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)

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

14 February 2019
1. ACER conclusions

(1) The Italian National Regulatory Authority (‘NRA’), Autorità di regolazione per energia reti e ambiente (‘ARERA’), proposes a capacity weighted distance (‘CWD’) methodology. ARERA proposes to apply a 50% discount at entry points from, and exit points to, storages, 15% commodity charges, and two non-transmission charges for metering. The Agency for the Cooperation of Energy Regulators (‘the Agency’) notes that ARERA conducts the consultation in the national language and provided a full English version of the relevant documents one month later.

(2) The Agency, after having completed the analysis of the consultation documents pursuant to Article 27(2) of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a Network Code on Harmonised Transmission Tariff Structures for Gas (‘NC TAR’), concludes that:

- The choice of the CWD methodology as the proposed Reference Price Methodology (‘RPM’) complies with the principle of cost-reflectivity, as it takes forecasted capacity and distance into account, which are the relevant cost drivers in the Italian transmission network.
- The consultation document contains most of the required information, with the exception of the elements indicated in Table 1.
- The consultation offers limited transparency on the proposed CWD methodology, as it does not provide:
  - Sufficient analytical and regulatory clarity on how the capacity reshuffling mechanism\(^1\) interacts with the RPM, specifically in setting the reference prices, applying rescaling, and managing the created over- and under-recovery.
  - Sufficient analytical clarity on how the “distance” driver that enters into the CWD methodology is calculated (adding up regional and national distances obtained in different ways).
- As a result of the lack of transparency, the Agency believes that network users are not able to reproduce the calculation of the tariffs: therefore the proposed RPM is not compliant with the NC TAR in this respect.
- The simplified tariff model is not compliant with the NC TAR because it does not cover commodity charges and does not allow users to estimate the evolution of tariffs beyond the prevailing tariff period.
- The results of the cost-allocation assessment (‘CAA’) calculations are lower than 10%, therefore they do not require any further justification.
- On the other hand, the proposed methodology creates cross-subsidies among intra-system users due to:
  - An additional, post-equalisation, distance-based discount to domestic exits located within 15 kilometres from the national transmission network. The Agency considers this discount and the resulting cross-subsidisation not compliant with the NC TAR.

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\(^{1}\) The capacity reshuffling mechanism is described in Section 4, footnote 7.
The rescaling applied to compensate for the missing revenues in 2020, caused by the application of capacity reshuffling, according to which capacity paid in the past will be used, without additional payments, in 2020.

- The Agency understands from bilateral contacts with ARERA that the past over-recovery generated by the reshuffling will be neutralised in 2020: this is achieved by lowering the revenue to be collected through the same set of entry points to which the rescaling is applied, thus in theory affecting the same group of network users. Therefore, most of the cross-subsidy should disappear over time.

- The Agency considers that ARERA’s choice of rescaling to compensate for the missing revenue due to the application of the reshuffling mechanism is not fully transparent. The Agency cannot assess whether ARERA could have proposed a better solution to solve the over- and under-recovery effects of the reshuffling mechanism.

- There is negligible volume risk, since transit flows are less than 1% of total system volumes.

The tariffs proposed in the consultation comply with the principle of non-discrimination.

The Agency finds that one of the two proposed non-transmission services satisfies the criteria of Article 4(4) of the NC TAR, but could not assess the other one, since ARERA will set it in the future.

The Agency recommends that ARERA, in its final decision:

- Provide greater transparency and clearer explanations on the effects of reshuffling on all aspects of the tariff setting, while aiming at minimising its potentially distortive impact.
- Provide analytical transparency on how the “distance” driver is calculated.
- Provide an improved and complete tariff model.
- Remove the proposed discount applied to domestic exit points located within 15 kilometres from the national transmission network.

Finally, the Agency recommends ARERA to assess whether all services charged by TSOs outside the RPM are not related to access to the natural gas transmission network. If any of these services is instead related to access to the natural gas transmission network, the Agency recommends ARERA to include it in the final decision and treat it as either a transmission or as a non-transmission service.

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2 The ‘CM’T: charge for metering at transmission level. Detailed provided in chapter 4.3.
3 The ‘CM’CF: charge for metering final customers. Detailed provided in chapter 4.3.
2. Introduction


(8) Article 27 of the NC TAR requires the Agency to analyse the consultation documents on the reference price methodologies for all entry-exit systems. This Report presents the results of the analysis of the Agency for the transmission system of Italy.

