ACER
European Union Agency for the Cooperation of Energy Regulators

PUBLIC

RECOMMENDATION No 02/2025
OF THE EUROPEAN UNION AGENCY
FOR THE COOPERATION OF ENERGY REGULATORS

of 28 July 2025

on the methodologies for setting the inter-temporal cost allocation in accordance with Article 5(3) of Regulation (EU) 2024/1789 on the internal markets for renewable gas, natural gas and hydrogen.

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[1], and, in particular, Article 6(9a) thereof,

Having regard to Regulation (EU) 2024/1789 of the European Parliament and of the Council of 13 June 2024 on the internal markets for renewable gas, natural gas and hydrogen[2], and, in particular, Article 5(6) thereof,

Having regard to the outcome of the consultation with ACER's Gas Working Group,

Having regard to the favourable opinion of the Board of Regulators of 26 June 2025, delivered pursuant to Article 22(5)(a) of Regulation (EU) 2019/942,

Whereas:

1. INTRODUCTION

(1) Hydrogen is expected to play an important role toward the Union's climate objectives and the overarching goal of climate-neutrality by 2050 by enabling the decarbonisation of hard to abate sectors. Establishing an integrated hydrogen network across the EU is deemed essential for the cost-effective delivery of renewable hydrogen to end users. However, the expansion of hydrogen use is anticipated to be a gradual process, subject to uncertainties primarily those arising from high production costs and the

[1] OJ L158, 14.6.2019, p. 22.
[2] OJ L 2024/1789, 15.7.2024.

uncertain pace of demand materialisation. Building infrastructure capable of accommodating future demand could result in a situation where, during the initial ramp-up phase, a limited number of users bear the burden of high network costs. This, in turn, could lead to prohibitively high tariffs in the early stages, potentially hindering the broader adoption of hydrogen.

(2) Recognising this challenge, Article 5(3) of Regulation (EU) 2024/1789 (the Regulation) makes it possible for Member States to allow hydrogen network operators to spread the recovery of the network costs over time via network access tariffs. This inter-temporal cost allocation aims to ensure that future users of the hydrogen network duly contribute to the initial investment. This promotes a fairer sharing of network costs between early and future users, resulting in more affordable tariffs for everyone.

(3) The inter-temporal cost allocation and its underlying methodology must be approved by the regulatory authorities. ACER is tasked under Article 5(6) of the Regulation as well as Article 6(9a) of Regulation (EU) 2019/942 with issuing recommendations on these methodologies to the regulatory authorities and to the operators of transmission systems, distribution systems and hydrogen networks (for simplicity, collectively referred to as 'network operators').

(4) This Recommendation provides the first set of ACER's recommendations on the methodologies for inter-temporal cost allocation and will be reviewed and updated at least every two years.

2. PROCEDURE

(5) In developing this Recommendation, ACER actively involved a wide range of stakeholders through a public consultation and bilateral meetings and carried out an assessment supporting its recommendations.

(6) The public consultation[3], held between 10 and 31 March 2025, served to collect stakeholders' views on the uses and design elements of inter-temporal cost allocation methodologies. The summary and the evaluation of responses have been published on ACER's website[4].

(7) The bilateral meetings involved the regulatory authorities from Member States which are more advanced in developing hydrogen regulatory frameworks and future hydrogen network operators (through voluntary pre-ENNOH cooperation[5]).

[3] ACER Public consultation on inter-temporal cost allocation mechanisms for financing hydrogen infrastructure.
[4] Download the responses to the consultation and see the Evaluation of responses.
[5] The Regulation requires hydrogen transmission network operators to cooperate at Union level through the European network of network operators for hydrogen (ENNOH). As ENNOH has not yet been officially established at the time of developing this Recommendation, ACER has engaged with future hydrogen network operators through voluntary pre-ENNOH cooperation.

(8) The inputs gathered through the public consultation and the bilateral exchanges were incorporated in ACER's assessment accompanying this Recommendation (Annex).

