



## DECISION

In the administrative proceedings pursuant to section 29(1) Energy Industry Act (EnWG) in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) 715/2009 in conjunction with Article 4(1), Article 4(2), Article 4(4), Article 6(4)(c), Article 27(4) first sentence and Article 27(5) of Regulation (EU) 2017/460 and also section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 Incentive Regulation Ordinance (ARegV) in conjunction with section 28 first sentence para 3 ARegV

concerning the periodic decision making regarding the reference price methodology and the other points listed in Article 26(1) of Regulation (EU) 2017/460 applicable to all transmission system operators (REGENT 2021)

Ruling Chamber 9 of the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Tulpenfeld 4, 53113 Bonn,

represented by

The Chair Dr Christian Schütte,

The Vice Chair XXX

The Vice Chair XXX

decided on xx [month] xxxx:

1. The reference price methodology to be used by the transmission system operators operating in the German market area for calculating reference prices is determined as being the calculation of non-distance related entry and exit tariffs (so-called uniform postage stamp tariffs). This entails dividing the transmission services revenue by the average contracted non-adjusted capacities at the entry and exit points forecasted for the calendar year. No capacities shall be taken into account and no entry tariffs charged for the input of biogas, hydrogen produced by water electrolysis, or gas manufactured using hydrogen produced by water electrolysis with subsequent methanation (power-to-gas). For the months of October to December 2021, when calculating the reference prices the transmission system operators must run a hypothetical booking forecast that assumes there to be a single German market area for the whole of 2021.
2. Capacity-based transmission tariffs at entry and exit points at storage facilities for firm and interruptible capacity products and for capacity products with an attached condition shall be discounted by 75% if and insofar as the storage facility that is connected to more than one transmission or distribution network is not used as an alternative to an interconnection point. Before granting such a discount the transmission system operator must ask for proof from the storage facility operator that the facility cannot be used to compete with an interconnection point. Further discounts or year-round discounts other than the above-mentioned are not permissible.
3. A discount may be set for transmission tariffs for conditional firm capacity with free allocability and firm, dynamically allocable capacity. Discounting must not reduce capacity charges for conditional firm capacity with free allocability and firm, dynamically allocable capacity to below the capacity charge for the interruptible standard capacity product with the lowest discount at this point. These provisions are also applicable to entry and exit points at storage facilities, although only after application of the discount determined according to operative provision 2.
  - a) The interconnection point connecting the end user Wacker Chemie AG to bayernets GmbH is subject to benchmarking in accordance with Article 6(4)(a) of Regulation (EU) 2017/460, otherwise a pipeline with direct access would have to be built. This arrangement shall only apply if the Überackern 2 entry point (network point 700069-8001-1) is used to supply this end user via the relevant interconnection point.
    - (1) If the reduced tariff is applied, firm or interruptible access to the virtual trading point must be ruled out. In the event that capacity products with access to the virtual trading point are offered at these points, general

tariff structures apply, not benchmarking, if access to the virtual trading point is used within the duration of the capacity.

(2) Assuming an imputed duration of use for the impending direct pipeline of four years, the overall indicative tariff amounts to €0.84 per kWh/h/a for booking corresponding entry and exit capacities, whereby the tariff calculated according to operative provision 3(b) is to be applied for the entry capacity. For the exit capacity, the tariff to be applied is the difference between the indicative tariff of €0.84 per kWh/h/a and the tariff calculated for the entry capacity.

(3) The reduced tariff is tied to the petitioner and to the relevant entry and exit points and is applied regardless of the shipper or the supplier to the end user. bayernets GmbH must recalculate the reduced tariff at the start of a regulatory period, using updated interest rates. The Bundesnetzagentur must be notified of every recalculation. The transmission system operator bayernets GmbH must always identify the reduced tariff transparently.

b) The entry and exit points at the Haidach storage facility operated by astora GmbH & Co. KG and GSA LLC, connecting to bayernets GmbH (network points 700069-8021-1 and 700069-8021-2), are subject to benchmarking in accordance with Article 6(4)(a) of Regulation (EU) 2017/460, otherwise a pipeline with direct access would have to be built. In the case of gas being put into storage, this arrangement shall only be applied if the entry point Überackern 2 (network point 700069-8001-1) is used for this purpose. In the case of gas being withdrawn from storage, this arrangement shall only be applied if the exit point Überackern 2 (network point 700069-8001-2) is used for this purpose.

(1) If the reduced tariff is applied, firm or interruptible access to the virtual trading point must be ruled out. In the event that capacity products with access to the virtual trading point are offered at these points, general tariff structures apply, not benchmarking, if access to the virtual trading point is used within the duration of the capacity.

(2) Assuming an imputed duration of use for the impending direct pipeline of four years, the indicative tariff amounts to €0.13 per kWh/h/a for booking corresponding entry capacity and €0.13 per kWh/h/a for booking corresponding exit capacity. No other discounts at storage facilities are to be applied to these tariffs.

(3) The reduced tariff is tied to the petitioner and to the relevant entry and exit points and is applied regardless of the shipper. bayernets GmbH

must recalculate the reduced tariff at the start of a regulatory period, using updated interest rates. The Bundesnetzagentur must be notified of every recalculation. The transmission system operator bayernets GmbH must always identify the reduced tariff transparently.

(4) Gas volumes transported out of the Austrian market area and put into storage using tariffs reduced according to this operative provision must not be transported into the German market area using entry capacities discounted according to operative provision 2. The relevant gas volumes may only either be transported using the tariff reduced according to this operative provision back into the Austrian market area or imported into the German market area using a non-discounted entry capacity. Gas volumes transported out of the German market area and put into storage using exit capacity discounted in accordance with operative provision 2 must not be transported into the Austrian market area using tariffs reduced according to this operative provision. The relevant gas volumes may only be transported back into the German market area. The transmission system operators to whose networks the Haidach storage facility is connected must be given the relevant evidence for this by the petitioner at the Haidach storage facility and exchange information with each other in so far as is necessary for application of this paragraph.

4. Rescaling in accordance with Article 6(4)(c) of Regulation (EU) 2017/460 at all entry and exit points with the aim of being able to collect transmission services revenue in actual fact shall be carried out by multiplying by a constant.
5. The costs that according to Section 19a(1) first sentence Energy Industry Act network operators have to bear for the technical adjustments of connection points, customer facilities and consumer appliances necessary for conversion of the gas quality within the network from L-gas to H-gas (conversion costs) shall be shared among all gas supply networks across the Federal Republic of Germany. The market area conversion charge is classified as a non-transmission service within the meaning of Article 4 of Regulation (EU) 2017/460.
  - a) Every year, the transmission system operators jointly calculate the total conversion costs to be reimbursed to their downstream distribution system operators and which they themselves expect to incur. In addition, they jointly calculate the forecasted total amount of exit capacities booked or ordered for the year in question at all exit points with the exception of interconnection points and storage points. The calculated total costs are shared evenly over the forecasted booked or ordered exit capacities at exit points with the exception of

interconnection points and storage points and added to the corresponding capacity charges. The transmission system operators establish a compensation mechanism which ensures that the market area conversion charge does not affect the net income of individual transmission system operators.

- b) The costs of conversion are borne equally by all network customers using exit points with the exception of interconnection points and storage points.
  - c) In cases where the capacities on which the calculation was based diverge from the capacities actually marketed, the resulting differences in generated revenues are balanced using a comparison between forecasted and actual values within the framework of the market area conversion charge system. Likewise, differences resulting from divergences between forecasted and actual conversion costs must be balanced using a comparison between forecasted and actual values within the framework of the market area conversion charge system. Both these differences are calculated individually in the calendar year after they were generated and are fully balanced in the following calendar year. Interest is incurred on these differences to the level of the amount committed on average in the calendar year to be balanced. The amount committed on average is calculated as the average of the figure at the beginning and end of the year. The interest rate is based on the average running yield of fixed-interest securities from German issuers over the previous ten full calendar years as published by the Deutsche Bundesbank.
6. The following costs shall be spread across all German networks: costs for efficient network connection and for maintenance and operation according to section 33(2) Gas Network Access Ordinance (GasNZV), the measures pursuant to section 33(10) GasNZV and the measures pursuant to section 34(2) GasNZV, costs for extended balancing actions pursuant to section 35 GasNZV minus the lump sum to be paid by the balancing group manager according to section 35(8) GasNZV, costs for measures pursuant to section 36(3) and (4) GasNZV and costs for the tariffs for avoided network costs to be paid by the network operator to the shippers of biogas in accordance with section 20a Gas Network Charges Ordinance (GasNEV) (biogas costs). The biogas charge is classified as a non-transmission service within the meaning of Article 4 of Regulation (EU) 2017/460.
- a) Every year, the transmission system operators jointly calculate the total biogas costs to be reimbursed to their downstream distribution system operators and which they themselves expect to incur. In addition, they jointly calculate the forecasted total amount of exit capacities booked or ordered for the year in question at all exit points with the exception of interconnection points and storage

points. The calculated total costs are shared evenly over the forecasted booked or ordered exit capacities with the exception of interconnection points and storage points and added to the corresponding capacity charges. The transmission system operators establish a compensation mechanism which ensures that the biogas charge does not affect the net income of individual transmission system operators.

- b) The biogas costs are borne equally by all network customers using exit points with the exception of interconnection points and storage points.
- c) In cases where the capacities on which the calculation was based diverge from the capacities actually marketed, the resulting differences in generated revenues are balanced using a comparison between forecasted and actual values within the framework of the biogas charge system. Likewise, differences resulting from divergences between forecasted and actual biogas costs must be balanced using a comparison between forecasted and actual values within the framework of the biogas charge system. Both these differences are calculated individually in the calendar year after they were generated and are fully balanced in the following calendar year. Interest is incurred on these differences to the level of the amount committed on average in the calendar year to be balanced. The amount committed on average is calculated as the average of the figure at the beginning and end of the year. The interest rate is based on the average running yield of fixed-interest securities from German issuers over the previous ten full calendar years as published by the Deutsche Bundesbank.

7.

- a) For meter operation at exit points to end users, which also includes metering, meter operation charges are levied using a cost-reflective, non-discriminatory, objective and transparent methodology to be determined by the respective transmission system operator. Meter operation at these points is classified as a non-transmission service. In the event of divergences between the costs of meter operation at exit points to end users for the calendar year assuming efficient provision of services and the valuations included in the revenue cap in this regard, which result from changes in the number of connection users for whom meter operation is carried out by the network operator, such divergences – insofar as they have occurred from 2020 onwards – are balanced using a separate regulatory account. Any divergences that arose before 2020 are balanced using the normal regulatory account.
- b) A meter operation charge reflecting the costs of the respective metering station and the costs of metering is also levied for meter operation at internal order

points. Meter operation at these points is likewise classified as a non-transmission service.

- c) Meter operation at interconnection points and at entry and exit points at storage facilities is classified as a transmission service.
8. Charges are levied for the alternative nomination procedure according to section 15(3) GasNZV in so far as it is used. The alternative nomination procedure is classified as a non-transmission service.
  9. The directives in points 1 to 8 come into effect as of 1 October 2021.
  10.
    - a) If, prior to the repetition of this procedure in accordance with Article 27(5) fourth sentence Regulation (EU) 2017/460, new circumstances arise which were not considered in this determination, in particular in the form of new conditions for firm capacity products or new non-transmission services for a transmission system operator, and which could make it necessary to reassess the points listed in Article 26(1) of Regulation (EU) 2017/460, the Bundesnetzagentur must be notified of such circumstances immediately.
    - b) In order to assess the volume risk according to Article 7 second sentence (d) of Regulation (EU) 2017/460, the transmission system operators must publish a joint report after the conclusion of each calendar year, by 31 January of the following calendar year, starting with the 2021 calendar year. The report must contain data on technical capacity, on the forecasted average contracted non-adjusted capacity, on the forecasted average contracted adjusted capacity and on the transmission services revenue in the completed calendar year and must at least itemise the data according to the point types as set out in Annex 2. Data on interconnection points must be itemised according to the adjacent entry and exit systems and/or neighbouring countries. In each case, the report must detail the developments compared to the same period in the previous year and explain to what extent the developments are the result of significant changes in technical capacity, the booking behaviour of network users or other factors. The report must point out if gas is transported using other entry and exit systems as substitutes. Furthermore, the report should detail the revenue lost as a result of the tariff exemption for biogas and power-to-gas. The reporting obligation ends with the issuing of the subsequent decision in accordance with Article 27(5) fourth sentence of Regulation (EU) 2017/460.
  11. The transmission system operators are obliged to submit all documents, in full, required for the cost allocation assessments according to Article 5 of Regulation (EU) 2017/460

and for assessment of the final consultation according to Article 26(1) of Regulation (EU) 2017/460 for the calendar year 2022 to the Bundesnetzagentur by 1 January 2021. The documents to be submitted consist of a report and an annex.

- a) The structure and the contents of both the report and the annex must conform to the specifications set out in Annex 8 of this decision.

*(Annex 8 is available on the Bundesnetzagentur website at: <http://www.bundesnetzagentur.de>; menu items: "Ruling Chambers" → "Ruling Chamber 9" → "Decisions" → "BK9-19/610 Decision concerning the periodic decision making regarding the reference price methodology and the other points listed in Article 26(1) of Regulation (EU) 2017/460 applicable to all transmission system operators (REGENT 2021)")*

- b) The documents must be submitted in both electronic and written form, with the exception of the data entry form included in the annex to the report.

- c) The data entry form included in the annex to the report must be sent in electronic form only, using the latest updated XLSX file provided by the Bundesnetzagentur ("BNetzA\_BK9-19-610.xlsx") and must be fully and correctly completed. No changes may be made to the structure of the XLSX file in the course of completing the form. Other files must be submitted in formats such as PDF, Word or similar, with no security restrictions (eg copy protection).

*(The XLSX file is available for download from the Bundesnetzagentur website at: <http://www.bundesnetzagentur.de>; menu items: "Ruling Chambers" → "Ruling Chamber 9" → "Decisions" → "BK9-19/610 Decision concerning the periodic decision making regarding the reference price methodology and the other points listed in Article 26(1) of Regulation (EU) 2017/460 applicable to all transmission system operators (REGENT 2021)")*

- d) When sending documents electronically, network operators must always use the Bundesnetzagentur Energiedaten-Portal, which can be accessed via the website <http://www.bundesnetzagentur.de>.

*(The Bundesnetzagentur Energiedaten-Portal can be accessed directly at: <https://app.bundesnetzagentur.de/Energie/>, the title of the procedure is "Datenübermittlung im Rahmen des Art. 26 der Verordnung (EU) 2017/460 (NC TAR").)*

Before being sent via the Energiedaten-Portal, all documents must be encrypted using the encryption program provided on the internet.

*(The encryption program is available on the Bundesnetzagentur website at: <http://www.bundesnetzagentur.de>; menu items: "Elektrizität und Gas" → "Unternehmen/Institutionen" → "Datenaustausch und Monitoring" → "Erhebung von EEG-Daten" → "Energiedatenportal" → "Download Verschlüsselungs-Programm 2007".)*

12. The order for payment of costs is reserved.

## Rationale

### A.

1 The Ruling Chamber has opened own-initiative proceedings for the determination of a reference price methodology and the other points listed in Article 26(1) of Regulation (EU) 2017/460 for all transmission system operators operating in Germany.

#### I. Proceedings

2 Notification of the opening of proceedings was given in the Official Gazette 09/2019 of 15 May 2019 and simultaneously on the Bundesnetzagentur's website.

3 The background to these proceedings is the network code on harmonised transmission tariff structures for gas (Regulation (EU) 2017/460), which entered into force on 6 April 2017 and is directly applicable European law yet also requires several implementing acts from the national regulatory authority. These acts need to undergo a comprehensive consultation process.

4 The Bundesnetzagentur conducted extensive surveys among the transmission system operators regarding all the information required for the cost allocation assessments according to Article 5 of Regulation (EU) 2017/460 and for assessment of the final consultation according to Article 26(1) of Regulation (EU) 2017/460. The plausibility of the data thus obtained was checked and any errors and implausibilities that became apparent were corrected as necessary in consultation with the transmission system operators concerned.

5 Based on the submitted reports and data entry forms, the Bundesnetzagentur developed the present decision in accordance with Article 27(4) of Regulation (EU) 2017/460.

6 Even before the consultation proceedings began, an expert opinion from DNV GL Energy Advisory GmbH in which among other things two alternative reference price methodologies were proposed was submitted by Gascade Gastransport GmbH, GRTgaz Deutschland GmbH and Gazprom export LLC via email dated 5 December 2019. Firstly it proposed a postage stamp tariff differentiated by point type with no explicit cost allocation according to transport tasks which had already been discussed in the BK9-18/610-NCG and BK9-18/611-GP proceedings under the designation "postage stamp tariff per type of network point". In this case each transmission system operator's revenue cap is to be shared between various point types, namely entry points from neighbouring market areas and production facilities, entry and exit points to storage facilities, exit points to end users and downstream network operators and exit points to neighbouring market areas, weighted according to the forecasted capacity bookings. The revenues to be generated per point type will be aggregated across all transmission system operators and divided by the corresponding capacities in order to determine a separate postage stamp tariff for each point type. Secondly, for the first time a function-specific postage stamp on

the basis of explicit cost allocation according to transport tasks is introduced into the debate. In this case each transmission system operator's revenue cap is to be shared between the two network functions intra-system and cross-system network use. The possible parameters proposed for the split are pipeline diameter (with all pipelines with a diameter >700 mm allocated to cross-system network use), pressure range (with all pipeline sections with a pressure range >60 bar allocated to cross-system network use) and capacity forecasts at cross-border points in relation to other network node points. The formation of function-specific revenue caps is proposed as a further variant. One postage stamp tariff will then be formed from this for intra-system network use and one for cross-system network use, for all transmission system operators. The tariff for cross-system network use will have to be paid by all network customers in the same way, whereas the tariff for intra-system network use at the internal exit points is calculated in addition to the tariff for cross-system network use.

## **II. Other information**

- 7 These determination proceedings do not cover the question of whether in derogation of Article 10(1) of Regulation (EU) 2017/460 the reference price methodology is to be applied separately, Article 10(2)(a) of Regulation (EU) 2017/460, which as a general principle according to Article 10(4) of Regulation (EU) 2017/460 would only be possible within a set time period anyway. No corresponding determination proceedings were initiated by the Ruling Chamber. The proceedings on the introduction of an effective compensation mechanism between the transmission system operators of the Germany-wide market area (BK9-19/607, "AMELIE 2021"), initiated in parallel, relate solely to the compensation mechanism to be established when the reference price methodology is applied jointly in accordance with Article 10(3) first sentence of Regulation (EU) 2017/460.
- 8 For further details, reference is made to the content of the implementing acts.

## B.

9 Through this determination, in accordance with Article 27(4) of Regulation (EU) 2017/460 the Bundesnetzagentur is issuing a motivated decision on all points stated in Article 26(1) of Regulation (EU) 2017/460.

10 The decisions taken fall under the responsibility of the Bundesnetzagentur as provided for by section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentence Energy Industry Act in conjunction with Article 6(11) and Article 7(3) of Regulation (EC) 715/2009 in conjunction with Article 4(1), Article 4(2), Article 4(4), Article 6(4)(a) and (c), Article 27(4) first sentence and Article 27(5) of Regulation (EU) 2017/460 and section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 Incentive Regulation Ordinance (ARegV) in conjunction with section 28 first sentence para 3 ARegV. The competence of the Ruling Chamber derives from section 59(1) first sentence Energy Industry Act.

### **I. Determination of a reference price methodology in accordance with Article 26(1)(a) of Regulation (EU) 2017/460 (operative provision 1)**

11 The decision pursuant to operative provision 1 on the reference price methodology is based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence and Article 26(1)(a) of Regulation (EU) 2017/460.

12 Accordingly, it is necessary to establish a reference price methodology to be applied to the part of the transmission services revenue to be recovered from capacity-based transmission tariffs with the aim of deriving reference prices (Article 3 second sentence para 2 of Regulation (EU) 2017/460). The reference price is the price for a capacity product for firm capacity with a duration of one year (Article 3 second sentence para 1 of Regulation (EU) 2017/460). In principle, the transmission services revenue shall be recovered by capacity-based transmission tariffs (Article 4(3) first sentence of Regulation (EU) 2017/460).