(9) The Italian NRA, Autorità di regolazione per energia reti e ambiente (‘ARERA’), launched the consultation on 16 October 2018, which remained open until 17 December 2018. The consultation was carried out in Italian. The NRA published an executive summary of the consultation and the Agency template in English. On 16 November 2018, ARERA published the full English version of the consultation on the website of the main Italian TSO, Snam Rete Gas (‘SRG’).

(10) ARERA published the consultation responses on 11 January 2019 and their summary in English on 18 January 2019. 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).

Reading guide

(11) Chapter 3 presents the analysis on completeness, namely whether all the information referred to in Article 26(1) has been published. Chapter 4 focusses on compliance, namely whether the RPM complies with the requirements set out in Article 7 of the Code, whether the criteria for setting commodity-based transmission tariffs as set out in Article 4(3) are met, and whether the criteria for setting non-transmission tariffs as set out in Article 4(4) are met. Chapter 5 includes other comments. This document contains two annexes, respectively on the legal framework and a list of abbreviations.

3. Completeness

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

(12) Article 27(2)(a) of the NC TAR requires the Agency to analyse whether all the information items referred to in Article 26(1) of the NC TAR have been published.

(13) Article 26(1) of the NC TAR requires that the consultation document be published in English, to the extent possible. The Agency notes that the consultation document was published initially only in Italian and only the Executive summary and the Agency template were available in English. The full version of the consultation in English was published on 16 November 2018: therefore the Agency remarks that, unlike the consultation in the national language, the consultation in English only lasted one month.

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

5 Beyond SRG, which is the main TSO, in Italy there are other 8 TSOs: Società Gasdotti Italia, Infrastrutture Trasporto Gas, Retragas, Energie Rete Gas, Metanodotto Alpino, GP infrastrutture trasporto, Consorzio della Media Valtellina per il trasporto del gas, and Netenergy service. The proposed RPM applies jointly to all TSOs. The correct breakdown of revenue between the TSOs is guaranteed by the inter-TSO compensation mechanisms described in Chapter 26 of the consultation document. The inter-TSO compensation mechanisms are out of the scope of this Report.
The Agency concludes that ARERA has published most of the information in Article 26(1) of the NC TAR, as noted in Table 1 below, with the observation formulated therein.

The Agency recommends to improve transparency when publishing the final decision by completing the publication with all the items listed below.

Table 1 Checklist of the information referred to in Article 26(1) of the NC TAR

<table>
<thead>
<tr>
<th>Article</th>
<th>Information</th>
<th>Published:</th>
</tr>
</thead>
<tbody>
<tr>
<td>26(1)(a)</td>
<td>The description of the proposed reference price methodology</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(a)(i)</td>
<td>The indicative information set out in Article 30(1)(a), including:</td>
<td>Partly.</td>
</tr>
<tr>
<td>26(1)(a)(i)(1)</td>
<td>• the justification of the parameters used that are related to the technical characteristics of the system</td>
<td></td>
</tr>
<tr>
<td>26(1)(a)(i)(2)</td>
<td>• the corresponding information on the respective values of such parameters and the assumptions applied</td>
<td></td>
</tr>
<tr>
<td>26(1)(a)(ii)</td>
<td>The value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(a)(iii)</td>
<td>The indicative reference prices subject to consultation</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(a)(iv)</td>
<td>The results, the components, and the details of these components for the cost allocation assessments set out in Article 5</td>
<td>Partly.</td>
</tr>
<tr>
<td>26(1)(a)(v)</td>
<td>The assessment of the proposed reference price methodology in accordance with Article 7</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(a)(vi)</td>
<td>Where the proposed reference price methodology is other than the CWD reference price methodology detailed in Article 8, its comparison against the latter accompanied by the information set out in point (iii)</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(b)</td>
<td>the indicative information set out in Article 30(1)(b)(i), (iv), (v)</td>
<td>Yes</td>
</tr>
<tr>
<td>26(1)(c)(i)</td>
<td>Where commodity-based transmission tariffs referred to in Article 4(3) are proposed</td>
<td>Partly.</td>
</tr>
<tr>
<td>26(1)(c)(i)(1)</td>
<td>• the manner in which they are set</td>
<td></td>
</tr>
<tr>
<td>26(1)(c)(i)(2)</td>
<td>• the share of the allowed or target revenue forecasted to be recovered from such tariffs</td>
<td></td>
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<tr>
<td>26(1)(c)(i)(3)</td>
<td>• the indicative commodity-based transmission tariffs</td>
<td></td>
</tr>
<tr>
<td>26(1)(c)(ii)</td>
<td>Where non-transmission services provided to network users are proposed:</td>
<td>Partly.</td>
</tr>
<tr>
<td>26(1)(c)(ii)(1)</td>
<td>• the non-transmission service tariff methodology</td>
<td></td>
</tr>
<tr>
<td>26(1)(c)(ii)(2)</td>
<td>• the share of the allowed or target revenue forecasted to be recovered from such tariffs</td>
<td></td>
</tr>
<tr>
<td>26(1)(c)(ii)(3)</td>
<td>• the manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3)</td>
<td></td>
</tr>
<tr>
<td>26(1)(c)(ii)(4)</td>
<td>• the indicative non-transmission tariffs for non-transmission services provided to network users</td>
<td></td>
</tr>
<tr>
<td>26(1)(d)</td>
<td>The indicative information set out in Article 30(2)</td>
<td>Partly.</td>
</tr>
</tbody>
</table>
4. Compliance