(9) ACER's assessment highlights the key challenges related to the development of hydrogen networks, in particular the risks associated with demand materialisation and cost recovery. ACER also reviews the existing and emerging approaches to inter-temporal cost allocation across EU Member States, and how these approaches aim to allocate costs effectively and mitigate associated risks. Additionally, ACER assesses the necessary preconditions for the functioning of inter-temporal cost allocation mechanisms, including governance structures and the roles of national regulatory frameworks.

(10) ACER's Gas Working Group was consulted on the draft Recommendation between 27 May and 11 June 2025 and provided its advice on 13 June 2025.

(11) On 26 June 2025, ACER's Board of Regulators issued a favourable opinion pursuant to Article 22(5)(a) of Regulation (EU) 2019/942.

3. BROADER CONSIDERATIONS

3.1. Risks underpinning investments in hydrogen networks

(12) In its early development stage, the hydrogen sector is characterised by several uncertainties that affect the development of the new market. For hydrogen network investments the risks can be broadly categorised into two main types: price or market risk, and regulatory risk. A key challenge is the comparatively high cost of renewable hydrogen relative to carbon-intensive alternatives, which poses a significant uncertainty for stakeholders across the value chain. Despite some optimistic projections, there is high uncertainty regarding the potential for cost reductions. On the other hand, anticipation of future cost reductions often causes potential hydrogen users to delay adoption, particularly in the early stages of market development.

(13) The price risk discourages hydrogen users and producers from entering into long-term offtake agreements, which, in turn, exposes network operators to volume risk, making it more difficult to secure private capital for network development. At the same time, the absence or delayed roll-out of hydrogen networks increases uncertainty for producers and consumers, as reliable infrastructure is a prerequisite for scaling supply and demand. This cycle of uncertain demand, supply, and infrastructure challenges can hinder the development of the hydrogen market.

(14) Regulatory risks may also affect the development of the market, although stakeholders are impacted in different ways. For hydrogen users and suppliers, key sources of regulatory uncertainty include the implementation of the EU and national hydrogen-related targets and quotas and the ambiguity around low-carbon hydrogen. For hydrogen infrastructure operators, including hydrogen network operators (HNOs), regulatory uncertainty pertains to the eventual design of the national regulatory frameworks once the Directive is implemented by the Member States.

(15) Unlike electricity and natural gas networks, which have a broad demand base and an established market to provide sufficient assurance against volume risk for network operators, demand for hydrogen supplied via networks is only now being developed. As a result, HNOs cannot rely on a stable base of future network users to safeguard their investments. At the same time, relying only on limited binding capacity bookings, that may be currently available, can lead to underinvestment in hydrogen networks, thereby undermining the market ramp-up. To address this, Member States and public institutions may consider deploying appropriate financing instruments to mitigate investment risks and provide guarantees against volume risk. This is particularly relevant for cross-border networks as paragraph (20) further explains. The public financing measures can be complemented by the implementation of inter-temporal cost allocation mechanisms. While public financing and inter-temporal cost allocation are complementary tools that work in tandem, they are separate, and this Recommendation concerns only the latter.

3.2. A transitory regulatory period

(16) The European hydrogen network is still in early development. Building the necessary infrastructure and developing the EU network codes for hydrogen[6] will require time. The European network of network operators for hydrogen (ENNOH), tasked with developing these codes, can only be officially established once its members are certified as hydrogen transmission network operators under national laws.[7] The certification process depends on the transposition of the certification provisions from Directive (EU) 2024/1788 (the Directive)[8] into national legislation.

(17) Given the time needed for transposing the Directive and developing the EU network codes[9], it is unlikely that the first set of EU network codes for hydrogen will be in place before 2027. Infrastructure developments across Members States are also progressing at different paces. While several Member States plan to develop national hydrogen networks in the short term, discussions on cross-border hydrogen corridors are still in a preliminary phase. Regulatory frameworks for hydrogen network operation and financing, including mechanisms such as inter-temporal cost allocation, are under development in a few Member States.

