmission system operators take a very critical view of the conclusions drawn by the EU Commission for the design of the regulatory framework. The objectives can be achieved efficiently and effectively by an obligation to have unbundled accounts along with regulatory supervision. The obligation proposed by the EU Commission to introduce legal, informational and organisational unbundling for gas and hydrogen network operators does not in any way contribute to meeting the goals defined. On the contrary, by prohibiting the sharing of commercially sensitive information and the joint use of services (cf. Article 50 and in particular Article 36 of the draft directive, which is placed in a new context), it prevents the parties involved from realising the enormous synergy potential that can be exploited by jointly operating natural gas and hydrogen networks.

The EU Commission itself recognises that joint operation of hydrogen and gas networks creates synergies and should therefore be permissible (recital 68 of the draft directive). It is also supported in this by ACER and CEER⁵, among others. Synergies can in particular be drawn from the know-how and technical expertise the network operators of pipeline-based energy transmission systems have built up over decades and the specialist personnel available for both natural gas and hydrogen transportation. What's more, the conversion of gas pipelines to hydrogen and the construction of new dedicated hydrogen pipelines as well as gas pipelines to ensure security of supply in the remaining gas network can only be achieved efficiently, quickly, effectively, with the right fit and in a properly coordinated way if there is an integrated view of both gas and hydrogen networks. Legal, informational and organisational unbundling would prevent these enormous synergies from being achieved without adding any value to the unbundling of accounts in terms of the aforementioned transparency objectives. ACER and CEER are therefore right in proposing not to introduce legal, informational and organisational unbundling because it would prevent a cost-efficient and timely development of market and lead to inefficient duplicate structures. The gas transmission system operators also question whether additional qualified personnel would be available in the first place, given demographic developments in companies and the current challenge of acquiring appropriately qualified personnel. The recruitment of additional skilled personnel, which simply isn't possible in the market at the moment, would take time, which is not available given the need for a timely market ramp-up. Having to compete for skilled labour for two separate network infrastructures would significantly increase the risk of delay or even failure in developing the hydrogen network of tomorrow. Construction, maintenance and operation of hydrogen and gas networks basically require the same skills and equipment and can be done by the same personnel. The gas and hydrogen infrastructure will develop side by side, requiring and enabling the use of the same maintenance and repair personnel and similar IT and control

⁵ [ACER-CEER Position Paper on the Key Regulatory Requirements to Achieve Gas Decarbonisation, December 2021:](#)

Horizontal unbundling rules: *allow gas network operators to also become hydrogen network operators, subject to NRA approval and mandatory separate balancing between gas and hydrogen infrastructure and activities in order to ensure transparency and efficient tariff-setting*

equipment/systems. In order to exploit synergies, it will be essential to not only share services/personnel but also exchange information on construction, operation, maintenance and network planning between hydrogen and gas network operators. The extensive informational and organisational unbundling envisaged by the EU Commission is incompatible with the goal of exploiting synergies and must therefore be rejected. Moreover, it is unclear how integrated network planning as part of the urgent conversion process can be effective if gas and hydrogen network operators cannot share the necessary information.

Experience in Germany during the course of the market area conversion from L-gas to H-gas has clearly shown that infrastructure conversion projects require integrated planning and implementation processes, especially if timelines are tight. For the energy transition it is equally important not to waste valuable time with inefficient bureaucratic hurdles and administration, especially if there is no added benefit for the market as a whole. To ensure a fast and effective conversion of the existing gas infrastructure to hydrogen, it must therefore be possible for vertically unbundled network operators to build and operate both infrastructures jointly and in an integrated manner.

Moreover, legal unbundling could lead to tax problems and bureaucracy in the transfer of real property and rights of way between companies. When assets such as networks are transferred between two legal entities, hidden reserves may have to be disclosed under German tax law for income tax purposes, resulting in a considerable tax burden for the network operators. In addition, land (compressor stations, etc.) is also transferred as part of the network transfer which can trigger a land transfer tax burden (5% of the market value of the property on average in Germany).

Proposed solutions:

- Article 36 (1) of the draft Gas Directive prohibiting gas transmission system operators from disclosing commercially sensitive information and using joint facilities should be amended in such a way that this prohibition only applies to the vertical unbundling concept and that any information sharing as well as the use of joint facilities between a gas transmission system operator and a hydrogen system operator within a group of companies is fully permissible.
- Article 50 (1) of the draft Gas Directive prohibiting hydrogen network operators from disclosing commercially sensitive information should be amended in such a way that this prohibition only applies to the vertical unbundling concept and that any information sharing between a gas transmission system operator and a hydrogen system operator within a group of companies is fully permissible.
- Article 63 of the draft Gas Directive, which provides for legal unbundling at the horizontal level, should be deleted.