#### **1. Description of the reference price methodology according to Article 26(1)(a) of Regulation (EU) 2017/460**

13 Article 26(1)(a) of Regulation (EU) 2017/460 stipulates that a description of the proposed reference methodology must be provided. This description is derived from the wording of operative provision 1. In the case of contracted capacities it was explicitly clarified that only non-adjusted contracted capacities shall be relevant because, under the system set out in Regulation (EU) 2017/460, any higher or lower revenues resulting from multipliers and discounts are not part of the reference price methodology but must (in a second step) be taken into account as

part of the rescaling according to Article 6(4)(c) of Regulation (EU) 2017/460. In addition, the reference was changed to average contracted capacities without any (unnecessary) reference to a time frame. This does not result in any material changes to the actual reference price. The relevant forecasted capacities to be used for the reference price methodology are those relating to the period for which the reference price was determined.

## **2. Parameters for the reference price methodology according to Article 26(1)(a)(i) of Regulation (EU) 2017/460**

According to Article 26(1)(a)(i)(1) and (2) of Regulation (EU) 2017/460, a description is required of the indicative information set out in Article 30(1)(a) of Regulation (EU) 2017/460, ie the parameters used in the reference price methodology relating to the technical characteristics of the transmission system. If the uniform postage stamp method according to operative provision 1 is applied, the only parameter to be specified is the forecasted contracted capacity at the entry and exit points and the associated assumptions (Article 30(1)(a)(ii) of Regulation (EU) 2017/460).

In order to fulfil this requirement the Bundesnetzagentur conducted a survey on the average contracted non-adjusted capacity forecasted for the calendar year 2021 at all entry and exit points. This included all network operators that were certified as transmission system operators or that were engaged in an ongoing certification process on account of their capacity as a transmission system operator at the time of the proceedings. In this context the Ruling Chamber did not concern itself with the question as to whether the merger of the two current market areas on 1 October 2021 will have repercussions for the status of individual transmission system operators. This appears to be possible in the case of Ferngas Netzgesellschaft mbH in particular, whose sole interconnection point is the Vitzeroda market area interconnection point, which will not exist after the merger. Were this state of affairs to lead to Ferngas Netzgesellschaft mbH no longer being considered a transmission system operator in future, the consequences for the matters addressed in this decision would be negligible. The significance of Ferngas Netzgesellschaft mbH within the German market area in terms of its economic weight and capacity is too small to affect the analyses conducted here to an extent that any consequences for the choice of most suitable reference price methodology for the market area would appear seriously possible. Furthermore, no consideration was given to potential but uncertain and currently unforeseeable developments in connection with the extension of the scope of gas directive 2009/73/EC by amending directive (EU) 2019/692 of 17 April 2019 and the corresponding amending of the German Energy Industry Act (EnWG). The new rules state that interconnectors between a member state and a third country are now subject to regulation. Under specific circumstances temporary derogations from the regulation are possible under section 28b Energy Industry Act. Currently two exemption procedures according to section 28b

Energy Industry Act are currently pending at the Bundesnetzagentur and have not been concluded as at the date of this decision.

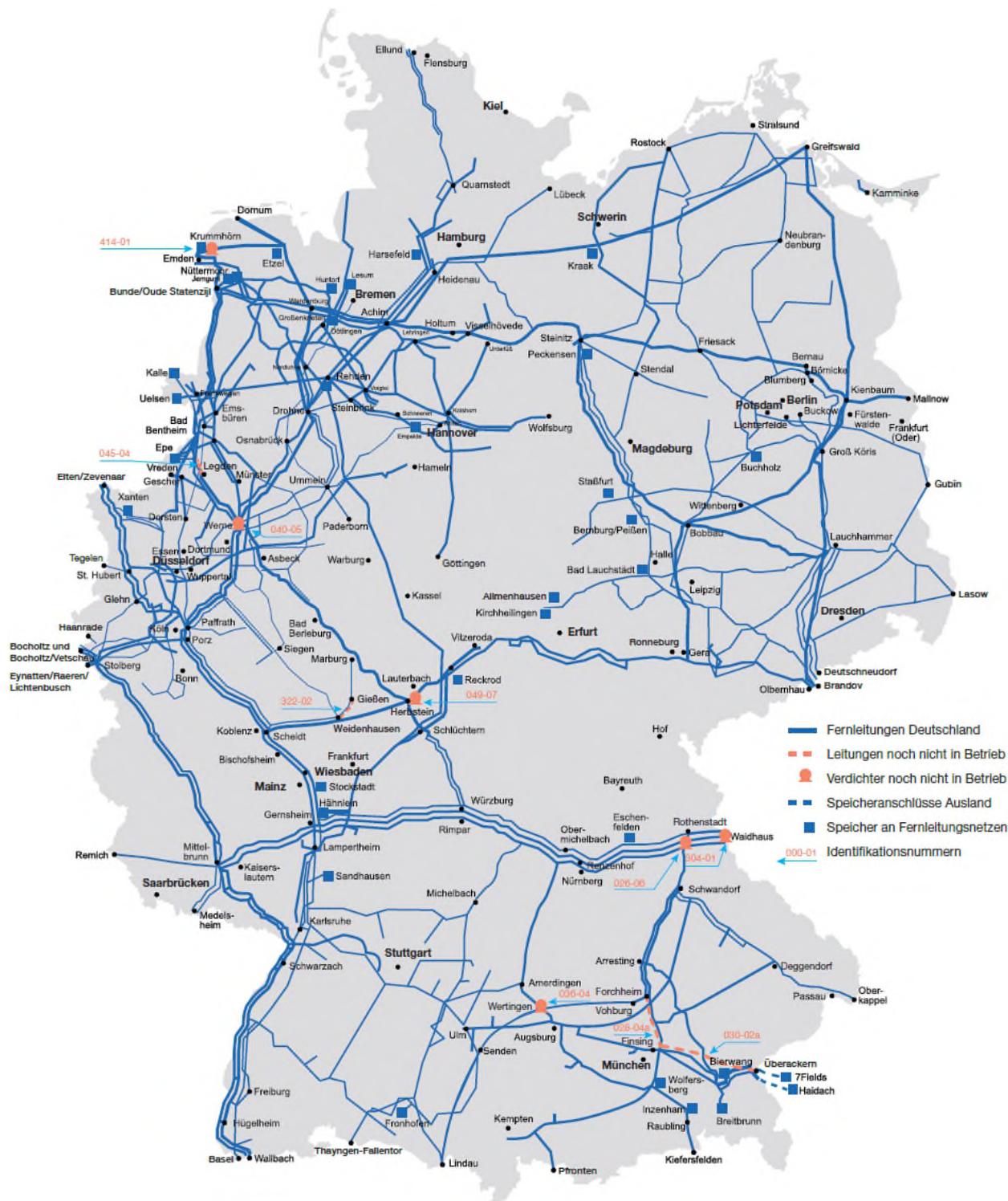
- 16 The total of the reported capacities is shown in Annex 1. According to Article 26(1)(a)(i)(1) of Regulation (EU) 2017/460, justification for using this parameter must be provided. The justification is that the booked or ordered capacity in each case is a significant cost driver, which means that, according to Article 3 second sentence para 18 of Regulation (EU) 2017/460, it is a key determinant of the transmission system operator's activity which is correlated to the costs of that transmission system operator. This parameter facilitates appropriate, pro-rata allocation of the costs caused by the reservation of the entire transmission system to the users of the transmission system. Article 5(1)(a)(ii) of Regulation (EU) 2017/460 explicitly lists the forecasted contracted capacity as a possible cost driver and, likewise, the capacity weighted distance reference price methodology described in Article 8 of Regulation (EU) 2017/460 recognises forecasted capacity as a cost driver. Detailed justifications of suitability as a cost driver and also of the rejection of distance as a complementary cost driver given the complexity and the meshed structure of the German gas transmission networks can be found in section B.I.5.b). The Ruling Chamber, however, does not generally consider technical capacity (within the meaning of Article 2(1) para 18 of Regulation (EU) 715/2009 the maximum firm capacity that the transmission system operator can offer to the network users, taking account of system integrity and the operational requirements of the transmission network) to be a suitable cost driver. Using technical capacity merely results in an abstract consideration of the capability of the individual entry and exit points with no reference to the distribution of costs during a given tariff period among the network users, whose booking behaviour (and hence the booked or ordered capacity in each case) is a key factor in determining the extent to which the existing costs should be apportioned to the network users. Furthermore, the transmission system operators intend to offer additional capacity to the market for a limited period of time using an oversubscription and buy-back scheme, because the firm technical capacity is available only in a reduced amount for the merged market area after the consolidation of the two current market areas (see the corresponding procedure KAP+ carried out by Ruling Chamber 7, BK7-19/037) Thus, an abstract view on the performance of the specific entry and exit points would not include the capacity's real marketing situation and therefore its possibilities for use, whereas taking into account the actual booking behaviour of network users reflects real demand as closely as possible to the current point in time.
- 17 In addition to the relevant indicative information, according to Article 26(1)(a)(i)(2) of Regulation (EU) 2017/460 the assumptions applied are also subject to consultation. In advance of this decision the transmission system operators were required to estimate the capacity forecasts for 2021, among other things. This was to be based on a hypothetical scenario that assumes a common German market area to be already in place from 1 January 2021 (more details below under 9.) In accordance with this provision, the transmission system operators extrapolated the

booked or ordered capacities from the previous years using estimates, in so doing taking appropriate account of findings such as the German network development plan, the loss of customers, the planned expansion of infrastructure, the development of prices resulting from the joint use of the reference price methodology, the trends of previous years, long-term forecasts of downstream network operators, the development of gas extraction in individual fields and/or any emerging shift of capacities at key points. Since at the time of the data collection it was not yet established what capacity framework will be used following the merger of the two current market areas, the transmission system operators were required to produce forecasts for two different scenarios. On the one hand a "minimum scenario" was taken as a basis in which only the capacity offer that can be presented and secured using the existing network infrastructure was taken into account. On the other hand a "maximum scenario" was used in which it was assumed that the capacity offer available prior to the market merger is transferred in full. The purpose was to represent the entire spectrum of anticipated developments and utilise them for subsequent economic analyses. In the course of the procedure, it emerged that a supply of capacity comparable to the surveyed maximum scenario will probably be reached due to the procedure for the enabling of an oversubscription and specific market-based instruments for the creation of additional capacity carried out by Ruling Chamber 7 (BK7-19/037; KAP+) and the procedure for the classification of the costs caused by such measures as volatile costs carried out by Ruling Chamber 9 (BK9-19/606; KOMBI), so the following deliberations are based on this scenario. In addition, booking forecasts were requested for a further hypothetical scenario which assumes the continued existence of the two current market areas NetConnect Germany and Gaspool until 31 December 2021 in order to obtain comparative data and thus to gain insights into the development of tariffs and the charges resulting from the merger of the market areas. The Bundesnetzagentur has no indication that this capacity estimate is incorrect.

- 18 Insofar as the transmission system operators forecasted marketing firm capacity with limited allocability (BZK), the Ruling Chamber classed this as firm, dynamically allocable capacity (DZK). In so doing it is conforming to the provisions of Decision BK7-18/052 of Ruling Chamber 7 of 10 October 2019 (KASPAR), according to which BZK products are no longer permitted to be marketed as of 1 October 2021 or will be incorporated in the more broadly defined DZK product. All in all the share of capacity affected by this amounts to approximately 0.53% of the total forecasted bookings in the market area. The Ruling Chamber proceeded in the same fashion with the fBZK product identified by Open Grid Europe GmbH, which according to information from the network operator does not differ from a standard BZK product in terms of its characteristics and is merely an internal designation.
- 19 Insofar as Article 26(1)(a)(i) of Regulation (EU) 2017/460 refers to Article 30(1)(a)(iv) of Regulation (EU) 2017/460, it must be noted that a structural representation of the transmission network with an appropriate level of detail is not a parameter used in the reference price methodology and thus is not subject to formal consultation nor does it mandatorily form part of

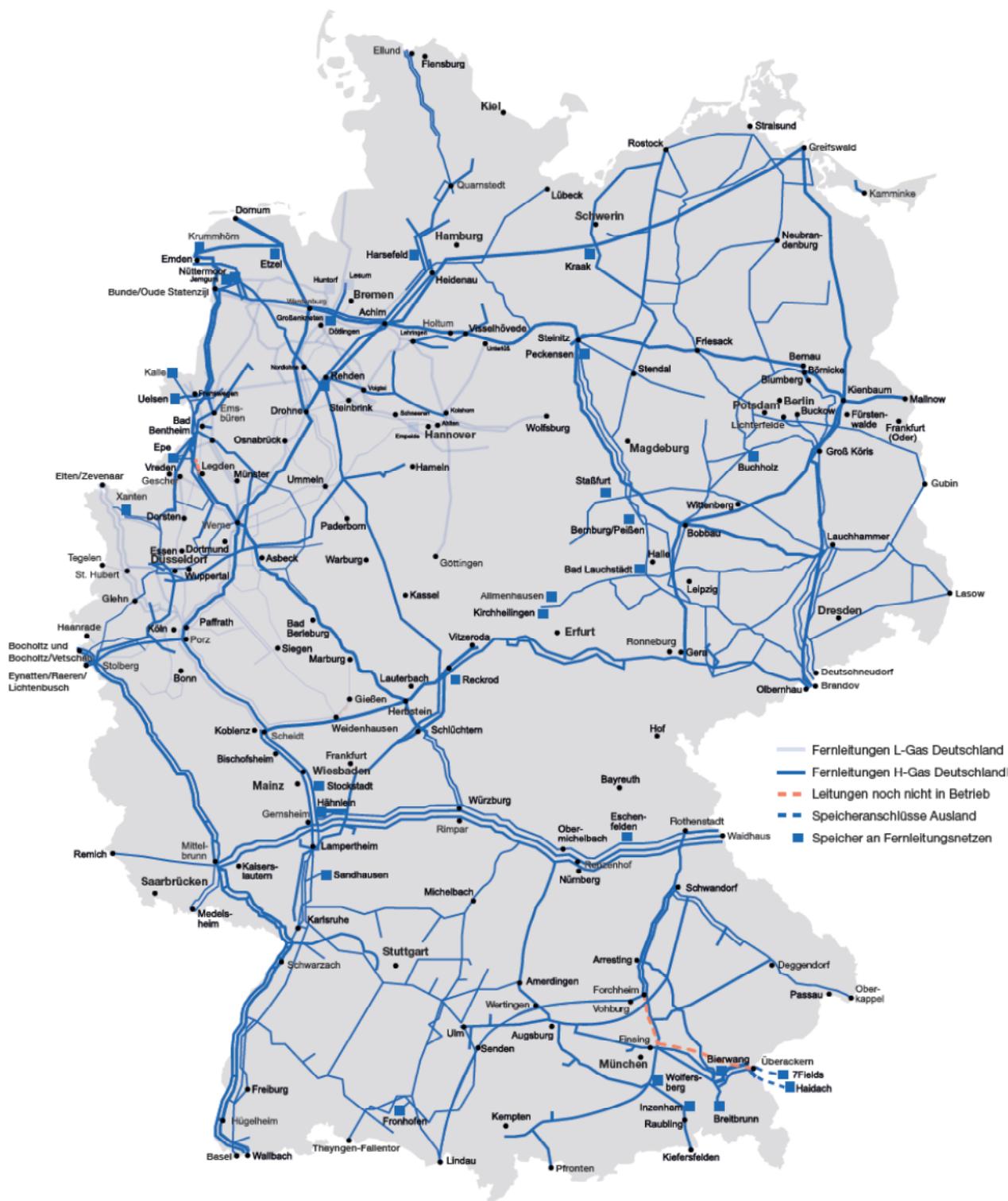
this decision. However, for reasons of transparency and because the above will need to be addressed in the context of stating the level of complexity of the transmission network within the meaning of Article 7 second sentence (b) of Regulation (EU) 2017/460, the Ruling Chamber nevertheless includes a representation of the transmission network below. To this end, the Ruling Chamber adopts relevant outline maps from the 2018–2028 Gas Network Development Plan, which present an overview of the entire German transmission system showing both gas qualities:

20 Start network for modelling the 2018–2028 Gas Network Development Plan as of 31 December 2017, source: transmission system operators, 2018–2028 Gas Network Development Plan of 20 March 2019, page 73.



21 Complementing the above, the figures below present an overview of the corresponding H-gas and L-gas structures. This is important insofar as the reference price methodology to be determined here is to be applied to a cross-quality market area. The cross-quality nature of the market area is relevant because it results in increased complexity.

22 H-gas transport network, source: transmission system operators, 2018–2028 Gas Network Development Plan of 20 March 2019, page 68.



23 L-gas transport network, source: transmission system operators, 2018–2028 Gas Network Development Plan of 20 March 2019, page 69.



### 3. Indicative reference prices according to Article 26(1)(a)(iii) of Regulation (EU) 2017/460

24 According to Article 26(1)(a)(iii) of Regulation (EU) 2017/460, the indicative reference prices are subject to consultation. The indicative reference price for the reference price methodology to be applied jointly by all transmission system operators within one entry-exit system in accordance

with Article 10(1) of Regulation (EU) 2017/460 is shown in Annex 1 for the reference price methodology according to operative provision 1 (uniform postage stamp method). Annex 1 shows the indicative reference price before and after rescaling according to Article 6(4)(c) of Regulation (EU) 2017/460. The price before rescaling does not take into account that, depending on the booking behaviour of the network users, the forecasted contracted capacities may result in different revenues due to multipliers and discounts. Rescaling with the indicative factor shown in Annex 1 enables the transmission system operators to recover transmission services revenue in actual fact. Based on the information from the network operators on forecasted capacity and indicative transmission services revenue, the Ruling Chamber calculated the indicative reference price itself. After the performance of various plausibility checks and corrections, this price differs slightly from the reference price calculated by the transmission system operators (< 0.5%).

25 Mergers of interconnection points in accordance with Article 19(9) of Regulation (EU) 2017/459 to establish virtual interconnection points are not shown. This is not necessary with the uniform postage stamp reference price methodology as the reference price is uniform anyway.

#### **4. Cost allocation assessment according to Article 26(1)(a)(iv) of Regulation (EU) 2017/460**

26 Article 26(1)(a)(iv) of Regulation (EU) 2017/460 stipulates that the results and components of the cost allocation assessments set out in Article 5 of Regulation (EU) 2017/460 and the details of these components are subject to consultation.

27 The cost allocation assessment must indicate the degree of cross-subsidisation between intra-system and cross-system network use based on the proposed reference price methodology (Article 5(2) of Regulation (EU) 2017/460). Intra-system network use, as defined in Article 3 second sentence para 8 of Regulation (EU) 2017/460, means transporting gas within an entry-exit system to customers connected to that same entry-exit system. Cross-system network use, as defined in Article 3 second sentence para 9 of Regulation (EU) 2017/460, means transporting gas within an entry-exit system to customers connected to another entry-exit system.

28 According to Article 5(1) of Regulation (EU) 2017/460, the cost allocation assessment relating to transmission services revenue must be based exclusively on the cost drivers of technical capacity, forecasted contracted capacity, technical capacity and distance or forecasted contracted capacity and distance. Because the only cost driver included in the uniform postage stamp reference price methodology is the forecasted contracted capacity and because, in accordance with Article 5(2) of Regulation (EU) 2017/460, the basis of the cost allocation assessment must be the proposed reference price methodology, the Ruling Chamber carried out the cost allocation assessment in accordance with Article 5(1)(a)(ii) of Regulation (EU) 2017/460 based on the forecasted contracted capacity.