(18) At present, the only inter-temporal cost allocation mechanism in place is the German WANDA scheme[10], which is complemented with significant State financing support.

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[6] Article 72 of the Regulation.
[7] According to Article 57(3) of the Regulation, ENNOH shall consist of hydrogen transmission network operators certified pursuant to Article 71 of the Directive, which regulates the certification process to be implemented in the Member States.
[8] OJ L, 2024/1788, 15.7.2024.
[9] Member States must transpose the certification provisions by August 2026 (Article 94 of the Directive). The first priority list for the areas to be included in the hydrogen network codes will be established by the European Commission within one year of the establishment of ENNOH (Article 72(3) of the Regulation).
[10] https://www.bundesnetzagentur.de/EN/RulingChambers/GBK/Level1/WANDA/start.html.

Denmark is also developing a similar scheme, although with a different approach to complementary State financing. Austria, Belgium, and the Netherlands are also evaluating the options to develop national regulatory frameworks that support their respective hydrogen network development plans. The limited number and the early stage of implementation of inter-temporal cost allocation methodologies means that a comprehensive assessment of their effectiveness and the identification of best practices remain premature.

(19) Alongside financing measures, including inter-temporal cost allocation, both Germany and Denmark are currently developing national rules for network access and operation. These rules, however, may require future adjustments to ensure alignment with the forthcoming EU network codes. Notably, inter-temporal cost allocation methodologies are long-term mechanisms, potentially operating over extended periods of up to 30 years or more. The combination of national market rules that might need to adapt to the forthcoming EU network codes and the long-lasting inter-temporal cost allocation mechanism constitute a regulatory challenge. Careful consideration of this potential interaction is necessary to ensure sufficient flexibility and adaptability to the national market rules to accommodate future revisions. In Member States with interconnected hydrogen markets, close cooperation and coordination would be essential to create frameworks that facilitate cross-border trade and avoid future market fragmentation[11].

(20) Given the uncertain trajectory of hydrogen market development, investing in hydrogen networks entails significant challenges related to cost recovery and risk management, particularly for cross-border networks. For instance, uncertain demand in an importing country may undermine the financial viability of networks located in exporting or transit countries. On one hand, the mitigation of this risk may pose a significant burden over importing countries, slowing market[12]. On the other hand, keeping such risk entirely over transit/exporting countries could make cross-border infrastructure initiatives not viable. The current cross-border cost allocation (CBCA) instruments alone might not be entirely adequate to address these complexities or to support multilateral agreements. CBCA typically involves ex-ante cost allocation that needs to be recovered through future tariffs. Using this instrument would thus still require mitigating the volume risk, which may require additional tools, possibly involving State-backed guarantees. A more harmonised EU-level approach to cost recovery and risk sharing between Member States and HNOs could facilitate the development of cross-border infrastructure.

[11] For example, market fragmentation might be the result of prolonged lead times and transitory periods for the implementation of network codes in certain jurisdictions to provide smooth transition to the new regulatory regime.

[12] For example, heterogeneous application of the necessary risk mitigation measures among different cross-border routes may impact the competitiveness of more economic solutions.

3.3. Mitigating risks

(21) The uncertainties surrounding the future development of the hydrogen market imposes a significant volume risk on HNOs. These operators are expected to design and build networks to meet demand that may only materialise over a multi-decade horizon. It is therefore essential to prioritise risk minimisation through thorough assessments of infrastructure needs and the application of appropriate risk mitigation measures. Investment decisions in hydrogen networks should be guided by careful planning and grounded in reliable demand forecasts.

(22) In this context, the national network development planning process should align the requirements of the EU integrated network planning[13]. Oversight of regulatory authorities over the ten-year network development plans (TYNDPs) can contribute to improving the quality of the analysis conducted by network operators and better link network planning process, cost recovery and market development[14]. While policy targets as reflected in the national energy and climate plans (NECPs) should be considered in the network development plans[15], the inclusion of alternative demand scenarios would be beneficial[16]. Moreover, the network planning methodology could be complemented by appropriate risk assessment (e.g. accounting for the different risks surrounding hydrogen production facilities or residential, transport and industrial demand). These assessments may support the prioritisation and planning of the network, potentially leading to adopting a more gradual network development process (e.g. based on a risk-impact analysis). Additionally, they could also be used to enhance the design of inter-temporal cost allocation methodologies, enabling the evaluation of their performance and effectiveness under diverse market and network development scenarios.