4 FINANCING THE CONSTRUCTION OF THE HYDROGEN SYSTEM

4.1 DRAFT REGULATION: FINANCIAL TRANSFERS / DEDICATED CHARGES

The energy transition in Europe will only succeed if energy affordability for consumers can be guaranteed and the transition is therefore widely accepted by the public. The aim of the regulatory framework must therefore be to avoid prohibitively high charges and allow predictable, plannable tariffs. This must be guaranteed both during the market ramp-up of the hydrogen market and in the phase of declining natural gas demand. Many of today's natural gas customers will be tomorrow's hydrogen customers. The socialisation of costs between natural gas and hydrogen customers or hydrogen and natural gas customers will therefore be essential for a successful energy transition. Paradigms that were purposeful before the energy transition will have to be revisited in the light of the energy transition. From the transmission system operators' point of view, the most efficient way of implementing the justified socialisation of common costs would be to have uniform tariffs for natural gas and hydrogen transmission and, preferably, a joint regulated asset base (RAB). The German legislator, too, has enshrined the clear goal of adapting the regulatory framework for joint regulation and financing of gas and hydrogen networks in Section 112b of the German Energy Industry Act (EnWG). Monetary separation could already be ensured in a transparent way through unbundling of accounts. The alternative approach of introducing a dedicated charge is extremely complex, leaves many detailed questions unanswered, would first have to be implemented by the Member State and then by the regulatory authority, and entails a high potential for conflict, and will hinder a successful market ramp-up both in terms of time and substance.

Evaluation of the Commission's proposals:

The provisions of the draft regulation on the formation of charges are worded very vaguely in many places, so an assessment is hardly possible. Overall, they also appear to be extremely complex for the market, without the objective being described in a sufficiently comprehensible manner and the effects being sufficiently explored. Uncertainty is also increased by the fact that the provisions have yet to be defined in more detail by network codes, delegated acts of the EU Commission and recommendations by ACER on methodologies for the calculation of financial transfers and the dedicated charge, without any targets or at least direction having been provided by the directive or

the regulation. Both complexity and the long-standing uncertainties will not contribute to a rapid market ramp-up, either on the part of customers or on the part of network operators and investors.

ACER's potential recommendations on asset transfers, the scope and duration of financial transfers and the dedicated charge, among other things, should provide sufficient flexibility to take account of the different speeds of the market ramp-up in Europe and the particularities in the individual Member States and, where applicable, regulations already in place in some of the countries. The most efficient way of achieving this goal would be to introduce a "learning" regulatory framework. For example, under the German regulatory regime, as provided for by the Hydrogen Network Charges Ordinance, assets transfers between two regulated asset owners are recorded at their residual value. It will be important to ensure that any such future transfers will also be based on the principle of value preservation.

Limiting the time window of the financial transfer to "a maximum of one third of the depreciation period of the infrastructure concerned" as provided for in the draft regulation appears to be very complex and not very transparent from a practical implementation perspective. The need to review each individual asset not only significantly restricts the flexibility of the regulation, but it also increases the workload for the network operators and the regulatory authorities without providing any visible benefit for the market. The presumed goal of the regulation, i.e. not to allow an unlimited number of financial transfers, could be achieved much more efficiently by calling for an evaluation at a given point in time, for example, after 15 to 20 years, based on the maximum contract term according to Article 6 (3) of the draft regulation.

Limiting financial transfers to exit points to end users domiciled in the same Member State as the recipient of the financial transfers, as provided for in the draft regulation, would only be justified if, in return, tariffs are also introduced for cross-border interconnection points. Having only the national end users bear the dedicated charges would only be justified if they also receive revenues from the prices set at the cross-border interconnection points.

The transmission system operators interpret the regulations on financial transfers to mean that they would be determined across all hydrogen network operators within a Member State and allocated as a uniform levy to the relevant transport tariffs in the natural gas transmission sector. This levy would thus be collected in the form of capacity charges set by the transmission system operators, with the compensation paid pro rata across all hydrogen system operators – in the same way as for the biogas levy in Germany. The reference in Article 4 (2) to Article 4 (1) of the draft regulation could be misinterpreted to mean that the dedicated charges would only be permissible within a group. A clarification that this is not meant is necessary.

The provision contained in Article 4 (3a) of the draft regulation stating that "network access tariffs shall be levied on the users of the regulated assets that benefit from the financial transfer" is incomprehensible and requires clarification.

Proposed solutions:

- The regulation should be based on uniform tariffs for natural gas and hydrogen and, preferably, a joint regulated asset base .

In the alternative, the following should be implemented:

- The provision in Article 4 (3c) of the draft regulation limiting the duration of the dedicated charges to "a maximum of one third of the depreciation period of the infrastructure concerned" should be deleted. Alternatively, the regulation could include an obligation for the national regulator to evaluate the continued need for a financial transfer after 15 - 20 years.
- Limiting the levelling of dedicated charges to exit points connecting end users domiciled in the same Member State as the recipient of the financial transfer, as provided for in Article 4 (2b) of the draft regulation, is only acceptable in combination with tariffs introduced at cross-border interconnection points.
- The obligation for ACER to issue recommendations on methods for, inter alia, asset transfers, the scope and duration of financial transfers and on dedicated charges, as provided for in Article 4 (4) of the draft regulation, should be supplemented to include the objective for ACER to take account of the different speeds of the market ramp-up in Europe and the particularities in the individual Member States.
- Clarification in Article 4 (2) of the draft regulation that the dedicated charges are allocated as a uniform levy to the relevant transport tariffs in the natural gas transmission sector in the same way as the biogas levy; the levy would thus be collected in the form of capacity charges set by the transmission system operators, with the compensation paid pro rata across all hydrogen system operators.
- The provision contained in Article 4 (3a) of the draft regulation stating that network tariffs will be levied on the users of the regulated assets that benefit from a financial transfer should be revised to make its regulatory content clear.