- 29 Annex 2 lists the following, itemised by type of entry and exit point (for information purposes): the individual technical capacity, the forecasted contracted capacity (which, due to interruptible capacities, may in individual cases be greater than the technical capacity) and the revenues generated by intra-system and cross-system network use.
- 30 The following types of entry point are specified:
- NKP (GÜP) – cross-border interconnection point
  - (NAP (Ez) – connection of domestic production facilities
  - NAP (Sp) – storage
  - NAP (Bio) – biogas input
  - NAP (PtG) – power-to-gas
- 31 The following types of exit points are specified:
- NKP (GÜP) – cross-border interconnection point
  - NKP (iB) – internal booking of a downstream distribution system operator
  - NAP (Sp) – storage
  - NAP (Lv) – end user connection
- 32 No entry points from LNG facilities are included yet because no marketing of such points in Germany is to be expected yet for 2021, the year for which indicative information is to be published with this decision. Nevertheless, the provisions made here – assuming that the validity of this decision remains unchanged (see also below under VI) – will also apply to such points in future calendar years.
- 33 The totals of these data constitute the components of the cost allocation assessment; the respective individual values constitute the details of these components (see Article 26(1)(a)(iv) of Regulation (EU) 2017/460). The Ruling Chamber has received a further breakdown of the data. However, some of the data are confidential industrial and business information, concerning end users for example, and shall therefore not be made available to the public in full. Capacity forecasts at specific points may also be considered commercially sensitive for transmission system operators because such data are internal assessments of customer behaviour.
- 34 The derivation of the forecasted capacities has already been explained in the context of Article 26(1)(a)(i) of Regulation (EU) 2017/460. The key factor for the cost allocation assessment according to Article 5 of Regulation (EU) 2017/460 is the split of forecasted revenue between intra-system and cross-system network use.
- 35 The transmission system operators had to notify the Ruling Chamber of their total revenues, taking into account any adjustments resulting from, for example, multipliers, discounts and seasonal factors and adjustments pursuant to Article 6(4)(a) to (c) of Regulation (EU) 2017/460. The Ruling Chamber dispensed with a supplementary cost allocation assessment in accordance with Article 5 of Regulation (EU) 2017/460, in which the revenue is calculated solely on the basis of the unadjusted average contracted capacities without considering multipliers etc, because

under the uniform postage stamp reference price methodology in conjunction with a capacity weighted entry-exit split a calculation of this nature would always result in a comparison index of 0%. Any divergences from this by taking a discount at storage facilities into account would have no significance in the assessment of cross-subsidisation between intra-system and cross-system network use. This line of thought shows anyway that with a postage stamp of this type as the reference price methodology and resultant uniform reference prices the cost allocation assessment according to Article 5 of Regulation (EU) 2017/460 does not provide any information with regard to the reference price methodology. All that is assessed is merely whether factors beyond the reference price methodology such as multipliers or discounts for interruptible capacity lead to higher or lower reserve prices for intra-system or cross-system network use. The cost allocation assessment is still carried out, however, for reasons of transparency.

36 Intra-system network use refers to the transport of gas within an entry-exit system to customers connected to that same entry-exit system (Article 3 second sentence para 8 of Regulation (EU) 2017/460). Cross-system network use refers to the transport of gas within an entry-exit system to customers connected to another entry-exit system (Article 3 second sentence para 9 of Regulation (EU) 2017/460). The revenue at exit points to downstream distribution system operators and to end users is always allocable to intra-system network use. The transmission system operators considered the revenue at exit points at storage facilities (putting gas into storage) to be intra-system network use. It is not possible to give an unequivocal answer to the question of how to classify revenue at storage facilities, firstly because an exit point at a storage facility is located within the entry-exit system and can be treated in the same way as a customer who is connected to the entry-exit system. This would justify attributing the revenue to intra-system network use. Secondly, putting gas into storage enables gas to be taken out of storage at a later date, which in turn can be apportioned pro rata to both intra-system and cross-system network use, as the calculation logic set out in Article 5(5) of Regulation (EU) 2017/460 generally shows for entry points.

37 Consequently, in order to cover all possibilities, the Ruling Chamber carried out multiple cost allocation assessments and allocated the revenue at the exit points at storage facilities using the variants shown in Annex 2

- only to intra-system network use (according to the assessment of the transmission system operators)
- pro rata according to the ratio between the forecasted contracted capacities at exit points which clearly serve intra-system or cross-system network use respectively (see above: therefore around 29.34% allocated to cross-system network use)
- equally attributed, 50% to intra-system and 50% to cross-system network use
- attributed only to cross-system network use.

38 The question of the extent to which the revenue at entry points should be allocated to intra-system or cross-system network use is also unclear. The provisions set out in Article 5(5) of

Regulation (EU) 2017/460 provide for equal distribution. Accordingly, by analogy, the proportion of cross-system exit capacities divided by the total capacities at the entry points yields the relevant ratio for splitting the revenue at the entry points.

39 Annex 2 shows the result of the cost allocation assessment based on the calculation steps set out in Article 5(2), (3) and (5) of Regulation (EU) 2017/460. An index of 12.08% is obtained only in the variant where the revenue and capacities at exit points to storage facilities are fully allocated to cross-system network use. In all other variants, the comparison index is below 10%. However, fully allocating the revenue and capacities at exit points at storage facilities to cross-system network use is not at all appropriate and is also a somewhat theoretical situation. What is appropriate at best is the pro-rata allocation of approximately 29% to cross-system network use (this corresponds to the ratio between the forecasted contracted capacities at exit points which clearly serve intra-system or cross-system network use respectively). However, even with a 50% allocation to intra-system/cross-system network use the test is considered to have been passed and therefore the result does not require further explanation according to Article 5(6) second sentence of Regulation (EU) 2017/460.

#### **5. Assessment of the reference price methodology according to Article 26(1)(a)(v) of Regulation (EU) 2017/460**

40 According to Article 26(1)(a)(v) of Regulation (EU) 2017/460, it is necessary to consult on and determine the assessment of the proposed reference price methodology in accordance with Article 7 of Regulation (EU) 2017/460. In addition, in accordance with Article 26(1)(a)(vi) of Regulation (EU) 2017/460, as the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8 of Regulation (EU) 2017/460, a comparison against the latter must be carried out together with a comparison of the respective reference prices.

41 Article 7 of Regulation (EU) 2017/460 stipulates that the reference price methodology shall comply with Article 13 of Regulation (EC) 715/2009 and shall aim at enabling network users to reproduce the calculation of reference prices and their accurate forecast; taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network; ensuring non-discrimination and preventing undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5 of Regulation (EU) 2017/460; 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; and ensuring that the resulting reference prices do not distort cross-border trade.

42 Article 13(1) of Regulation (EC) 715/2009 stipulates that the approved tariffs and the approved methodologies used to calculate them must be transparent, must take into account the need for system integrity and its improvement, and must 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, must be applied in a non-discriminatory manner. They must 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 must 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 and exit points must be approved by the national regulatory authorities. Article 13(2) of Regulation (EC) 715/2009 stipulates that tariffs for network access must neither restrict market liquidity nor distort trade across borders of different transmission systems.

- 43 Some of the requirements set out in Article 7 second sentence of Regulation (EU) 2017/460 correspond to those set out in Article 13 of Regulation (EC) 715/2009 or are only marginally different, while other requirements are mentioned exclusively in Article 7 second sentence of Regulation (EU) 2017/460 or exclusively in Article 13 of Regulation (EC) 715/2009. The specific requirements and the compatibility of the reference price methodology with these requirements are set out in the following. As Article 26(1)(a)(vi) of Regulation (EU) 2017/460 prescribes that the proposed methodology must be compared against the capacity weighted reference price methodology detailed in Article 8 of Regulation (EU) 2017/460, a comparison of the methodologies is made with respect to each of the requirements set out in Article 7 second sentence of Regulation (EU) 2017/460 and Article 13 of Regulation (EC) 715/2009. In addition, the reference price methodologies proposed by some network operators, the postage stamp per type of network point and the function-specific postage stamp on the basis of explicit cost allocation according to transport tasks, are assessed for comparison using the above criteria.
- 44 Some market participants criticised the postage stamp per type of network point reference price methodology for being incomplete. They claimed that the grouping of point types had not been sufficiently justified and that information on adjustment factors was lacking.
- 45 These aspects are arguments against the postage stamp per type of network point reference price methodology insofar as they weaken the legal certainty of the methodology. In the opinion of the Ruling Chamber the legal certainty of any methodology is indeed a significant factor because rescinding or modifying a determination of methodology as extensive as the one in question would result in considerable economic impacts and difficulties. However, there are also material grounds counting against the introduction of a postage stamp tariff per type of network point, as set out in the following.
- 46 Specifically:

**a) Article 7 second sentence (a) of Regulation (EU) 2017/460**

- 47 According to Article 7 second sentence (a) of Regulation (EU) 2017/460 the reference price methodology must have the objective of enabling network users to reproduce the calculation of reference prices and their forecast. This sets out in more concrete terms the general requirement in Article 13(1) of Regulation (EC) 715/2009 for transparency of tariffs or of the methodologies used to calculate them.
- 48 The uniform postage stamp reference price methodology meets this requirement. The calculation is carried out by dividing the transmission services revenue by the forecasted contracted capacities, ensuring maximum transparency for all market participants. If adjustments are made to the estimate of the two input parameters, the effects on the reference prices are directly evident. Furthermore, Article 30(1)(a) of Regulation (EU) 2017/460 stipulates that these parameters must be published, thus to this extent ensuring maximum transparency over the course of time. The non-pricing of biogas and power-to-gas entry points is also easily comprehensible and therefore transparent.
- 49 Compared to the above, the capacity weighted reference price methodology detailed in Article 8 of Regulation (EU) 2017/460 does not meet the requirements set out in Article 7 second sentence (a) of Regulation (EU) 2017/460 given the complexity of the relevant market area in this case. In order to calculate and ensure the transparency of the reference prices in accordance with Article 8 of Regulation (EU) 2017/460, extensive knowledge of internal information about the transmission system operators is necessary, which market participants cannot have because some of it is confidential industrial and business information relating to third-party companies (such as capacity forecasts of final consumers) or includes security-related information such as the exact locations of energy supply facilities and their importance with respect to capacity. Necessary flow scenarios as defined in Article 3 second sentence para 20 of Regulation (EU) 2017/460 are also internal information which cannot simply be made transparent for or modelled by market participants. Although the use of clusters (Article 3 second sentence para 19 of Regulation (EU) 2017/460) for the purpose of simplifying the calculation of the reference price methodology in accordance with Article 8 of Regulation (EU) 2017/460 facilitates the calculation, in effect the results obtained are to a degree only seemingly accurate.
- 50 Furthermore, the capacity weighted reference price methodology described in Article 8 of Regulation (EU) 2017/460 has a low error tolerance. As the methodology is highly complex, errors cannot be ruled out, and moreover they may remain undetected as a result of its lack of transparency.
- 51 The forecast quality is also significantly higher with the uniform postage stamp reference price methodology, the reason being that because of the cumulation of values and subsequent calculation of averages, point-specific capacity forecasts do not influence the (point-specific) results as much as they do in the case of the capacity weighted reference price methodology.

With the postage stamp method, the forecast quality is dependent only on how accurate the forecast development of overall capacity proves to be. In contrast with the capacity weighted reference price methodology detailed in Article 8 of Regulation (EU) 2017/460, using the postage stamp reference price methodology does not result in volatile revenues when new points are introduced or load flows are relocated, because taken together the prices have a lower variability.

52 The forecasted transmission services revenue is taken into account to the same extent in every reference price methodology and is therefore irrelevant to the comparative assessment of reference price methodologies.

53 In principle, the proposed postage stamp per type of network point reference price methodology also meets the requirements set out in Article 7 second sentence (a) of Regulation (EU) 2017/460, although transparency is somewhat reduced on account of its greater complexity compared to the uniform postage stamp reference price methodology. Furthermore, the proposal leaves certain questions about the actual calculation unanswered. For instance, revenue can be allocated to the individual point types either on the basis of capacities weighted according to duration of use and proportional value or on the basis of non-weighted capacities. Both variants were put forward for discussion in the course of earlier consultation proceedings. Using non-weighted capacities leads to the follow-up question of whether the reference prices per type of network point should be adjusted as a whole according to Article 6(4)(c) of Regulation (EU) 2017/460 or whether the appropriate solution would be to adjust them for each point type. If adjustment is carried out as a whole and also if the adjusted capacities are used in the first step, discounts such as for conditional firm capacity products in the form of dynamically allocable capacity products would have to be borne by other point types. This may be appropriate at storage points where discounting is mandatory, but otherwise needs to be discussed in more detail with respect to Article 7 second sentence (b) of Regulation (EU) 2017/460. In any case, these necessary intermediate steps increase the complexity of the methodology.

54 The uniform postage stamp reference price methodology thus meets the requirements set out in Article 7 second sentence (a) of Regulation (EU) 2017/460 because it enables network users to reproduce the calculation of reference prices and their accurate forecast. The capacity weighted distance reference price methodology set out in Article 8 of Regulation (EU) 2017/460 does not satisfy these requirements nearly as well. The proposed postage stamp per type of network point reference price methodology also meets these requirements, if not to the same extent as the postage stamp reference price methodology. In addition, some questions as to the specific design of this methodology remain unanswered, as explained above.

## **b) Article 7 second sentence (b) of regulation (EU) 2017/460**

- 55 Article 7 second sentence (b) of Regulation (EU) 2017/460 stipulates that the reference price methodology must aim at taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network. This sets out in more concrete terms the requirement in Article 13 of Regulation (EC) 715/2009 that the approved tariffs or methodologies used to calculate them must 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).
- 56 The qualifying bracketed adjunct to the actual costs in Article 13 of Regulation (EC) 715/2009 is sufficiently satisfied by the provisions of the Gas Network Charges Ordinance (GasNEV) and the Incentive Regulation Ordinance (ARegV) and is relevant only to the question of the level of the revenue cap and therefore also the level of transmission services revenue, but not to the comparative assessment of reference price methodologies. However, this does not mean that the reference price methodology could be determined independently of actual costs. On the contrary, the degree of cost-reflectivity is a key element in ensuring that the reference price methodology is appropriate.

### **(1) Complexity of the transmission system**

- 57 The postage stamp reference price methodology meets this requirement against the background of the complexity of the German market area. The German market area is a highly complex system consisting of 16 transmission system operators who cooperate in all matters. They operate a transmission network with a length of – taking the previous NetConnect Germany and Gaspool market areas together – more than 37,000 km with 270 physical entry points and 3,514 physical exit points. Altogether 122 bookable entry points and 1,171 bookable or orderable exit points can be counted from the data entry forms submitted by the transmission system operators for the future joint market area after removal of the market area interconnection points. Within this context, facilities which are common property or which are held by jointly operating transmission companies are taken into account twice because of the greater complexity of joint use and joint maintenance. This complexity is also apparent from the large number of branches (7,615) and mesh points (1,298). The data on which this information is based is the transmission system operator efficiency comparison for the third regulatory period.
- 58 Apart from these metrics, numerous other aspects point to a high level of complexity within the meaning of Article 7 second sentence (b) of Regulation (EU) 2017/460.
- 59 The Ruling Chamber is of the opinion that, even compared to other European countries, the German market area is an extremely complex transmission system. An indication of this complexity, apart from the above-mentioned metrics, is the extensive flexibility of the system. The network is able to transport gas on a firm basis from every neighbouring country with the

exception of France and Switzerland. Consequently, gas flow and demand for capacity are dependent on price differences between market areas, political developments and even by the weather. Furthermore, for topological reasons the German market area is an important location for interim gas storage. These fundamental considerations in themselves demonstrate that the German market area is highly meshed and flexibly designed.

60 The number of possible combinations of entry and exit points can also be used as a measure for the complexity of the system. According to information from the transmission system operators, as long ago as 2009 there were 116,281 possible combinations in the GASPOOL market area and 380,397 possible combinations in the NCG market area in 2011. The future merger of these two market areas, planned for 1 October 2021, will increase the number of possible combinations to 948,780.<sup>1</sup> The large number of possible combinations in each case demonstrates that each market area already constitutes a sufficiently complex system in itself. Furthermore, in future this complexity will significantly increase many times over. Given the pending market area merger, the complexity of the German transmission system poses particular challenges for the transmission system operators in determining the basic future framework of the capacity structure. The node-edge model, for example, which is used to describe the network topology in this context, yields around 60-70 million results to be analysed according to the transmission system operators, across a number of different scenarios.<sup>2</sup>

61 The underlying node-edge model is illustrated by the transmission system operators' graphical representation shown below.<sup>3</sup> The main striking feature is the large number of edges originating from the various nodes, while the large number of edges originating from nodes depicted in red stands out in particular. The model uses the colour red to signify node points that can be attributed to more than one transmission system operator. This clearly demonstrates the complexity of the German transmission system as a whole and also the high degree of meshing between individual transmission system operators.

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<sup>1</sup> Presentation by the transmission system operators on the market dialogue during E-world energy & water on 6 February 2019 in Essen, available at: [http://www.marktgebietszusammenlegung.de/wp-content/uploads/Praesentation\\_eworld\\_2019\\_02\\_06\\_DE.pdf](http://www.marktgebietszusammenlegung.de/wp-content/uploads/Praesentation_eworld_2019_02_06_DE.pdf), slide 26, date of download: 13 February 2019.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.



- 62 From a capacity standpoint, this situation demands a high level of cooperation between transmission system operators. From the perspective of access to the transmission systems, although market areas have gradually been merged since the start of regulation thanks to cooperation between the transmission system operators, thus creating highly liquid markets, there were no corresponding arrangements in place that would have led to pricing of the relevant essential services between the transmission system operators. From the perspective of tariffs – in spite of the market area mergers – prices were still determined separately even though it is indisputable that, in some cases, the respective transmission system operator is only able to offer the capacities identified in the merged market area by using the infrastructure of other network operators. The Ruling Chamber has been deliberating over this issue for a period of several years and, with the participation of other market actors, has tried to arrive at an appropriate tariff system, which ultimately failed due to legal and technical obstacles. It is necessary to describe these proceedings in order to understand the deliberations of the Ruling Chamber, leading ultimately to uniform tariffication:
- 63 In 2009 the Ruling Chamber contacted the transmission system operators to discuss the issue of horizontal cost allocation with them. In response, the transmission system operators stated that they considered it appropriate not to price capacities made available to another market area partner at network interconnection points within a market area. Given the fact that the market area mergers have not yet been concluded, the Ruling Chamber at first accepted this approach while announcing even at the time that it would re-examine whether the procedure was appropriate if and when the Ruling Chamber found that there were indications that the action of the transmission system operators created false incentives on the market.
- 64 After the experience of the first regulatory period (2009 to 2012), the Ruling Chamber came to the conclusion that the existing system was such that the booking behaviour of network users forced the network operators to deviate more and more from appropriate cost allocation and instead to place a greater burden on captive customers. It was also to be assumed that, because of the merger of the market areas, appropriate allocation of costs was doubtful in the existing system.
- 65 For this reason, in a letter dated 26 July 2013 Ruling Chamber 9 informed the affected transmission system operators of its intention to issue a determination on horizontal cost allocation between transmission system operators. The same letter included an invitation to the affected transmission system operators to take part in an initial consultation event for the purpose of a joint discussion on the deliberations.
- 66 Over the following months the Ruling Chamber held various bilateral talks with the market participants discussing different methodological approaches to horizontal cost allocation. These various approaches were presented to the affected transmission system operators and discussed with them at another consultation event on 25 November 2014 in Bonn. During the

discussions, the Ruling Chamber made it clear that its preference was the methodology which proposes a type of cost allocation analogous to vertical cost allocation.

67 Gas industry actors raised objections, stating among other things that this approach threatened the current market area cooperation. They argued that the planned cost allocation method would also further distort cost-reflectivity because the preferred model only took account of the gas goods or services provided by the transmission system operator supplying the gas, whereas gas transport from the transfer point was also a gas service for which the service provider should be reimbursed in the same way.

68 Subsequently, the Ruling Chamber examined the so-called "forward and reverse allocation" methodology. In this approach, both the transmission system operator providing the capacity – in terms of flow mechanics upstream – and the network operator receiving the gas – in terms of flow mechanics downstream – would each have had to pay for the gas services provided by the other. Consequently, both the transmission system operator providing the gas and who makes the capacity available at the network interconnection point within the market area and also the transmission system operator accepting the gas and who transports the gas from this point would be paid a fee for the gas goods and services they provided. Likewise, tariffs would also have been set for capacity used jointly by different transmission system operators within the same transmission company.

69 Some gas industry actors raised objections to this, claiming that it was impossible to determine which gas services were provided in view of the fact that capacities within transmission companies were interruptible or made available to the best of their abilities.

70 The Ruling Chamber subsequently conducted a survey to collect data on the gas services described above. After evaluating the submitted data, the Ruling Chamber concluded that the contractual arrangements relating to the maximum amount of firm capacity offered at physical interconnection points between transmission system operators within a market area do not constitute a sufficiently strong basis for price setting.

71 In order to explore and discuss the problems that had arisen and the intended further proceedings, the Ruling Chamber invited the transmission system operators and associations to another consultation event, which took place in Bonn on 19 November 2015. At this event, the issues surrounding the contractual arrangements were discussed in detail but no new potential solutions emerged. For this reason the Ruling Chamber indicated that it would examine whether pricing of the actual load flows could constitute an appropriate and cost-reflective alternative to contractually agreed capacities. Against this background, the transmission system operators were promised another survey to collect data on load flows.

