

## Agency Report

# Analysis of the Consultation Document on the Gas Transmission Tariff Structure for Denmark

NRA: Forsyningstilsynet  
TSO: Energinet

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## 1. ACER conclusion

- (1) The Danish TSO Energinet proposes a postage stamp methodology, an ex-post entry-exit split (to set all entry and exit tariffs at the same level) and a 100% discount at entry points to and exit points from storage facilities. Furthermore, both commodity-based transmission tariffs and non-transmission tariffs are proposed. The consultation document is provided in English and clearly describes the proposal for the tariff structure.
- (2) After having completed the analysis of the consultation document pursuant to Article 27(2) of the NC TAR, the Agency concludes that:
  - The consultation document contains the required information listed in Article 26(1) of the NC TAR, with the exception of the information on non-transmission services;
  - The assessment of the proposed reference price methodology ('RPM') against the criteria in Article 7 of the NC TAR is extensive, but the Agency has not been able to conclude that the RPM is compliant with the NC TAR. While the argument that the postage stamp methodology is more robust to future changes is conceptually valid, it needs to be further substantiated. Also, the results for the cost allocation assessment need a justification;
  - The criteria for setting the commodity charge are not met;
  - The criteria for setting non-transmission charges are not included in the consultation document, which is in this respect not compliant with the NC TAR, and therefore the Agency has not been able to assess this aspect.
- (3) The Agency recommends that, in its final decision, Forsyningstilsynet (the Danish National Regulatory Authority):
  - fix the period up front for which the tariff methodology applies or, as a second-best, describe the circumstances that will lead to a new tariff review;
  - elaborate on why the postage stamp methodology is more robust considering also the tariff period and analyse the effects that different choices for an RPM would have on the level of cross-subsidisation and publish the results of such an analysis;
  - include an assessment of the compliance of the proposed RPM with Article 7(d) of the NC TAR regarding volume risk;
  - assess if there is a strong correlation between the total operational costs and the quantity of gas flow and if this is not the case reduce the share of commodity-based transmission tariffs;
  - clarify that the commodity-based transmission tariffs are flow-based charges;
  - set the same flow-based charge for all exit points (including exit points to storage facilities);
  - include an assessment of the compliance of the non-transmission services against the criteria in Article 4(4) of the NC TAR.

## 2. Introduction

- (4) Commission Regulation (EU) 2017/460 of 16 March 2017 establishes a network code on harmonised transmission tariff structures for gas ('NC TAR').
- (5) Article 27 of the NC TAR requires the Agency to analyse the consultation documents for all entry-exit systems<sup>1</sup>. This Report presents the analysis of the consultation document for the transmission system in Denmark.
- (6) On 22 August, the Danish National Regulatory Authority ('NRA') Forsyningstilsynet forwarded the consultation document to the Agency. The consultation was launched on 15 August 2018 and was planned to remain open until 15 October 2018. However, as some required elements were omitted from the consultation document, the consultation was relaunched and extended until 16 November 2018<sup>2</sup>.
- (7) A number of bilateral exchanges to collect additional information took place between the Agency, the NRA and Energinet, the Transmission System Operator ('TSO'). A more extensive version of the tariff model was also provided by Energinet to the Agency. The Agency appreciated the openness of both parties during this process, as it supported the analysis.
- (8) On 6 December 2018, the consultation responses and their summary were published<sup>3</sup>. The Agency took note of these. Within five months following the end of the final consultation, and pursuant to Article 27(4) of the NC TAR, Forsyningstilsynet shall take and publish a motivated decision on all the items set out in Article 26(1).

### *Reading guide*

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

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<sup>1</sup> With the exception of Article 10(2)(b), when different RPMs may be applied by the TSOs within an entry-exit zone.

<sup>2</sup> An updated consultation document was published on 31 August 2018 to include the results on the cost allocation assessment and non-transmission services. The consultation deadline was adjusted until 1 November 2018 to allow for a two month consultation period. The Danish TSO Energinet forwarded the updated consultation document to the Agency on 31 August 2018. The simplified tariff model was only published on 16 October 2018. To allow stakeholders to properly review the model, the consultation deadline was again extended on 26 October 2018 to last until 16 November 2018. On that same date, the model was also updated by publishing additional information to take into account preliminary comments by the Agency to improve transparency.

