



European Union Agency for the Cooperation
of Energy Regulators

Agency Report

Analysis of the Consultation Document on the Gas Transmission Tariff Structure for Italy

NRA: Autorità di Regolazione per Energia,
Reti e Ambiente (ARERA)

TSO: Snam Rete Gas (SRG) S.p.A.

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1. ACER conclusion

- (1) The Italian national regulatory authority ('NRA'), ARERA, proposes a capacity-weighted distance ('CWD') reference price methodology ('RPM') in line with Article 8 of the Network Code on Harmonised Transmission Tariff Structures for Gas ('NC TAR'). The methodology is proposed to be applied for four years, starting on 1 January 2024. ARERA proposes a change in the entry-exit split from the current 28/72 to 25/75. The methodology foresees the grouping of exit points based on six geographical clusters. Within each geographical cluster, two 'proximity groups of points' are defined based on regional exit points being either within or beyond a 15 kilometre distance from the transmission network. As a result, the methodology is based on 12 domestic exit clusters. ARERA additionally proposes to equalise separately exit points to storages and entry points from storages¹. Next to that, ARERA proposes to continue the 50% discount to exit points to and entry points from storages and to not apply any discounts to entries from LNG. The methodology foresees a discount for the exit point to Malta, the Gela interconnection point ('IP'), for the purpose of ending the isolation of this Member State.
- (2) ARERA proposes to allocate both, transmission and regional networks, using the same RPM, as it is currently applied. There is no difference in the way distance is calculated compared to the current approach, which was assessed by ACER in its 2019 Report on the Italian Tariff Consultation².
- (3) The NC TAR foresees a cost allocation assessment ('CAA') and the comparison of the chosen RPM with the CWD methodology. The calculation of the CAA results in 3%. This value is within the 10% threshold laid out in Article 5(6) of the NC TAR and does not require further justification. Regarding the standard CWD methodology, the comparison reveals differences that only result from the different entry-exit splits used (25/75 for the proposed RPM and 50/50 for the standard CWD methodology as laid out in Article 8 of the NC TAR). The comparison does not lead to questioning the RPM proposed by ARERA.
- (4) ARERA proposes two commodity based tariffs, a flow based charge to allocate, amongst others, all OPEX costs (and not only "*the costs mainly driven by the quantity of the gas flow*", as foreseen under Article 4(3)(a) of the NC TAR) and a complementary revenue recovery charge ('CRRC'). The latter is a less frequent charge across EU tariff methodologies and is foreseen under Article 4(3)(b)(iv) of the NC TAR. ARERA proposes the CRRC to reconcile both capacity tariffs and the flow-based charge, and is applicable at domestic exit points and exit points to storage facilities. The flow costs to be recovered from the flow-based charge forecasted for 2024 increase significantly as a result of the high energy prices, from EUR 70 million in 2020 to EUR 800 million in 2024. The additional OPEX allocated with the flow-based charge constitute approximately another EUR 210 million. Finally, ARERA proposes a non-transmission charge for the metering service.

¹ The proposed grouping of points into 12 areas, the equalisation of storage points, the discount to storage points and the absence of discounts to LNG entries are part of the methodology being used to calculate the tariffs currently applicable.

²https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/Agency%20report%20-%20analysis%20of%20the%20consultation%20document%20for%20Italy.pdf

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- (5) ARERA proposes to include in the RPM the network to supply the region of Sardinia. The region is expected to be supplied by LNG transported from the Italian terminals, via a dedicated LNG service named ‘virtual pipeline’³. ARERA proposes to include two domestic exit clusters in the region of Sardinia. To measure the distance to the points of the Italian mainland network, ARERA proposes to measure only the pipeline distance, not taking into account the maritime distance. The consultation provides information regarding costs related to the transport of gas to the region of Sardinia that is mostly based on assumptions. ARERA estimated in the consultation document the effect of including the region of Sardinia in the RPM. The calculation, which depends significantly on the assumptions used, results in tariff increases for network points in the Italian mainland of 4.5% at entries, 4.2% at exits and 2% for the commodity-based charge. ARERA informed the Agency that the requirement to allocate these costs together with the rest of the Italian transmission network is a legal requirement established under the Italian Decree 76/2020.
- (6) The timeline of the entry into operation of the connections to both Malta and Sardinia remains unclear⁴, and it is unlikely to happen in the first part of the period for which the RPM is proposed, between 2024 and 2027. Until the points become operational, tariffs are calculated excluding these connections and their costs from the RPM.
- (7) Compared to the 2018 consultation, ARERA no longer proposes the reshuffling capacity mechanism⁵.
- (8) ARERA refers in the last section of the consultation document to a number of charges, which are not set based on the NC TAR, and are set to transmission points of the network. These charges relate, amongst others, to storage and LNG costs, and were partially assessed in the ACER 2020 NC TAR Implementation Report⁶.
- (9) The Agency concludes, after having completed the analysis of the proposed RPM, pursuant to Article 27(2) of the NC TAR, that:
- The consultation includes all the information required by Article 26(1) of the NC TAR, with the exception of the assessment on cross-subsidies applicable to the proposed complementary recovery charge. This is a requirement according to Article 4(3)(b)(iv) of the NC TAR.
 - The compliance of the proposed RPM with the requirements on cost-reflectivity, cross-subsidisation and cross-border trade is subject to ARERA following the recommendations made

³ See chapter 6 for additional analysis on this point.

⁴ On Malta, there is currently no final investment decision on the offshore pipeline connecting to Italy. The expected commissioning date is 2028 (project submission for the 2022 TYNDP). The same information is provided in the promoter’s website on publically available information (<https://melitatransgas.com.mt/>).

On Sardinia, the expected commissioning dates range between 2024 and 2028, but these dates could be reconsidered. The relevant projects under the 2022 TYNDP are currently labelled as “less advanced”. The virtual pipeline is expected by 2025, but this is closely linked to the commissioning of Sardinian infrastructure.

⁵ With Resolution 666/2017/R/GAS, ARERA introduced provisions that allow the owners of long-term transmission capacity at cross-border points subscribed before Regulation (EU) No 984/2013 came into effect to re-modulate their transmission rights over time; in particular, this Resolution provided for the right for the shippers not to use, totally or in part, the contracted capacity regarding gas years 2017-2018 and afterwards, and the possibility to reuse it at the same interconnection point within the third gas year after expiration of the long-term contract.

⁶ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/The%20internal%20gas%20market%20in%20Europe_The%20role%20of%20transmission%20tariffs.pdf

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in section 6.1.3, on the tariff methodology applicable to the Sardinian network, and in section 5.2.2 on the complementary revenue recovery charge. The proposed RPM is compliant with the requirement on transparency, non-discrimination and volume risk.

- The proposed flow-based commodity tariff is not compliant with the requirements laid out under Article 4(3)(a) of the NC TAR, as the charge allocates all OPEX costs and not only the “costs mainly driven by the quantity of the gas flow” as required to Article 4(3)(a) of the NC TAR. The proposed revenue recovery charge is not fully compliant with the NC TAR as ARERA does not provide the assessment on cross-subsidies required by Article 4(3)(b)(iv) of the NC TAR.
- The proposed non-transmission tariffs are compliant with Article 4(4) of the NC TAR.