72 In a letter dated 1 December 2015 the Ruling Chamber asked the transmission system operators to submit all hourly load flow values measured at every physical interconnection point between transmission system operators and/or to submit the allocated values at all entry and

exit points from and to transmission companies for the last three calendar years. The submitted data were evaluated and the findings obtained were assessed, from which the Ruling Chamber established that actual load flows at interconnection points did not constitute a sufficiently strong basis for pricing either, particularly in view of the fact that joint schedule management in a given market area makes precise allocation of gas flows impossible in some cases, especially at interconnection points to and within transmission companies.

- 73 For this reason, the Ruling Chamber refrained from using the intended "forward and reverse allocation" approach. Subsequently, an easy to implement method to manage cost allocation between transmission system operators was developed. This methodology would specify a capacity weighted entry-exit split for every transmission system operator. The costs assigned to the entry side would then be allocated to all entry points in the respective market area, which would have resulted in a consistent entry charge for a firm, freely allocable yearly capacity within a given market area. These provisions were to be implemented by 1 January 2018 as set out in Determination BK9-13/607 of 22 June 2016. However, a complaint was filed against this determination. During a hearing at the Higher Regional Court of Düsseldorf on 11 October 2017 the Bundesnetzagentur revoked the determination, the main reason being doubts about whether there was an appropriate enabling provision. This meant that since then tariffs have continued to be set separately without a compensation mechanism; however, according to Article 10(3) second sentence of Regulation (EU) 2017/460, such a mechanism would be mandatory as of 1 January 2020 in the event of any reference price methodology being applied separately.
- 74 This timeline demonstrates two distinct issues: firstly, in the highly complex German market area and with the web of interest-driven interaction between the transmission system operators it is impossible to arrive at a consensus on the specific design of an effective compensation mechanism where the reference price methodology is applied separately and which in the opinion of the Ruling Chamber and of other market participants has to take account of the gas services between the transmission system operators. Secondly, issuing an administrative order for a mechanism of this nature is extremely difficult and there is only a very slight possibility or, given the available data, no possibility at all of determining the actual value of the gas services provided mutually between the transmission system operators.
- 75 These findings are connected to aspects of the complexity of the transmission systems and to the cost-reflectivity of reference price methodologies insofar as some gas industry actors claimed that separate tariffication, for instance in 2019, constitutes an unrestrictedly cost-reflective approach.
- 76 The shortcomings of this assessment against the background of the previous tariffication methodology are set out below, preceded by additional details of the complexity of the market area.

- 77 The Ruling Chamber is well aware of the complexity of the market area, partly from other processes. For instance, the Bundesnetzagentur recently carried out efficiency benchmarking of the transmission systems operators for the third regulatory period. In the course of data collection and plausibility checking of the comparison parameters for this procedure and during the resulting process of developing comparison parameters, the complexity of the network structures was discussed on several occasions, including deliberations on how this complexity could be reflected in numerically quantifiable parameters. Additional parameters were thus developed to reflect the network-related flexibility and complexity requirements. During the consultation, transmission system operators pointed out that each branch increases the pipe friction factor (in particular because regulators, valves etc are often installed at branches) and that, furthermore, the complexity of system control and the general need for system flexibility increases with the number of branches and mesh points. Consequently, data were collected on the number of branches per network operator and the number of independent mesh points.
- 78 As mentioned above, the numbers for these parameters (aggregated for the entire market area) are high (based on the assumption that the total numbers will not change when the two market areas are merged and can simply be added together, 7,615 branches and 1,298 mesh points).
- 79 In addition, it again became apparent during the efficiency benchmarking process that it is almost impossible for the transmission system operators to carry out appropriate allocation of measured load and energy values at jointly operated pipes. However, as discussed above, information on how these values are allocated is a prerequisite for further allocation of costs or a compensation mechanism with a separately applicable reference price methodology.
- 80 The above aspects, in conjunction with the Bundesnetzagentur's experience of the processes involved in former mergers and the impending merger of market areas, lead to the conclusion that the future German market area is characterised by a meshed structure and that the degree of meshing is so high that the uniform postage stamp reference price methodology constitutes the best possible approach to cost allocation and is justified in principle. These circumstances in particular show that distance as a cost driver is not suitable as a means of allocating costs to individual entry and exit points, as a stable gas flow scenario would be required for that to be the case. The reality, however, is characterised by many different gas flow scenarios, which must be mastered with the aid of the complex market area.
- 81 All of these deliberations previously applied to the two smaller market areas, NetConnect Germany and Gaspool. They will be further intensified by the forthcoming merger of the market areas on 1 October 2021. By its nature, this merger will further increase complexity because of the large number of additional possible combinations of entry and exit points that will have to be taken into account.
- 82 Furthermore, the currently ongoing administrative proceedings BK7-19/037 (KAP+) and BK9-19/606 (KOMBI) indicate that the allocation of transport services and transport infrastructure,

and the costs connected with those, is likely to be fundamentally impossible, especially under the conditions of a united market area. With these proceedings, as of 1 October 2021 an oversubscription and buy-back scheme is to be enabled for a limited period and a series of market-based instruments used with the aim of ensuring a high level of availability of firm and free allocable capacity even if this cannot be represented with the technically available capacity alone. This decoupling of marketable capacity (enabled and secured by market-based instruments) and technical capacity enabled and secured by infrastructure illustrates particularly clearly the impossibility of making statements about the specific costs of a transmission service in a complex market area.

83 Another aspect that illustrates the complexity of the market area is virtual interconnection points. If two or more interconnection points connect the same two adjacent market areas, according to Article 19 first sentence (9) of Regulation (EU) 2017/459 the transmission system operators concerned must offer their available capacities there at a single virtual interconnection point. This even applies if multiple transmission system operators are jointly affected by this at the same border, which is the case at various German external borders. This virtual merger of booking points, too, can only be resolved on the tariff side if the idea of a direct connection between a certain transmission service tariff and the costs of a quite specific physical transport path or the revenue cap of an individual participating transmission system operator is abandoned.

## **(2) Share of conditional firm capacity products**

84 Another aspect that can speak for or against the complexity of the transmission systems is the availability and share of conditional firm capacity products. To be able to address this aspect in more detail, the Ruling Chamber evaluated the shares of these capacity bookings. Annex 6 lists the capacities booked in 2021, categorised according individual types of network points. The list includes freely allocable capacity (FZK), cumulatively all conditional firm capacity products (conditional firm capacity with free allocability (bFZK) and firm, dynamically allocable capacity (DZK)) as well as bookings of interruptible capacities. The proportional figures per point type are then shown. Interruptible capacity bookings are disregarded in the calculation of shares because these can be presented irrespective of the technical capability of the network.

85 Several conclusions can be drawn from the data. For instance, it is a fact that a significant share of bookings at certain types of points is made using conditional firm capacity products. Thus around 61% of bookings at interconnection points on the entry side and around 57% of bookings at interconnection points on the exit side are made using conditional firm capacity products. In contrast, internal orders to downstream network operators are processed entirely via such products, and only a very small proportion (approximately 6%) of bookings by end users. The data also show that a considerable proportion of bookings (around 50 to 65%) at entry and exit points to and from storage facilities are made using these products. However, in large part these

bookings at end users and storage facilities are reflected by the benchmarking according to operative provisions 3.a)) and 3.b)(4)) and are therefore no longer included within the scope of the reference price methodology. Furthermore it can be generally stated that the share of conditional firm capacities has further increased in the course of time.

86 To summarise: at interconnection points and storage points a significant proportion but not the majority of bookings are made using conditional firm capacity products. This is only rarely the case at domestic exit points.

87 However, the Ruling Chamber is of the firm opinion that these facts cannot be used to make the assumption that, based on the share of conditional firm capacity products, there is only a low degree of complexity and/or of meshing in the German market area. Viewing the situation as a whole, this is evident from the fact that a significant proportion of bookings at the entry points and the great majority of bookings at the exit points are made using firm, freely allocable capacity products, whose share is around 66% (again measured as a proportion of all capacity bookings not including interruptible capacities). Thus, a quite significant increase of the conditional firm capacity products compared to the figures of the previous year (approx. 75% for NetConnect Germany and approx 79% for Gaspool) caused by the merger of the two market areas can be observed. Nevertheless the overall picture shows that bookings of these products are in any event not the norm. The market area is thus characterised by the use of firm, freely allocable capacities by means of which liquid markets are created. It is therefore also mandatory for transmission system operators to collaborate when carrying out capacity calculations and load flow simulations, with the aim of maximising technical capacities and offering a sufficient amount of freely allocable capacities (see section 9(2) and (3) Gas Network Access Ordinance (GasNZV) and the current deliberations on the creation of an oversubscription scheme and the introduction of market-based instruments to increase the capacity offer).

88 Likewise, an analysis of just the interconnection points at which a not insignificant share of bookings is in the form of conditional firm capacity products does not allow the conclusion that there is only a low degree of complexity in this part of the transmission systems. In fact the opposite is the case: if conditional firm capacity products are offered at a so-called transit pipeline it follows that the complexity of the market area to which this pipeline is allocated is such that it is simply impossible for firm, freely allocable capacity products to be offered. Also, given this situation, the question is ultimately not whether an individual pipeline is complex or not but whether the entire system is complex.

89 Despite receiving repeated comments on this matter in the context of previous and ongoing proceedings, the Ruling Chamber could not be convinced that concrete evidence had been produced to the effect that pipelines exclusively used for transit actually existed. In point of fact, every pipeline is always integrated into the market area. Even for network operators who

exclusively run so-called transit pipelines, certain aspects certainly indicate that they are sufficiently integrated into the complex market area:

90 Fluxys Deutschland GmbH, for instance, operates the NEL pipeline (jointly with NEL Gastransport GmbH), exclusively for DZK. However, it is not at all the case that this pipeline only has one point-to-point connection from Greifswald to the Achim II interconnection point. In fact, there is also a DZK product available that can be combined with numerous exit points in the GASCADE Gastransport GmbH transmission system, including the Rehden storage facility. This demonstrates how such a pipeline is integrated into the market area, at least to some extent. The same applies to NEL Gastransport GmbH, which also uses the pipeline and in addition offers possible combinations with points belonging to the network operators Gasunie Deutschland Transport Services GmbH and GASCADE Gastransport GmbH.

91 Another example is Fluxys TENP GmbH, where roughly 32% of bookings are conditional firm capacity products, a proportion which shows that this pipeline, too, is fully integrated into the market area. In addition, in the past investment measures have been implemented on the TENP, and others are either planned or being implemented, with the aim of creating capacities in a south-north direction as well. This is another aspect illustrating a certain degree of complexity of this pipeline. Since October 2018, flows in a south-north direction have therefore been possible on the TENP. Furthermore, a deodorisation plant is due to enter operation in the course of 2020, which will then enable natural gas to be imported to Germany from the south (Italy, Switzerland and France) as well as from the north (the Netherlands and Norway). This is meant to increase the flexibility of gas imports in line with needs, and in addition to diversifying gas markets is particularly aimed at ensuring the security of supply of natural gas for Baden-Württemberg and supporting the network conversion from L-gas to H-gas in north-west Germany by providing additional gas imports into south-west Germany. These aspects show that even a pipeline such as TENP cannot be categorised solely as a transit pipeline.

92 The situation with GRTgaz Deutschland GmbH is similar: even though conditional firm capacity products account for a high proportion of its bookings on the MEGAL pipeline (around 62%), this also shows that at the same time a not insignificant proportion of all firm capacities in the market area is freely allocable.

93 From the above it is clear that there are no pipelines that can be categorised as for transit only, and despite the proportion of conditional firm capacity products they are fundamentally integrated into the market area. It is not possible to draw any conclusions from this that the market area is assessed as having a low degree of complexity.

94 Insofar as no freely allocable capacities are marketed on the OPAL pipeline by the transmission system operators OPAL Gastransport GmbH & Co. KG and Lubmin-Brandov Gastransport GmbH, this is a special case, partly related to the pipeline's substantial exemption under section 28a Energy Industry Act (EnWG). Consequently, the point-to point transit connection in

this case is exempt from the regulation anyway. In the so-called partially regulated sector, OPAL Gastransport GmbH & Co. KG also offers firm, freely allocable capacity products.

- 95 Lubmin-Brandov Gastransport GmbH exclusively offers bookings for the Lubmin entry point on the OPAL pipeline, with a usage restriction. Usage is restricted due to the possibility of transfer to the adjacent transmission systems in Groß Körös, operated by the market area-wide network operators GASCADE Gastransport GmbH and ONTRAS – VNG Gastransport GmbH, another situation offering proof of a certain degree of integration into the market area.
- 96 Apart from these case-specific considerations, there are more general aspects indicating that the presence or the proportion of conditional firm capacity products do not allow unequivocal conclusions to be drawn as to the complexity of the market area. Thus according to operative provision 1 a) aa) (3) of Decision BK7-18-052 (KASPAR) of 10 October 2019, as of 1 October 2021 all of these products have, at the least, interruptible access to the virtual trading point. In conjunction with the relatively low probability of interruptions in the market areas (see Annex I of determination BK9-19/612 issued in parallel relating to the probability of interruption at interconnection points; a safety margin of ten percentage points is added at these points), this leads to the conclusion that even conditional firm capacity products such as DZK are integrated into the market area.
- 97 Inasmuch as the firmness is linked to demand or flow (specifically as a result of certain temperatures or pressures) in the network in the case of capacity products in the form of bFZK, this also indicates that network structures are complex rather than simple.
- 98 In conclusion it can be stated that the proportion of conditional firm capacity products is not a factor that is an argument against the complexity of transmission systems and therefore against the uniform postage stamp reference price methodology. In fact they may even be an expression of complexity. This is obvious in the case of bFZK products, which by definition are not coupled to a certain transport path but rather can be used for any connections and are merely restricted by conditions such as temperature. However, a DZK product with a fixed point-to-point connection also offers a high degree of flexibility as a result of its interruptible access to the virtual trading point and is therefore an indicator for a high degree of meshing. If at all it would be different if DZK products would have to be regularly interrupted aside from their fixed product component; the historical interruption data, however, show that this is precisely not the case.

### **(3) Comparison of tariffs for quarters 1 to 3 and quarter 4 of 2021**

- 99 A comparison of the forecasted reference prices for the fourth quarter of 2021 with the forecasted reference prices to be formed for the first three quarters of that year reveals a moderate price rise because of the market area merger. For the first three quarters the reference price for the current market areas NetConnect Germany and Gaspool taken together is €3.27 per kWh/h/a, on a capacity weighted average. The indicative reference price for the new

German market area shown in Annex 1 of this decision is somewhat higher, at €3.69 per kWh/h/a. This is a consequence of the forecast fall in capacity bookings from approximately 770,000,000 kWh/h/a in quarters 1 to 3 to approximately 753,000,000 kWh/h/a in the fourth quarter. These declines are partly the result of the removal of the market area interconnection points that can no longer be booked following the merger of the market areas and whose costs will therefore have to be borne by all other points in the system in future. It should be noted here that the actual development of capacity bookings following the market area merger can only be estimated with considerable caveats at the present time because the regulatory requirements for the capacity offer have not yet been determined and the behaviour of network customers after the market situation has changed is difficult to forecast. The assumptions presented here are therefore subject to even greater uncertainties than is already the case with indicative price information anyway, by its very nature.

#### **(4) The uniform postage stamp reference price methodology**

100 It must firstly be noted that, within the existing entry-exit system, network charges must not be calculated on the basis of the transport paths (see Article 13 of Regulation (EC) 715/2009). According to recital 3 of Regulation (EU) 2017/460, after the introduction of the concept of the entry-exit system by Regulation (EC) 715/2009, transmission costs are no longer directly associated to one specific route as entry and exit capacities can be contracted separately, and network users can have gas transported from any entry point to any exit point. Under this framework, the transmission system operator decides the most efficient way of flowing gas through the system.

101 As a result of the virtual trading point being constantly available in the case of non-conditional capacity products, bookings are abstracted from actual network operation. In the Ruling Chamber's view, the reference price methodology should pick up on these aspects and strengthen but by no means counteract them. On the one hand, the postage stamp reference price methodology is able to establish a certain degree of cost fairness by using the recognised cost driver of the capacities that are expected to be booked which, in the main, mirrors the network contingency costs. On the other hand, the methodology acknowledges the abstraction of contract paths by disregarding distances, and thus ultimately it prices entering and/or exiting the market area. For the shipper, the service is the main concern and not the actual physical transport of gas, such that in principle there is no direct connection between a booking and the use of specific infrastructure. Exceptions to this are possible, such as in the case of conditions for firm capacity products, as is the case for products with limited allocability. However, according to Article 4(2) of Regulation(EU) 2017/460 it is not necessary to include such exceptional cases in the reference price methodology itself; they only have to be taken into account when setting transmission tariffs (and not reference prices), if required.

- 102 On the other hand, a more detailed cost allocation, such as allocating individual pipelines to specific bookings, is not possible due to the complexity and meshed structure of the Germany-wide market area. In this respect, the postage stamp per type of network point reference price methodology also does not attempt to allocate costs to individual pipelines. Instead, it uses a more general approach based on the transmission system operators' revenue caps and their respective shares of bookings among the various groups of network points. The proposal of this reference price methodology makes it plain that this form of allocation is ruled out, particularly on the entry side, since it is not possible to differentiate unequivocally between intra-system and cross-system network use. Allocation on the exit side is also not carried out on the basis of concrete cost structures but only in an abstracted form on the basis of the shares of capacity bookings. Therefore costs are not allocated more accurately than they would be with a uniform postage stamp, merely in a different way, which only appears to be accurate.
- 103 In contrast, the capacity weighted distance reference price methodology is based on the cost drivers of distance as well as the cost driver of capacity. In linear systems, for example, this can be an appropriate further differentiation resulting in greater cost fairness. The more complex the system, the lower the probability that using an inflexible combination of capacity and distance will result in a tariff that is actually cost-reflective. As discussed above, the complexity and meshed structure of the German gas transmission networks prevent distance from being considered an appropriate cost driver. This also applies against the backdrop of the full integration of the H-gas and L-gas networks in balancing, where as a rule there is no physical connection that could be used to calculate a distance.
- 104 As a general rule it can be stated that calculating average prices at least rules out (open or hidden) arbitrary cost allocation. Another key factor ensuring sufficient cost-reflectivity is multipliers as detailed in Article 13 of Regulation (EU) 2017/460, by means of which in the case of within-year capacity bookings it is guaranteed that an appropriate proportion of the transmission network contingency costs incurred throughout the year will be borne. Another aspect giving rise to greater cost-reflectivity is the consideration of conditions for firm capacity products, Article 4(2) of Regulation (EU) 2017/460. If, for example, the accessibility of the virtual trading point cannot be guaranteed with a capacity product, it is appropriate to reduce the relevant tariff accordingly. Although such aspects are not within the scope of the reference price methodology, they demonstrate that the issue of cost-reflectivity is addressed in the overall system of tariff setting even with a postage stamp tariff applicable to all network operators.
- 105 A possible objection to the postage stamp reference price methodology may be that it does not even try to allocate costs directly. On the other hand, this prevents the inappropriate, non-transparent allocation of costs within a complex methodology in a manner that is not easily apparent to market participants. For example, taking distance into account as a cost driver does not necessarily lead to the particularities of the transmission networks being mapped more precisely. It should be noted that the capacity weighted distance methodology disregards other

key cost drivers such as the difference between inlet and outlet pressure. This carries the risk of overemphasising distance as a cost driver as compared to other potential cost drivers.

106 In particular when considering trade via the virtual trading point, it becomes apparent that the capacity weighted distance methodology detailed in Article 8 of Regulation (EU) 2017/460 has weaknesses because it disregards this issue, whereas with the postage stamp reference price methodology a uniform price for access to the virtual trading point is guaranteed. In the opinion of the Ruling Chamber, the notion that there would have to be different tariffs for access to the virtual trading point is not a general counter-argument against this aspect. It may be appropriate in transmission systems where stable gas flows and transparent supply sources make it possible to approximate the location of a virtual trading point. This already happens in Austria, for instance, where the nature of the network and the gas flows make it possible to define the interconnection point Baumgarten as a virtual reference point. However, the meshed and complex structure of the German transmission systems rules out such an approach. Against this background, the Ruling Chamber is of the opinion that it cannot be argued that a particular point or, more generally, a particular type of point (eg interconnection points or points to end users) enables access to the virtual trading point at lower or higher cost.