<sup>3</sup> The responses and summary were shared with the Agency on 23 November 2018. One respondent sent a version of their response to be shared with the Agency and another version to be shared only with the NRA. Furthermore, one respondent only allowed their input to be shared with the NRA. This consultation response was shared with the Agency on 7 December 2018 and was not published at the time of publishing this analysis.

### 3. Completeness

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

- (10) 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.
- (11) Article 26(1) of the NC TAR requires that the consultation document be published in the English language, to the extent possible. The Agency confirms that the consultation document has been published in English.
- (12) Most of the information in Article 26(1) of the NC TAR has been properly published, with the exception of the information on non-transmission services. Also, the simplified tariff model was only available from 16 October 2018. The Agency recommends improving the transparency on the non-transmission services when publishing the final decision.
- (13) In addition, the Agency notes that the consultation document provides information on the *cost base* and on *the share of the cost base* to be recovered from commodity-based transmission tariffs and non-transmission services. The NC TAR does not use the term ‘cost base’. Instead it uses allowed or target revenues and transmission services revenue and non-transmission services revenue. From input received by the Danish TSO and NRA, the Agency understands that in Denmark a cost-plus methodology is used and no (allowed or target) revenues are set, instead the tariffs are set based on the cost base. Therefore, the Agency considers that the (share of) the cost base is the relevant information that should be published to meet the requirements in Articles 26(1)(b) and (c) of the NC TAR. It would be helpful if this were clarified by the NRA in the decision.

Table 1 Checklist information Article 26(1)

Article	Information	Published: Y/N/NA
<b>26(1)(a)</b>	the description of the proposed reference price methodology	Yes
<b>26(1)(a)(i)</b> <b>26(1)(a)(i)(1)</b> <b>26(1)(a)(i)(2)</b>	the indicative information set out in Article 30(1)(a), including: <ul style="list-style-type: none"> <li>the justification of the parameters used that are related to the technical characteristics of the system</li> <li>the corresponding information on the respective values of such parameters and the assumptions applied</li> </ul>	Yes
<b>26(1)(a)(ii)</b>	the value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9	Yes
<b>26(1)(a)(iii)</b>	the indicative reference prices subject to consultation	Yes
<b>26(1)(a)(iv)</b>	the results, the components and the details of these components for the cost allocation assessments set out in Article 5	Yes
<b>26(1)(a)(v)</b>	the assessment of the proposed reference price methodology in accordance with Article 7	Yes
<b>26(1)(a)(vi)</b>	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

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<b>26(1)(b)</b>	the indicative information set out in Article 30(1)(b)(i), (iv), (v)	Yes, although only the cost base is provided and not the allowed or target revenue and transmission services revenue
<b>26(1)(c)(i)</b> <b>26(1)(c)(i)(1)</b> <b>26(1)(c)(i)(2)</b> <b>26(1)(c)(i)(3)</b>	where commodity-based transmission tariffs referred to in Article 4(3) are proposed <ul style="list-style-type: none"> <li>the manner in which they are set</li> <li>the share of the allowed or target revenue forecasted to be recovered from such tariffs</li> <li>the indicative commodity-based transmission tariffs</li> </ul>	Yes, although only the share of the cost base is provided and not the share of the allowed or target revenue
<b>26(1)(c)(ii)</b> <b>26(1)(c)(ii)(1)</b> <b>26(1)(c)(ii)(2)</b> <b>26(1)(c)(ii)(3)</b> <b>26(1)(c)(ii)(4)</b>	where non-transmission services provided to network users are proposed: <ul style="list-style-type: none"> <li>the non-transmission service tariff methodology therefor</li> <li>the share of the allowed or target revenue forecasted to be recovered from such tariffs</li> <li>the manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3)</li> <li>the indicative non-transmission tariffs for non-transmission services provided to network users</li> </ul>	No, although the non-transmission service is mentioned it does not include these aspects
<b>26(1)(d)</b>	the indicative information set out in Article 30(2);	As of 16 October
<b>26(1)(e)</b> <b>26(1)(e)(i)</b> <b>26(1)(e)(ii)</b> <b>26(1)(e)(iii)</b> <b>26(1)(e)(iv)</b>	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"> <li>the proposed index;</li> <li>the proposed calculation and how the revenue derived from the risk premium is used</li> <li>at which interconnection point(s) and for which tariff period(s) such approach is proposed</li> <li>the process of offering capacity at an interconnection point where both fixed and floating payable price approaches referred to in Article 24 are proposed</li> </ul>	Not applicable

## 4. Compliance

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

- (14) 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) 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.