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

(16) Article 27(2)(b)(1) of the NC TAR requires the Agency to analyse whether the proposed RPM complies with the requirements set out in Article 7 of the NC TAR. This Article refers to Article 13 of Regulation (EC) No 715/2009 and lists a number of requirements to be taken 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.

(17) Since the concepts of cost-reflectivity, non-discrimination, cross-subsidisation, cross-border trade, and transparency are closely related⁶, the Agency has performed an overall assessment.

(18) It is worth highlighting at the beginning of this section that ARERA’s consulted methodology is influenced by two pre-existing factors that have an impact on the tariff methodology and the reference prices:

- The existence of a capacity ‘reshuffling’ mechanism⁷.

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⁶ The principle of cost-reflectivity is related to the principles of cross-subsidisation and non-distortion of cross-border trade. Tariffs that are fully cost-reflective do not result in any form of cross-subsidisation (and hence they do not distort cross-border trade), as they charge users for the exact costs they cause to the system. Following this reasoning, tariffs that are less cost-reflective may result in cross-subsidisation between users.

⁷ 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.

The Agency believes, from an initial assessment performed with the limited sources available to analyse the matter, that the implemented reshuffling is not compliant with the EU rules: it deviates from the system of capacity auctions mandated by the NC...
• The distinction of two types of transmission networks: national and regional.\(^8\)

The consequences of these pre-existing factors on the compliance of the RPM are explained in the following sub-sections.

### 4.1.1 Transparency

According to **Article 7(a)** of the NC TAR, the RPM shall aim at enabling network users to reproduce the calculation of reference prices and their accurate forecast.

The Agency considers that the consultation lacks transparency on how the “distance” driver enters the RPM and on how the reshuffling mechanism impacts the tariffs. The Agency was able to reproduce the calculation of the reference prices only thanks to the additional information ARERA provided bilaterally. Without this information, network users will not be able to reproduce the calculation of reference prices\(^9\).

The Agency recommends that ARERA increase the clarity and transparency of the information provided in order to enable network users to reproduce the calculation of the reference prices.

ARERA provides a link to the SRG’s website where a simplified tariff model is available\(^10\).

This simplified tariff model is rather basic and does not provide:

• The possibility to calculate the commodity charges.

• The forecasted capacity bookings for the following years of the regulatory period.

Therefore the Agency considers the simplified tariff model incomplete and not compliant with Article 30(2)(b) of the NC TAR, because it does not allow users to calculate all transmission tariffs for the prevailing year, nor to estimate their possible evolution.

Moreover, the simplified tariff model only gives limited transparency with respect to:

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\(^8\) 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 (RNG, Rete Nazionale dei Gasdotti) 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.

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

Article 2(1)(1) of Regulation (EC) No 715/2009 does not recognise any distinction between regional and national transmission, while only proposing a definition for ‘transmission’. However, Article 2(5) of Directive 2009/73/EC proposes the inclusion of regional networks in ‘distribution’ under the supervision of the Member State. It is not for the Agency to judge the alignment with these articles.

\(^9\) Even though they would still be able to partly calculate the reference prices using the simplified tariff model, as explained in paragraphs (23) to (25).

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- The values of the capacity subject to reshuffling excluded from the calculation of the RPM, which are mentioned in a footnote, without providing a clear explanation for users not acquainted with the Italian system.

- The domestic exit tariff, explicitly provided only for a set of network users, while the tariff for the remaining ones can be calculated thanks to the information provided in a footnote only.

(27) The Agency recommends ARERA to ensure that the SRG publish a complete and more transparent version of the tariff model according to Article 30(2)(b) of the NC TAR.

### 4.1.2 Cost-reflectivity

(28) Article 7(b) of the NC TAR requires that the RPM take into account the actual costs incurred for the provision of transmission services, considering the level of complexity of the transmission network.