107 Ultimately, the provisions in Article 8 of Regulation (EU) 2017/460 do not take account of the particularities of a complex, multi-quality market area incorporating a large number of transmission system operators. Different assumptions or a different design of the connection for the H-gas and L-gas networks would result in different tariffs without there being compelling reasons for this in the interests of cost-reflectivity when setting tariffs.

108 The privileged situation for biogas injection and gas from power-to-gas plants, too, does not contradict the cost-reflectivity principle but is due to the complexity of the transmission network and the consequences of such inputs into the transmission network. The decentralised domestic injection of a natural gas equivalent reduces the strain on the network as the corresponding volumes no longer have to be imported from foreign sources. The input takes place closer to the consumption location, thus reducing transport requirements. This results in a reduction of costs that can be directly allocated to the relevant entry points. Furthermore, in contrast to other entry points, the costs for the technical infrastructure used for the input of biogas are not covered by the transmission tariffs governed by the reference price methodology but by the biogas charge. Network customers transporting biogas are therefore not completely exempt from the costs of injection; they pay these costs, at least pro rata, via the biogas charge to be paid when the gas is withdrawn. It is therefore cost-reflective to exempt these points from entry tariffs. In addition the Ruling Chamber sees a network-benefiting and cost-reducing effect in the case of hydrogen produced by water electrolysis and gas manufactured using hydrogen produced by water electrolysis with subsequent methanation. The Ruling Chamber adheres to its policy of tariff exemption for technologies of this kind. If in future other technologies exhibit similar effects and, where applicable, tariff exemption may be appropriate for reasons of climate policy, market

participants are free to put forward such aspects in the course of future consultations, which have to take place at regular intervals anyway. However, a general ruling open to all technologies brings with it the risk of subsuming circumstances in which tariff exemption is not justified. Under a reference price methodology to be determined on a specific basis, the Ruling Chamber does not consider abstract exemptions from the methodology to be appropriate.

109 In order to be able to take into account the impacts of such a tariff exemption in future, if and when the share of these technologies increases, the reporting duty with respect to the volume risk includes the duty to report the share of revenue lost as a result of these special circumstances.

110 In conclusion, it can be stated that the postage stamp reference price methodology takes account of the actual costs incurred for the provision of transmission services and the complexity of the transmission network is taken into consideration. Although the capacity weighted distance reference price methodology detailed in Article 8 of Regulation (EU) 2017/460 is considerably more complex in terms of methodology, it does not achieve greater cost-reflectivity given the circumstances of the German market area.

#### **(5) The postage stamp per type of network point reference price methodology**

111 The proposed postage stamp per type of network point reference price methodology is an attempt to better reflect the actual costs of capacity bookings considering the level of complexity of the transmission network by using a differentiated approach. This approach assumes that cross-system network use incurs lower costs and accordingly should in principle be priced at a lower level than intra-system network use. The main assumption is that lower-cost pipelines are relevant to cross-system flows.

112 It is questionable whether this assumption applies without exception. The basic assumption is that, in a static view of a pipeline with a relatively large diameter and assuming that the pipeline is used for cross-system network use, the costs per unit of capacity are lower than in the case of pipelines with smaller diameters or in the case of a more complex pipeline system used for transmission which also has a distributive function. However, this approach disregards the fact that, in a complex entry and exit system with a large number of cooperating transmission system operators, the transmission system operators also always provide services to each other to a certain degree.

113 The suggestion that there is such a thing as an ideal form of cross-system network use is questionable. Notwithstanding the provisions in Article 3 second sentence para 8 and 9 of Regulation (EU) 2017/460 which define intra-system and cross-system network use, and the associated cost allocation assessment in accordance with Article 5 of Regulation (EU) 2017/460, it is doubtful whether any such allocation can be made with complete certainty in an entry and exit system. The provisions set out in Article 5(5) of Regulation (EU) 2017/460 show that,

particularly on the entry side, differentiation is only possible by making very sweeping assumptions.

- 114 In this regard, recital 3 of Regulation (EU) 2017/460 makes it clear that, after the introduction of the concept of the entry-exit system by Regulation (EC) 715/2009, transmission costs are no longer directly associated to one specific route as entry and exit capacities can be contracted separately and network users can have gas transported from any entry to any exit point. In this context, no conclusions as to the reference price methodology should be drawn from possible conditional firm capacity products with allocation restrictions such as DZK, since the methodology determines the reference price for a firm capacity product without any allocation restrictions. Instead, such allocation restrictions must be taken into account separately when setting transmission tariffs according to Article 4(4) of Regulation (EU) 2017/460 and an appropriate discount on the reference price must be granted. Moreover, in addition to fixed point-to-point access DZK products allow interruptible access to the VTP, so as a general principle there cannot be assumed to be an ideal transit flow in this case.
- 115 Within the scope of the postage stamp per type of network point reference price methodology it is then also apparent that the targeted cost allocation is meant to be put into practice in only very limited circumstances. The justification for the four point types mentioned above is mainly limited to the argument that the exit points in the form of cross-border interconnection points should be grouped together because cross-border transport has a different cost structure. However, this alone cannot be the basis on which the allocation of all four of these point types is ultimately determined. It would therefore also be necessary to discuss the extent to which allocation to the other three groups can be carried out appropriately on the basis of typical costs. The proposal for the postage stamp tariff per type of network point determines the remaining groups of point types but without justifying how this is done.
- 116 The Ruling Chamber is convinced that – on this level in any case – the cost allocation per capacity booking under the uniform postage stamp reference price methodology constitutes an appropriate allocation of the actual costs incurred. The Ruling Chamber considers it mandatory to justify any general charges and discounts applied to individual point types that differ from this principle and does not consider that the comments submitted during the preliminary and final consultation procedures are a sufficient basis for determining a reference price methodology other than the uniform postage stamp reference price methodology.
- 117 Even at the outset, an argument to be made against this proposal is that the postage stamp tariff per type of network point does not ensure a consistent distribution of costs since ultimately it is not the costs but the proportions of total bookings that are allocated to the individual point types. Consequently, if the shares of bookings fluctuate over the course of the following years the corresponding tariffs would change but the actual cost share would have to remain the same. It would however still be unclear why, for instance, in the context of methodological cost allocation

the cost pool for transit should change when transit bookings are higher or lower. This circumstance cannot be used as a counterargument against the uniform postage stamp methodology since it uses the bookings merely to distribute the total cost pool evenly and in a non-discriminatory fashion.

- 118 With the postage stamp tariff per type of network point, costs are distributed on the basis of capacity forecasts, so in principle it also opens a gateway for inappropriate cost distribution. It cannot be ruled out, for instance, that the forecast at interconnection points is set too low, which then results in a higher reference price being calculated at interconnection points. Any additional revenue generated would also have to be distributed at domestic points in the following years, which would lead to an inappropriate displacement of revenues to the benefit of domestic points. In the case of a uniform postage stamp, on the other hand, incorrect forecasts always merely result in higher or lower revenues, which are evenly balanced via the regulatory account.
- 119 In addition, the postage stamp per type of network point reference price methodology gives rise to follow-up questions with regard to allocation of costs. Thus, there are numerous cases where end users or downstream network operators are connected to large pipelines that are also used for transit purposes and according to the proposal are regarded as being especially cost-effective. In spite of this, these end users and downstream network operators would have to pay higher tariffs under the proposal for the postage stamp tariff per type of network point. However, there would be no objective reason for these higher tariffs.
- 120 Ultimately, the proposed methodology results in a differentiation in tariffs on the basis of the ownership structures of transmission system operators, which – with different costs – each have a different share of the individual point types in terms of capacity. The Ruling Chamber does not consider this to be a more cost-reflective approach than a uniform postage stamp tariff.
- 121 One further aspect is the allocation of shortfalls in revenue by means of deductions from the reference price. Whereas in the case of the postage stamp reference price methodology through Article 6(4)(c) of Regulation (EU) 2017/460 these shortfalls in revenue are shared among all points, for example because of discounts for conditional firm capacity products in accordance with the reference price methodology being applied uniformly, under the proposed postage stamp per type of network point reference price methodology they do not stay within the groups but in fact are also borne by other point types. It remains unclear in this connection why a cost allocation that has already taken place should be disrupted again. In the case of storage facilities, the argument in favour of this can be expressed to the extent that, logically, they are not able to bear the cost of this deduction as set out in Article 9(1) of Regulation (EU) 2017/460 themselves. However, in the case of exit points that take the form of cross-border interconnection points, for example, this is not readily apparent.
- 122 In light of the deliberations set out above, the Ruling Chamber considers the proposed postage stamp per type of network point reference price methodology not to be preferable over the

postage stamp reference price methodology in respect of aspects of cost-reflectivity, taking account of the complexity of the transmission networks.

**(6) Function-specific postage stamp on the basis of explicit cost allocation according to transport tasks**

- 123 The proposal for a function-specific postage stamp on the basis of explicit cost allocation according to transport tasks was submitted to the Ruling Chamber by the companies that arranged for it to be drawn up, at a time when the preparation of this consultation document was already at a very advanced stage. As the transmission system operators require binding provisions at an early stage to calculate their tariffs from 1 October 2021 onwards and further postponement of the consultation thus did not appear justifiable, only a provisional assessment of this reference price methodology could initially be made and at present has not yet been completed. The mathematical verification, in particular, is proving to be difficult in the available time. The proposed variants of cost allocation according to functions per type of network point and function-specific revenue caps are described only very imprecisely in the expert opinion submitted from DNV GL Energy Advisory GmbH and cannot be implemented without further conceptual and analytical deliberations. The variants of cost allocation according to the diameter of the pipelines and according to pressure ranges in the gas pipeline network could possibly be modelled on the basis of structural data from the efficiency comparison for the third regulatory period. That said, these data originate from the base year 2015 and are therefore outdated. Carry out a calculation with current values would first of all require an additional survey to collect data among all transmission system operators.
- 124 It can already be stated that the function-specific postage stamp on the basis of explicit cost allocation according to transport tasks reference price methodology represents an attempt to eliminate the shortcomings of the postage stamp per type of network point reference price methodology with regard to its lack of cost allocation in that it links in a somewhat more differentiated manner to different components of the revenue caps of the individual transmission system operators in order to attribute the corresponding costs in a supposedly focused way to intra-system or cross-system network use. However, as in the case of the postage stamp per type of network point, the question arises here too as to whether such a distinct separation between intra-system and cross-system network use is at all possible. Cost allocation to the two forms of use – assuming that they can be clearly distinguished – is also by no means unambiguous. All proposed variants of the split operate with a blanket approach that is intended to allocate the entire cost base to the transmission system operators on the basis of a single indicator. It is questionable whether reliable information about the share of cross-system use can be derived from the proposed indicators. The fundamental problem, that in an integrated market area transport services are also performed using other transmission system operators' systems and in practice it is almost impossible to identify the infrastructure actually used for the

performance of a specific service, is not solved by the analyses in the expert opinion either. The presumption that a large pipeline diameter and high compressor capacity are linked to a predominantly cross-system network function disregards the fact that transmission system operators with relevant types of transport systems do not perform their services in isolation from the other transmission system operators' pipelines. If, as proposed, in order to determine the costs of cross-system network use for an individual transmission system operator the methodology uses a certain proportion of the operator's revenue cap that is associated with cross-system transports because of specific features, it is precisely the case that it does not take account of the entirety of all costs necessary for transport. This is because the revenue cap does not reflect those costs that arise as a result of services by other transmission system operators in the market area and are not priced, or are only priced through a compensation mechanism that does not directly affect the revenue caps. It is unclear whether a link between cross-system network use and specific technical features would become apparent even if all the technical processes needed to bring about an input and a corresponding offtake in the market area were taken into consideration, and is probably impossible to determine in light of the repeatedly mentioned complexity of the physical gas flows in the market area and their interactions with each other.

125 The transparency of the methodology for the network customers is very greatly reduced by the increasing complexity of the calculation. Moreover, the quantity of input data required is additionally extended by certain structural parameters. The Ruling Chamber has already had the experience in several proceedings concerning the performance of efficiency comparisons that the collection of structural data is often associated with complications, data errors and the need for extensive corrections and follow-up data collections. Carrying out a data collection of this nature on an annual basis to determine the current reference prices at the time, something that furthermore would have to be organised by the transmission system operators themselves acting cooperatively without the participation of the Bundesnetzagentur, appears at the very least to be demanding and subject to various uncertainties.

#### **(7) Other reference price methodologies**

126 In addition to the uniform postage stamp, postage stamp per type of network point, function-specific postage stamp on the basis of explicit cost allocation according to transport tasks and capacity weighted distance reference price methodologies, within the framework of the proceedings for the preceding decisions BK9-18/610-NCG and BK9-18/611-GP ACER put forward the matrix reference price methodology, stating that this should be discussed if the uniform postage stamp reference price methodology proves not to be cost-reflective following closer assessment.

127 Firstly, the Ruling Chamber is convinced that the cost-reflectivity of the uniform postage stamp reference price methodology can be demonstrated, especially against the background of the

complexity of the transmission networks. Secondly, the matrix reference price methodology does not constitute a practicable methodology for Germany's transmission networks. To begin with, this reference price methodology requires a whole host of input parameters: the length, capacity and construction costs must be known for each individual pipeline section, based on full cartographic details of the entire network being held on file. Furthermore, the corresponding pipeline sections must be allocated for all combinations of entry and exit points. Realistically, this can only be achieved if the transmission network exhibits a stable, typical flow. However, in a mesh network with the possibility of being supplied from various sides, no such allocation can be carried out properly. Moreover, the integration of the L-gas and H-gas networks is a distinct argument against the creation of such paths. A corresponding matrix would thus have almost one million values for the German market area.

128 Besides, a methodology of this type would be highly opaque for network users and in many respects, in terms of results, would be dependent on assumptions that would have to be made during the calculation steps.

### **c) Article 7 second sentence (c) of regulation (EU) 2017/460**

129 According to Article 7 second sentence (c) of Regulation (EU) 2017/460, the reference price methodology shall aim at ensuring non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5 of Regulation (EU) 2017/460. This specifies the requirement set out in Article 13 of Regulation (EC) 715/2009 that the approved tariffs or the methodologies used to calculate them must be applied in a non-discriminatory manner and that cross-subsidies between the network users must be avoided.

130 The postage stamp reference price methodology fulfils these requirements because, on the basis of the equal treatment of all forecasted capacity bookings, it guarantees the equal treatment of all network users and thus non-discrimination. The necessary splitting of revenues at entry and exit points (entry-exit split) is carried out in a non-discriminatory manner merely on the basis of the forecasted booked capacities for cost-reflective cost allocation. Individual network users or groups of network users neither gain an advantage nor suffer a disadvantage in this process, as equal services are priced identically. In particular, the reference price for accessing the virtual trading point is always identical.

131 The results of the cost allocation assessment according to Article 5 of Regulation (EU) 2017/460 described in section B.I.4 also make it clear that there is no undue cross-subsidisation.

132 Likewise, the non-pricing of biogas and power-to-gas input does not have a discriminatory effect. As explained above under b), the input of this gas is associated with cost-reducing effects, which justify it being treated differently from other entry points. The justification for not being treated equally with other decentralised entry points at conventional natural gas storage facilities is that these are finite, climate-damaging resources whose use should not be incentivised by granting

additional discounts. The input of biogas, on the other hand, serves the aim of increasing the use of climate-neutral resources and is intended to generate its network-benefiting effect over the long term. Power-to-gas plants are likewise intended to be of lasting benefit to the network and to provide for coupling between the electricity and gas sectors in order to enable the storage of excess quantities of electricity, which occur ever more frequently on account of the increasing amount generated from renewable sources.

- 133 The capacity weighted distance reference price methodology set out in Article 8 of Regulation (EU) 2017/460, however, does not satisfy these requirements to the same extent. The rigid approach of a 50/50 entry-exit split in accordance with Article 8(1)(e) of Regulation (EU) 2017/460 prevents costs or revenues from being allocated to the entry and exit points in an appropriate manner tailored to individual circumstances. The access to the virtual trading point is priced differently, for which there is no objective justification arising from the distance in a meshed transmission network, and this issue is not covered in the detailed provisions of Article 8 of Regulation (EU) 2017/460. For further details of the cost allocation assessment under the capacity weighted distance reference price methodology, refer to sections B.I.5.e) and B.I.6.
- 134 The propose postage stamp per type of network point reference price methodology does not meet these requirements to the same extent either. Although setting higher prices at exit points to end users and downstream network operators could be justified in that these points entail higher costs compared with exit points in the form of cross-border interconnection points, but even this assumption is subject to doubt (see explanations in section B.I.5.b). Furthermore, the network operators submitting the proposal did not put forward that or give reasons why any price differentiation in the form of a discount on the reference price would also be justified at storage facilities (irrespective of Article 9(1) of Regulation (EU) 2017/460) and at the other entry points, as would arise according to the non-binding calculations carried out by the Ruling Chamber using the proposed postage stamp per type of network point reference price methodology.
- 135 In light of these considerations, the Ruling Chamber considers the proposed postage stamp per type of network point reference price methodology not to be preferable over the uniform postage stamp reference price methodology with regard to the need to ensure non-discrimination and the prevention of undue cross-subsidisation taking into account the cost allocation assessments set out in Article 5 of Regulation (EU) 2017/460.

**d) Article 7 second sentence (d) of Regulation (EU) 2017/460**

- 136 Article 7 second sentence (d) of Regulation (EU) 2017/460 states that the reference price methodology shall aim at 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. There are no directly corresponding provisions in Article 13 of Regulation (EC) 715/2009.

- 137 Recital 6 of Regulation (EU) 2017/460 states that transmission system operators in certain entry-exit systems transport significantly more gas into other systems than for consumption into their own entry-exit system. Consequently, reference price methodologies should include safeguards required to shelter such captive customers from risks related to large transit flows.
- 138 However, within the German entry-exit system it is not the case that significantly more gas is transported into other systems than for consumption in their own entry-exit system: on the contrary, it is less. This remains the case regardless of whether the assessment is made on the basis of booked capacity or actual gas flow. It is therefore questionable whether the above requirement detailed in Article 7 second sentence (d) of Regulation (EU) 2017/460 is at all relevant for the reference price methodology established for the German entry-exit system.
- 139 It is also questionable whether the associated risk of a significant reduction in capacity demand for cross-market-area network use can be addressed at all by the reference price methodology. The reference price methodology system (in the case of a price-cap regulatory regime in accordance with ARegV; see also Article 3 second sentence para 3 of Regulation (EU) 2017/460) takes as its starting point certain revenue that can be recovered from transmission tariffs. Tariffs and revenue always relate to a tariff period; see Article 3 second sentence para 23 of Regulation (EU) 2017/460. If the volume risk addressed here materialises, reconciliation can be achieved using the regulatory account in accordance with Article 17 ff of Regulation (EU) 2017/460 in future. With respect to the ongoing tariff period, only as precise a forecast as possible of the booked capacities can be used as the basis for setting tariffs.
- 140 The postage stamp reference price methodology at least offers the advantage that because of averaging there are only minor fluctuations in the event of individual shifts in flow or load or if they drop out altogether. This methodology is therefore not dependent on a point-specific capacity forecast being as accurate as possible. Because of the averaging and non-discriminatory tariff setting, irrespective of the typification of entry and exit points, the volume risk is borne equally by all (future) network users.
- 141 Further-reaching solutions, for example in the form of switching the regulatory system to a price cap regime (Article 3 second sentence para 17 of Regulation (EU) 2017/460), are not relevant in the context of the assessment of the reference price methodology on the basis of the criteria detailed in Article 7 of Regulation (EU) 2017/460. With regard to the regulatory account, Article 19(4) of Regulation (EU) 2017/460 prescribes that only one regulatory account may be used, thus ruling out, for example, separate regulatory accounts for cross-system and intra-system system network use. Any remaining volume risks are counteracted by the transmission system operators providing as precise a forecast as possible of the booked capacities. The quality of the forecast cannot be determined in the abstract, however.
- 142 Compared to the postage stamp reference price methodology, the capacity weighted distance reference price methodology detailed in Article 8 of Regulation (EU) 2017/460 does not meet the

criterion set out in Article 7 second sentence (d) of Regulation (EU) 2017/460 to the same extent due to the poorer quality of the forecast. The latter methodology results in tariffs that differ relatively widely on a point-specific basis and thus makes forecasting the behaviour of traders significantly more difficult than with the postage stamp reference price methodology. With the capacity weighted distance reference price methodology as detailed in Article 8 of Regulation (EU) 2017/460, therefore, there may potentially be a tendency for higher amounts to appear in the regulatory account, which would exacerbate the problem of passing on the volume risk to end users of the entry-exit system.