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- (15) As the concepts of transparency, cost-reflectivity, non-discrimination, cross-subsidisation and cross-border trade are closely related, the Agency concludes with an overall assessment. Special attention is paid to the allocation of revenues between domestic and transit routes.

### 4.1.1 Transparency

- (16) **Article 7(a)** of the NC TAR requires that the RPM aim at enabling network users to reproduce the calculation of reference prices and their accurate forecast.
- (17) The proposed postage stamp methodology makes it easy for users to understand and calculate tariffs compared to other methodologies.
- (18) The Agency finds the simplified tariff model compliant with the requirements of Article 30(2)(b) of the NC TAR. The model allows network users to make changes to the cost, capacity and volume data for the gas years 2019/2020 up to and including 2024/2025 under two scenarios: with and without the Baltic Pipe. The model provides all information that is needed to reproduce the calculation of the reference prices and allows network users to forecast the reference prices.
- (19) While the model meets the requirements of the NC TAR, the model could be taken a step further in terms of user-friendliness by (1) including a step-wise calculation of the reference prices and commodity tariffs and (2) publishing an unprotected version of the relevant excel sheets allowing network users to copy the data and see the formulas.
- (20) Finally, based on information provided by the Danish NRA and TSO, the Agency understands that the period during which this new tariff methodology will be applicable is not fixed. As prescribed in the NC TAR, the methodology will be fixed for at most five years. The Agency recommends to fix the period up front or, as a second-best, to clarify the proposed approach and describe the circumstances that will lead to a new tariff review. In addition, the Agency proposes that the decision on the RPM be primarily made considering the status of the network as it is foreseen for the years of the proposed tariff period.

### 4.1.2 Cost-reflectivity

- (21) **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.
- (22) The transmission system network in Denmark can be considered a relatively simple network. The Danish transmission system serves a geographically small and homogeneous gas market. There are three entry points<sup>4</sup>: one for domestic production in the Danish North Sea (Nybro Entry), one for imported gas from Germany (Ellund Entry) and one for locally produced biogas (BNG Virtual Entry). There are four exit points: one to Sweden (Dragør Exit), one to Germany (Ellund Exit), one to the

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<sup>4</sup> Dragør Entry Point from Sweden is not used today, due to the Swedish market being supplied from the Danish transmission system (Dragør Exit).

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North Sea (Ellund Exit)<sup>5</sup>, while all offtake points towards direct consumers and distribution networks are clustered (Exit zone Denmark).

- (23) Energinet proposes to use a postage stamp methodology on the basis of the following arguments:
- There is limited reasoning in allocating historical assets to individual users and points.
  - Robustness of the postage stamp methodology, because there will be changes in flow patterns, caused by a temporary disruption from Danish production points (during the years 2019 to 2022) and the Baltic pipeline becoming operational from October 2022.
  - Having the same entry tariffs across the system is a better safeguard to foster competition from different supply sources.
  - Uniform capacity tariffs provide a more transparent price signal compared to the capacity weighted distance ('CWD') methodology.
  - The comparison with the counterfactual shows that when the CWD methodology is used, there is a 75% difference between lowest and highest tariffs compared to the postage stamp methodology. Energinet states that this would adversely impact competition between points and routes in the Danish transmission system.
- (24) The Agency appreciates the clear reasoning in the consultation document and considers it a good practice. In the following paragraphs, the Agency comments on the arguments put forward by Energinet.

### *Reasoning in allocating historical assets to individual users and points*

- (25) Article 4(1) of the NC TAR acknowledges that distance is a relevant cost driver. However, the NC TAR allows flexibility in the choice of the RPM, as long as the methodology is assessed against the CWD methodology. In simpler transmission systems it is easier to allocate costs based on distance than in more meshed systems. The Danish system is a simple system shaped like a cross, with gas mostly entering in the east and south of the country and exiting in the north and east of the country. Thus, in principle, taking distance into account would not be overly complicated.