(29) Following the reasoning laid out in the following paragraphs, the Agency concludes that the application of the proposed RPM is compliant with the principle of cost-reflectivity.

(30) ARERA opts for a CWD methodology. Distance is relevant for both entries and exits and, given the complexity of the system, which is clearly explained by ARERA in the consultation document, the Agency considers this choice appropriate.

(31) ARERA proposes to cluster, based on geographic proximity and in order to simplify the RPM:

- The nearly 7,000 domestic exits points into 6 domestic delivery areas. All delivery points are located onto the regional transmission network, since the national transmission network has no delivery point.

- The 67 entry points from production into 10 production entry hubs.

(32) The Agency finds the clustering approach suitable.

#### 4.1.2.1 Inputs to the methodology

(33) **Distance** - The "distance" driver entering the CWD matrix is derived by summing two distance components: one national and one regional.

(34) ARERA does not show the calculation of the "distance" driver analytically in the consultation document.

(35) The Agency, thanks to the additional information provided bilaterally by ARERA, understands that the calculation of the "distance" driver for a clustered delivery area is performed as follows:

- On the national transmission network, the ‘main interception and offtake points’ (‘PIDIs’) that connect to the regional networks are identified. Several PIDIs serve each clustered delivery area\(^1\).

- The national distance from a selected entry point to a selected PIDI is the shortest physical path along the pipeline system connecting them.

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\(^1\) A single PIDI may connect delivery points located in different clustered delivery areas.
The regional distance from a selected PIDI to a selected clustered delivery area is the average distance from the selected PIDI to all its underlying delivery points, weighted by their capacities.

The total distance from a selected entry point to a selected clustered delivery area\(^{12}\) is the sum of the average national and regional distances of all PIDIs serving the selected clustered delivery area, weighted for the respective PIDIs’ capacities.

Regarding production points, the distance of each clustered production hub to the exit points is set equal to the distance of the largest point, in terms of volumes, of those within the same hub. The Agency considers this simplification compliant, despite introducing an additional principle by which the distance is identified for the sake of clustering.

The total distance obtained through the aforementioned steps enters the CWD matrix for the calculation of the RPM.

ARERA explains\(^{13}\) that the rationale of the proposed calculation of the “distance” driver is that regional networks are highly meshed and therefore it is not possible to identify a prevalent flow pattern.

ARERA explains that, since regional networks are longer than the national one, considering average distances for regional transmission networks, instead of actual ones, decreases their weight on the total transmission network.

ARERA considers the proposed simplified approach and its effects acceptable, since the cost of the regional network is much lower, due to its technical features. Therefore, in ARERA’s view, the proposed approach increases cost-reflectivity.

ARERA explained to the Agency that the choice of the “distance” driver has no impact on cross-border trade. In particular, ARERA explained that, if regional networks were not considered in the RPM, the reference prices at the entry IPs would not have changed, while those at exit IPs would have increased remarkably in percentage value. The Agency notes that only less than 1% of total injected volumes exits the country, therefore the proposed calculation of the “distance” driver can be considered to have little effect on cross-border trade.

In conclusion, the Agency believes that the consultation document could have explained more clearly all steps leading to the definition of the “distance” driver and that the proposed approach adds a layer of complexity to the RPM. At the same time, given the physical complexity of the transmission network and the existing legal distinction between regional and national networks, the Agency believes that the proposed “distance” driver calculation methodology is adequate.

Capacity - ARERA uses different values of forecasted bookings for the entry IPs Mazara del Vallo and Tarvisio when calculating the weights of the CWD methodology compared to when calculating the tariffs. More precisely, ARERA uses the lower value (capacity net of reshuffled values) when setting the tariffs, compared to the higher one used when setting the weights for the distances. This

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\(^{12}\) Every clustered delivery area has a number of national and regional distances equal to the number of PIDIs belonging to the clustered delivery area.

\(^{13}\) In bilateral calls and exchange of written clarifications that have taken place between mid-November 2018 and mid-January 2019.
is because the capacity will be used in 2020, but it will not be paid, as it was already paid in the past (and not used in the past because reshuffled to future years).

(44) The fact that the capacity that will be used in 2020 will not be paid creates a potential under-recovery. Using the lower values of forecasted capacity for the IPs Mazara del Vallo and Tarvisio and increasing all entry tariffs via a rescaling factor to collect the missing revenues across all entry points allows to avoid this potential under-recovery.