- 143 The non-pricing of biogas and power-to-gas input is not relevant to the volume risk owing to its minor monetary significance (see section B.I.5.e)).
- 144 In conclusion it can be stated that, because of its lower susceptibility to forecasting errors, the postage stamp reference price methodology is at least superior in terms of satisfying the requirements detailed in Article 7 second sentence (d) of Regulation (EU) 2017/460 than the capacity weighted distance reference price methodology set out in Article 8 of Regulation (EU) 2017/460.
- 145 In the course of earlier consultations the fear was expressed to the Ruling Chamber that there could be a general decline in cross-system network use and thus a tendency for tariffs to rise on account of the loss of corresponding bearers of costs. However, the comments referred merely to the abstract risk of the displacement of transit flows. No specific alternative routes were identified. In addition, respondents stated that a loss of cross-system capacity bookings could also occur due to switching to alternative supply sources such as LNG or to a fall in demand in target regions. This was another reason why the postage stamp per type of network point reference price methodology was proposed.
- 146 However, in the opinion of the Ruling Chamber this argument mixes aspects of cost-reflectivity and the volume risk. Even an absolutely cost-reflective reference price methodology may exhibit the outlined volume risk. Measures that mitigate the volume risk may therefore, insofar as they are justified, not be cost-reflective.
- 147 Based on the previous submission of comments, however, the Ruling Chamber continues to see no reason why the volume risk could directly take effect. In the course of earlier consultations it was stated anyway that the volume risk would not materialise abruptly when the postage stamp reference price methodology was applied. Other market participants commented that the assumed price elasticities when using a uniform postage stamp as the reference price methodology were unrealistic and that a corresponding degree of price elasticity could also be assumed among the domestic network users.
- 148 The Ruling Chamber is convinced that a specific determination of the trend for gas flows in Europe and, derived from that, an assessment of the volume risk cannot be carried out to the exclusion of all doubt. Apart from the fears mentioned above, other aspects also suggest that

increased demand is possible. These include in particular the new construction projects for North Stream 2 in conjunction with the corresponding pipelines for delivering gas volumes (EUGAL), the continuing plans to construct LNG terminals in Germany and the construction of new gas-fired power plants in connection with the energy transition.

- 149 Nevertheless, the Ruling Chamber has included the reporting duty laid down in operative provision 10 in this decision. With the aid of the reports, the Ruling Chamber will be put in a position to assess the volume risk in accordance with Article 7 second sentence (d) of Regulation (EU) 2017/460 on the basis of the actual developments. Pursuant to Article 27(5) fourth sentence of Regulation (EU) 2017/460, the decision on the reference price methodology and on the other points mentioned in Article 26(1) of Regulation (EU) 2017/460 shall be taken at regular intervals. A new decision on the reference price methodology, among other things, may possibly be required as soon as early 2021 in order to obtain an appropriate depiction of the effects of the market area merger and the associated changes in the capacity framework, which cannot be anticipated to a sufficiently reliable degree at the time of issuing this decision. Against this background, the findings from the ongoing monitoring obligations within the meaning of Regulation (EU) 2017/460 can be incorporated into the new determination with due consideration for the developments in bookings. At the present time it is not possible to come to a final conclusion on the extent to which this will lead to necessary adjustments to the reference price methodology.
- 150 Finally, on account of the – in some cases – only minor discounting of cross-system network use, it is questionable whether an assumed volume risk can be adequately countered with the postage stamp per type of network point reference price methodology. Furthermore, the comparisons of tariffs from 2019 and 2020 carried out in decisions BK9-18/610-NCG and BK9-18/611-GP of 29 March 2019 reveal that even with the separate pricing as practised up to and including 2019 (the cost-reflectivity of which was also put forward by transmission system operators who proposed the postage stamp tariff per type of network point methodology) considerable fluctuations in tariffs can arise (for further details see section B.I.5.b)(3)).
- 151 In comments from earlier consultations, respondents also pointed out the possibility of significant fluctuations in network tariffs at storage facilities, partly occurring as a result of weather conditions alone. This circumstance would arise if balancing of higher and lower revenues per point type were carried out. This appears at least to be a justifiable mechanism for balancing higher and lower revenues across a number of tariff periods, because if the costs are allocated to point types with the postage stamp tariff per type of network point, it would not be possible to balance the corresponding higher and lower revenues across all point types but only for each point type. Otherwise, in the event of a fall in bookings at domestic points, for example, in future the interconnection points would be burdened with costs which according to the submission of the postage stamp tariff per type of network point were previously distributed appropriately between the domestic points. This shows that the postage stamp tariff per type of network point

would be considerably more susceptible to tariff fluctuations than a uniform postage stamp and that if the higher and lower revenues are allocated as a whole the self-imposed principles of allocating costs would have to be broken.

152 In light of the deliberations set out above, the Ruling Chamber considers the postage stamp per type of network point reference price methodology not to be preferable over the postage stamp reference price methodology in respect of the volume risk.

**e) Article 7 second sentence (e) of Regulation (EU) 2017/460**

153 Article 7 second sentence (e) of Regulation (EU) 2017/460 stipulates that the reference price methodology shall aim at ensuring that the resulting reference prices do not distort cross-border trade. Article 13(1) of Regulation (EC) 715/2009 adds another requirement by stipulating that the approved tariffs or the methodologies used to calculate them must facilitate efficient gas trade and competition. Article 13(2) of Regulation (EC) 715/2009 stipulates that tariffs for network access must neither restrict market liquidity nor distort trade across borders of different transmission systems.

154 The wording gives rise to different requirements for the reference price methodology for various aspects. Article 7 second sentence (e) of Regulation (EU) 2017/460 merely states that it is sufficient for the reference prices not to distort cross-border trade. This requirement is also included in Article 13(2) of Regulation (EC) 715/2009, although here it applies to borders between different transmission systems. Whereas cross-border trade as defined in Article 7 second sentence (e) of Regulation (EU) 2017/460 within the context of the internal gas market signifies trade across borders of more than one member state, the wording of Article 13(2) of Regulation (EC) 715/2009 is different because it refers to the borders between transmission systems. The word "borders" in the latter case may signify not only borders between entry and exit systems but also borders between transmission system operators operating within one and the same entry-exit system. However, in the above-mentioned European context it can be assumed that, after the introduction of the entry-exit system concept, the wording signifies trade across more than one entry and exit system.

155 Given these assumptions, the question therefore arises of whether the reference price methodology and the associated setting of tariffs at cross-border interconnection points leads to a distortion of cross-border trade. Ultimately this comes down to whether a cost-reflective tariff is set at these points. It has already been explained that the uniform postage stamp reference price methodology aims at taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network (Article 7 second sentence (b) of Regulation (EU) 2017/460). It is not appropriate to facilitate cross-border trade over and above this by means of cross-subsidisation to the detriment of intra-system network use. In exceptional cases, such cross-subsidisation may be justified and permissible

within the meaning of Article 7 second sentence (c) of Regulation (EU) 2017/460, such as in the case of determining multipliers with a value of between 0 and 1 for daily standard capacity products and for within-day standard capacity products with the aim of promoting short-term trading in duly justified cases (Article 13(1)(b) second sentence of Regulation (EU) 2017/460). Whatever the case, it cannot be mandatory however to determine a reference price methodology which uses cross-subsidisation to facilitate cross-border gas trade. This would also contradict the basic assumptions for the cost allocation assessment in accordance with Article 7 second sentence (c) in conjunction with Article 5 of Regulation (EU) 2017/460, because it would always be necessary to justify the result of the assessment in cases of excessive facilitation of cross-border trade (see Article 5(6) of Regulation (EU) 2017/460).

156 There are no indications that the postage stamp reference price methodology does not facilitate efficient gas trade and competition (Article 13(1) of Regulation (EC) 715/2009). The established reference price methodology is a simple, transparent methodology which makes it easier for network users to calculate tariffs and forecast future tariffs and reduces transaction costs compared with a more complex reference price methodology. The same applies to a potential restriction of market liquidity (Article 13(2) of Regulation (EC) 715/2009).

157 Following the submission of the reports pursuant to operative provision 7 of the determination dated 19 July 2017 (BK9-17/609), transmission system operators commented that the use of a postage stamp reference price methodology does not result in a distortion of cross-border trade. They stated that the postage stamp reference price methodology was already used by almost all transmission system operators without any such distortions being apparent. They also stated that there was a high degree of convergence between the GASPOOL, NetConnect Germany and TTF market areas including high load flows at the individual borders.

158 Lastly, the result of the cost allocation assessment can also be used to analyse whether the reference price methodology distorts cross-border trade. The results of the calculations conducted according to Article 5 of Regulation (EU) 2017/460 suggest no disadvantage arises for cross-system network use.

159 The non-pricing of the input of biogas and gas from power-to-gas plants results in a corresponding increase of tariffs at other entry and exit points, which also affects cross-border trade. However, in light of the very small number of biogas and power-to-gas facilities at least in the transmission network and the comparatively low entry capacity, in monetary terms these indirect effects are very small and negligible. As is apparent from Annex 2 in conjunction with the indicative reference price according to Annex 1, such indirect effects are lost revenue from transmission services amounting to 0.04% of total revenue from transmission services. In addition, as outlined above there are important reasons for the input privilege which justify this minor effect on other issues. What is more, the input privilege for biogas is closely connected to the biogas charge, which makes a significant contribution to financing the input of biogas but is

not a burden on the interconnection points in contrast with other exit points. If the biogas charge did not exist, the costs of these entry points would have to be spread across all points, ie also interconnection points, as part of the general network charges. Consequently, overall the combination of biogas charge and input privilege does not necessarily produce a disadvantage for cross-border trade.

160 Based on the information from the transmission system operators on point-specific reference prices determined using the capacity weighted distance reference price methodology pursuant to Article 8 of Regulation (EU) 2017/460 and the capacity forecasts, the Ruling Chamber calculated the expected revenue at the individual points and used these figures to carry out the cost allocation assessment on an indicative basis for the capacity weighted distance reference price methodology. In this variant of the test the Ruling Chamber used only the reference prices calculated in accordance with Article 8 of Regulation (EU) 2017/460 and the forecasted capacities, disregarding multipliers and discounts in order to show the clear effect of the distance weighting. The result significantly exceeded the threshold of 10% as defined in Article 5(6) of Regulation (EU) 2017/460 (see Annex 2). Although this approach to the assessment did not include distance as a cost driver, it nevertheless demonstrates clearly that, because of the larger average distances in cross-system network use (evidently as a result of geographical circumstances), precisely these points are subject to higher tariffs under the capacity weighted distance reference price methodology. This does not necessarily constitute a distortion of cross-border trade, for instance if the blanket unconditional approach of using distance as a cost driver actually ensured greater cost-reflectivity (which in light of the complexity of the transmission networks is at best questionable; see the explanation in section B.I.5.b). However, there is at least the risk of distorting cross-border trade when using the capacity weighted distance reference price methodology, to the extent that this methodology satisfies the criterion detailed in Article 7 second sentence (e) of Regulation (EU) 2017/460 less well than the postage stamp reference price methodology.

161 In some cases the increases are considerable in comparison with the capacity weighted distance reference price methodology. In this respect reference is made to the statements given in section B.I.6.

162 In this connection the Ruling Chamber adheres to the principle of performing the cost allocation assessment without distance as a cost driver. In the case of the capacity weighted distance reference price methodology, too, statements could be made about matters beyond the scope of the reference price methodology such as storage discounts etc provided that the cost drivers for the cost assessment (in this case the capacity weighted average distance per point) such as capacity and revenue as set out in Article 5(5) of Regulation (EU) 2017/460 are weighted and a capacity weighted entry-exit split is used. If the cost drivers are weighted differently, for example at entry points separately according to intra-system and cross-system network use, arithmetically the results obtained would be different. However, this would merely bring to light

the fact that Articles 5 and 8 of Regulation (EU) 2017/460 provide for different methods of calculation. In other words, in the case of the cost allocation assessment it would simply be established that Article 8 of Regulation (EU) 2017/460 allocates a reference price to each entry point and during booking no distinction is drawn according to whether the purpose of the booking is intra-system or cross-system (which is in fact not at all possible in an entry and exit system and when booking freely allocable capacity).

163 With regard to the proposed postage stamp per type of network point reference price methodology it may be the case that a general rise in cost at domestic exit points (compared with the uniform postage stamp) and the associated reduction in tariffs at exit points to neighbouring entry and exit systems would facilitate cross-border trade as a result of subsidisation of this nature. The associated questions relating to cost-reflectivity, non-discrimination and the volume risk have already been discussed in sections B.I.5.b) to B.I.5.d). As shown, these deliberations do not lead to the conclusion that facilitation of cross-border trade is appropriate. The postage stamp reference price methodology, on the other hand, precisely meets the criteria set out in Article 7 second sentence (e) of Regulation (EU) 2017/460, because it does not distort cross-border trade through equal treatment.

#### **f) Interim result for Article 7 second sentence (a) to (e) of Regulation (EU) 2017/460**

164 Taking an overall view of the criteria listed in Article 7 second sentence (a) to (e) of Regulation (EU) 2017/460, the uniform postage stamp reference price methodology meets all the requirements and is superior to the capacity weighted distance reference price methodology according to Article 8 of Regulation (EU) 2017/460. Any lower degree of cost-reflectivity as a result of average tariffs is offset by significantly greater transparency and better forecasting quality. The uniform postage stamp reference price methodology guarantees a high degree of non-discrimination with respect to tariff setting. Access to the virtual trading point is also uniformly priced in an appropriate manner by the postage stamp reference price methodology, without an adjustment in accordance with Article 6(4)(b) of Regulation (EU) 2017/460 having to be carried out. As discussed, there are no compelling reasons to determine the proposed postage stamp tariff per type of network point reference price methodology instead of the uniform postage stamp methodology. Any volume risk is adequately addressed by the reporting duty discussed above.

#### **g) Article 13(1) of Regulation (EC) 715/2009**

165 Other criteria for the assessment of the reference price methodology which are not already specified in detail by Article 7 second sentence (a) to (e) of Regulation (EU) 2017/460 derive from the reference in Article 7 first sentence of Regulation (EU) 2017/460 to Article 13(1) of Regulation (EC) 715/2009. Namely, Article 13(1) of Regulation (EC) 715/2009 stipulates that the approved tariffs or the methodologies used to calculate them must, in addition, take into account

the need for system integrity and its improvement and provide incentives for investment and maintaining or creating interoperability for transmission networks.

166 In the opinion of the Ruling Chamber a transparent and easily understandable reference price methodology such as the uniform postage stamp method is particularly suited to contributing to the interoperability of the transmission networks and is better at achieving this than a capacity weighted distance reference price methodology pursuant to Article 8 of Regulation (EU) 2017/460 which needs difficult agreements between the transmission system operators for its calculation. It is particularly the case that tariff setting at virtual interconnection points in accordance with Article 22 of Regulation (EU) 2017/460 which requires agreement between the TSOs concerned is significantly facilitated by uniform pricing anyway. This applies especially in cases where the only reason why multiple TSOs offer the corresponding interconnection points is because of their involvement in transmission companies and discrepancies have arisen in the past between the fundamental capacity rights and the marketed capacities. The proposed postage stamp per type of network point reference price methodology may also satisfy this criterion. In contrast, aspects of network integrity and of incentives for investments are not affected by an abstract reference price methodology in the opinion of the Ruling Chamber. These are adequately addressed by the provisions of the Gas Network Charges Ordinance (GasNEV) and the Incentive Regulation Ordinance (ARegV).

#### **h) Proportionality of the uniform postage stamp reference price methodology**

167 The established uniform postage stamp reference price methodology that is to be applied jointly by the transmission system operators in accordance with Article 10(1) of the Regulation is also proportionate.

168 The legitimate public purpose of the reference price methodology is not, as is partly assumed, to cross-subsidise some network users but to determine a method of calculating reference prices that is in particular transparent, cost-reflective and non-discriminatory. As explained in detail in sections B.I.2, B.I.4, and B.I.5.a) to B.I.5.g), the uniform postage stamp reference price methodology is suited to meeting these requirements.

169 There are no other reference price methodologies that meet these purposes to the same degree, thus the uniform postage stamp reference price methodology is also necessary. Separate tariffication in accordance with the provisions of GasNEV would already be legally impermissible owing to the lack of a compensation mechanism (for further details see sections B.I.5.b)**Fehler! Verweisquelle konnte nicht gefunden werden.** and B.I.5.b)(3)). The determination of a compensation mechanism for use with a separately applicable reference price methodology is not the object of this decision and, as explained in section B.I.5.b)(1), would be associated with significant legal and practical difficulties. Furthermore, the possibility could not be ruled out that a compensation mechanism of this type would lead to compensation payments comparable to

those arising with a reference price methodology to be applied jointly. Other reference price methodologies such as the postage stamp tariff per type of network point do not meet the requirements to the same extent, as set out.

170 The uniform postage stamp reference price methodology is also presented as being appropriate. If it leads to higher and lower revenues for certain transmission system operators and as a consequence corresponding compensation payments, this is an inherent element of an entry and exit system with multiple transmission system operators. Whichever reference price methodology is used, there will be payers and recipients in this configuration. That would also apply without exception to the capacity weighted distance reference price methodology and to the postage stamp per type of network point reference price methodology. However, a reference price methodology pursuant to Article 7 of Regulation (EU) 2017/460 should not be measured against this criterion but against the question as to whether the methodology is transparent, cost-reflective and non-discriminatory for the system as a whole. That said, these criteria are not met per se by determining a reference price methodology that has the aim of minimal compensation payments between the transmission system operators. Neither, therefore, can it ultimately be a matter of which transmission system operators obtains lower revenues and which transmission system operators obtain higher revenues following the joint use of a reference price methodology provided that this methodology is transparent, cost-reflective and non-discriminatory for the specific entry and exit system. It may be that under the postage stamp per type of network point reference price methodology the additional revenue will be lower for some transmission system operators so they will have to pay lower compensation payments accordingly. Conversely, however, this situation means that other transmission system operators will be subject to an additional burden with this methodology compared with that of a uniform postage stamp. Furthermore, it is hardly possible to speak of a specific burden because every transmission system operator may recover their revenue cap regardless of the reference price methodology. Any additional risks on account of the obligation to generate additional revenue compared with the previous status quo are reflected by the determination of an effective compensation mechanism in accordance with Article 10(3) first sentence of Regulation (EU) 2017/460.

171 Furthermore, in legal terms the provisions of Regulation (EU) 2017/460 require that there are official regulations to determine the tariffs for transmission services and non-transmission services. In this respect the transmission system operators no longer have the freedom anyway to use the infrastructure in their ownership (Article 14(1) of the German Basic Law – GG) or to set tariffs for their services (Article 12(1) second sentence GG). As these provisions are transparent, cost-reflective and non-discriminatory, the Ruling Chamber considers the provisions to be appropriate.