4.2 DRAFT DIRECTIVE: FINANCING CROSS-BORDER HYDROGEN INFRASTRUCTURE

The transmission system operators share the basic assumption mentioned in recital 119 of the draft directive that well-connected hydrogen markets in the Union are necessary for a successful energy transition and that investments in cross-border hydrogen infrastructure should therefore be facilitated or not hindered. This can be done most efficiently by pricing the cross-border IPs. The proposed mandatory cross-border compensation mechanism leads to considerable uncertainties for the market, regulatory authorities, network operators and investors regarding the design and implementation period of cross-border compensation between hydrogen network operators. Particularly in the case of the ITC mechanisms, a lengthy and contentious process is to be expected given the experience gained in Germany with the stipulations on inter-TSO compensation, whereby due to the cross-border and ultimately EU-wide component, the aspects to be taken into account as well as the positions of the companies, regulatory authorities and also Member States involved can be expected to be much more diverse. Neither the inherent complexity of the system nor the long-standing uncertainties and potential for conflict will make a positive contribution to a rapid market ramp-up.

Evaluation of the Commission's proposals:

Even if the cross-border financing provided for in Article 53 of the draft directive is a theoretically comprehensible approach, in practical implementation it would be subject to high uncertainties and a high potential for conflict. An overall positive contribution to the energy transition cannot be achieved through such a financial compensation mechanism, as the process for determining the compensation rules is likely to drag on until at least 2036 (before the ACER decision is available), even without legal disputes. An incentive to invest in cross-border infrastructure could be achieved in a more transparent and consistent manner, and thus also more efficiently, by levying tariffs at cross-border interconnection points, especially as the waiving of the levying of tariffs at cross-border interconnection points was only positively assessed by a few market participants in the consultation on the internal gas market package. It is therefore all the more surprising that the draft directive includes a model of a financial compensation mechanism that is alien to practice, instead of taking the established, transparent and comprehensible path of charging at cross-border interconnection points.

Proposed solutions:

- Delete Article 53 of the draft directive and include the option for Member States to agree a compensation mechanism on a voluntary basis that is individually negotiable between Member States.

5 TARIFFS MODEL FOR METHANE NETWORKS

A more widespread use of renewable and low carbon gases will be indispensable for decarbonisation in Germany and the EU. Transmission system operators therefore support the approach of subsidies to promote the market ramp-up. However, this should not take place via the "detour" of network charges (especially in connection with extremely complex and costly mechanisms for implementation for the network operators but also for all other market participants), but via the commodity market or gas emission certificate trading. Another option would be to specify quotas for renewable and low carbon gases for suppliers.

Evaluation of the Commission's proposals:

The EU Commission's proposal with regard to the discounts for production facilities appears to be fundamentally feasible; however, the discount of a maximum of 75% represents a deterioration for these facilities in Germany, as currently no charges are applied at the relevant entry points. The potential discount of a maximum of 75% for storage facilities would have no effect in Germany, because according to the REGENT determination a discount of this amount is currently generally granted to storage facilities.

The EU Commission's proposals regarding the application of discounts at storage facilities, cross-border interconnection points and LNG terminals are extremely complex, costly and in part impossible to implement. For example, in an entry-exit system with basically freely allocable and separately usable entry/exit capacities, the transmission system operator has no way of determining whether the gas to be injected into or withdrawn from a storage facility was first injected into the network in Germany or, if transported across several borders, whether the shortest possible route was used. Moreover, with regard to discounts at production and storage facilities, it is unclear how the transmission system operator is supposed to check that the gas is renewable or low carbon. In contrast to Article 16 (5) of the draft regulation, which refers to sustainability certificates but only applies to the discounts regulated there, Article 16 (1) does not contain any provision in this regard. It is also unclear whether the discount applies to the entire capacity booked by a network user at the respective point or only to the capacity actually shown to have been used for the transmission of renewable and low carbon gases. The former would mean unjustified discounts beyond the actual purpose of the subsidy and at the same time is likely to encourage capacity hoarding, which would lead to contractual bottlenecks. The latter would mean high additional efforts implementing the discount.

Furthermore, it should be borne in mind that discounts also applied at entry points from and exit points to third countries and at LNG terminal entry points would allow gas to be moved from a third country or an LNG terminal through the EU to a third country without any tariffs (for example if green LNG is fed into the system in Rotterdam for onward transportation via Germany to Switzerland). In such cases, network operators within the EU would not receive any tariffs and the costs would have to be borne by the other customers. This not only seems unreasonable, but also completely contradicts the principle of cost causation.

Moreover, the volume of renewable and low carbon gases fed into and/or withdrawn from the system and hence the level of the discounts and, for that matter, the extent to which costs are redistributed would hardly be predictable. Any increase or decrease in revenues will lead to more volatile tariffs, which would be difficult to explain to network users.