- (10) The Agency provides the following recommendations with a view to the motivated decision that ARERA should take pursuant to Article 27(4) of the NC TAR:
- (11) First, ARERA should use the flow-based charge to allocate the “costs mainly driven by the quantity of the gas flow” as required to Article 4(3)(a) of the NC TAR.
- (12) Second, ARERA should provide the assessment on cross-subsidies applicable to the proposed complementary recovery charge. This is a requirement according to Article 4(3)(b)(iv) of the NC TAR. Should the cross-subsidisation between points resulting from the over- or under- recovery of the proposed tariffs be significant, the Agency recommends that ARERA reduce these differences by adapting the revenue reconciliation scheme, for example by reconciling the regulatory account using transmission tariffs (instead of the flow-based charge applied only to end-users of the Italian network).
- (13) Third, ARERA should provide an allowed revenue estimations for the years for which the proposed RPM is applicable. Article 30(2)(b) requires that the simplified model enables “network users to calculate the transmission tariffs applicable for the prevailing tariff period and to estimate their possible evolution beyond such tariff period”. While network users can estimate the forecasted capacity for these years, ARERA is better positioned to provide an estimation of the allowed revenue applicable for this period.
- (14) Fourth, regarding the network in the Sardinian region, the Agency refers to its recommendation made for the allocation of regional networks as described in section 4.1. ARERA can allocate the costs of this network together with the proposed RPM applicable for the Italian transmission network. However, in order to apply this approach, ARERA should prove that the applicable methodology is capable of allocating the costs related to regional networks mainly to domestic exit points and not to IPs. If this aspect cannot be established firmly and justified through a separate consultation, these assets should be categorised as distribution assets and the connection of this infrastructure and its costs should be allocated outside the proposed RPM.
- (15) Fifth, the Agency invites ARERA to extend the requirements applicable to non-transmission charges, under Article 4(4) of the NC TAR, and to apply the guidelines provided in the chapter 6 of the ACER 2020 NC TAR Implementation Report, to the charges set to the transmission network which are not calculated based on the NC TAR.

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- (16) Finally, the Agency acknowledges the high quality of the analyses and the large amount of details provided in the consultation document. This information enables a high degree of transparency on the proposed tariff structure. The consultation document constitutes a good practice for other NRAs and TSOs to follow. The Agency further thanks ARERA for its availability and for its promptness when responding to ACER's information requests.

2. Introduction

- (17) Commission Regulation (EU) 2017/460 of 16 March 2017 establishes a network code on harmonised transmission tariff structures for gas (NC TAR).
- (18) Article 27 of the NC TAR requires the Agency to analyse the consultation documents on the reference price methodologies for all entry-exit systems.⁷ This Report presents the analysis of the Agency for the transmission system of Italy.
- (19) On 19 October 2022, ARERA, forwarded the consultation documents to the Agency. The consultation was launched on 18 October 2022 and remained open until 19 December 2022. On 18 January 2023, the consultation responses and their summary were published. The Agency has taken these into consideration for this analysis. Within five months following the end of the final consultation, and pursuant to Article 27(4) of the NC TAR, ARERA shall take and publish a motivated decision on all the items set out in Article 26(1) of the NC TAR.

Reading guide

- (20) In chapter 3, this document first presents an analysis on the completeness, namely if all the information in Article 26(1) has been published. Chapter 4 includes an assessment of the proposed RPM. Chapter 5 focusses on the compliance, namely if the RPM complies with the requirements set out in Article 7 of the code, if the criteria for setting commodity-based transmission tariffs as set out in Article 4(3) are met and if the criteria for setting non-transmission tariffs as set out in Article 4(4) are met. Chapter 6 includes other comments. This document contains two annexes, respectively the legal framework and a list of abbreviations.

3. Completeness

3.1 Has all the information referred to in Article 26(1) been published?

- (21) Article 27(2)(a) of the NC TAR requires the Agency to analyse whether all the information referred to in Article 26(1) of the NC TAR has been published.
- (22) Article 26(1) of the NC TAR requires that the consultation document should be published in the English language, to the extent possible. The Agency remarks that the consultation document has been published in English.
- (23) Overall, the information mentioned in Article 26(1) of the NC TAR has been properly published. The Agency recommends to improve the missing assessment on the proposed revenue recovery charges as indicated in the table below.

⁷ With the exception of Article 10(2)(b), when different RPMs may be applied by the TSOs within an entry-exit zone.

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Table 1 Checklist information Article 26(1)

| Article | Information | Published: Y/N/NA |
|---|---|--|
| 26(1)(a) | the description of the proposed reference price methodology | Yes |
| 26(1)(a)(i) 26(1)(a)(i)(1) 26(1)(a)(i)(2) | the indicative information set out in Article 30(1)(a), including: <ul style="list-style-type: none"> the justification of the parameters used that are related to the technical characteristics of the system the corresponding information on the respective values of such parameters and the assumptions applied | Yes |
| 26(1)(a)(ii) | the value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9 | Yes |
| 26(1)(a)(iii) | the indicative reference prices subject to consultation | Yes |
| 26(1)(a)(iv) | the results, the components and the details of these components for the cost allocation assessments set out in Article 5 | Yes |
| 26(1)(a)(v) | the assessment of the proposed reference price methodology in accordance with Article 7 | Yes |
| 26(1)(a)(vi) | where the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8, its comparison against the latter accompanied by the information set out in point (iii) | Yes |
| 26(1)(b) | the indicative information set out in Article 30(1)(b)(i), (iv), (v) | Yes |
| 26(1)(c)(i) 26(1)(c)(i)(1) 26(1)(c)(i)(2) 26(1)(c)(i)(3) | where commodity-based transmission tariffs referred to in Article 4(3) are proposed <ul style="list-style-type: none"> the manner in which they are set the share of the allowed or target revenue forecasted to be recovered from such tariffs the indicative commodity-based transmission tariffs | Partially. The consultation is missing the assessment on cross-subsidisation for the CRRRC required by Article 4(3)(b)(iv) |
| 26(1)(c)(ii) 26(1)(c)(ii)(1) 26(1)(c)(ii)(2) 26(1)(c)(ii)(3) 26(1)(c)(ii)(4) | where non-transmission services provided to network users are proposed: <ul style="list-style-type: none"> the non-transmission service tariff methodology therefor the share of the allowed or target revenue forecasted to be recovered from such tariffs the manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3) the indicative non-transmission tariffs for non-transmission services provided to network users | Yes |
| 26(1)(d) | the indicative information set out in Article 30(2); | Yes |
| 26(1)(e) 26(1)(e)(i) 26(1)(e)(ii) 26(1)(e)(iii) 26(1)(e)(iv) | where the fixed payable price approach referred to in Article 24(b) is considered to be offered under a price cap regime for existing capacity: <ul style="list-style-type: none"> the proposed index; the proposed calculation and how the revenue derived from the risk premium is used at which interconnection point(s) and for which tariff period(s) such approach is proposed the process of offering capacity at an interconnection point where both fixed and floating payable price approaches referred to in Article 24 are proposed | Not applicable |

4. Assessment of the proposed reference price methodology

- (24) The following sections presents the proposed RPM, in addition to the adjustment and other calculations affecting reference prices. The main changes compared to the analysis presented by the Agency in its 2019 Report on the Tariff Consultation for Italy⁸ are:
- Change in the entry-exit split from 28/72 to 25/75.
 - Discount proposed to the exit point to Malta (Gela IP)
 - Inclusion of the Sardinian natural gas network in the RPM calculation.
- (25) ARERA no longer proposes the capacity reshuffling mechanism⁹.
- (26) The treatment that regional networks should receive when setting tariffs was one of the main topics of the ACER 2020 NC TAR Implementation Report¹⁰ and remains to be an important topic in the current report. The topic is related to the treatment of the distance cost driver that is an input to the RPM, and specifically to the proposal to include the Sardinian natural gas network in the RPM calculation. This section therefore starts with an analysis of regional networks, highlighting the ACER position on the topic. This section also aims at improving the legal provisions as part of the recent legislative developments under the broader legal review of the Gas and Hydrogen Decarbonisation Package by affecting the way forward on how to treat this matter in the future.