(45) At the same time, ARERA pointed out that the reshuffled capacity paid, and not used, in the past had generated an over-recovery due to the fact that network users had to buy the same capacity again on a short-term basis, to face unexpectedly high market demand. ARERA explained\(^\text{14}\) to the Agency that the past over-recovery will be allocated in 2020 to all entries by decreasing the respective share of capacity-based allowed revenue.

(46) According to ARERA, addressing the over- and under-recovery generated in different periods by the capacity reshuffling mechanism via capacity charges is a fast and non-distortive solution: it balances the financial values in a single tariff period and affects the same set of users.

(47) The Agency considers that ARERA’s choice on rescaling to compensate for the missing revenue due to the application of the reshuffling mechanism is not fully transparent.

(48) The Agency cannot assess whether ARERA could have proposed a better solution to solve the over- and under-recovery effects of the reshuffling mechanism.

4.1.2.2 Adjustments to the application of the RPM

(49) ARERA proposes to equalise the reference price of all domestic exits clustered areas.

(50) The Agency finds the proposed equalisation compliant with the NC TAR. The Agency provides additional considerations on this choice in paragraphs (72) to (75), under cross-subsidisation.

(51) ARERA proposes an equalisation of the reference prices of all entry points from storages and of all exit points to storages, leading to the application of a single entry tariff and a single exit tariff for storages. The Agency considers the application of this equalisation compliant.

(52) ARERA applies a 50% discount on storages and different rescaling factors, driven by different reasons, at entry and exit points.

(53) At entry points, the proposed rescaling factor (1.36) is used to compensate for the missing revenue caused by the 50% storage discount and by the reshuffling of capacity\(^\text{15}\).

(54) The Agency notes that should the rescaling have been applied only to compensate for the missing revenues from storage discounts, it would have been significantly lower (1.13)\(^\text{16}\).

(55) At all exit points, ARERA proposes a 1.1 rescaling factor to compensate for the missing revenue due to the proposed storage discount.

\(^{14}\) As an additional explanation to what reported in the consultation document, paragraph 27.4.

\(^{15}\) See paragraph (44).

\(^{16}\) The Agency could assess this value thanks to ARERA’s availability bilaterally to share the full tariff model.
Moreover, ARERA proposes a 1.05 rescaling factor applied to all domestic exits situated beyond 15 kilometres of the national transmission system to compensate for a 10% discount to domestic exit points situated within 15 kilometres from the national transmission network.

The Agency understands the reasoning behind the application of rescaling, as it intends to adjust the reference prices in order to ensure the recovery of the allowed revenue, which could not be achieved otherwise, due to pre-existing situations and consequent tariff-design choices.

At the same time, the Agency considers that the distance-based discount for domestic exits is not in line with the NC TAR because it is not among those allowed by the NC TAR and because it allows for an ex-post, distance-based differentiation after the “distance” driver had already been considered in the CWD matrix for the calculation of the reference prices.

Therefore the Agency recommends not to use the rescaling in this case, since it would lead to in compliance with the NC TAR.

The Agency also considers that the rescaling applied to compensate for the missing revenue caused by the reshuffling creates cross-subsidies favouring the users of reshuffled capacity in 2020, at the expenses of current users of all other entry points. Yet these cross-subsidies seem to be compensated as explained in paragraph (46).

The Agency recommends to provide higher transparency on the rescaling applied to the reshuffling mechanism. The Agency cannot assess whether a better solution than rescaling could have been proposed to solve the under-recovery effects of the reshuffling mechanism.

4.1.2.3 Comparison with Capacity Weighted Distance methodology

Beyond the elements highlighted above, the only deviating element from the CWD methodology described in Article 8 of NC TAR is the entry-exit split. Given the proposed 28%-72% entry-exit split, all entries become 44% cheaper and all exits 44% more expensive than with the CWD methodology explained under Article 8 of TAR NC.

4.1.3 Cross-subsidisation and discrimination

4.1.3.1 Between intra-system use and cross-system use

Article 7(c) of the NC TAR requires the RPM to ensure non-discrimination and to prevent undue cross-subsidisation. One instrument to evaluate this is the cost allocation assessment (CAA, Article 5 of the NC TAR).

For this analysis, the Agency defines ‘discrimination’ as ‘applying different rules to comparable situations or the same rule to different situations’. The Agency, based on the information provided in the consultation document, has not identified any discrimination resulting from the application of the RPM.

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17 The distinction between national and regional transmission network and the reshuffling mechanism.
18 The introduction of an additional distance-related discount to accommodate the lower cost of exit points located close to the national transmission system and the assignment of lower capacity weights to the CWD to the points who benefitted from reshuffling of capacity.
For this analysis, the Agency defines ‘cross-subsidisation’ as a deviation from cost-reflectivity whereby users of the entry-exit system are charged tariffs that differ from the costs they cause to the system.