### *Robustness*

- (26) The Agency agrees that changes in flow patterns (impacting the forecasted contracted capacity) would lead to more fluctuating tariffs at the various entry and exit points under the CWD methodology, as described in Article 8 of the NC TAR.
- (27) Table 2 shows the difference in tariffs from year to year if the CWD methodology were used. The tariffs indeed would fluctuate quite a lot, with the biggest change in tariffs from gas year 2021/2022 to gas year 2022-2023 when the Baltic Pipe is expected to become operational, which will lead to an increase in forecasted bookings. However, Table 3 also shows that a similar change will happen with a postage stamp tariff. Furthermore, the change is quite consistent across the various points.

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<sup>5</sup> Not in demand from the shippers due to lack of end users in the North Sea.

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Table 2 Difference in reference prices from one year to the next using the CWD methodology

	Difference year 1-2	Difference year 2-3	Difference year 3-4	Difference year 4-5	Difference year 5-6
Exit Zone	5%	9%	-38%	-5%	-2%
Exit Dragør	5%	8%	-43%	-5%	-2%
Exit Ellund	5%	8%	-38%	-4%	-2%
Exit BP2				-3%	-2%
Entry Nybro	11%	-20%	-16%	4%	1%
Entry Ellund	11%	-20%	-36%	5%	1%
Entry RES	11%	-20%	-6%	4%	1%
Entry Baltic Pipe				4%	1%

Table 3 Difference in reference prices year to year using the postage stamp methodology

	Year 1-2	Year 2-3	Year 3-4	Year 4-5	Year 5-6
Postage stamp tariff	9%	5%	-35%	1%	-1%

- (28) On the other hand, the Agency understands from bilateral conversations with the Danish NRA and TSO that the change in flow patterns due to the disruptions in the production and the Baltic Pipe becoming operational is difficult to forecast and may be more severe than the base case that is presented in the consultation.

### *Competition between supply sources*

- (29) The Agency understands the objective of fostering competition from different supply sources. This can indeed be achieved by a postage stamp methodology, but also by creating a homogeneous group of points in a distance-based methodology, such as the CWD methodology, in line with definition 10 and Article 6(4)(b) of the NC TAR.

### *Price signal*

- (30) On the price signal, the Agency does not understand why Energinet concludes that the postage stamp methodology leads to a more transparent price signal, because the publication requirements for the postage stamp methodology and the CWD methodology are the same. What is clear, however, is that a postage stamp can be considered a simpler methodology, making it easier for network users to reproduce and forecast tariffs.

### *Competition between routes and points*

- (31) Competition between routes and points can indeed be enhanced by a postage stamp methodology. Alternatively, Regulation (EU) 715/2009 and the NC TAR specifically address the notion of 'pipeline-to-pipeline competition'. If effective pipeline-to-pipeline competition exists, the legislation foresees the instrument of tariff benchmarking. In order to apply this, the NRA needs to determine the existence of effective pipeline-to-pipeline competition<sup>6</sup>.

<sup>6</sup> See Commission staff working document on tariffs for access to the natural gas transmission networks regulated under Article 3 of Regulation 1775/2005, 20 April 2007: 'Regulators are supposed to develop criteria allowing them to determine the existence of "effective pipeline-to-pipeline competition". These criteria should at least take into account the expectation that competing systems imply a real choice for the user'.

### 4.1.3 Cross-subsidisation

- (32) **Article 7(c)** of the NC TAR requires the RPM to ensure non-discrimination and prevent undue cross-subsidisation.

#### *The Cost Allocation Assessment*

- (33) One instrument to evaluate this is the cost allocation assessment (CAA, Article 5 of the NC TAR). Regarding the cost drivers, the capacity CAA uses both forecasted contracted capacity and distance.
- (34) Energinet shows the CAA for the postage stamp methodology, the CWD methodology and the current methodology for a number of years and for the scenarios with and without Baltic Pipe<sup>7</sup>. This provides useful insights in a situation where changes are foreseen in the gas transmission system. The Agency considers this a good practice. The results are repeated below.