4.1 Regional networks

- (27) Regional networks have been a persistent matter throughout the implementation of the NC TAR. This category of infrastructure has been identified in the networks of Austria, France, Italy and Lithuania, where regional networks have been treated differently. Sometimes the cost of these networks have been allocated together with the rest of transmission networks, sometimes they have been allocated separately. In addition, discussions about regional networks have taken place in other Member States, such as Germany.
- (28) The NC TAR does not provide a clear definition of transmission and distribution but requires, pursuant to Article 3(2) and 4(1), to allocate the costs of the transmission services which are driven by the costs drivers of capacity and distance, using the RPM. Directive 2009/73/EC¹¹ provides two definitions to differentiate between transmission and distribution networks:
- 'Transmission', as defined under Article 2(3) of the Directive 2009/73/EC, *mainly contains high-pressure pipelines, other than an upstream pipeline network and other than the part of high-*

⁸https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/Agency%20report%20-%20analysis%20of%20the%20consultation%20document%20for%20italy.pdf

⁹ See the 2019 ACER report on the Italian Tariff Consultation in addition to footnote 5 of this report.

¹⁰https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/The%20internal%20gas%20market%20in%20Europe_The%20role%20of%20transmission%20tariffs.pdf

¹¹ Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.

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pressure pipelines primarily used in the context of local distribution of natural gas, with a view to its delivery to customers, but not including supply;

- ‘Distribution’, as defined in Article 2(5) of the Directive 2009/73/EC, *means the transport of natural gas through local or regional pipeline networks with a view to its delivery to customers, but not including supply.*

- (29) In the 2020 NC ACER TAR Implementation Report¹², the Agency referred to regional networks as infrastructure dedicated to supplying domestic consumers that cannot be used for transporting gas across IPs¹³. Based on the definition of ‘distribution’ in Article 2(5) of the Directive 2009/73/EC, regional networks should be categorised as distribution networks.
- (30) Given that these regional networks can have different unit costs compared to transmission networks, the allocation of the costs of both types of infrastructure under the same RPM can lead to cross-subsidies between these two groups of assets. In relation to the objectives of the NC TAR, including the costs of regional networks in the RPM can lead to increased IP tariffs that could distort the cross-border trade of gas.
- (31) The NC TAR entered into force once EU TSOs had already been certified, in some cases including regional infrastructure as part of their transmission networks. When providing its position on the allocation of the costs of regional networks, the Agency has aimed at preserving the definitions of ‘transmission’ and ‘distribution’ under Directive 2009/73/EC, as well as the NC TAR principles (referred to in paragraph (28) above), with the reality of some TSOs including regional infrastructure as part of their transmission networks. The Agency has consistently recommended to address the allocation of the costs related to regional networks by taking into account:
- First, in cases where regional networks are in place, these costs can be allocated using the RPM, should the proposed methodology prove capable of allocating the costs related to regional networks only to domestic users.
 - Second, should the allocation of the costs of regional networks to domestic end users not be possible under the proposed RPM, the Agency recommends to change the category of regional networks to distribution, allocating these costs outside the RPM¹⁴.
- (32) The Italian transmission network, as described in the ACER 2019 Report on the Italian Tariff Consultation, includes transmission and regional networks¹⁵. ARERA refers to these networks as

¹² See ACER 2020 report *The Internal Gas Market in Europe: The Role of Transmission Tariffs*. https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/The%20internal%20gas%20market%20in%20Europe_The%20role%20of%20transmission%20tariffs.pdf

¹³ See p. 27 of the ACER 2020 NC TAR Implementation Report.

¹⁴ The Agency pointed out a number of difficulties that NRAs could face when converting regional networks to distribution.

¹⁵ This distinction is based on the Italian legislative framework. The Ministry (Ministero per lo Sviluppo Economico) has to publish and update the lists of national and regional pipelines, following the criteria set out in article 9 of the Legislative Decree 164/00 and its integrations and modifications.

The National Transport Network (Rete Nazionale dei Gasdotti, RNG) is the network composed of: offshore pipelines, import and export pipelines, pipelines connecting two or more administrative regions, pipelines connected to storage facilities; pipelines directly or indirectly functional to the national natural gas system.

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national transmission (National Transport Network) and regional transmission (Regional transport network). Throughout this report, ACER refers to this infrastructure as the transmission network and the regional network, both of which are allocated using the same RPM. ACER follows, in this way, the definitions laid out in Directive 2009/73/EC.

- (33) Over time, ARERA moved from a separate allocation of the costs of regional and transmission networks to a joint allocation using the RPM. This took place as a result of the implementation of the NC TAR in 2019 and is described in a case study in the ACER 2020 NC TAR Implementation Report¹⁶. The effect of this joint allocation on tariffs applicable at interconnection points could be limited as a result of several instruments.
- (34) First, the entry-exit split allowed controlling the costs at either the entries or the exits. By fixing the amount of costs to be recovered from one of the two groups of points, the entry-exit split could avoid increases in IP tariffs at entries or exits. Based on this logic, ARERA previously changed the entry-exit split from 40/60 to 28/72, to avoid that the costs of regional networks are allocated to entry points.
- (35) Second, once the allowed revenue to be allocated at entries is set, two other instruments allow controlling the potential increases in exit tariffs at IPs:
- First, the computation of distance is based on different methodologies for transmission and regional networks¹⁷. This allows to partly control the transfer of costs from the regional network to the transmission network as the former is more densely meshed and the number of pipelines (hence the pipeline distance) for the same destination point can be higher than for the latter. ARERA proposed to use the shortest physical length for transmission pipelines while using the average distance for regional networks.
 - Second, by considering the exit capacity at regional exits into the RPM calculation, the overall capacity forecasted at domestic exits increases (compared to the domestic exit capacity on the transmission network that would have resulted by applying the RPM to the transmission network only). This results from the fact that regional networks are typically booked based on the peak load of end users, while exits at transmission networks generally have a flatter contracted capacity profile. When including this additional capacity as an input to the RPM, the weight of IP exits decreases, resulting in a reduction of tariffs. ARERA communicated to the Agency that the contracted capacity at domestic exits increased by 37% when including regional networks in the RPM back in 2018
- (36) In this context, ARERA is consulting on the proposed RPM for the period 2024-27. The following two aspects are relevant in relation to the topic of regional networks. First, ARERA proposes to continue the approach adopted for the tariffs currently applicable, which was consulted in 2018 and for which the Agency provided an analysis is the ACER 2019 Report on the Italian Tariff

The composition of the Regional Transport Network (Rete Regionale Gasdotti, RRG) is, on the other hand, identified by the criteria set in article 2 of the Ministerial Decree of 29 September 2005.

For additional details see section 4.1.2.1. of the ACER 2019 Report on the Italian Tariff Consultation.

¹⁶ See section 5.5. of the ACER 2020 NC TAR Implementation Report.

¹⁷ See paragraphs 18.3 and 18.4 of the consultation document.

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Consultation¹⁸. This is relevant for the sections assessing the distance cost driver of the proposed RPM. Second, ARERA proposes to include the natural gas network supplying the region of Sardinia as part of the RPM. This infrastructure can potentially be considered as a regional network and its treatment is discussed in Chapter 6.

- (37) Finally, ARERA informed ACER that a number of TSOs with regional networks converted a part of their transmission assets to distribution. There are currently two reclassification processes ongoing, for a portion of network of one TSO, and for the whole network of another TSO.

4.2 Proposed capacity weighted distance methodology

- (38) ARERA proposes a capacity-weighted distance methodology, as described in Article 8 of the TAR NC, with an entry-exit split of 25/75.