The result of the capacity CCA comparison index was 1.28%.

The Agency notes that, since the share of export is low in the Italian system, any even small export variation may sensibly change the result of the CAA.

ARERA provided bilaterally to the Agency the detailed components on the CAA, which were otherwise not provided in full transparency in the consultation document. The Agency then also screened those.

The Agency notes that the level of cross-subsidisation shown by the results of the CAA formula is low and as such, the methodology is compliant and does not require any additional justification because it is within the threshold set in Article 5 of the TAR NC.

In conclusion, the Agency recommends ARERA to provide, in its final decision, all the details of the components of the CAA fully to comply with the requirements of Article 7(c) of the NC TAR and offer greater transparency.

Among intra-system users, due to the equalisation of domestic exits

The CAA only assesses cross-subsidisation between intra-system use and cross-system use, but does not assess internal cross-subsidisation.

The Agency also assessed the existence of undue cross-subsidisation between other groups of users.

The Agency notes, from the information ARERA provided in the consultation document and bilaterally, that the equalisation creates modest cross-subsidies between domestic exit points and no cross-system effect.

In fact, after the clustering of all domestic exits into six domestic exit areas, whose tariffs range from 2 to 4.2 EUR/y/m³/d, the equalisation flattens the tariffs to a single value of 2.4 EUR/y/m³/d. The prior-to-equalisation tariffs higher than 2.4 EUR/y/m³/d receive a subsidy from those that cost less. ARERA justifies the equalisation, and the derived cross-subsidy, in light of avoiding outlier tariffs generated by the simplified CWD methodology.

The Agency notes that the adopted equalisation is in line with the NC TAR and, for this reason, the Agency does not consider the cross-subsidy undue.

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19 The result of the commodity CAA is commented in section 4.2.
20 Based on Article 5 of the NC TAR, the Agency requires to see how the inputs of the CAA formula are derived, and not just the inputs and the results of the formula.
21 A pre-equalisation CAA could lead additional insights on the cross-bored effects of the equalisation. This was not included in ARERA's consultation, but is not requested by the NC TAR.
22 Compared to the matrix methodology currently in place.
4.1.3.3 Caused by the additional distance-based discount

Another source of internal cross-subsidisation is the different reference prices applied to domestic exits from the regional network depending on their distance (within or beyond 15 kilometres) from the national network, as indicated in paragraph (56).

Users of the domestic exit points located within 15 kilometres from the national network have a 10% discount on the reference price.

ARERA proposes a form of grouping, and allows a discount, that is not among those allowed by Article 6(4) of the NC TAR.

The Agency recommends ARERA to remove this adjustment to preserve compliance with the NC TAR.

4.1.4 Volume risk

Article 7(d) of the NC TAR requires the RPM to ensure 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, 99% of transported gas is consumed domestically.

Therefore the magnitude of the volume risk that could be assigned to the final customer is minimal and does not need further assessment.

The Agency agrees with ARERA’s assessment and considers the RPM compliant in this respect.

4.1.5 Cross-border trade

Article 7(e) of the NC TAR requires the RPM to ensure that the resulting reference prices do not distort cross-border trade.

The CAA has not shown any subsidisation of intra-system usage at the expense of cross-system usage.

With the proposed methodology, all entry points (including domestic production) are 44% cheaper than with the standard CWD methodology. At the same time, all exit points are 44% more expensive. This is caused by the chosen entry-exit split 28-72%: ARERA has proposed it to replicate the effect of the current 40-60% split on the national network and of the 0-100% split on the regional network. According to ARERA, this setting avoids that the cost of regional network is improperly charged to the entry points, in order to ensure a higher degree of competitiveness for gas supply at the national level and to foster the alignment of the Italian gas hub price with those of the other European hubs.

The Agency notes that, by integrating the national and regional transmission networks, which may have different costs, into a single RPM, there is the possibility that the costs of any of the two types of networks are passed to the other. In particular, there can be a risk that the costs of the regional network are passed to the national network and are charged at the IPs. This possibility, in

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23 ARERA’s proposal on the entry-exit split aims at complying with the NC TAR to the extent that a single RPM is provided for the national and regional networks, which are indeed treated as a single network.
combination with collecting higher tariffs at exit IPs thanks to the proposed entry-exit split, may impact cross-border trade as it makes export more expensive. This impact could be relevant in case of high export volumes and non-cost-reflective allocation of the regional network’s cost to exit IPs. In order to avoid negative cross-border effects on tariffs, the Agency recommends to the Member State\textsuperscript{24} to verify whether the implementation of the definition of ‘distribution’\textsuperscript{25} is aligned with the EU law, since such definition can influence the scope of the RPM and the level of cross-border tariffs.