Table 4 CAA capacity-based transmission tariffs

	CWD	Postage stamp	CWD	Postage stamp
	<i>With Baltic Pipe<sup>8</sup></i>		<i>Without Baltic Pipe</i>	
<b>2019/2020</b>	not foreseen to be operational		(-)21.65%	<b>(+)11.70%</b>
<b>2020/2021</b>			(-)23.26%	<b>(+)8.65%</b>
<b>2021/2022</b>			(-)23.57%	<b>(+)10.53%</b>
<b>2022/2023</b>	(-)3.03%	(+)7.06%	(-)23.03%	<b>(+)10.15%</b>
<b>2023/2024</b>	(-)1.60%	(+)6.22%	(-)16.23%	(+)4.09%
<b>2024/2025</b>	(-)1.51%	(+)5.40%	(-)14.22%	(+)1.06%

- (35) Energinet updated the input data in the simplified model and therefore the results changed compared to the consultation document. The table shows that the outcome is above the 10% threshold for some years (in **bold** in the table), which requires a justification, which is not provided in the consultation document.
- (36) The Agency finds the results counter-intuitive<sup>9</sup>. The postage stamp methodology uses only capacity, while the CWD methodology uses both capacity and distance as cost drivers. As the CAA indicates the degree of cross-subsidisation using both distance and capacity as cost drivers, it is expected that the CWD methodology leads to less cross-subsidies than the postage stamp methodology. However, the results as shown in the tables do not support this.

<sup>7</sup> In the consultation document, the results are shown for the previous gas year '17-'18, the first gas year under the new methodology '19-'20 and the gas year '24-'25 while the simplified model shows the gas years 2019/2020 until 2024/2025.

<sup>8</sup> The NRA decided to set an f-factor of 60% for the Baltic Pipe project (DERA decision of 28 November 2017). The Agency understands that the 60% reflects the share of the capital costs of the Baltic Pipe. The investment is thus fully included in the regulated asset base and these costs are recovered via the postage stamp RPM. The operational costs are recovered via the commodity charge.

<sup>9</sup> The Agency also remarks that the outcome is quite sensitive to changes in the input data.

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- (37) One reason for this is the difference in entry-exit splits: the CWD methodology is calculated using a 50/50 entry-exit split, while for the postage stamp methodology no entry-exit split is set<sup>10</sup>. For the year 2019/2020, the postage stamp methodology implicitly uses a 54/46 entry-exit split. Applying the same entry-exit split in the CWD methodology changes the CAA outcome from 21.65% to 15.82% for that year.
- (38) Another reason is the different way in which exit points from storage facilities are influencing the outcome of the CAA. The NC TAR does not prescribe how to allocate exit capacity from these points. Energinet allocates it as 100% intra-system use. Instead if, for example, 10% of this exit capacity were allocated as cross-system use, the CAA result of 15.82% from the previous paragraph would be reduced to 9.68% (while the 11.70% of the postage stamp would change to 16.48%).
- (39) Thus, it is not evident that the CWD methodology leads to more cross-subsidies than the postage stamp methodology. The Agency advises that the Danish NRA study the effect that different choices have on the level of cross-subsidisation in more detail<sup>11</sup>.

### *Reference price comparison*

- (40) The Agency also assessed the difference between the postage stamp methodology and the CWD methodology over time for the scenario with Baltic Pipe (see Table 5). The tariffs for the Dragør exit point to Sweden are most impacted by the choice between these two methodologies. The tariff in the gas year 2019/2020 is for instance 46% higher using a CWD methodology than using a postage stamp methodology. A postage stamp tariff would thus subsidise the flows to Sweden, compared to the CWD methodology. The flows to Poland are cross-subsidised as well by using a postage stamp methodology, but to a lesser extent<sup>12</sup>.

*Table 5 Reference prices for the CWD methodology compared to those for the postage stamp methodology (with Baltic Pipe)*

	2019/2020	2020/2021	2021/2022	2022/2023*	2023/2024	2024/2025
Exit Zone Denmark	-8%	-12%	-9%	-11%	-16%	-18%
Exit Dragør	46%	41%	45%	28%	21%	19%
Exit Ellund	-15%	-19%	-15%	-20%	-24%	-25%
Exit Baltic Pipe				8%	4%	3%
Entry Nybro	-18%	-17%	-17%	-18%	-15%	-14%
Entry Ellund	0%	2%	1%	-23%	-19%	-18%
Entry RES	-47%	-46%	-47%	-40%	-38%	-38%
Entry Baltic Pipe				5%	8%	10%

\* Baltic Pipe is expected to become operational.