The cross-border compensation mechanism between transmission system operators according to Art. 16 (5) (c) of the regulation would mean an enormous effort for all parties involved. In addition, its effect in terms of a redistribution of costs is in no way predictable due to the lack of concrete regulations or at least a target description. Given the experience in Germany with inter-TSO compensation and the REGENT and AMELIE decisions, the negotiations between both the transmission system operators and the regulatory authorities can be expected to be extremely contentious and protracted. Moreover, different interests, starting positions, framework conditions and reflections can be expected to vary even more across borders than only at the German level. Furthermore, the pressure on the parties to reach an agreement is likely to vary considerably, since there are always winners and losers in such a mechanism, or since this is the impression that often arises. Against this background, it is unlikely that the transmission system operators or even the regulatory authorities will reach an agreement. What is more likely is that ACER will have to decide in the end, with a judicial review of the ACER decision then likely to follow. This means that the process can easily drag on for more than six years, which would jeopardise planning security for network operators, investors and capital providers as well as customers over a very long period of time. Positive effects on the market ramp-up are therefore not to be expected. Moreover, it is important to bear in mind that the process starts as soon as a transmission system operator exceeds the 10% threshold. From that point, the affected transmission system operator as well as all neighbouring transmission system operators are obliged to start negotiations on the compensation mechanism. Not only is it unclear which network operators are considered neighbouring transmission system operators (all transmission system operators connected to the affected transmission system operator via interconnection points?) but also, over time, new transmission system operators will be added by other transmission system operators exceeding the 10% threshold until the effect has occurred for all of them or all of them have joined the compensation mechanism due to their status as neighbouring transmission system operators. It is therefore likely that any status reached in the negotiations will no longer apply and that negotiations will have to start again to incorporate the new undertakings. In these situations, it is unlikely that the time periods for the previous group will start again.

Proposed solutions:

- Article 16 of the draft regulation should be deleted. As described above, the negative effects on the market ramp-up of renewable and low-CO₂ gases would clearly outweigh the positive ones. It would be more effective to promote the use of the commodity market or emission allowance trading or to set certain quotas for renewable and low-CO₂ gases for suppliers.

6 TARIFFS MODEL FOR HYDROGEN NETWORKS

Despite repeated discussions, there have been no changes in the highly developed internal market for natural gas to the tried and tested system of also levying tariffs for entry and exit bookings at cross-border interconnections points, not least because of the extent to which the European gas market integration has already advanced, the high liquidity at the gas trading points, and the lack of support from the market for such changes. According to the draft regulation, the result of the EU Commission's market consultation also showed only very limited support from market participants for the Commission's approach. It is therefore unclear why there are plans to deviate from the established and accepted regulations in natural gas at this point.

Evaluation of the Commission's proposals:

The mandatory introduction of regulated tariffs on the basis of the principles that are also applicable to natural gas from the time of regulated network access – i.e. from 2031 at the latest – is understandable.

However, the rule prohibiting tariffs at interconnection points between Member States from 2031 onwards is not comprehensible. An approach discussed in the Quo Vadis study for the highly developed natural gas market, but not implemented there, is now apparently to be introduced for the hydrogen transmission infrastructure still to be developed, even though it found hardly any support in the EU Commission's market consultation for the hydrogen sector.

In an entry-exit system, the network operators' transmission capacities are marketed via the entry and exit capacities that can be booked by shippers. However, according to the EU Commission's proposal, no tariffs would be charged for transits within the EU, although they trigger costs which, depending on the location, may even exceed transport costs from production facilities in the respective country, which can lead to distortions. The proposed approach could also lead to an increased use of more remote storage facilities, which in turn could have an impact on capacity models. At the same time, contractual bottlenecks have to be expected at entry and exit points that are not priced, which would not only lead to market distortions but also send the wrong signals concerning network development at the intra-European borders.

For this reason, entry and exit points at borders between two EU Member States should also be priced accordingly in the sense of a causation-based model. This will ensure that transits within the EU will bear a share of the transportation costs without the need for a complex, costly and dispute-prone cross-border financial compensation mechanism. It should also be taken into account here that the cross-border hydrogen transmission infrastructure will first have to be built up over the coming years and decades, and this will initially take place in the form of individual clusters (in particular also as part of IPCEI projects), which must then be gradually merged into an entry-exit system through pipeline links still to be built. It should by no means be assumed that this will be completed as early as 2031, which would further

complicate the requirements for a financial compensation mechanism and probably require constant readjustment.

Proposed solutions:

- Article 6 (7) sentence 2 of the draft regulation should be deleted. As described above, the approach of "no pricing at cross-border IPs" has practically no support, either in the natural gas market or in the hydrogen market, which is yet to develop.

7 RULES FOR THIRD PARTY ACCESS

On 1 October 2021, the German transmission system operators established the Trading Hub Europe market area across Germany by merging the GASPOOL and NCG market areas. This was preceded by market area consolidation at regional level over a period of approx. 20 years in order to solve the capacity and balancing issues in particular. The challenge for the German-wide market area was to bring the freely allocable firm capacities, which had been reduced by approx. 75% as a result of the market area consolidation, back to the pre-market area consolidation level by introducing new instruments (so-called MBIs – market-based instruments). This was only possible because, on the one hand, the transmission networks have a certain number of internal interconnection points and, on the other hand, because the German natural gas market is a highly developed and extremely liquid market that can offer MBIs at any time thanks to the large number of providers.