## **6. Comparison with the capacity weighted distance reference price methodology, including indicative reference prices, in accordance with Article 26(1)(a)(vi) of Regulation (EU) 2017/460**

- 172 According to Article 26(1)(a)(vi) of Regulation (EU) 2017/460, in addition to the comparison of the proposed reference price methodology with the capacity weighted distance reference price methodology pursuant to Article 8 of Regulation (EU) 2017/460, a comparison of the respective indicative reference prices must be carried out, Article 26(1)(a)(iii) of Regulation (EU) 2017/460.
- 173 Annex 3 shows the point-specific reference prices calculated using the capacity weighted distance reference price methodology according to Article 8 of Regulation (EU) 2017/460 (after rescaling in accordance with Article 6(4)(c) of Regulation (EU) 2017/460). The reference prices resulting from the postage stamp reference price methodology are shown in Annex 1. The prices are shown respectively before and after rescaling in accordance with Article 6(4)(c) of Regulation (EU) 2017/460. In addition, the average reference prices under the capacity weighted distance reference price methodology (weighted with the forecasted contracted capacity) and the relative price differences compared to the postage stamp reference price methodology are shown in Annex 2 for each type of point. Changes to the proposed reference price methodology arise not only from taking account of distance but also because of the 50/50 entry-exit split referred to in Article 8(1)(e) of Regulation (EU) 2017/460.
- 174 In addition, the Ruling Chamber has made an adjustment with regard to the entry-exit split and approximated reference prices according to the capacity weighted distance reference price methodology, which would arise according to the uniform postage stamp in the case of an entry-exit split. These prices are likewise shown in Annex 2.
- 175 If the differences are evaluated it becomes apparent that a capacity weighted distance reference price methodology leads to a price increase at interconnection points. The same applies to a calculation with an adjusted entry-exit split. Against this background, the uniform postage stamp reference price methodology already confers privileged status on interconnection points compared with the reference price methodology provided for in Regulation (EU) 2017/460.
- 176 For example, on average €8.18 per kWh/h/a would have to be calculated for booking at interconnection points (entry and exit) under the capacity weighted distance reference price methodology with an adjusted entry-exit split (instead of €7.38 per kWh/h/a according to a uniform postage stamp).
- 177 Specifically, for MEGAL, for example, in the case of entry at the border with Czechia and exit to France, the result under a uniform postage stamp methodology would be a reference price of twice €3.69 per kWh/h/a, ie €7.38 per kWh/h/a. Using the capacity weighted distance approach, a total reference price of €7.75 per kWh/h/a is obtained given a 50/50 entry-exit split or €8.78 per kWh/h/a given an entry-exit split corresponding to the uniform postage stamp. This illustrates the

fact that if distance is taken into account as a cost driver the tariffs on so-called transit pipelines may rise or lie within the range of a postage stamp tariff.

## **7. Allowed revenue, transmission services revenue and ratios for the transmission services revenue according to Article 26(1)(b) of Regulation (EU) 2017/460**

- 178 The requirements set out in Article 26(1)(b) in conjunction with Article 30(1)(b)(i), (iv) and (v) of Regulation (EU) 2017/460 should be seen in a thematic context with the reference price methodology established according to operative provision 1. Accordingly, the indicative information relating to the allowed revenue of the transmission system operators, including transmission services revenue and ratios for the transmission services revenue, must be published (in this context only the entry-exit split and the intra-system/cross-system network use split pursuant to Article 30(1)(b)(v)(2) and (3) of Regulation (EU) 2017/460) are relevant). The indicative information is detailed in Annex 1. In the opinion of the Ruling Chamber, the transmission system operators made a reasonable estimate taking into account all verified information available at the time. Cost centres were created, from which the revenue from transmission services was calculated. This estimate by the transmission system operators, too, gave rise to no objections in the opinion of the Ruling Chamber. The ratios according to Article 30(1)(b)(v)(2) and (3) of Regulation (EU) 2017/460 are shown in Annex 1. The entry-exit split represents a logical weighting of the transmission services revenue with respect to the entry and exit points on the basis of the forecasted capacities. As the level of capacity booking is principally to be regarded as an indicator for the use of the key cost driver figure and therefore for the level of the costs associated with it, the (indirectly) defined capacity-weighted entry-exit split reflects the costs and revenue that have to be allocated appropriately to the entry and exit side in a cost-reflective manner.
- 179 As an alternative to this, the entry-exit split could be determined ex ante with a fixed value. However, any such determination is always of a sweeping nature because it is not possible to allocate costs specifically to the entry and exit side. Inasmuch as standardised assumptions are made based on type, for example that costs would have to be transferred to the exit points because these supposedly tend to be lower cost than entry points, the implicitly determined capacity weighted entry-exit split in the booking situation in the German market area also does justice to this. It thus also leads to easing at the entry points and the thus assumed increased liquidity at the virtual trading point. No compelling, substantiated indications for a different entry-exit split were submitted in the context of the consultations to date. Capacity weighting, on the other hand, constitutes an objective and transparent yardstick.

## **8. Simplified tariff model according to Article 26(1)(d) of Regulation (EU) 2017/460**

- 180 According to Article 26(1)(d) in conjunction with Article 30(2) of Regulation (EU) 2017/460, an indicative consultation is to be carried out on a simplified tariff model.

181 With regard to the provisions set out in Article 30(2)(a)(ii) and (2)(b) of Regulation (EU) 2017/460, the Ruling Chamber has made a simplified tariff model available in Annex 5 which can be used to estimate the development of transmission tariffs for the remainder of the time in the third regulatory period. More detailed assumptions regarding the development of capacities and transmission services revenue, apart from the overall consumer price index (section 8 ARegV) and the general sectoral productivity factor (section 9 ARegV), are not included in the tariff model. At the present time, such forecasts relating to 2022 would be overly driven by assumptions and would therefore not be a helpful indicator for the development of tariffs. The Ruling Chamber considers it sufficient for the transmission system operators to present forecasts as of the tariff year 2021 and in so doing include the implementation of the provisions of Regulation (EU) 2017/460 in the forecasts. Assumptions on the development of the relevant revenue caps and capacities can be made by the respective user in the model.

182 The reference prices valid for the tariff year 2020 are also shown in Annex 1.

### **9. Determining the reference price in 2021**

183 Calculating the reference prices in 2021 is fraught with difficulty because of the market area merger taking place in the October of that year. According to Article 3 second sentence para 1 of Regulation (EU) 2017/460, the reference price always relates to a capacity product with a duration of one year. The transmission system operators' revenue caps which are used to determine the revenues to be generated through transmission services are also determined on a yearly basis (calendar year). The object of the calculation must therefore be a yearly product that is priced with a uniform tariff for the entire period from January to December 2021. However, this is not possible when linked to the (likely) actual circumstances. As a result of the merging of the existing NetConnect Germany and Gaspool market areas, there cannot be a uniform reference price for the whole of 2021. In the months January to September, the two market areas each have to form their own reference price in accordance with decisions BK9-18/610-NCG and BK9-18/611-GP of 29 March 2019. From October onwards there will be a new reference price in accordance with the provisions of this decision, the level of which will differ from the previous two reference prices even though it will have been determined using the same methodology. Furthermore there will be considerable change to the existing capacity structure. Firstly, capacity products that provided for entry or exit at the current market area interconnection points will no longer exist in that form. Secondly, freely allocable capacity products will change their character and in future will either cover a considerably wider geographical area or will become conditional products, as a consequence of which in accordance with Article 4(2) of Regulation (EC) 2017/460 and operative provision 3 of this decision the rules for their pricing will change. This situation can be redressed by the reference prices for both parts of the 2021 calendar year being formed on the basis of hypothetical annual forecasts. When the reference prices for quarters 1 to 3 are calculated, therefore, a booking forecast must be made for the whole of 2021 which

assumes that the NetConnect Germany and Gaspool market areas will continue to exist in the fourth quarter. In contrast, when the reference price for the fourth quarter is calculated a booking forecast must be made that assumes the existence of a joint German market area for the whole of 2021. For the fourth quarter, this derives from the fourth sentence of operative provision 1 of this decision. For quarters 1 to 3, the relevant decisions BK9-18/610-NCG and BK9-18/611-GP of 29 March 2019 do not expressly include any corresponding provisions. However, the procedure outlined here derives from an interpretation of the decisions guided by their spirit and purpose, since in the opinion of the Ruling Chamber they cannot otherwise be meaningfully applied in 2021.

## **II. Discounts at storage facilities according to Article 26(1)(a)(ii) of Regulation (EU) 2017/460 (operative provision 2)**

184 The decision pursuant to operative provision 2 is based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence (2), second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence, Article 26(1)(a) and Article 9(1) of Regulation (EU) 2017/460. Article 9(1) of Regulation (EU) 2017/460 stipulates that a discount of at least 50% shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point. The regulation does not set an upper limit to this discount; the only requirement is for a discount of at least 50% to be applied. In addition, the regulation requires that the discount be applied under only one condition: if a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point, a discount may not be applied. According to recital (4) of Regulation (EU) 2017/460, storage facilities can make a general contribution to security of supply and system flexibility in transmission systems. This fact is to be taken into account in the form of a discount on the transmission tariff. Moreover – no doubt in the interest of setting cost-reflective tariffs – the aim is to avoid double charging for transmission to and from storage facilities.

185 These considerations are applicable and are particularly important when determining the discount to be applied at entry and exit points at storage facilities. Storage facilities do indeed make a significant contribution to security of supply and system flexibility. In certain situations of higher demand or low supplies, for example during cold spells or during the winter months, storage facilities can balance out shortages in gas supply. Gas reserves stored in the storage facility can be made available to the system when demand is high and possibly cannot be met by other means. To this extent a storage facility can, to a certain degree, perform the function of a network substitute. Storage facilities also have an important role to play in the provision of balancing gas.

- 186 In addition, it is appropriate in any case, partly in respect of setting cost-reflective tariffs, to apply a mandatory discount to tariffs at entry and exit points at storage facilities. An entry tariff for gas input into the transmission system and an exit tariff for gas offtake at the final customer or in transit are already calculated for the capacity delivered into and later off-taken from the storage facility. Storage facility users thus already bear a share of the costs of transport infrastructure. Charging an additional full entry and exit tariff at storage facilities would effectively constitute double charging, which is to be avoided according to the considerations of Regulation (EU) 2017/460; overall, the tariffs charged would be twice as high even though putting gas into or taking gas out of storage does not result in double the costs for the network operator and does not put twice as much strain on the system.
- 187 Consequently, a 75% discount must be applied to capacity-based transmission tariffs at entry and exit points at storage facilities unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point. This discount is to be applied to the tariff for the respective booked capacity product. The tariff to be used as the basis for the discount therefore depends on whether the capacity product to be booked is firm, interruptible or with an attached condition.
- 188 The Ruling Chamber considers a discount of 75% in this respect to be appropriate. Some market participants often suggest that an even higher discount of up to 100% should be applied, thus fully removing tariffs at entry and exit points at storage facilities. In contrast, prior to the entry into force of Regulation (EU) 2017/460 the majority of network operators set a discount amounting to 50%, in conformance with the national provisions to the extent that they previously applied as established by the determination dated 24 March 2015, file reference BK9-14/608. In the opinion of the Ruling Chamber, however, the set discount of 75% takes account of the principle of the cost-reflectivity of tariff setting at storage facilities required under Regulation (EU) 2017/460 and at the same time adequately reflects the general contribution made by storage facilities to security of supply and system flexibility. The entry and exit tariffs at storage facilities are therefore reduced by a significant amount, which in the opinion of the Ruling Chamber not only reflects the contribution to security of supply made by storage facilities but also further enhances the attractiveness of storage facility usage, supporting security of supply. Furthermore, in the opinion of the Ruling Chamber the set discount takes appropriate account of the costs arising within a network for transport in connection with storage facility usage. On the one hand, there is acknowledgement that there would be no justification to charge double the tariff. On the other hand, it also takes into account the fact that there is usually an additional strain on the network infrastructure when a storage facility is used to transport gas, such that complete exemption from tariffs by applying a discount of 100% is out of the question. Otherwise, the costs arising from this transport would always be spread indirectly among all network users and would not be allocated to the user who has initiated this network use or profits from it. Finally, the discount of 75% balances conflicting interests, ie on the one hand the

demands of some market participants for a higher discount of up to 100% and on the other hand the demand to restrict discounts to the prescribed minimum of 50%.

- 189 Capacity bookings at storage facility connection points which are connected to more than one transmission or distribution network can only have a discount applied if evidence has been provided to the network operator that the storage facility cannot be used by the respective user for a discounted border crossing or swaps within the storage facility followed by a discounted border crossing in the event of actual use (ie in the case of a capacity booking, not generally at the level of the storage facility). The above follows from the provision in Article 9(1) of Regulation (EU) 2017/460 according to which a discount on transmission tariffs at entry points from and exit points to storage facilities shall be applied unless and to the extent a storage facility is used to compete with an interconnection point. As detailed in recital 4 of Regulation (EU) 2017/460, the background for this provision is the potential for discrimination, which arises at such storage facilities where discounted entry and exit tariffs are applied in that they can be used as an interconnection point but this usage would be discounted if the discount is applied. Network users who (have to) book a normal interconnection point without a discount would therefore be put at a disadvantage because they would have to pay a higher transmission tariff for crossing a border at an interconnection point than the network user who uses the storage facility as a "discounted" interconnection point.
- 190 To be certain that the storage facility at which a discounted transmission tariff is set will not be used to compete with an interconnection point, thus resulting in discrimination against certain network users, there may be the possibility of entirely ruling out discounts being applied to transmission tariffs at entry and exit points at such storage facilities, ie to set these tariffs without any discounts. However, in the opinion of the Ruling Chamber this would contradict the intention expressed in Regulation (EU) 2017/460 that discounts should generally be applied to transmission tariffs at entry points from and exit points to storage facilities and would also disregard the undoubted contribution to security of supply and system flexibility made by storage facilities which are connected to more than one transmission or distribution network. It is therefore not appropriate to completely prohibit the discounting of capacity tariffs at such storage facilities. It thus appears to the Ruling Chamber to be advisable to allow the mandatory application of a discount of 75% to transmission tariffs at entry points from and exit points to storage facilities under certain conditions. Accordingly, application of this discount is to be stipulated if the network operator has received evidence in each individual case that the storage facility – for reasons such as contractual prohibitions – is not being used as a "discounted" interconnection point in the specific case in question (ie in the case of a capacity booking, not generally at the level of the storage facility). The storage facility operator must provide the network operator with such evidence. In cases where such evidence is lacking, the tariff calculated using the reference price methodology must be set without any discount applied. Similarly, the tariff calculated according to the reference price methodology without a discount

applied is to be set if it is intended from the outset for there to be a possibility of using the storage facility as an interconnection point in the corresponding booking case. It follows that, whatever the network or storage facility user's booking situation, there are only two alternatives at storage facilities which are connected to more than one transmission or distribution network: firstly, the storage facility can be used by the network and storage facility user as a storage facility without the potential of being used as an interconnection point, in which case input and offtake of the gas quantities stored with the corresponding capacity is only possible within Germany; in such cases a discount of 75% must be applied to the transmission tariff. Secondly, the storage facility can be used by the network and storage facility user as an interconnection point in which case input and offtake of the gas quantities stored with the corresponding capacity is also possible in neighbouring countries; in these cases, however, a discount may not be applied. It is not necessary to allocate a storage facility as a whole to these alternatives; rather, a differentiated analysis must be carried out at the level of the respective booking.

- 191 Gas volumes put into storage with and without a discount are available without restriction at all storage facilities in order to guarantee security of supply in the relevant market areas, ie at storage facilities connected to more than one transmission or distribution network and at storage facilities connected to only one transmission network. In this regard in the case of volumes put into storage with a discount from within the German market area it is necessary to book discounted entry capacity back to the original market area and capacity for the market area switch. Especially for customers with long-term bookings who, when putting their gas into storage, do not yet want to specify its ultimate destination, this opens up the possibility of responding flexibly to market opportunities and if applicable arranging a crossing to an adjacent market area despite discounted input. Gas volumes put into storage from abroad cannot immediately be withdrawn from storage in the German market area using an already booked discounted entry capacity. To do this, in principle the additional booking of an undiscounted entry capacity for the withdrawal and a discounted exit capacity for putting the gas into storage would be necessary. This would be the only way that the shipper could provide evidence that the cross-border gas volumes were not transported using a discounted capacity.
- 192 Instead of such bookings, on application from the shipper the transmission system operator concerned may also issue an invoice for the corresponding tariffs. As the gas remains in the storage facility anyway or is merely to be withdrawn to the adjacent market area, from the regulatory standpoint no corresponding bookings of real capacities are required. If a network and storage facility user wishes to use an undiscounted capacity for the withdrawal of discounted stored quantities back into the German market area, that user is free to do so. Compulsion to rebook a discounted capacity is not appropriate.
- 193 If it can be proven that quantities stored without a discount are fed back into the German market area, a discounted entry capacity can be used for this purpose. In such cases the storage facility is not used to compete with an interconnection point at the time of withdrawal, so the exception

allowed in Article 9(1) of Regulation (EU) 2017/460 regarding the discount generally to be granted at storage facilities does not apply to the entry capacity. However, with undiscounted exit capacity and the corresponding allocation of quantities, the network and storage facility user putting the gas in storage has acquired full flexibility allowing potential use of the storage facility to compete with an interconnection point and the price is to be set without a discount accordingly. Retrospective discounting of the exit capacity used for storing these quantities is thus out of the question. This applies both to the eventuality of the gas quantities being traded (possibly multiple times) between being put into and taken out of storage and the eventuality of the quantities remaining with the network and storage facility user putting the gas into storage. In these cases, on the one hand in relation to putting gas into storage the situation remains unchanged with undiscounted exit capacity, with which full flexibility was acquired, and on the other hand in relation to withdrawal from storage the option remains of using a discounted entry capacity back into the German market area, which when taken advantage of does not constitute use to compete with an interconnection point. The bookings of exit and entry capacities and the associated input into and withdrawal from storage must therefore be considered in isolation. It is not appropriate to deny the acquirer or owner of the quantities the discount for the entry capacity provided no switch to another market area takes place. It is appropriate, however, not to apply a discount for the exit capacity because a price must be set for the acquisition of flexibility. Whether or not use is deemed to compete with an interconnection point is therefore determined by the network user at the time of booking the corresponding capacities.

- 194 Any year-round discounts other than the uniform discount of 75% applicable to transmission tariffs at entry points from and exit points to storage facilities are not permissible. To the extent that Regulation (EU) 2017/460 governs the application of seasonal factors, this relates to interconnection points only. From the legal perspective, according to Regulation (EU) 2017/460 in the absence of an enabling provision there is no possibility of governing seasonal factors at entry and exit points at storage facilities on this basis. Accordingly, the application or non-application of seasonal factors at points other than interconnection points is carried out on the basis of the BEATE 2.0 determination (BK9-18/608), which is based on national legislation. Insofar as the application of seasonal factors is permissible under national legislation or determinations based on such legislation, operative provision 2 of this determination does not preclude this, because in the opinion of the Ruling Chamber seasonal factors do not constitute discounts within the meaning of this determination.

### **III. Firm capacity products to which a condition is attached according to Article 4(2) of Regulation (EU) 2017/460 and benchmarking according to Article 6(4)(a) of Regulation (EU) 2017/460 (operative provision 3)**

- 195 The decision pursuant to operative provision 3 is based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence (2), second and third sentences Energy Industry Act

in conjunction with Article 4(2), Article 6(4)(a) and Article 7 of Regulation (EU) 2017/460 in conjunction with Article 13 of Regulation (EC) 715/2009.

**a) Firm capacity products to which a condition is attached according to Article 4(2) of Regulation (EC) 2017/460**

- 196 According to Article 4(2) of Regulation (EU) 2017/460, transmission tariffs may be set in a manner as to take into account the conditions for firm capacity products. Article 4(2) of Regulation (EU) 2017/460 contains no further provisions. However, benchmarks for the determination of discounting may be taken from Article 7 of Regulation (EU) 2017/460 in conjunction with Article 13(1) of Regulation (EC) 715/2009. Accordingly, among other things the transmission tariffs must be non-discriminatory and facilitate efficient gas trade and competition, while at the same time avoiding undue cross-subsidies between network users. From these general provisions it ensues that the discounting of tariffs for conditional firm capacity products – like tariffs for firm or interruptible standard capacity products – must be designed in an appropriate manner.
- 197 Tariffs for conditional firm capacity products, with the exception of transmission tariffs at entry points from and exit points to storage facilities and taking into account the above considerations with respect to appropriateness and in particular with respect to the prohibition of undue cross-subsidisation, must not be lower as a result of discounting than the capacity tariffs for the interruptible standard capacity product with the lowest discount at this point. Conditional firm capacity products comprise all capacity products which are neither a firm capacity product without any condition nor an interruptible capacity product. Products to be considered, therefore, according to operative provision 1 a) of Decision BK7-18-052 of 10 October 2019, are capacity products with conditional firmness and free allocability (bFZK) or products with firm, dynamically allocable capacity (DZK). A corridor is thus defined for the setting of tariffs for conditional firm capacity products, the upper limit of which is the tariff for a firm capacity product without any condition and the lower limit the tariff for an interruptible capacity product.
- 198 The lower limit formed by the tariff for an interruptible product is justified by the fact that, viewed objectively, an interruptible capacity is a lower quality product compared to the other capacities. An interruptible capacity product is always interruptible. A network customer must always reckon with the possibility of an interruptible capacity indeed being interrupted, even if the probability of an interruption may be very low. There are no circumstances where this potential for being interrupted is completely absent (in actual fact interruption is improbable in many cases). In contrast, this is by definition not the case for conditional firm capacity products. Even though such products – depending on the chosen product – likewise carry some restrictions and as a result may be rated differently, they always have a part of the product that is to be classified as firm capacity. In this case, in contrast to interruptible capacities, network users can be confident that they will be able to use the booked product with certainty provided that they keep within the

framework of the condition attached to the firm capacity product. Because of this "firm product part", it is objectively the case that conditional firm capacity products must be classed as higher quality than interruptible such products; in this sense, interruptible capacities objectively represent the "most inferior" product. Accordingly, it is appropriate that the network operator is not permitted to set a lower tariff for conditional firm capacity products than for interruptible capacities.