4.2.1 Entry-exit split

- (39) The entry-exit split currently in place is set to 28/72 (applicable for the period 2020-23). This split was calculated by aggregating the entry-exit split of both the transmission and regional networks. Each of these two entry-exit splits, for transmission and for regional networks, are aggregated based on the weight that the allowed revenue to be recovered from capacity-based charges for each of these networks has. Currently, transmission networks account for 66% of the total network costs, while regional networks account for 34% (the total transmission revenue to be recovered by capacity-based charges estimated for 2024 is EUR 1.892 billion). The methodology to establish the entry-exit split of the transmission network is based on the capacity utilisation rate, understood as the maximum daily capacity utilised at each entry point of the national gas pipeline network, as recorded during the last three years, and excludes storage sites. For regional networks a 0/100 entry-exit split is applied, setting the entries to 0.
- (40) In recent gas years, the reduced demand for natural gas and the entry into operation of a new entry point (Melendugno) decreased the load factor at entry points. Applying the same approach would result in a share of revenues attributed to transmission entry points ranging between 30-35% in the 2024-27 period. When aggregated with regional networks, the revenue to be allocated to entries results in 20-25%, instead of the current 28%.
- (41) Based on these calculations, and keeping the same methodology, ARERA proposes to set a 25/75 entry-exit split.
- (42) The Agency considers that the application of the entry-exit split is well justified as required by Article 26(1)(a) of the NC TAR.

¹⁸ See section 4.1.2.1. and paragraph 42 of the ACER 2019 Report on the Italian Tariff Consultation.

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4.2.2 Forecasted contracted capacity

- (43) ARERA provides the methodology used to calculate the contracted capacity forecast that is an input to the RPM. This information is particularly relevant as tariffs at individual points depend on the forecasted contracted capacity at those points.
- (44) ARERA proposes to use forecasted contracted capacity for each tariff year. The estimation is provided by the TSOs and is approved by the NRA. The estimate also considers:
- The short-term capacity utilisation, which is converted to an annual capacity product.
 - The interruptible capacity, which is converted to firm capacity taking into account the relevant (probability) discount applied.
- (45) The Agency considers that the information provided on the calculation of the forecasted contracted capacity is compliant with the level of justification required by Article 26(1)(a)(i) of the NC TAR.

4.2.3 Distance cost driver

- (46) ARERA proposes to use the same approach to calculating distance that is currently in place. The approach measures the distance applicable to transmission and regional networks in a different way, to adapt to the different topographical patterns that these networks have.
- For the transmission network, distance is measured as the shortest physical length of the pipelines connecting an entry point and an exit point;
 - For the regional network, distance is measured as the average distance from the transmission network to exit points in an exit area and weighted by the forecasted contracted capacity at these points.
- (47) The Agency concluded, in its 2019 Report on the Italian Tariff Consultation¹⁹, that the the proposed approach to establishing the distance cost driver was compliant with the NC TAR.

4.2.4 Grouping of points

- (48) ARERA proposes to continue the current approach applied to grouping network points. The already applicable approach is based on the grouping of the following points:
- Entry points from production are grouped into 10 entry points from production hubs; for each hub, the distance to the exit points is determined by considering the distance to the most representative production point in terms of input volumes.
 - Domestic exits in the regional network are grouped into 6 withdrawal areas.
- (49) ARERA proposes to modify this scheme. For each of the six clusters defined for exits from regional networks, ARERA proposes two sub-clusters based on whether the regional exit point is within or beyond 15 kilometres of the transmission network. As a result, exit points are grouped into twelve exit clusters, instead of six.

¹⁹ See paragraph 42:

https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/Agency%20report%20-%20analysis%20of%20the%20consultation%20document%20for%20Italy.pdf

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- (50) In the 2019 tariff consultation, ARERA proposed a discount to exit points that were within 15 kilometres of the transmission network and justified this proposal on the basis of cost-reflectivity. ARERA argued that this discount would give an incentive for users to exit the network at a closer distance from the transmission network, therefore requiring less regional network infrastructure to be supplied. This discount is however not part of the closed list of adjustments referred under Article 6(4) and 9 of the NC TAR. As a result, ARERA did not include the proposed 15% discount as part of its motivated decision. Instead, it opted for grouping points according to a proximity criterion. This feature is applied for the calculation of the currently applicable tariffs. The 2022 consultation proposes to continue this specific feature of the RPM.
- (51) The results of the proposed grouping are similar to the previously discussed 15% discount, albeit the value of the resulting discount decreases under the revised clustering approach to 8%.
- (52) ARERA's proposal is based on the NC TAR definition of 'homogeneous group of points' under Article 3(10) of the NC TAR. An 'homogeneous group of points' is a group of points from a list which includes domestic exit points²⁰. The established groups are intended to avoid aggregating different types of point together (e.g. domestic points with IPs). ACER notes that ARERA respects this criteria. At the same time, it creates two subgroups within the category of domestic exit points.
- (53) The Agency remarks that this use of subgroups is not explicitly foreseen in the NC TAR. At the same time, the Agency remarks that the proposed clustering criteria potentially increases the cost reflectivity of tariffs and is therefore in line with the principles laid out under Article 7 of the NC TAR. Such calculation can reduce the network costs triggered by network users when locating their connections to the network. The measure promotes the allocation of capacity closest to transmission networks contributing to the optimal development of the network. The approach adopted by ARERA does not have a negative impact on cross-border points.

4.3 Adjustments and discounts to the RPM

- (54) ARERA proposes to continue the discounts currently applicable, namely of 50% for points to and from storage²¹, and of zero for entry points from LNG terminals.
- (55) In addition, ARERA proposes to equalise entry points from storage facilities and exit points to storage facilities. These two categories of points (entry and exit) are equalised separately. Entry and exits points are equalised as a result of the grouping of points already discussed in the previous section.

²⁰ Article 3(10) of the NC TAR: '*homogeneous group of points*' means a group of one of the following types of points: entry interconnection points, exit interconnection points, domestic entry points, domestic exit points, entry points from storage facilities, exit points to storage facilities, entry points from liquefied natural gas facilities, exit points to LNG facilities and entry points from production facilities.

²¹ ARERA discussed with stakeholders the possibility of applying a discount to transmission tariffs to and from storage equal to 100%. This approach is linked to the European Commission's recommendation of 23 March 2022, revising Regulation (EU) 2017/1938

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- (56) As a result of the discounts proposed to points to and from storage, tariffs need to be rescaled. The rescaling recovers the missing revenue from discounts and serves to preserve the entry-exit split of 25/75.
- (57) The Agency considers the application of these adjustments compliant with the NC TAR.

4.3.1 Discounts to the exit point to Malta

- (58) The consultation document refers to the plans to connect the Italian network to Malta via an offshore pipeline. ARERA explained to the Agency²² that this connection could be completed towards the end of the period for which tariffs are being proposed (2024-27). The proposed tariffs are calculated without applying the proposed discount to this exit point. As communicated to the Agency, ARERA has consulted on this discount already in this consultation to give certainty to investors in relation to the economic fundamentals of the project.
- (59) ARERA proposes to apply an additional discount of 50% to the future exit point at Gela connecting Italy and Malta. Article 9(2) of the NC TAR states that: *“At entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems, a discount may be applied to the respective capacity-based transmission tariffs for the purposes of increasing security of supply”*.
- (60) ARERA provides an analysis of the impact of the proposed discount in the Appendix to the consultation document²³. The investment costs approximate EUR 8 million and result in a tariff charge of approximately EUR 0.8 million per year (equal to 0.04% of revenues to be recovered through capacity-based charges estimated for 2024). The forecasted contracted capacity at the exit point to Malta equals to 2.74 MSm³/d²⁴ (approximately 0.44% of the forecasted contracted capacity at all exit points in 2024). On the basis of the same parameters used to estimate the tariffs for the year 2024, the entry into operation of the exit point to Malta is estimated to increase entry tariffs in the Italian network by 0.04% and to decrease exit tariffs by -0.4%. In the case of applying a 50% discount to the future exit point at Gela, the effect on exit tariffs for the Italian network would be approximately -0.2%, entry tariff would not be affected and the specific commodity exit charge would be approximately EUR 2.1/year/Sm³/d.
- (61) The discount meets the criteria laid out in Article 9(2) of the NC TAR. Based on the conditions set in the NC TAR, the Agency considers that the proposed discount is compliant.