<sup>10</sup> The cost base is divided by the total (entry and exit) capacities, resulting in the same level of reference prices for entry points and exit points.

<sup>11</sup> A capacity weighted distance methodology with an entry-exit split that better fits the actual shares of technical or booked capacity on entry and exit points may provide more interesting insights.

<sup>12</sup> Although the tariffs for the Baltic Pipe are lower when the postage stamp methodology is used than using the CWD methodology, overall the tariffs decrease once the Baltic Pipe becomes operational due to the increased transport volumes.

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### 4.1.4 Volume risk

- (41) **Article 7(d)** of the NC TAR requires that the RPM 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.
- (42) Energinet does include an assessment against this criterion and does not propose any measures to deal with volume risk.
- (43) The Agency notes that, if the Baltic Pipe becomes operational, it may be the case that significantly more gas passes through the system than what is used for consumption. The Agency understands that there would be no volume risk assigned to final customers, as capacity on the Baltic Pipe has been allocated in long term contracts in the Open Season 2017. Nonetheless, the Agency recommends that the NRA assess, in its final decision, if final customers in Denmark would need to be protected from any volume risk on the Baltic Pipe.

### 4.1.5 Cross-border trade

- (44) **Article 7(e)** of the NC TAR requires that the RPM ensure that the resulting reference prices do not distort cross-border trade.
- (45) In view of Energinet, uniform entry tariffs (on the competing entry points) strengthen competition and avoid distorting cross-border trade.
- (46) The Agency notes that reference prices are compliant with the principle of not distorting cross-border trade if the RPM complies with the principles of cost-reflectivity, non-discrimination and preventing undue cross-subsidisation. The Agency refers to its remarks on those principles in the previous sections of this Chapter.

#### *Overall assessment*

- (47) Overall, the choice of a postage stamp methodology makes it easy for network users to forecast and understand the tariffs. However, the limited complexity of the Danish system allows distance to be taken account in the choice of RPM. While the argument that the postage stamp is more robust is conceptually valid, it needs to be further substantiated. Furthermore, the Agency advises further to study the effect that different choices (such as the entry-exit split) have on the level of cross-subsidisation.

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

- (48) 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) of the NC TAR are met. Table 6 provides an overview of the assessment against the criteria in Article 4(3)(a).
- (49) Commodity-based transmission tariffs can be used as an exception. The NC TAR allows for two types of commodity-based transmission tariffs: a flow-based charge and a complementary revenue charge. In the consultation document, Energinet does not explain which of these charges would be

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used. From a bilateral meeting, the Agency understands that the proposal is to use a flow-based charge. The Agency recommends clarifying this in the final decision.

- (50) Energinet proposes to apply commodity-based transmission tariffs with a dynamic capacity-commodity split. Appendix 7 of the consultation document states that the capacity-commodity split for the gas year 2019/2020 is 51%-49%, but on page 12 it is mentioned that a cap is introduced so that no more than 40% of the cost base is recovered through commodity-based tariffs. Based on the evidence in the consultation document, the Agency considers this an excessive use of the commodity charge and thus not compliant with Article 4(3), first paragraph, of the NC TAR. In the Agency's view, the NC TAR considers commodity-based transmission tariffs to be the exception, because high commodity charges create a higher risk of under recovery (as flows may be more difficult to forecast than booked capacity) and are less transparent because they are not included in the reserve price and thus not visible in the capacity auction.
- (51) The high share of revenue to be recovered through commodity-based transmission tariffs is the result of the proposal to cover all operational costs via the commodity charge. Article 4(3)(a)(i) of the NC TAR requires that the commodity charge should cover the costs mainly driven by the quantity of gas flow. The Agency understands the intention of the NC TAR is to cover costs such as fuel costs (which are directly driven by the quantity of gas flow). Instead, Energinet argues that the full operational costs vary with the gas flow; in the extreme case that there were no gas flowing through the system, the operational costs could be largely avoided, while the capital costs are sunk cost. The Agency notes that this is an extreme case and recommends that the NRA assesses whether there is indeed a strong correlation between the total operational costs and the quantity of gas flow and, in case such a strong correlation exists, to assess the impact of a high commodity share on the aims of Article 13 of Regulation (EC) 715/2009.
- (52) Regarding Article 4(3)(a)(ii) of the NC TAR, the Agency notes that based on information shared bilaterally, it is clear that the commodity charge is only charged at exit points and not at exits to storage points (because of a 100% discount). The Agency recommends clarifying in the decision that the charge is only levied at exits. Although the Agency understands the objective to keep storages competitive, the discount on commodity charges does not comply with the requirements in the NC TAR as this implies the charge is not the same at all exit points. Finally, the Agency recommends clarifying how the forecast on the flows are made.