The hydrogen infrastructure and the hydrogen market, meanwhile, are only just starting their development which will initially be based on individual projects or clusters. The first goal will be to develop clusters and only in a second step to connect completed projects, which realistically cannot be expected before 2026. An almost liquid market like the one in the natural gas sector will not develop until much later. The merger of individual hydrogen networks into one Germany-wide market area will therefore only happen in the long term.

A uniform balancing regime for hydrogen would certainly make sense once the hydrogen market has reached a certain degree of maturity. However, given the experience gained in the natural gas sector, the transmission system operators believe that a uniform market area can only be implemented at a much later stage. The definition of an "entry-exit system" must therefore allow for hydrogen networks to be subdivided into individual zones or market areas based on technical and (macro-)economic considerations, even if a uniform balancing regime is applied.

Evaluation of the Commission's proposals:

A uniform balancing regime for hydrogen at national level as a target model is supported from a certain degree of maturity of the hydrogen market. This way, market participants will also find uniform balancing rules for the division into several entry-exit systems (market areas), which is necessary for capacity and balancing reasons. Standardisation of the balancing rules should not be mandatory before 2031 in order to give hydrogen projects with few partners or customers the necessary flexibility for development during the start-up phase. Mandatory standards should therefore only be introduced after 2026. This should be taken into account when the corresponding network codes are drawn up.

Multiple entry-exit systems (market areas) within a Member State, on the other hand, must be possible over a longer period of time – i.e. well beyond 2031. The offer of freely allocable firm capacities across larger balancing zones places immense demands on the technical interconnection of the hydrogen networks and requires a high liquidity of the market. Given the experiences made in the natural gas sector, larger market areas or even a Germany-wide market area can only be implemented well after balancing rules have been standardised. The definition of an "entry-exit system" must therefore allow for the division of hydrogen networks into zones or market areas according to technical and (macro-)economic considerations, even where a uniform balancing regime is applied. This is not ensured by the current definition. The definition should be revised accordingly.

The definition of an "entry-exit system" in the draft regulation also differs from that in the draft directive. Standardisation is required here.

In order to be able to initiate the development of a hydrogen market in the first place, it is essential that the infrastructure operators as well as the initial hydrogen customers are given the opportunity to conclude long-term contracts. These contracts give planning security to both the customers having to invest in the conversion of their infrastructure and to network operators when it comes to refinancing their investments. The regulatory authorities' right to set shorter maximum contract periods, as laid down in Article 6 (3) of the draft regulation, does not yet provide for an obligation to take this into account when a decision on a shorter period is taken. A corresponding obligation on the part of the regulatory authorities should therefore be included. The envisaged maximum duration of 20 years for existing hydrogen systems also misses the mark, as most of the planned hydrogen infrastructure projects will not yet have been completed by the time the regulation comes into force. The reduction of the maximum contract duration to 15 years should therefore only take effect from 2031.

Article 31 (5) of the draft directive raises various questions. It states that until 31 December 2030, Member States can opt for negotiated network access. If this is the case, the regulatory authorities are to inform hydrogen users about how negotiated tariffs will be affected by the introduction of regulated network access. This provision cannot be evaluated at present as it requires further details to be known. What should also be explained is how Article 31 (5) and Article 53 (8) of the draft directive are to be understood in relation to each other.

The transmission system operators have already comprehensively fulfilled their obligation under Article 19 (9) of the Network Code CAM to combine all interconnection points to a neighbouring market area into virtual interconnection points (VIPs). On 1 April 2022, the last two THE VIPs were successfully merged after the merger of the market areas into the Trading Hub Europe's Germany-wide market area . In order not to trigger any termination rights for existing contracts as a result of the implementation of the regulatory obligation and to avoid any resulting increases in tariffs for the remaining customers, the transmission system operators have chosen the so-called "dual model". Under this model, existing contracts remain at the previous interconnection points and all new contracts are concluded at the VIP, with uniform tariffs and uniform operational regulations applying to all contracts. This approach has been accepted by the market and there were no objections from the regulatory authority. The provision added in sentence 2 of Article 5 (3) of the draft regulation, according to which every contracted capacity at interconnection points is to be transferred to the VIP regardless of the time of the conclusion of the contract (thus also existing contracts), does not add any value or advantages for the market and could potentially result in unwanted tariff increases due to contract terminations. Therefore, Article 5 (3), or at least its second sentence, should be deleted.

Proposed solutions:

- Standardisation of balancing rules should not be mandatory before 2031.
- Several entry-exit systems (market areas) covered by one uniform balancing regime, which should generally apply to at least one Member State, must be possible over a longer period of time – i.e. well beyond 2031.
- The definition of "entry-exit system" in the draft regulation and the draft directive differ. These definitions should be harmonised.
- The right of the regulatory authorities to set shorter maximum contract periods, as laid down in Article 6 (3) of the draft regulation, should be supplemented by an obligation for the regulatory authorities to take account of any adverse impact on the planning and refinancing options for the network operators concerned when a decision on a reduction is taken. Furthermore, the reduction of the maximum contract term from 20 to 15 years should not take effect before 2031.
- Article 31 (5) of the draft directive is incomprehensible in its present form and requires explanation.
- Article 5 (3) of the draft regulation, or at least its second sentence, should be deleted.