4.4 Cost allocation assessment

- (62) ARERA provides the results of the cost allocation assessment, both for the proposed RPM and for the proposed commodity-based tariffs, in addition to its components. The result for the RPM is 3% and for the flow-based tariffs 0%.

²² See footnote 4.

²³ See page 14 of the annex to the consultation document.

²⁴ Million standard cubic meters per day (MSm³/d).

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- (63) The Agency remarks that the results are within the threshold set in Article 5(6) of the NC TAR and do not require further justification.

4.5 Comparison with the capacity weighted distance methodology

- (64) ARERA provides a comparison between the proposed CWD methodology and the standard CWD methodology as laid out in Article 8 of the NC TAR. The only difference between the two calculations results from the different entry-exit splits used (25/75 for the proposed RPM and 50/50 for standard CWD methodology as laid out in Article 8 of the NC TAR). The differences in the resulting tariffs do not question the choice of RPM as proposed by ARERA.

5. Compliance

5.1 Does the RPM comply with the requirements set out in Article 7?

- (65) Article 27(2)(b)(1) of the NC TAR requires the Agency to analyse whether the proposed reference price methodology complies with the requirements set out in Article 7 of the NC TAR. This article refers to Article 13 of Regulation (EC) 715/2009 and lists a number of requirements to take into account when setting the RPM. As these overlap, in the remainder of this chapter, the Agency will take a closer look at the five elements listed in Article 7 of the NC TAR.

5.1.1 Transparency

- (66) **Article 7(a)** of the NC TAR requires that the RPM aims at ensuring that network users can reproduce the calculation of reference prices and their accurate forecast. The Agency finds the simplified tariff model, as required by Article 30(2)(b) of the NC TAR, is useful as it allows reproducing the calculation of reference prices.
- (67) Article 30(2) of the NC TAR requires that the simplified model enables “*network users to calculate the transmission tariffs applicable for the prevailing tariff period and to estimate their possible evolution beyond such tariff period*”. The Agency considers that, for this purpose, ARERA should facilitate the estimated allowed revenue input expected to be allocated through network tariffs. Users can further establish the capacity forecast to estimate tariffs, which can be volatile in the coming times, and for which, ARERA does not necessarily have an accurate forecast.
- (68) The Agency considers that the consultation document is compliant with the requirement on transparency subject to the provision of the estimated allowed revenue trajectory for the years for which the RPM is proposed.

5.1.2 Cost-reflectivity

- (69) **Article 7(b)** of the NC TAR requires the RPM to take into account the actual costs incurred for the provision of transmission services, considering the level of complexity of the transmission network.
- (70) The Agency concludes that the compliance with the requirement on cost-reflectivity is subject to ARERA following the recommendations made in section 6.1.3, on the gas network for the Sardinian

region, and in section 5.2.2 on the complementary revenue recovery charge. Regarding the latter, the Agency notes that the application of the complementary revenue recovery charge is subject to an assessment on cross-subsidisation, pursuant to Article 4(3)(b)(iv), as the revenue reconciliation for all points of the network is carried out netting all under- and over- recoveries to domestic exit points (excluding IPs). This is particularly relevant for the proposed flow-based charge, which is subject to significant fluctuations over time as a result of the changing market conditions. The current flow-based charge is used to allocate forecasted fuel costs²⁵ amounting to EUR 800 million forecasted for 2024 compared to the approximately EUR 70 million in 2020 (the total costs allocated with the flow based charge amount to EUR 1.1 billion). ARERA does not provide the required analysis on cross-subsidisation for the complementary revenue recovery charge, as discussed in section 5.2.2.

5.1.3 Cross-subsidisation and non-discrimination

- (71) **Article 7(c)** of the NC TAR requires the RPM to ensure non-discrimination and prevent undue cross-subsidisation. One instrument to evaluate this is the cost allocation assessment (CAA, Article 5 of the NC TAR). The result for the capacity cost allocation comparison index is 3%. The outcome of the commodity cost allocation comparison index is 0%.
- (72) Based on the conclusion on cost-reflectivity, the Agency concludes that the proposed RPM is compliant with the requirement on preventing undue cross-subsidisation. At the same time, this conclusion is subject to ARERA following the recommendations made in section 6.1.3, on the gas network for the Sardinian network, and in section 5.2.2 on the complementary revenue recovery charge.
- (73) The Agency concludes that the proposed RPM is compliant with the requirement on non-discrimination.

5.1.4 Volume risk

- (74) **Article 7(d)** of the NC TAR requires that the RPM ensures that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system. In Italy, it is not the case that significantly more gas is transported than used for consumption.
- (75) The Agency concludes that the proposed RPM is compliant with the requirement on volume risk.

5.1.5 Cross-border trade

- (76) **Article 7(e)** of the NC TAR requires that the RPM ensures that the resulting reference prices do not distort cross-border trade.
- (77) Based on the conclusion on cost-reflectivity, the Agency concludes that the proposed RPM is compliant with the requirement of non-distorting cross-border trade. At the same time, this

²⁵ Compressor fuel costs include the costs of gas in addition to network losses and UFG.

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conclusion is subject to ARERA following the recommendations made in section 6.1.3, on the gas network for the Sardinian network, and in section 5.2.2 on the complementary revenue recovery charge.

5.2 Are the criteria for setting commodity-based transmission tariffs as set out in Article 4(3) met?

- (78) Article 27(2)(b)(2) of the NC TAR requires the Agency to analyse whether the criteria for setting commodity-based transmission tariffs as set out in Article 4(3) are met.
- (79) ARERA proposes to apply two commodity-based charges, a flow-based charge and a complementary revenue recovery charge (CRRC).

5.2.1 Flow based charge

- (80) ARERA proposes to set a flow-based charge at exit points (i.e. domestic exit points, exit points to storage and exit IPs). While the flow-based charge is intended to recover “*the costs mainly driven by the quantity of the gas flow*” according to Article 4(3)(a) of the NC TAR, ARERA proposes to allocate all network OPEX using this charge. The consultation document states that the charge is expected to recover “*recognised operating costs, the Emission Trading System costs and costs for the supply of quantities of gas to cover fuel gas, losses and UFG*”²⁶.
- (81) The proposed flow-based charge is intended to recover an unusually high share of the allowed revenue as a result of the high energy prices since 2021. The amount to be recovered from commodity charges is EUR 1.1 billion, which is approximately 36% of the total allowed revenue (EUR 3 billion). ARERA provided bilaterally to the Agency the components of these costs, which are not yet public:
- EUR 210 million accounting for OPEX
 - EUR 30 million accounting for ETS costs
 - EUR 800 million accounting for compression costs and network losses.
- (82) For comparison purposes, this same scheme was in place in 2020 and resulted in approximately EUR 100 million accounting for compression costs and unaccounted-for gas (‘UFG’), compared to the expected EUR 800 million in 2024. The commodity charge in 2020, including OPEX, amounted to 15%.