In the case of Italy, the proposed entry-exit split increases the costs of exporting gas to other countries compared to a CWD methodology with a 50-50% split. Yet ARERA pointed out that the effect of the price changes is not favouring any specific transport route to flow gas into neighbouring systems, nor favouring production. For this reason, ARERA concludes that there is no distortion of cross-border trade.

The Agency considers that the increase in exit tariffs created by the proposed entry-exit split is sizeable. At the same time, the Agency acknowledges that it applies to less than 1% of the total system volumes and therefore there is no sizeable distortion of cross-border trade.

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

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.

The use of commodity-based transmission tariffs is an exception. Only part of the transmission services revenue may be recovered by commodity-based transmission tariffs. The NC TAR allows for two types of commodity-based transmission tariffs. ARERA proposes to apply both: a flow-based charge (‘CV’) and a complementary revenue recovery charge (‘CV\textsubscript{FC}’).

The indicative CV charge for year 2020 is 0.0035 €/Scm.

The proposed flow-based charge CV meets the criteria set in Article 4(3).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Y/N?</th>
</tr>
</thead>
<tbody>
<tr>
<td>levied for the purpose of covering the costs mainly driven by the quantity of the gas flow</td>
<td>Y</td>
</tr>
<tr>
<td>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</td>
<td>Y</td>
</tr>
<tr>
<td>expressed in monetary terms or in kind</td>
<td>Y</td>
</tr>
</tbody>
</table>

The Agency notes that the consultation document does not contain an assessment of the cost-reflectivity and potential cross-subsidisation between IPs and non-IPs (Article 4(3)(b)(iv) of the NC TAR) for the CV\textsubscript{FC}.

The Agency understands that the newly proposed complementary revenue recovery charge will apply as of 2021, using inputs known only as of 2020.

\textsuperscript{24} In Italy, the distinction between regional and national transmission network is decided at ministerial level and not by the NRA.

\textsuperscript{25} As defined in Article 2(5) of Directive 2009/73/EC.
Therefore, the proposed complementary revenue recovery charge $CV_{FC}$ only partly meets the criteria set in Article 4(3) of the NC TAR.

**Table 3 Criteria set in Article 4(3)(b) of the NC TAR for setting complementary revenue recovery charges**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Y/N?</th>
</tr>
</thead>
<tbody>
<tr>
<td>levied for the purpose of managing revenue under- and over-recovery</td>
<td>Y</td>
</tr>
<tr>
<td>calculated on the basis of forecasted or historical capacity allocations and flows, or both</td>
<td>Y, but unknown value at the moment</td>
</tr>
<tr>
<td>applied at points other than interconnection points (delivery points and storage exit points)</td>
<td>Y</td>
</tr>
<tr>
<td>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</td>
<td>N</td>
</tr>
</tbody>
</table>

ARERA proposes to reconcile the past regulatory accounts in one single year, 2020, by giving back to the system users the over-recovery according to the present reconciliation mechanism, via capacity charges. Therefore ARERA assumes that in 2020 the complementary revenue recovery charge will be zero.

ARERA assumes that commodity charges will form 15% of the total transmission charges. In particular, for 2020, the flow-based charge alone will raise to the targeted 15%.

The Agency considers 15% a compliant share for the commodity charge.

The outcome of the commodity cost allocation comparison index was 1.31%. Since it is below the threshold of 10%, it does not require any further justification.

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

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) are met.

Only the metering service is recovered via two separate, capacity-based, non-transmission tariffs:

- The ‘CM’ (charge for metering at transmission level) applied to all delivery points in the system, to cover the cost of the meter and meter reading on the transmission network;
- The ‘CM^{CP}’ (charge for metering final customers) applied only to delivery points where the metering facility is owned by the TSO (instead of the final customer), to cover for the cost of the metering activity on such delivery points

These services can qualify as non-transmission services because their costs are not driven by both capacity and distance.

The costs of these services are part of the regulated asset base.

According to ARERA’s forecast, in 2020 the non-transmission services revenue will equal EUR 42 million, whereas the transmission services revenue will equal EUR 2,059 million. The Agency notes that the non-transmission service revenue constitutes a limited share (2%) of the total revenue.
ARERA proposes the introduction of a specific reconciliation account for the metering service (called FC^M), in order to compensate for the possible differences between the metering service reference revenues and the actual metering service revenues for the same year.