(23) The allocation of a reasonable amount of the volume risk to hydrogen network operators should also be considered to incentivise greater scrutiny of the proposed projects, better demand estimations, and more efficient network planning, development and operation. However, such decisions should not increase the overall network costs disproportionally and therefore the potential implications for network financing and the potential need for additional remuneration due to the higher risks should be thoroughly assessed.

(24) Considering the significant volume risk associated with the development of hydrogen networks, binding long-term commitments by network users are important to mitigate this risk. Various ways to encourage binding commitments could be examined; for

[13] Article 55 of the Directive.
[14] According to Article 78(1)(ee) of the Directive regulatory authorities approve and amend the network development plans.
[15] According to Article 55(2)(h) of the Directive the ten-year network development plan shall be in line with the national energy and climate plan and its updates.
[16] See also relevant recommendations in ACER's Opinion 05/2025 on ENTSOG's draft hydrogen infrastructure gaps identification report.

example, Member States could request that a minimum share of the network capacity is pre-booked with binding long-term commitments prior to the implementation of inter-temporal cost allocation and/or the provision of public funds or guarantees to further support the network development[17]. An alternative could be to prioritise the application of inter-temporal cost allocation and/or additional support to network elements associated with off-take agreements between producers and users or with investment commitments by end-users to transition to the use of renewable or low-carbon hydrogen. Regulatory authorities could also examine whether incentives for long-term commitments via appropriate tariff structures set in accordance with Article 17 of the Regulation could mitigate the volume risk, especially in the early period (e.g. by applying discounted weights to longer-term capacity products reflecting the reductions in the direct risk for the HNO).

3.4. Governance

(25) Article 5(3) of the Regulation requires that the inter-temporal cost allocation and its underlying methodology is approved by the regulatory authority. The Regulation does not specify which national authority or entity should be responsible for developing the methodology. Assigning this task depends on the national frameworks and is outside the scope of this Recommendation. However, since regulatory authorities are already tasked with approving the methodology and considering that the methodology concerns the remuneration of hydrogen networks via regulated tariffs which these authorities also fix or approve[18], a potential approach could be to assign them the additional task of developing the methodology, in close cooperation with network operators and relevant stakeholders. Doing so would help ensure consistency, transparency and coherence within the regulatory framework.

(26) Due to the significant volume risks for the HNOs and the potential liquidity gaps that may arise before demand reaches sufficient levels, inter-temporal cost allocation may need to be complemented by additional State-funded support mechanisms. These two financing methods are interlinked; thus their design needs to be developed together. A timely and strong cooperation between all relevant parties is important to ensure that the inter-temporal cost allocation methodology will be developed in a structured and coherent manner, taking into account the design elements of any complementary support mechanism. While the design of any potential financing or de-risking schemes is ultimately determined by the Member States, their details impact the design and implementation of the inter-temporal cost allocation mechanism. The timely involvement of regulatory authorities in the design of such State support schemes will also ensure that they align with the general principles for network operation and cost recovery set out in the Regulation. Overlapping of roles and responsibilities, e.g. in

[17] This is similar to the approach currently considered in Denmark for the financing of the hydrogen network.
[18] According to Article 78(1)c of the Directive regulatory authorities shall fix or approve, in accordance with transparent criteria, tariffs for hydrogen network access or their methodologies, or both.

terms of tariff setting, should be avoided. Moreover, the interlinkage between the financing mechanisms and the inter-temporal cost allocation mechanism may complicate decision making related to potential revisions and changes in response to actual market developments. Clarity over such decision-making processes is important to improve implementation.