*Table 6 Compliance with the criteria set out in Article 4(3a) of the NC TAR*

Criteria	Y/N?
levied for the purpose of covering the costs mainly driven by the quantity of the gas flow	No
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	No
expressed in monetary terms or in kind	Yes

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

- (53) 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.

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- (54) The consultation document includes one service that is to be recovered via non-transmission tariffs, the 'emergency supply services'. The cost components for this service are:
- the cost of purchasing emergency supply instruments from underground storages;
  - capacity rights in adjacent systems to Nybro (North Sea upstream infrastructure) and interruptible consumers;
  - 1/3 of CAPEX relating to Ellund capacity expansion is allocated to the emergency supply cost base.
- (55) The consultation document does not include an assessment against the criteria in Article 4(1) of the NC TAR. The Agency assesses that these services should indeed qualify as non-transmission services because the costs for these services are not driven by capacity and distance.
- (56) Energinet argues that the cost base and resulting tariffs of the emergency supply services are separated from the transmission tariffs and as such not regulated by the NC TAR. The Agency does not agree with this assessment: non-transmission services are regulated by the NC TAR under Article 4(4), which requires that the non-transmission tariffs shall be cost-reflective, non-discriminatory, objective and transparent and shall be charged to the beneficiaries of the non-transmission service. In this respect, therefore, the consultation document is not compliant with the NC TAR. The Agency strongly recommends that an assessment against these criteria is included in the final decision.

## 5. Other comments

- (57) The Agency notes that Energinet also charges a number of fees not included in the consultation document. Those are:
1. Purchase and sale of balancing gas;
  2. Fees for the use of Gas Transfer Facility, Capacity Transfer Facility and Exchange transfer facility;
  3. Various transaction fees for nomination, over delivery, overrun, underrun, payments covering deliveries in force majeure situations (including emergency) and off-spec fee.
- (58) The Agency advises the NRA to include an overview of these fees in the final decision and explain why those charges are considered to be outside the scope of the NC TAR. More specifically:
- Regarding (1), the Agency agrees with Energinet's assessment that, from a joint reading of Articles 3(11), (12) and (15) of the NC TAR, these are excluded from the scope of the NC TAR.
  - Regarding (2), the Agency understands that these fees have always been set to zero. They are included in the overview to recover cost in case IT development investments were required; however, this is currently not foreseen. The Agency also assesses both services as related to the 'access to the natural gas transmission networks'. In case the fees aim to recover the costs of providing the service, they should fall within the scope of the NC TAR and should subsequently be treated as either transmission or as non-transmission services.
  - Regarding (3), the Agency requested more information regarding the payments covering deliveries in force majeure situations (including emergency) and off-spec fee. The Agency

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understands that these services are not often used. However, with the information available at the time of writing this Report, the Agency understands that these fees aim to recover the costs of providing the services. The Agency also assesses both services as related to the 'access to the natural gas transmission networks'. Therefore, they should fall within the scope of the NC TAR and should subsequently be treated as either transmission or as non-transmission services.

## Annex 1: Legal framework

(59) 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.*

(60) 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.*
- (61) 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.*

(62) 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.*

(63) 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.*

(64) 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
<b>ACER</b>	Agency for the Cooperation of Energy Regulators
<b>NRA</b>	National Regulatory Authority
<b>TSO</b>	Transmission System Operator
<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>NC TAR</b>	Network code on harmonised transmission tariff structures for gas
<b>RPM</b>	Reference Price Methodology
<b>CWD</b>	Capacity Weighted Distance
<b>CAPEX</b>	Capital Expenditures