8 RULES FOR PLANNING METHANE AND HYDROGEN INFRASTRUCTURE

The development of hydrogen transmission infrastructure will only be swift, climate-friendly and efficient in economic terms if it is predominantly done through conversion of existing natural gas pipelines. This requires close alignment of network development plans (NDPs) for gas and hydrogen, which could be achieved most effectively by incorporating hydrogen into the Gas NDP. Moreover, the German transmission system operators show in their current and latest Gas NDP that methane and hydrogen network planning are iteratively interdependent activities. Incorporating hydrogen into the Gas NDP would also help to avoid coordination losses, which would otherwise entail considerable work and thus slow down the process. The positive experience gained during the conversion from L-gas to H-gas has shown that an integrated process can be managed transparently and efficiently as part of the Gas NDP, and this could be replicated for the conversion from methane to hydrogen.

In addition, closer cooperation with the various energy industry players will be indispensable to successfully tackle the challenge of transforming the energy system in a way that is right for the climate. At the same time, however, the different circumstances governing energy systems must also be taken into account. Here, the processes before and during electricity network planning on the one hand, and gas and hydrogen grid planning on the other, sometimes differ significantly. These individual conditions should therefore be taken into account when the legal regulatory framework is amended.

Evaluation of the Commission's proposals:

The transmission system operators firmly reject the creation of a joint scenario framework. Instead, a common scenario basis should be developed as part of an upstream process, in particular by ensuring the same input parameters, and the respective network development planning processes for electricity and gas should be harmonised over time. This would ensure a coordinated set of assumptions and targets, while at the same time taking account of the network operators' individual planning and process steps.

In addition, the demand-oriented approach to gas network planning for the observation periods t+5 and t+10 adopted to date should be retained in order to ensure security of supply. In order to comply with the national energy and climate plans, the transmission system operators propose to extend the current observation periods by another modelling year, for example t+15, which, however, would rely on scenario-based modelling. Maintaining the demand-oriented approach for the years t+5 and +10 is also essential given that this is the only way of separating methane pipelines from the existing gas infrastructure in an iterative process without jeopardising security of supply. Relying only on scenario-based modelling would not guarantee this and would not only put security of supply in Germany at risk, but also significantly hinder the development of a hydrogen infrastructure.

The distribution system infrastructure has already been incorporated into the Gas NDP through inclusion of the entry and exit capacities and quantities at the network interconnection points (e.g. VNB long-term forecasts). Further inclusion of the distribution system infrastructure in the Gas NDP would not be feasible. The need for coordination would already be enormous given the huge diversity of tasks, and such a process would not be practicable with the more than 700 players. The distribution system operators should be involved via an upstream process, for example as part of the preparations for a system development plan.

As regards the inclusion of information in the Gas NDP about pipelines to be decommissioned, it should be borne in mind that decommissioning is associated with a loss of permits under public law and with steps to ensure pipeline safety under private law. Therefore, in network development planning, the focus should not be on decommissioning but on alternative use of the pipeline in the longer term or conversion to hydrogen.

As regards network development planning for hydrogen, the European Commission's proposal is lacking. There are no concrete proposals concerning hydrogen network planning details. Information on the extent of conversions from natural gas to hydrogen can only be provided if there is an integrated planning process for both gas and hydrogen networks and if the pipelines can be identified by way of an iterative process. Here, additional unbundling regulations create high hurdles, for example when it comes to identifying the pipelines to be repurposed. All of this will not help in advancing the development of a hydrogen economy. What is important here is to have a binding NDP process for hydrogen networks at national level; mere reporting is not sufficient. In addition, close alignment with the Gas NDP is imperative.

Experience has shown that close cooperation between all parties involved is an essential prerequisite for the success of any planning process. This is where potential antitrust implications and risks for the network operators should be excluded. For this reason, the European requirements should already make it clear that cooperation between network operators is required. Therefore, we advocate the introduction of an integrated NDP process for gas and hydrogen, especially given the need to rapidly develop a hydrogen infrastructure as an essential component of decarbonisation.

Proposed solutions:

- Article 51 of the draft directive is to be expanded into a joint network development plan for all gases, including hydrogen. The provisions for the report on hydrogen infrastructure in Article 52 of the draft directive are therefore superfluous.
- The joint scenario framework between electricity and gas network operators required in Article 51 (1) e) of the draft directive is to be replaced by a common basis for separate scenario frameworks.
- Article 51 (2) lit. (a) of the draft directive should continue to be limited to transmission networks (the relevant clause deleted should be put back into the text).