3.5. Concluding remarks

(27) ACER acknowledges that efforts to guide the development of inter-temporal cost allocation methodologies face a double challenge. First, there is a lack of established best practices that could be identified, generalised, and applied. Second, in the absence of EU network codes for hydrogen, there is currently no comprehensive EU regulatory framework to complement the Regulation and define the detailed market design to which inter-temporal cost allocation mechanisms could be aligned.

(28) Considering these constraints, ACER at this stage of the hydrogen market development prefers not to issue recommendations that attempt to prematurely harmonise the detailed design elements of inter-temporal cost allocation methodologies. This also concerns elements that might be regulated in the upcoming EU network codes for hydrogen, to avoid overregulation during this evolving period. Hence, in addition to raising awareness of the key challenges in designing these methodologies, this Recommendation primarily focuses on the high-level principles and approaches to inter-temporal cost allocation. The biannual update of the Recommendation, as foreseen in the Regulation, will provide an opportunity to incorporate more detailed guidance as experience accumulates during this initial phase of the market evolution.

HAS ADOPTED THIS RECOMMENDATION:

5. RECOMMENDATIONS REGARDING THE INTER-TEMPORAL COST ALLOCATION METHODOLOGIES

5.1. Interaction with national market rules

(29) The specifics of the inter-temporal cost allocation are, to some degree, determined by national market rules, including network access rules and tariff structures. To ensure consistency and avoid significant changes to inter-temporal cost allocation methodologies resulting from any future development of national market rules, **and insofar as the national market rules for the hydrogen market will be developed by the regulatory authorities and the network operators, ACER recommends that they develop the inter-temporal cost allocation methodology and the relevant national market rules in a coordinated manner.**

5.2. Scope of the inter-temporal cost allocation

(30) Member States may follow different approaches to develop their national hydrogen networks; they may opt for an accelerated core-network development or choose a

more gradual network expansion aligned with expressed market needs and hence subject to less volume risk. Therefore, inter-temporal cost allocation may be necessary for all or part of the network. To ensure regulatory certainty and oversight, **ACER recommends that the inter-temporal cost allocation methodology includes a requirement for regulatory approvals of the network elements subject to inter-temporal cost allocation, along with their respective costs.**

(31) The definition of hydrogen networks includes both transmission and distribution networks[19]. The characteristics of hydrogen distribution networks are expected to vary significantly between and within Member States. It is generally expected that distribution network operators can (and will) develop networks in a gradual manner mitigating the uncertainties related to the evolution of demand. However, a potential need for an inter-temporal cost allocation for distribution networks cannot be excluded. Distribution networks will be developed at different paces in different locations and will face different levels of uncertainties. While the differences between transmission and distribution networks may call for separate inter-temporal allocation schemes[20], coexistence of multiple schemes might increase complexity. **ACER recommends that regulatory authorities and network operators carefully examine the need for inter-temporal cost allocation in distributions networks. If such a need is identified, ACER recommends that separate schemes for transmission and for distribution networks, and potentially distinct schemes for different distribution networks, could be considered. Such decisions should be taken considering a balanced approach that weights cost-reflectivity, simplicity, and national specificities.**

5.3. Duration

(32) The duration of the inter-temporal cost allocation, i.e. the time over which the costs of the network will be spread, is a key parameter of the methodology[21]. The duration also defines the expected demand over which the costs will be distributed and impacts directly the estimated tariff level. The methodology may allow for flexibility to adjust the duration in case of significant deviation from initial assumptions on costs and demand that may not be handled by simply re-adjusting the tariff levels. Potential interlinks between the inter-temporal cost allocation mechanisms and the State support or guarantee schemes, for example in the case of claw back provisions, could however reduce this possibility. **ACER recommends that the inter-temporal cost allocation**

[19] Article 2(21) of the Directive defines hydrogen network as "a network of onshore and offshore pipelines used for the transport of hydrogen of a high grade of purity with a view to its delivery to customers, excluding supply".
[20] This should be examined in cases of e.g. geographically separate distribution networks to avoid cross-subsidisation.
[21] In principle, the duration of the inter-temporal cost allocation should not exceed the economic lifetime of the network and in any case should have a repayment period not exceeding the technical lifetime of the network considering any network (re)investments. However, since the lifetime of different network elements may differ substantially, a good practice would be to set the duration of the mechanism so that substantial re-investments are unlikely to be necessary within its timeframe.

methodology includes rules governing the adjustment of the duration of the inter-temporal cost allocation, along with an established process for implementing such adjustments. These rules need to consider the interaction of the inter-temporal cost allocation with any complementary financing mechanisms.