Table 2 Criteria Article 4(3)(a) of the NC TAR

| Criteria | Y/N? |
|--|--|
| levied for the purpose of covering the costs mainly driven by the quantity of the gas flow | Partially, the flow based charge allocates all OPEX costs. |
| calculated on the basis of forecasted or historical flows, or both | Yes |
| set in such a way that it is the same at all entry points and the same at all exit points | Yes |
| expressed in monetary terms or in kind | Yes |

²⁶ See page 35 of the consultation document.

- (83) The Agency concludes that the proposed flow-based charge does not follow the rule in Article 4(3)(a) of the NC TAR of recovering the costs “*mainly driven by the quantity of the gas flow*”. Energy, and not all OPEX, is the main cost component resulting from the quantity of the gas flow. At the same time, the Agency remarks that the share of transmission revenue allocated using this charge (including OPEX) remains rather low, as required by Article 4(3) of the NC TAR that establishes that commodity charges should only be used as an exception. As explained in paragraphs (81) and (82) above, this share stood at normal levels of 15% in 2020, although it is forecasted to increase up to 36% in 2024 as a result of the high energy prices. The increase in the share of costs allocated using the flow-based charge results from the increase in fuel costs and not from OPEX.

5.2.2 Complementary revenue recovery charge

- (84) ARERA proposes to set a complementary revenue recovery charge (CRRC) to allocate the under- and over- recoveries resulting from the following charges:
- Capacity transmission tariffs as calculated based on the proposed RPM.
 - Flow-based charge.
- (85) The CRRC is applied to domestic exits points, exits to storage facilities as an increase (if positive) or decrease (if negative) of the flow-based charge.
- (86) While most network methodologies reconcile capacity tariffs using the regulatory account and netting the under- or over- recoveries with the allowed revenue of future tariff years, the NC TAR foresees the possibility of carrying out this reconciliation using a CRRC. Article 20(1) of the NC TAR states that “*the full or partial reconciliation of the regulatory account shall be carried out in accordance with the applied reference price methodology and, in addition, by using the [complementary revenue recovery charge], if applied*”.
- (87) As a result of the proposed CRRC, the potential over- and under- recoveries related to IPs (both in relation to capacity tariffs and the flow-based charge) are reconciled only to end users of the Italian network. This can lead to a cross-subsidisation effect. This assessment is not included in the consultation and is a requirement of the NC TAR pursuant to Article 4(3)(b)(iv).
- (88) The Agency concludes that the proposed CRRC is compliant with the criteria set in Article 4(3)(i-iii) of the NC TAR. At the same time, ARERA does not provide an assessment on cross-subsidisation as required by Article 4(3)(b)(iv) of the NC TAR. Table 3 below summarises this. The Agency recommends that ARERA include this assessment as part of the motivated decision. The Agency additionally recommends that ARERA consider for this assessment potential scenarios where exports to neighbouring networks would increase. Should the cross-subsidisation between points resulting from the over- or under- recovery of the proposed tariffs be significant, the Agency recommends that ARERA reduce these differences by adapting the revenue reconciliation scheme, for example, by reconciling the regulatory account using transmission tariffs (instead of the flow-based charge only applied to end-users of the Italian network).

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Table 3 Criteria Article 4(3)(b) of the NC TAR

| Criteria | Y/N? |
|---|------|
| levied for the purpose of managing revenue under- and over-recovery | Yes |
| calculated on the basis of forecasted or historical capacity allocations and flows, or both | Yes |
| applied at points other than interconnection points | Yes |
| applied after the national regulatory authority has made an assessment of its cost-reflectivity and its impact on cross-subsidisation between interconnection points and points other than interconnection points | No |

5.3 Are the criteria for setting non-transmission tariffs as set out in Article 4(4) met?

- (89) Article 27(2)(b)(3) of the NC TAR requires the Agency to analyse whether the criteria for setting non-transmission tariffs as set out in Article 4(4) of the NC TAR are met. Non-transmission tariffs shall be cost-reflective, non-discriminatory, objective and transparent and shall be charged to the beneficiaries of the non-transmission service.
- (90) In the consultation document it is proposed to make use of non-transmission tariffs for the metering service. The non-transmission services revenue forecasted for 2024 equals EUR 42 million.

5.3.1 Tariff structure of the metering service

- (91) ARERA proposes two charges allocate the costs of the metering, CM^T and CM^{CF} . The charge CM^T covers the general metering services of the network and is applied to all network users. The charge CM^{CF} is applied only to delivery points where metering facilities are owned by the TSO
- (92) For the CM^{CF} , ARERA proposes two instruments to differentiate the charge and to stabilise its levels over time.
- (93) Regarding the differentiation, ARERA proposes to set various charging steps to take into account the costs associated with the different meter types. ARERA proposes to assess the different costs types after the conclusion of this tariff consultation.
- (94) Regarding the stability of the tariffs, ARERA refers to a risk of a high volatility in the valuation of the charge, due to the transition underway from a system where most of the metering infrastructure is owned by the final customers, to a system where a significant part of these metering stations could be sold to TSOs for the purposes of an optimised management of the network. The value of the forecasted contracted capacity and the costs associated with these plants can therefore also vary significantly from year to year. In order to ensure greater stability, certainty and predictability in the development of the differentiated CM^{CF} charge, ARERA proposes to set these tariffs for the first year of the regulatory period, and to update them annually.
- (95) The Agency considers that the proposed non-transmission charges for the first year are compliant with the requirements of cost-reflectivity, non-discrimination and transparency, in addition to being objective and to being charged to the beneficiaries of the non-transmission service.

6. Other comments

6.1 Extension of the natural gas network to the region of Sardinia

- (96) In the consultation document, ARERA refers to the possibility of connecting the Italian transmission network to the region of Sardinia via LNG. ARERA clarified to the Agency that these plans are not firm and they are subject to changes²⁷. It is, therefore, unclear when the connection will be in place. ARERA proposes a methodology to set tariffs for the region of Sardinia in case the connection is there by the end of the 2024-27 period. Up to the point when Sardinia is connected, tariffs for the Italian network do not include the network costs from the region of Sardinia.
- (97) According to the Article 60.6 of the Italian Decree 76/20, the energy supply to Sardinia should be granted at prices aligned with the mainland, and for that purpose it should be considered “*part of the national transmission network, also for tariff purposes, [and should include] the ensemble of the transmission and regasification infrastructures of liquefied natural gas necessary to ensure the supply of natural gas through vessels from regulated Italian regasification terminals and their possible expansion to regasification terminals to be built in the region*”²⁸.
- (98) The initial plans to supply the region of Sardinia included an offshore connection pipeline to connect Sardinia with the mainland, however the latest plans are based on the supply of natural gas via the LNG of Panigaglia and OLT Livorno on the mainland, which can supply the LNG terminals to be built in Sardinia.
- (99) ARERA proposes to apply the same tariff structure applied in mainland Italy, namely:
- A capacity charge based on the RPM calculation;
 - A flow based charge;
 - A complementary revenue recovery charge that is netted with the flow based charge for the purpose of the reconciliation.
- (100) The approach to setting tariffs for the region of Sardinia is based on two elements. First a ‘virtual pipeline’ that allows including the Sardinian network as part of the proposed RPM applicable to the Italian network. This approach aims at establishing a distance value to the exit points in the Sardinian network that can be integrated in the CWD calculation for the Italian transmission network. For this purpose, ARERA does not consider the maritime distance but only the pipeline distance in the Italian mainland and within the region of Sardinia. Second, the infrastructure that allows transporting gas to the Sardinian network via LNG and that allows distributing it within the region down to the domestic exit points. As outlined in footnote 4, the information on the entry into operation of these projects and the associated costs is not clear yet.

²⁷ See footnote 4.