9 GAS QUALITY AND BLENDING OF HYDROGEN INTO THE METHANE SYSTEM

In view of the growing shares of renewable and decarbonised gases in the European gas transmission system, aspects such as gas quality are becoming increasingly important for cross-border gas trading. In this context, European gas quality standards can provide a framework to ensure safe transportation and support the market ramp-up of renewable and decarbonised gases. It will be crucial to ensure here that the rules on gas quality in force in Germany are not undermined or weakened. Similarly, it will be important to prevent transmission system operators from being forced to accept gas qualities at cross-border IPs that may not be delivered at domestic network connections.

In addition, close cooperation between European transmission system operators will be crucial to ensure barrier-free transmission of natural gas and renewable as well as decarbonised gases and to prevent possible restrictions in cross-border gas transmission. In the same way as for the increasing importance of gas quality, appropriate questions regarding responsibility, accountability and liability will have to be addressed and clarified among gas industry players. The blending of hydrogen into the existing natural gas network is a possible path towards the transmission system operators' goal of operating pure hydrogen networks in the future. Possible blending limits must apply to the entire European gas infrastructure, and the responsibilities for compliance with the agreed limits must be clearly defined. The technical feasibility of specific hydrogen concentrations may depend on various parameters (fluctuating blending rates, network characteristics, regulation of blending in swing zones, gas use, etc.) and requires further technical investigation.

Evaluation of the Commission's proposals:

The EU Commission proposes introducing stronger European gas quality standardisation by revising the existing Network Code on Interoperability (NC INT) (Article 53 of the draft regulation). As part of this proposal, the Commission intends to include a Wobbe index classification, cost-benefit analyses to prevent gas quality-related transportation obstacles, an arbitration mechanism, minimum standards for the gas properties of biomethane, short-term and long-term monitoring of gas quality parameters, information provision, cooperation and communication, publication obligations and transparency requirements in the NC INT.

The Commission's proposal on standardising gas quality parameters is to be welcomed in principle. The existing NC INT represents a suitable basis for enshrining the above-mentioned processes (Wobbe index, cost-benefit analyses, etc.). The NC INT will be revised by ENTSOG and thus ultimately by the European transmission system operators, who can provide the necessary expertise. However, the concrete gas quality

parameters for a European H-gas standard will continue to be developed by CEN (Mandate 400). It should be noted that the national regulators should recognise the costs arising from the new requirements concerning compliance with gas quality standards. This will require coordination with the relevant authorities.

The development of an NC INT for hydrogen proposed by the EU Commission, which mirrors the above-mentioned elements of the NC INT for gas, should be viewed critically because it would be more efficient to integrate hydrogen network codes into the existing system of gas network codes. In this way, synergies and the existing transmission system operators' technical expertise could be utilised in the best possible way. The hydrogen quality standards developed as part of the NC INT should be based on the discussions held by the European Committee for Standardisation (CEN) and, if necessary, incorporate elements from existing national regulations such as Germany's DVGW Code of Practice G 260.

Closer cooperation between transmission system operators on gas quality matters, as proposed by the Commission (Article 19 of the draft regulation), is to be welcomed in principle. With regard to the described arbitration process, it should be noted that technical and operational restrictions can most efficiently be resolved bilaterally between transmission system operators. The steps proposed in the arbitration process (Article 19 (4) a-e of the draft regulation) provide a detailed timetable and cost allocation for this process. In addition, the Commission should introduce an obligation for end users, storage system operators, transmission system operators, etc. to provide information regarding technical and operational gas quality requirements in order to ensure sustainable arbitration.

The responsibilities proposed for gas quality management require further clarification. According to Article 35 (4) of the draft directive, transmission system operators have a duty in gas quality management: "Transmission system operators shall ensure efficient gas quality management in their facilities in line with applicable gas quality standards". It is not clear from this to what extent transmission system operators have to invest in active gas treatment. A simple rejection of "off-spec" gas at the entry point, as is already possible today, is probably not intended here. It must therefore be clarified which concrete additional obligations are imposed on the transmission system operators, also with a view to the future transportation of hydrogen. Among other things, it must be clarified up to which degree of deviation transmission system operators have to process or can reject that gas. These details should also be worked out in parallel at national level in close coordination with the national regulatory authority. Among other things, it must be guaranteed that any costs incurred will be recognised by the regulator.

Another element of standardisation in the area of gas quality is the hydrogen blending rate of 5 vol.% at cross-border IPs proposed by the EU Commission (Article 20 of the draft regulation). European rules on hydrogen blending are to be welcomed in principle. However, the technical feasibility of specific hydrogen blending rates may depend on various parameters (fluctuation of concentrations, network characteristics, regulation of admixture in swing zones, gas utilisation, etc.) and requires further investigations to determine the extent to which technical H₂-blending readiness is possible. Furthermore, a specific blending rate

should be applied across the entire European gas infrastructure, for example to take account of sensitive customers. A limitation to cross-border IPs is therefore not sufficient.

Proposed solutions:

- A 5% blending rate for hydrogen at cross-border IPs should be extended to the entire gas infrastructure (amendment of Article 20 of the draft regulation).