5.4. Tariff design

5.4.1. Tariff structure

(33) The inter-temporal cost allocation methodology may include specific rules for tariff structures and for the calculation of the relevant tariffs. It may also simply set the rules for the allocation of network costs across time and between the early and future users, while tariff structures are dealt with separately. Considering the transitory regulatory phase until the establishment of the EU network codes for hydrogen, **ACER recommends that the inter-temporal cost allocation methodology allows for flexibility and adaptability with regards to the relevant tariff rules,** to account for any potential revisions in view of future market needs and the EU network codes for hydrogen**.**

5.4.2. Demand forecasts

(34) Inter-temporal cost allocation mechanisms rely on estimates of demand often spanning over multi-decade horizons. Large deviations between actual and forecast demand, especially in the later periods of the mechanism, may have high impact on the cost recovery or the level of tariffs. While in principle similar demand assumptions as those in the hydrogen network development plans could be used by regulatory authorities to set the tariffs based on inter-temporal cost allocation, the uncertainty pertaining to such assumptions is normally too high, as they mostly rely on policy targets. Such policy-related demand projections could result in unrealistic tariff levels that may prove inadequate to recover the costs, if demand does not materialise, increasing the possibility for corrective measures. If the demand profile is skewed towards the future, the room for corrective actions may be too narrow. On the other hand, considering only a very conservative demand profile, e.g. based only on binding long-term commitments and excluding any other potential demand growth, may result in unnecessarily high tariff levels. Demand projections should be carefully reviewed to avoid the impact of overinflated or too conservative demand expectations. When choosing the appropriate duration and demand evolution profile over which the cost will be distributed, regulatory authorities should make use of all information available such as binding long-term commitments, projects with final investment decisions or with secured (fully or partially) financing (such as PCI/PMI/IPCEI), and policy driven scenarios of demand evolution. **ACER recommends that the demand projections used for the purpose of the inter-temporal cost allocation should be carefully selected, following an assessment of the impact of different demand scenarios – including via sensitivity analysis – on the tariffs, on the allocation and recovery of costs, on the duration of the scheme, as well as on the effectiveness of any complementary support.**

5.4.3. Depreciation

(35) During the determination of the allowed revenue or approved costs different depreciation models can be considered. Progressive depreciation models allocate a larger portion of depreciation to later periods, which typically have higher expected utilisation. These models essentially function as a form of a less flexible inter-temporal cost allocation. **ACER recommends that if regulatory authorities consider the application of progressive depreciation models, they should carefully evaluate the cumulative impact on the volume risk and the financing of the network operators.**

5.4.4. Costs elements

(36) The inter-temporal cost allocation aims to spread costs duly between early and future network users, allowing for the recovery of both capital and operating expenditures at affordable tariff levels. Variable operating costs are highly uncertain as they depend mostly on the cost of energy used in the compressor stations. Moreover, if expectations of demand growth do not materialise, increasing the cost base of the inter-temporal cost allocation by including forecast costs of an overestimated demand will put additional burden to early network users. For similar reasons, cost of services related to the operation of the network such as balancing and user flexibility should not be part of the costs shifted over time by an inter-temporal cost allocation mechanism. **ACER suggests the inter-temporal cost allocation methodology is designed so that variable costs are collected closer to the time when they are incurred[22] while balancing this objective against other critical considerations such as stability and predictability of the tariff and/or the relevance of the variable operating cost over the total costs.**