²⁸ The original text states that the network for the region of Sardinia should be considered “ (...) *parte della rete nazionale di trasporto, anche ai fini tariffari, l’insieme delle infrastrutture di trasporto e rigassificazione di gas naturale liquefatto necessarie al fine di garantire la fornitura di gas naturale mediante navi spola a partire da terminali di rigassificazione italiani regolati e loro eventuali potenziamenti fino ai terminali di rigassificazione da realizzare nella regione stessa [Sardinia]*”.

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6.1.1 Proposed reference price methodology

- (101) ARERA proposes to calculate the tariffs applicable in the Sardinian region as part of the proposed CWD methodology. The key parameters to consider in this calculation are the distance cost driver and the costs associated with the Sardinian network.
- (102) The distance cost driver is calculated without considering the maritime distance separating mainland Italy from the region of Sardinia. ARERA proposes to take into account only the pipeline distances laid across the Italian mainland and the Sardinian region.
- On the Italian mainland, ARERA establishes the distance using the LNG terminals of Panigaglia and OLT Livorno, which would be designated to supply the region of Sardinia. The distance for this segment is calculated as an average of the distances associated to the two LNG entry points as part of the RPM calculation.
 - On the Sardinian network, ARERA proposes to establish two domestic exit cluster points based on the proximity criteria discussed for the grouping of the points under Section 4.2.4, set to 15 kilometres.
- (103) The Agency notes that the description to establish the distance cost driver is not sufficiently detailed to assess its compliance with the cost reflectivity principle. The information provided in the consultation document does not offer sufficient insights into how the proposed distance cost driver for the Italian mainland network and for the Sardinian network reflect the underlying costs of the infrastructure. The consultation document does not assess the consistency of these two approaches. This is particularly relevant as the costs of transporting gas to the region of Sardinia involve costs related to LNG infrastructure that are not reflected in the measured pipeline distance, which is assigned to the exit points in Sardinia and excludes the 'maritime distance' from these points. In addition, the Agency notes that the consultation document does not provide information on the costs associated with the LNG supply to the region of Sardinia and their allocation.

6.1.2 Resulting tariffs

- (104) ARERA assesses the impact of including the region of Sardinia in the same RPM as the Italian transmission network.
- (105) The results are subject to various assumptions on the amount and the profile used to forecast capacity and on the costs of the Sardinian network. In general, they show an increase in transmission tariffs for the Italian network. Capacity tariffs increase at entries to the Italian network by 4.5%, at exits by 4.2% and 2% for the commodity-based tariffs.
- (106) ARERA clarified to the Agency that the inclusion of the Sardinian network in the proposed RPM does not distort the relative weight that network points have in the methodology. This is because the placement of the point in the network, which is based on a virtual position (established as the average distances between the LNG terminals of Panigaglia and OLT Livorno), is close to the centre of the Italian network. The result is similar to locating a large exit point in the centre of Italy.
- (107) At the same time, the inclusion of the Sardinian network in the RPM presumably leads to increases in tariffs at all points of the Italian network. It is unclear from the calculations provided, and as understood from ARERA, whether such increases result from the inclusion of regional networks in

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the calculation or from other factors. For example, increases could simply be the result of including networks which unit costs are significantly above the costs of the rest of the network (e.g. due being less depreciated than the rest of the network infrastructure), or the result of demand per unit of infrastructure in the region of Sardinia being below the average levels in the rest of the Italian network.

6.1.3 ACER view on the inclusion of Sardinia as part of the transmission network

- (108) The Agency remarks that the scope of the NC TAR is to ensure cost-reflectivity and to prevent cross-subsidisation. This objective relies on the assumption that all TSOs' assets are transmission assets. The Agency has extensively discussed that the application of the NC TAR to assets other than transmission assets can potentially contravene these objectives and distort cross-border trade²⁹.
- (109) Based on the definitions of transmission and distribution provided in paragraph (28) above, the Agency considers that the network infrastructure in the region of Sardinia falls under the definition of distribution network, as *the transport of natural gas through local or regional pipeline networks with a view to its delivery to customers, but not including supply*³⁰. While the network will indeed be connected to LNG entry points, it does not allow to physically transport gas to other IPs of the transmission network.
- (110) The Agency has previously provided recommendations on regional networks, as discussed in Section 4.1, which are here extended to the Sardinian network. The Agency points out that the costs of the Sardinian network can be allocated together with the costs of the rest of the Italian network, as proposed by ARERA. This is consistent with Article 3(2) of the NC TAR, which requires that the transmission revenue of the TSO(s) be allocated using the RPM, and with Article 6(3) of the NC TAR, which requires that the same RPM is applied to all points of the network. However, in order to adopt this approach, ARERA should prove that the proposed methodology is capable of allocating the costs related to regional networks mainly to domestic exit points of the Italian network. ARERA should provide quantitative evidence of this approach not resulting in additional costs at IPs of the Italian networks. ARERA should distinguish these effects at least from the two other effects referred to under paragraph (107), namely, the differences in infrastructure depreciation times, and the differences in demand levels.
- (111) The purpose of this analysis is to prove that a joint allocation of the Sardinian network, together with the Italian mainland network, does not lead to cross-subsidisation. If this aspect cannot be established firmly and justified through a separate consultation, these assets should be categorised as distribution and the connection of this infrastructure and its costs should be allocated outside the proposed RPM.

²⁹ See Chapter 5 of the ACER 2020 NC TAR Implementation Report: https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/The%20internal%20gas%20market%20in%20Europe_The%20role%20of%20transmission%20tariffs.pdf

³⁰ Article 2(5) of the Directive 2009/73/EC

6.2 Charges for costs unrelated to transmission activities

- (112) The Agency notes that ARERA includes in Part IV of the consultation document a number of charges applied to the transmission network that are not set based on the NC TAR. The Agency assessed in the ACER 2020 NC TAR Implementation Report³¹ the charges related to LNG and storage facilities.
- (113) In this 2020 Report, ACER pointed at three general risks that such charges could potentially lead to. These include cross-subsidisation between gas consumers, the over-dimensioning of infrastructure and the distortion of competition.
- (114) With a view to preventing these potential negative externalities, the Agency recommends that ARERA provide additional transparency on these charges. For this purpose, the Agency invites ARERA to extend the requirements applicable to non-transmission charges, under Article 4(4) of the NC TAR, and to apply the guidelines provided in the chapter 6 of the ACER 2020 NC TAR Implementation Report, to the charges set to the transmission network which are not calculated based on the NC TAR. According to Article 4(4) of the NC TAR, non-transmission tariffs shall be cost-reflective, non-discriminatory, objective and transparent and shall be charged to the beneficiaries of the non-transmission service.

³¹https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/The%20internal%20gas%20market%20in%20Europe_The%20role%20of%20transmission%20tariffs.pdf

Annex 1: Legal framework

(115) Article 27 of the NC TAR reads:

1. *Upon launching the final consultation pursuant to Article 26 prior to the decision referred to in Article 27(4), the national regulatory authority or the transmission system operator(s), as decided by the national regulatory authority, shall forward the consultation documents to the Agency.*

2. *The Agency shall analyse the following aspects of the consultation document:*

(a) whether all the information referred to in Article 26(1) has been published;

(b) whether the elements consulted on in accordance with Article 26 comply with the following requirements:

(1) whether the proposed reference price methodology complies with the requirements set out in Article 7;

(2) whether the criteria for setting commodity-based transmission tariffs as set out in Article 4(3) are met;

(3) whether the criteria for setting non-transmission tariffs as set out in Article 4(4) are met.

3. *Within two months following the end of the consultation referred to in paragraph 1, the Agency shall publish and send to the national regulatory authority or transmission system operator, depending on which entity published the consultation document, and the Commission the conclusion of its analysis in accordance with paragraph 2 in English.*

The Agency shall preserve the confidentiality of any commercially sensitive information.