10 MISCELLANEOUS

10.1 EU BENCHMARKING BY ACER:

An EU-wide efficiency benchmarking exercise cannot be expected to produce robust, verifiable and fair results in any way.. Cost or efficiency comparisons are already part of many national revenue or incentive regulation systems. In order for the results to be meaningful on a European level, the data used would have to meet strict criteria, which cannot be ensured across Europe due to the differences between the individual national regimes used for cost and revenue regulation and because of the very strong heterogeneity of the transmission system operators within the EU itself. It is therefore not appropriate to apply such an instrument at EU level. Obliging the national regulatory authorities to recognise the results of such a comparison, as provided for in the last sentence of Article 17 (2) of the draft regulation, therefore makes no sense either.

Evaluation of the Commission's proposals:

The mandate to ACER contained in Article 17 (2) of the draft regulation is apparently intended to contribute to the widely desired increased transparency with regard to the transmission system operators' revenues (see also Article 17 (1)). However, the instrument is unsuitable for this purpose because at best it would provide pseudo-transparency, as the calculation results would be based on qualitatively unsuitable data that are too heterogeneous and largely not verifiable in detail. Apart from technical, geographical and demographic differences in the transmission system operators' supply task across the EU, which determine their technical and cost-driving characteristics, there are major national differences between ownership structures as well as between regulatory regimes and the economic environment. These would strongly distort the result of any comparison. As the determination of the transmission system operators' revenue cap is regulated differently at national level, an EU-wide efficiency comparison would never start from the same conditions and as a result would show the diversity of the regulatory regimes rather than the efficiency of the transmission system operators. This is made clear, for example, by the fact that the length of the regulatory periods varies quite significantly across the EU, which is why no uniform data can be obtained in

relation to the underlying base years. The EU Commission itself points out in the last sentence of this clause that additional national circumstances must be taken into account. Existing heterogeneities between transmission system operators are already very difficult to reflect in the data at national level – at European level this is completely impossible.

Proposed solutions (request to change the wording of the law):

- Delete Article 17 (2) of the draft regulation and leave the efficiency comparison to the national regulator. At the very least, national regulators should be free to decide whether or not to include such evaluations in their regulatory decisions.

10.2 TRANSPARENCY AND PUBLICATION OBLIGATIONS FOR HYDROGEN NETWORK OPERATORS (ANNEX 1 REGULATION, CHAPTER 4)

With the increasing use of hydrogen, there is a growing need for reliable and up-to-date information on the situation in the hydrogen network. The gas transmission system operators therefore support the proposal that transparency and publication requirements should be based on the requirements in the natural gas sector. However, they do not believe that applying all of these requirements for hydrogen networks from the start of the first infrastructures would be expedient.

Brief description of the relevant rules:

In the draft of Annex 1 of the regulation, the EU Commission defines the transparency and publication obligations for hydrogen network operators.

Furthermore, the proposal stipulates that hydrogen network operators should also publish information on the purity of and any impurities in the hydrogen on a daily basis, with preliminary values having to be published within three days and final values within three months. According to clause 4.1.1 lit. h), this information has to be published on a central platform throughout the Union by 1 October 2025.

In addition, Article 66 of the draft regulation stipulates that the scope of Regulation (EU) No. 1227/2011 must be extended to include the hydrogen sector. Regulation 1227/2011 describes the requirements regarding the integrity and transparency of wholesale energy trading. The extension to the hydrogen sector means that, when the regulation enters into force, REMIT data will have to be reported to ACER in the same way as is currently done in the natural gas sector.

Evaluation of the Commission's proposals:

As regards the EU-wide transparency platform, the gas transmission system operators share the view of the EU Commission that the necessary information must be available to all market participants to ensure a functioning hydrogen market. At present, however, it can be assumed that only regional sub-networks will have been switched to hydrogen by 1 October 2025 or that new local hydrogen infrastructure will have been built. The information to be published for these sub-networks has no

supra-regional significance and therefore does not allow any conclusions to be drawn about the situation in other regional sub-networks. Furthermore, experience with the implementation of the ENTSOG Transparency Platform has shown that this led to high costs and effort, which would be disproportionate to the added value of the information provided during the early phase of the hydrogen market ramp-up. An introduction of the platform as early as 1 October 2025 is therefore not expedient and should be judged on the basis of the market maturity of the hydrogen network.

The provisions of Article 66 of the draft regulation stipulate that when the regulation comes into force, the requirements regarding REMIT data reporting defined for natural gas will also apply to the hydrogen infrastructure. Given the fact that during the hydrogen market ramp-up the capacity contracts will be concluded bilaterally between the parties as part of negotiated TPA arrangements, it is unlikely that there will be any form of standardisation for uniform reporting any time soon. Furthermore, the existing Implementing Regulation (EU) No. 1348/2014 would also have to be extended to include the hydrogen sector and the existing data format would have to be adapted. Currently, there is no identifier for hydrogen in ACER's REMIT Transaction Reporting User Manual (TRUM) and the corresponding edig@s Message Implementation Guidelines. Experience in the natural gas sector has shown that it takes time to adapt the data formats and the regulatory requirements.

Proposed solutions:

- The gas transmission system operators support the proposals regarding uniform transparency and publication obligations for hydrogen network operators, but are critical of the implementation date. Therefore, they propose that the EU-wide uniform transparency platform as well as the data reporting obligations pursuant to Article 66 of the draft regulation should come into effect upon the implementation of regulated network access from 2031.