(37) Estimation of network costs over its duration, including costs of establishing new pipelines or repurpose gas pipelines to hydrogen use, is an essential process of the intertemporal cost allocation methodology. These cost estimates can be highly uncertain especially for repurposed assets for which cost of retrofitting may be difficult to project. This uncertainty can lead to potentially volatile cost setting, which should be mitigated to the extent possible by ensuring alignment with actual costs, incorporating flexibility into the cost allocation design, and enhancing transparency of cost estimation especially through clear differentiation between new and repurposed assets. **ACER recommends that the network operators use detailed updates of cost estimates, separately for new and repurposed assets. These updates should be clearly communicated to regulatory authorities, allowing them to effectively identify any deviations between forecast and actual costs.**

[22] That may be done by considering the application of a volume-based charge for the separate recovery of those volume-based operating costs that should not form the part of the costs falling under the scope of an inter-temporal cost allocation.

5.4.5. Remuneration

(38) The total cost of the network includes the remuneration of investment, normally through the weighted average cost of capital (WACC). In the context of inter-temporal cost allocation, a specific remuneration related to the deficits accumulated in the early stages of the ramp-up (accounted for in an inter-temporal cost allocation account - also referred to as debt account) may also be considered, if HNOs are exposed to additional financing risks stemming from this debt account. The level of remuneration is impacted by elements such as State support to de-risk the network investments and the overall policy framework supporting or promoting the production and use of hydrogen mitigating the volume risk. **ACER recommends that regulatory authorities set the level of remuneration based on the regulated asset base and, potentially, the inter-temporal cost allocation account, so that it reflects the real risk borne by the HNOs. Regulatory authorities should exclude from this remuneration (risk premia) the level of risks already mitigated by other measures such as State support.**

5.4.6. Reassessment of key parameters

(39) Inter-temporal cost allocation is based on expected costs and demand that may be highly uncertain. To ensure that resulting tariffs are appropriate and that full cost recovery is achieved, enhanced monitoring and regular reassessments of the key parameter are essential. These reassessments (e.g. regarding cost development for users) along with the outcomes of the periodically updated hydrogen infrastructure needs assessments, should be used to evaluate the progress of the inter-temporal cost allocation and, where necessary, trigger predefined corrective actions by the regulatory authority. To identify early enough any significant deviations that could jeopardise the expected inter-temporal allocation outcome, **ACER recommends that the inter-temporal cost allocation methodology includes monitoring of market developments and regular reassessment of the key parameters of the inter-temporal cost allocation. The methodology should also include clear and quantifiable conditions triggering any corrective action**[23].

5.5. Processes and transparency

(40) Given the market uncertainties and the long duration of the inter-temporal cost allocation mechanisms**,** a clear process plan indicating milestones, roles and responsibilities, and necessary communication between parties involved (e.g. in terms of data transfer between network operators and regulatory authorities), would allow to avoid overlapping processes and to anticipate the timing of key decisions (e.g. regarding the

[23] For example, if there is persistent significant deviation of actual demand growth from forecasts for a subsequent number of years, or a significant increase of the deficit in the inter-temporal cost allocation account.

revision of the tariffs). **ACER recommends that the inter-temporal cost allocation methodology includes a clear and transparent administrative processes identifying the roles and responsibilities of the involved parties and indicating clear timelines and milestones.**

(41) **ACER recommends that the inter-temporal cost allocation methodology ensures that the underlying calculations are performed in a transparent manner. If the methodology includes specific rules for tariff structures and for the calculation of the relevant tariffs, these rules should align with the transparency requirement for tariff setting in Article 17 of the Regulation.** In anticipation of the relevant EU network codes for hydrogen, the transparency and public consultation provisions of the network code on harmonised transmission tariff structure for natural gas could serve as an example of good practice.

This Recommendation is addressed to transmission system operators, distribution system operators, hydrogen network operators and regulatory authorities.

Done at Ljubljana, on 28 July 2025.

- SIGNED -

For the Agency
The Director
C. ZINGLERSEN

Annexes:

Annex – ACER's assessment