4. *Within five months following the end of the final consultation, the national regulatory authority, acting in accordance with Article 41(6)(a) of Directive 2009/73/EC, shall take and publish a motivated decision on all items set out in Article 26(1). Upon publication, the national regulatory authority shall send to the Agency and the Commission its decision.*

5. *The procedure consisting of the final consultation on the reference price methodology in accordance with Article 26, the decision by the national regulatory authority in accordance with paragraph 4, the calculation of tariffs on the basis of this decision, and the publication of the tariffs in accordance with Chapter VIII may be initiated as from the entry into force of this Regulation and shall be concluded no later than 31 May 2019. The requirements set out in Chapters II, III and IV shall be taken into account in this procedure. The tariffs applicable for the prevailing tariff period at 31 May 2019 will be applicable until the end thereof. This procedure shall be repeated at least every five years starting from 31 May 2019.*

(116) Article 26(1) of the NC TAR reads:

1. *One or more consultations shall be carried out by the national regulatory authority or the transmission system operator(s), as decided by the national regulatory authority. To the extent possible and in order to render more effective the consultation process, the consultation document should be published in the English language. The final consultation prior to the decision referred to in Article 27(4) shall comply with the requirements set out in this Article and Article 27, and shall include the following information:*

(a) the description of the proposed reference price methodology as well as the following items:

(i) the indicative information set out in Article 30(1)(a), including:

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- (1) *the justification of the parameters used that are related to the technical characteristics of the system;*
 - (2) *the corresponding information on the respective values of such parameters and the assumptions applied.*
- (ii) *the value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9;*
- (iii) *the indicative reference prices subject to consultation;*
- (iv) *the results, the components and the details of these components for the cost allocation assessments set out in Article 5;*
- (v) *the assessment of the proposed reference price methodology in accordance with Article 7;*
- (vi) *where the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8, its comparison against the latter accompanied by the information set out in point (iii);*
- (b) *the indicative information set out in Article 30(1)(b)(i), (iv), (v);*
- (c) *the following information on transmission and non-transmission tariffs:*
 - (i) *where commodity-based transmission tariffs referred to in Article 4(3) are proposed:*
 - (1) *the manner in which they are set;*
 - (2) *the share of the allowed or target revenue forecasted to be recovered from such tariffs;*
 - (3) *the indicative commodity-based transmission tariffs;*
 - (ii) *where non-transmission services provided to network users are proposed:*
 - (1) *the non-transmission service tariff methodology therefor;*
 - (2) *the share of the allowed or target revenue forecasted to be recovered from such tariffs;*
 - (3) *the manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3);*
 - (4) *the indicative non-transmission tariffs for non-transmission services provided to network users;*
- (d) *the indicative information set out in Article 30(2);*
- (e) *where the fixed payable price approach referred to in Article 24(b) is considered to be offered under a price cap regime for existing capacity:*
 - (i) *the proposed index;*
 - (ii) *the proposed calculation and how the revenue derived from the risk premium is used;*
 - (iii) *at which interconnection point(s) and for which tariff period(s) such approach is proposed;*
 - (iv) *the process of offering capacity at an interconnection point where both fixed and floating payable price approaches referred to in Article 24 are proposed.*

(117) Article 7 of the NC TAR reads:

The reference price methodology shall comply with Article 13 of Regulation (EC) No 715/2009 and with the following requirements. It shall aim at:

- a) *enabling network users to reproduce the calculation of reference prices and their accurate forecast;*
- (b) *taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network;*
- (c) *ensuring non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5;*

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(d) ensuring that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system;

(e) ensuring that the resulting reference prices do not distort cross-border trade.

(118) Article 13 of Regulation (EC) No 715/2009 reads:

1. Tariffs, or the methodologies used to calculate them, applied by the transmission system operators and approved by the regulatory authorities pursuant to Article 41(6) of Directive 2009/73/EC, as well as tariffs published pursuant to Article 32(1) of that Directive, shall be transparent, take into account the need for system integrity and its improvement and reflect the actual costs incurred, insofar as such costs correspond to those of an efficient and structurally comparable network operator and are transparent, whilst including an appropriate return on investments, and, where appropriate, taking account of the benchmarking of tariffs by the regulatory authorities. Tariffs, or the methodologies used to calculate them, shall be applied in a nondiscriminatory manner.

Member States may decide that tariffs may also be determined through market-based arrangements, such as auctions, provided that such arrangements and the revenues arising therefrom are approved by the regulatory authority.

Tariffs, or the methodologies used to calculate them, shall facilitate efficient gas trade and competition, while at the same time avoiding cross-subsidies between network users and providing incentives for investment and maintaining or creating interoperability for transmission networks.

Tariffs for network users shall be non-discriminatory and set separately for every entry point into or exit point out of the transmission system. Cost-allocation mechanisms and rate setting methodology regarding entry points and exit points shall be approved by the national regulatory authorities. By 3 September 2011, the Member States shall ensure that, after a transitional period, network charges shall not be calculated on the basis of contract paths.

2. Tariffs for network access shall neither restrict market liquidity nor distort trade across borders of different transmission systems. Where differences in tariff structures or balancing mechanisms would hamper trade across transmission systems, and notwithstanding Article 41(6) of Directive 2009/73/EC, transmission system operators shall, in close cooperation with the relevant national authorities, actively pursue convergence of tariff structures and charging principles, including in relation to balancing.

(119) Article 4(3) of the NC TAR reads:

3. The transmission services revenue shall be recovered by capacity-based transmission tariffs. As an exception, subject to the approval of the national regulatory authority, a part of the transmission services revenue may be recovered only by the following commodity-based transmission tariffs which are set separately from each other:

(a) a flow-based charge, which shall comply with all of the following criteria:

- (i) levied for the purpose of covering the costs mainly driven by the quantity of the gas flow;*
- (ii) calculated on the basis of forecasted or historical flows, or both, and set in such a way that it is the same at all entry points and the same at all exit points;*
- (iii) expressed in monetary terms or in kind.*

(b) a complementary revenue recovery charge, which shall comply with all of the following criteria:

- (i) levied for the purpose of managing revenue under- and over-recovery;*
- (ii) calculated on the basis of forecasted or historical capacity allocations and flows, or both;*

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(iii) applied at points other than interconnection points;

(iv) applied after the national regulatory authority has made an assessment of its cost-reflectivity and its impact on cross-subsidisation between interconnection points and points other than interconnection points.

(120) Article 4(4) of the NC TAR reads:

4. The non-transmission services revenue shall be recovered by non-transmission tariffs applicable for a given nontransmission service. Such tariffs shall be as follows:

(a) cost-reflective, non-discriminatory, objective and transparent;

(b) charged to the beneficiaries of a given non-transmission service with the aim of minimising cross-subsidisation between network users within or outside a Member State, or both.

Where according to the national regulatory authority a given non-transmission service benefits all network users, the costs for such service shall be recovered from all network users.

Annex 2: List of abbreviations

| Acronym | Definition |
|---------------|---|
| ACER | Agency for the Cooperation of Energy Regulators |
| ENTSOG | European Network of Transmission System Operators for Gas |
| NRA | National Regulatory Authority |
| TSO | Transmission System Operator |
| EC | European Commission |
| EU | European Union |
| MS | Member State |
| NC TAR | Network code on harmonised transmission tariff structures for gas |
| IP | Interconnection Point |
| VIP | Virtual Interconnection Point |
| RPM | Reference Price Methodology |
| CWD | Capacity Weighted Distance |
| CAA | Cost Allocation Assessment |
| RAB | Regulated Asset Base |
| OPEX | Operational Expenditures |
| CAPEX | Capital Expenditures |