ARERA explained to the Agency that, opting for a dedicated reconciliation account preserves cost-reflectivity, since it does not mix transmission and non-transmission reconciliation accounts, which are ultimately caused by different drivers.

The Agency notes that the introduction of a dedicated reconciliation account for non-transmission revenues is an acceptable interpretation of the NC TAR\textsuperscript{26}.

The CM^T charge is determined as the ratio between the sum of CAPEX and OPEX, and forecasted contracted capacity at all delivery points. The tariff is a single tariff at national level, with a compensation mechanism between TSOs. The indicative CM^T tariff for the year 2020 is 0.0903 €/y/Scm/day.

The CM^CF is calculated as the ratio between the sum of CAPEX and OPEX related to such metering activity, and forecasted contracted capacity on such delivery points.

The CM^CF tariff will be determined following further analysis by ARERA, concerning in particular the assessment of the costs borne by the TSOs for such activity. Therefore ARERA has not provided indicative levels for the CM^CF service tariffs.

The Agency notes that the consultation document is therefore not complete in this respect.

The Agency also notes that the total amount of non-transmission tariffs (EUR 42 million) does not include CM^CF, therefore also the share of non-transmission service revenues over the total allowed revenue is under-estimated in the consultation document.

ARERA told the Agency that the impact of CM^CF will be marginal and the final numbers will not change visibly. The Agency notices that ARERA could have clearly stated this in the consultation document.

The Agency recommends that the indicative tariffs for the CM^CF service is decided and communicated to network users as soon as possible in order to enhance transparency.

While the Agency acknowledges that the CM^T charge satisfies the criteria of Article 4(4)(a) of the NC TAR since it is cost-reflective, non-discriminatory and transparent, and charged to the beneficiaries of the service it pays for, the Agency cannot assess the same features for the CM^CF charge.

The Agency concludes that the criteria for setting non-transmission tariffs as set out in Article 4(4) of the NC TAR are only partially met.

5. Other comments

The Agency notes that the transmission costs of entries from, and exits to, storages are primarily recovered through storage capacity allocation auctions, rather than through the RPM, as they should: should the auction revenue be insufficient to recover the storage-related transmission costs,

\textsuperscript{26} Chapter IV of the NC TAR on reconciliation of revenue, especially Articles 17 and 19.
an additional unit variable fee (CRVOS)\textsuperscript{27} would be levied to domestic delivery points. The Agency considers this choice not cost-reflective and potentially creating undue cross-subsidies benefiting storage users to the expense of domestic delivery points.

(119) The Agency understands from bilateral talks with ARERA\textsuperscript{28} that the consultation document does not include services for which tariffs are set outside the scope of the NC TAR and charged outside the allowed revenue.

(120) ARERA reported that the TSOs specify such charges in their network codes and directly collects them, after approval of the NRA.

(121) The Agency recommends ARERA to assess whether any of these services is related to access to the natural gas transmission network and fall therefore within the scope of the NC TAR. If these services were within the scope of the NC TAR:

- The consultation would be incompliant because these services should have been included in the consultation document.
- They should be treated as either transmission or as non-transmission services in the final decision.

### Annex 1: Legal framework

(122) 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.

\textsuperscript{27} The CRVOS fee is only mentioned in the consultation document, but not consulted upon.

\textsuperscript{28} ARERA provided bilaterally to the Agency a list of these services on 17 January 2019.
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.

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:
      (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 thereafter;
(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.

(124) 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;
(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.

(125) 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 non-discriminatory 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.

(126) 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;
   (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.

(127) 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 non-transmission 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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACER, the Agency</td>
<td>Agency for the Cooperation of Energy Regulators</td>
</tr>
<tr>
<td>CAA</td>
<td>Cost Allocation Assessment</td>
</tr>
<tr>
<td>CWD</td>
<td>Capacity Weighted Distance</td>
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<tr>
<td>DSO</td>
<td>Distribution System Operator</td>
</tr>
<tr>
<td>EI</td>
<td>Energimarknadsinspektionen</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>NC TAR</td>
<td>Network code on harmonised transmission tariff structures for gas</td>
</tr>
<tr>
<td>NRA</td>
<td>National Regulatory Authority</td>
</tr>
<tr>
<td>RPM</td>
<td>Reference Price Methodology</td>
</tr>
<tr>
<td>TSO</td>
<td>Transmission System Operator</td>
</tr>
</tbody>
</table>