199 The discounting for a network operator's specific conditional firm capacity product may not vary according to whether such a product is classified as a within day, daily, monthly, quarterly or yearly standard capacity product. The level of discounting depends on the assessment of the respective condition; according to Article 4(2) of Regulation (EU) 2017/460 it is the conditions for firm capacity products that may be taken into account when setting tariffs. Objectively, however, the condition in the case of, for example, a daily standard capacity product should not be rated differently from that in the case of, for example, a monthly standard capacity product. Consequently, a specific conditional firm capacity product always has an identical discount, regardless of the duration of the standard capacity product. The lower limit determined by the tariff for an interruptible capacity product is based on the lowest discount calculated for a standard capacity product at the relevant point in accordance with Article 16 of Regulation (EU) 2017/460. If this lowest discount were not taken, the consequence would be that a conditional firm capacity product with any duration could be granted a higher discount than the corresponding interruptible standard capacity product. This would obviously be inappropriate and would, from the outset, undermine the requirement already explained above that tariffs for conditional firm capacity products must not be lower than tariffs for the interruptible standard capacity product with the lowest discount at this point.

200 The requirement set out in operative provision 3 applies to capacity-based transmission tariffs at entry points from and exit points to storage facilities only under the condition that the discount determined according to operative provision 2 is applied to the transmission tariff beforehand. It is true that, as a consequence of this, the tariff for a firm capacity product at a storage facility may be lower than the tariff for an interruptible capacity product at interconnection points. However, this is appropriate in the interest of the general contribution which storage facilities can make to security of supply and network flexibility, and ultimately also in the interest of cost-reflective pricing, as double charging for transmission to and from gas storage facilities is to be avoided. These aspects are expressly set out in recital 4 of Regulation (EU) 2017/460. For this reason, Article 9(1) of the Regulation stipulates that a discount of at least 50% shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point.

201 The provision specified in operative provision 3 does not contradict the requirements set by Article 7 of Regulation (EU) 2017/460 for the choice of reference price methodology. To start

with, the transparency of the reference prices within the meaning of Article 7 second sentence (a) of Regulation (EU) 2017/460 is not affected: the prices resulting from the discounts for conditional firm capacity products in conjunction with the transmission system operators' respective contractual conditions are transparent and understandable. The effect of discounting on the other prices can be reproduced using the rescaling mechanism detailed in Article 6(4)(c) of Regulation (EU) 2017/460. As a general rule, the postage stamp method delivers sound and sufficient cost reflectivity within the meaning of Article 7 second sentence (b) of Regulation (EU) 2017/460 with respect to firm capacity products. However, the conditions that come into consideration here and the resulting lower quality justify a discount that ranges above the framework of that which is provided for in Article 16 of Regulation (EU) 2017/460 for objectively even lower quality interruptible standard capacity products. Non-discrimination within the meaning of Article 7(c) of Regulation (EU) 2017/460 is thus also ensured. It would be hard to justify if, contrary to the above, network users were made to pay the same price for an inferior product as for a firm standard capacity product.

202 As capacity products which do not allow any access to the virtual trading point are no longer permissible anyway according to operative provision 1 a) of Decision BK7-18-052 of 10 October 2019, full orientation of the tariffs for conditional capacity products with the reference price is appropriate without exception.

203 In consequence of the above, the discounts for conditional firm capacity products submitted by the network operators as indicative information lie within the set corridor with the exception of the Überackern 2 and underground storage facility Haidach points and with regard to the end user Wacker Chemie AG. In this respect reference is also made to the determination pertaining to Article 28 of Regulation (EU) 2017/460 (BK9-19/612). Insofar as higher discounts were granted for the Überackern 2 and underground storage facility Haidach points and the end user Wacker Chemie AG, this situation is addressed in the following within the framework of benchmarking in accordance with Article 6(4)(a) of Regulation (EU) 2017/460.

#### **b) Benchmarking in accordance with Article 6(4)(a) of Regulation (EU) 2017/460**

204 In accordance with Article 6(4)(a) of Regulation (EU) 2017/460, benchmarking by the national regulatory authority can be carried out, whereby reference prices at a given entry or exit point are adjusted so that the resulting values meet the competitive level of reference prices.

205 This provision is based on the fact that in certain constellations there may be competition between transmission systems (for example where there are alternative transport routes across other countries). If a defined reference price methodology is applied, there would be no possibility that the transmission system operators concerned could respond to this competitive situation.

- 206 In the constellation described here, however, the starting point for benchmarking is not currently existing competition but the threat of competition in the form of the impending construction of a direct pipeline. Given the particular network situation at the Burghausen network node in the region of the border with Austria, while it is true that entry and exit points there are formally integrated into the German market area they do not have unrestricted access to the virtual trading point. The tariffication applicable prior to the entry into force of Regulation (EU) 2017/460 provided for heavily discounted tariffs for so-called short-distance products/BZK with bayernets GmbH, which merely enabled access to the Austrian market area.
- 207 Those affected by this particular network situation are Wacker Chemie AG as the end user, connection owner and connection user and astora GmbH & Co. KG and GSA LLC as storage facility operators. These are also referred to here as petitioners. Wacker Chemie AG operates not only a chemical plant at the Burghausen site but also a gas-fired power plant classified as systemically relevant according to section 13f(2) Energy Industry Act, which supplies process energy (steam and electricity) to the Burghausen site. In this context the Ruling Chamber refers solely to the connection owner and connection user Wacker Chemie AG as the petitioner. The fact that other end users beyond the connection point are also affected by agreements is relevant only to the corresponding internal relationship.
- 208 Both astora GmbH & Co. KG and GSA LLC market the Haidach storage facility, which is located on Austrian territory and is connected to the German market area via the bayernets GmbH and Open Grid Europe GmbH networks. For the most part, however, the storage facility is filled/emptied from/to Austria. The relevant network segments are only 1,300 metres (cross-border interconnection point Überackern 2 to storage connection point Haidach) and 900 metres (storage connection point Haidach to end user Wacker Chemie AG) long respectively.
- 209 The earlier form of tariffication provided for discounts amounting to approximately 98% off the reference price and in the case of the storage points the application of storage discounts in addition. With the application of a reference price methodology, despite discounting of these conditional firm capacity products within the context of the principles set out in section B.III.a) there would be huge tariff increases at the relevant points (by up to a factor of 50).
- 210 Against the background of these tariff increases, the petitioners considered connecting directly to the Austrian transmission network because this alternative would prove more economic than paying the tariffs with bayernets GmbH which would then have only a very small discount. However, this would not only give rise to a macroeconomically and operationally inefficient parallel infrastructure but also lead to loss of the bookings – even if they are heavily discounted – in the German market area with a cost pool that stays the same. In order to prevent this, the Ruling Chamber is carrying out benchmarking in accordance with Article 6(4)(a) of Regulation (EU) 2017/460. This is being done with regard to bayernets GmbH, because this company is threatened by the loss of the previous capacity bookings. The fact that the Haidach storage

facility is also connected to the Open Grid Europe GmbH network is thus not relevant to benchmarking. An existing or additional connection to the German market area with access to the virtual trading point is not relevant either, because when considering the impending construction of a direct pipeline the concern is access solely to the Austrian market area, in other words an entirely different matter. Any comparison with the 7Fields storage facility does not bear scrutiny either, because this facility is already connected to both market areas. The connection line required for this is already priced into the corresponding tariffs in the case of 7Fields, such that the reduced tariff for the Haidach storage facility identified here results in the storage facilities being on an equal footing in economic terms.

211 This is an exceptional circumstance that must be tied to strict criteria. In no way is it permissible for exceptions to cancel out the entire cost-reflective tariff system, especially as every discount that is granted leads to an increase in the reference price to the detriment of the other network users. However, this additional burden would be even higher if the bookings were to be lost entirely because of the construction of a direct pipeline as this would be linked to a cost reduction at bayernets GmbH. In effect, therefore, the other network users are not placed at a disadvantage.

212 The Ruling Chamber came to the conclusion the construction of a direct pipeline for connection to the Austrian market area is indeed a threat for the petitioners. In arriving at this conclusion the Ruling Chamber arranged to be given relevant project plans with cost estimates and carried out investment calculations on the basis of the annuity method. The result was that the construction of a direct pipeline proves to be more economic for the petitioners than paying what will now be less heavily discounted network tariffs. In this context it was assumed, for the petitioner Wacker Chemie AG, that of numerous alternative project plans submitted there would be a direct connection to the cross-border interconnection point Überackern 2. This is the project alternative with the highest estimated investment costs. The Ruling Chamber is convinced that in this case connecting only to the Haidach storage connection point must be ruled out because this alternative would depend on other factors (including the availability of capacity in the storage facility itself). A project consortium for implementing a joint pipeline from the storage connection point to the cross-border interconnection point is not a sufficiently explained threatening scenario either. It is by no means sufficient in this case that a petitioner offers a one-sided explanation of the usefulness of such a consortium. If the estimate of investment costs is too low, the Ruling Chamber reserves the right to initiate misuse proceedings. All calculations and recalculations must be submitted to the Bundesnetzagentur anyway. However, over and above the details of the estimated costs the Ruling Chamber used increased costs for easements. As compulsory expropriation of the landowners concerned is ruled out because of the existing supply situation, correspondingly higher costs for easements are to be expected. The Ruling Chamber therefore set this cost item with a factor of 5 as a blanket figure, which is equivalent to the full market value of the parcels of land.

- 213 For the petitioners at the Haidach storage facility, from among the several alternative project plans submitted the assumption was not that a direct pipeline would be constructed but instead a transfer station close to the border at the Überackern 2 point. In this case there would be a direct connection to the Austrian network. This, too, is the project alternative with the highest estimated investment costs. The background to this is the fact that constructing a station at the cross-border interconnection point appears to be more realistic than building a parallel pipeline which would have to cross the Salzach River that forms the border. Furthermore, as mentioned above, the procurement of easements to construct a pipeline is problematic (even if it is not ruled out).
- 214 The Ruling Chamber has to point out that these assumptions are only of a preliminary nature so far. During the consultation procedure further evidence will have to be provided by the affected market participants. This concerns not only precise and current information on the possibility and efficiency of the construction of a direct pipeline, but also on the availability of capacities on the Austrian side needed for the supply of such a pipeline. In particular it is doubtful if the continuing gas inflow an industrial final consumer needs can really be ensured reliably in sufficient quantities by the Austrian market area in this border region or if the Haidach storage facility is necessary for this.
- 215 On the basis of the thus determined project costs, the Ruling Chamber calculated a capital cost annuity and estimated annual operating costs amounting to 2% of the investment costs. A blended rate of 4.27% and a term of 4 years were used in the calculations. Determination of the annual operating costs and the blended rate follows the principles set out in the regulatory authorities' guide to determining special tariffs in accordance with section 20(2) of the Gas Network Charges Ordinance (GasNEV) (charges for the avoidance of direct pipeline construction). These principles can be applied to the present case because the provision set out under section 20(2) of GasNEV and the benchmarking carried out in this case provide for a reduction in the network tariff to avoid the impending construction of a direct pipeline. The fact that this relates to distribution network segments in the case of section 20(2) of GasNEV and transmission system operators in the present case does not make any difference to the way the impending construction of a direct pipeline is viewed. Deviations from this imputed view are only possible if the construction of a direct pipeline actually takes place.
- 216 With regard to the term of the annuity, in the case of the charges identified in the operative part a term of four years was estimated in line with the regulatory authorities' guide to determining special tariffs in accordance with section 20(2) of GasNEV. With regard to the assumed capacities, the typical booking level was used for the end user Wacker Chemie AG and only the existing long-term contracts for the Haidach storage facility. Using only the fixed long-term bookings leads to a higher indicative tariff. Since the details of the stated capacity bookings are confidential industrial and business information from the petitioners, more detailed information on the calculations cannot be provided.

- 217 The tariff deriving from operative provision 3 b) is always to be used for the relevant restricted products at the Überackern 2 and underground storage facility Haidach points. As a result, however, transport to the end user Wacker Chemie AG's interconnection point is to be charged with a corresponding increase in the tariff for the exit capacity in such a way that there is economic equivalence with the hypothetical construction of a direct pipeline and the associated annuity.
- 218 The reduced tariff must be recalculated at the start of each regulatory period. If the outcome is a lower or higher tariff, in particular because of changes to interest rates, this new tariff is absolutely authoritative. The recalculation may result in a lowering or raising of the tariffs. These opportunities and risks can only be avoided in a direct pipeline is actually constructed (although in this case, too, changes to the costs may arise in the event of refinancing). The recalculation must be submitted to the Bundesnetzagentur. The same applies to cases where a recalculation is carried out because of an adjusted duration of use of adjusted project costs, for example.
- 219 Tariffs reduced because of benchmarking are valid only with a combination of the entry and exit points identified in the operative part. Unlike in the previous decision BK9-18/610-NCG a reduced tariff can only be applied at the final consumer Wacker Chemie AG's exit point if the corresponding input has taken place at the entry point Überackern 2. An input from the Haidach storage facility does not fit the criteria for the appliance of benchmarking, because this connection cannot be substituted by the construction of a direct pipeline to Austria. In addition any access to the rest of the market area must be ruled out because such access would not be possible via the hypothetical direct pipeline. Although Ruling Chamber 7's decision BK7-18/052 (KASPAR) sets out that in future there will be no more capacity products without at least an interruptible access to the virtual trading point, so the capacity cannot be limited in such a manner from the start, this rule can be satisfied by marketing the respective capacity in the first instance including the possibility to use the connection to the VTP and without any tariff reduction. If the purchaser of the capacity then voluntarily abandons the access to the rest of the market area, a part of the tariff to be paid can be remitted according to the provisions of this decision. The waiver affects the whole capacity product (duration and volume), a "structured" waiver only leading to a few possibilities to use the access to the rest of the market area that are charged with the full post stamp tariff is impermissible. Furthermore, it is stipulated for gas volumes put into storage that they cannot be switched to another market area at a lower tariff in an inappropriate manner. There is thus equal treatment with other storage facilities that are connected to more than one market area. If gas is put into storage using tariffs reduced in accordance with the benchmarking, these gas volumes are categorised as coming from the Austrian market area regardless of the actual flow situation.
- 220 As a general rule, within-year bookings are also permissible if corresponding multipliers are used. With regard to the Haidach storage facility, however, further discounts in accordance with Article 9(1) of Regulation (EU) 2017/460 cannot be applied in addition because calculation of the

reserve price for the booking has already been carried out. An additional storage facility discount would lead to a systematic failure to meet the calculated costs to the detriment of the other network users.

221 The provisions do not create any incentives to make investments in gas-withdrawing infrastructure in areas close to the border, because there is no reduced-price access to the virtual trading point. Any petitioners are simply put into the same position economically as they would be if they were directly connected to another market area.

222 The principles and calculations described here relate to a clearly definable special case which also has a European relevance on account of the cross-border circumstance. Otherwise there is no change to the application of the reference price methodology to all entry and exit points in accordance with Article 6(4) of Regulation (EU) 2017/460. Insofar as the fundamental provisions pursuant to B.III.a) are relevant to other conditional firm capacity products, this is appropriate. This derives in particular from the accessibility of the virtual trading point and the fact that there can be no direct pipelines on a larger scale (for instance to link interconnection points). These configurations would instead have to be classified as transmission system operators.

223 Nor is the Ruling Chamber required to determine an abstract, generally applicable mechanism that allows a response to competitive situations in addition to the uniform postage stamp reference price methodology. This mechanism has already been set out in Article 6(4)(a) of Regulation (EU) 2017/460, as explained, and in accordance with the wording of the Regulation can only be applied in a specific individual case on the basis of a decision by the national regulatory authority. No other specific demonstrable competitive situations are known to the Ruling Chamber.

#### **IV. Adjustments concerning the application of the reference price methodology to all entry and exit points in accordance with Article 6(4)(c) of Regulation (EU) 2017/460 (operative provision 4)**

224 The directives in operative provision 4 are issued on the basis of section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentence Energy Industry Act in conjunction with Article 6(4)(c) of Regulation (EU) 2017/460.

225 Adjustments in accordance with Article 6(4)(c) of Regulation (EU) 2017/460 are necessary because only forecasted average contracted non-adjusted capacities are used in the reference price methodology calculations, with no account being taken for example of adjustments according to Article 9(1) of Regulation (EU) 2017/460 at entry and exit points from/to storage facilities, multipliers according to Articles 13 and 14 of Regulation (EU) 2017/460 or discounts according to Article 16 of Regulation (EU) 2017/460 for weighting the capacities.

226 Determination BK9-17/609 dated 19 July 2017 already included the decision that individual transmission system operators should make adjustments according to Article 6(4)(c) of

Regulation (EU) 2017/460 at all entry and exit points with the aim of being able to collect the transmission services revenue in actual fact (competence for adjustment). Operative provision 4 of this determination provides that the change to the reference prices at all points should be made by means of multiplication with a constant. In contrast to the addition or subtraction of a constant, multiplication with a constant has the advantage that the higher or lower revenues resulting from the unadjusted reference price are added or deducted in a non-discriminatory manner at all entry and exit points thereby maintaining the difference between discounted entry and exit points (for example at storage facilities and at entry and exit points where conditions for firm capacity products apply) and non-discounted entry and exit points.

- 227 Since tariffs are set annually, the adjustment factor must also be reset annually by the transmission system operators and shown transparently within the framework of the information to be published in accordance with Article 30 of Regulation (EU) 2017/460.

#### **V. Transmission services and non-transmission services according to Article 26(1)(c)(ii) of Regulation (EU) 2017/460 (operative provision 5 to 8)**

- 228 According to Article 4 of Regulation (EU) 2017/460, tariffs must be charged for transmission services and for non-transmission services. According to Article 3 para 12 of Regulation (EU) 2017/460, transmission services are the regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of transmission. According to Article 3 para 15, non-transmission services are the regulated services other than transmission services and other than services regulated by Regulation (EU) 312/2014 that are provided by the transmission system operators. According to Article 4(1) of Regulation (EU) 2017/460 a given service is considered a transmission service if the costs of such service are caused by the cost drivers of both technical or forecasted contracted capacity and distance and the costs of such service are related to the investment in and operation of the infrastructure which is part of the regulated asset base for the provision of transmission services. Cost drivers according to Article 3 para 18 of Regulation (EU) 2017/460 are key determinants of the transmission system operator's activity which is correlated to the costs of that transmission system operator. Should one of these two criteria not be met, a specific service can be deemed either a transmission service or a non-transmission service. In this context, the term "non-transmission service" [in the German version of the Regulation *Systemdienstleistung* = system service] is not identical to system service within the meaning of the German Gas Network Charges Ordinance (GasNEV) but is defined in effectively negative terms by differentiating it from the term "transmission service" (see also the wording of the English version of Regulation (EU) 2017/460: "non-transmission service"), and thus covers a broader scope of application. According to Article 4(4) of Regulation (EU) 2017/460, the tariffs for non-transmission services must be cost-reflective, non-discriminatory, objective and transparent and must be charged to the beneficiaries of a given non-transmission service with the aim of minimising cross-subsidisation between network

users within and/or outside the Federal Republic of Germany. If, in the opinion of the Bundesnetzagentur, all network users are the beneficiaries of a specific non-transmission service, the costs of this service must be borne by all network users.

### **1. Market area conversion charge (operative provision 5)**

- 229 The directives set out in operative provision 5 are based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence, Article 26(1)(c)(ii), Article 4(1) and (4) of Regulation (EU) 2017/460.
- 230 Against the background of Regulation (EU) 2017/460, the assumption of conversion costs as such by certain network operators and ultimately by the network users requires no particular explanation. In section 19a(1) first sentence Energy Industry Act, the German legislator made it mandatory for network operators to carry out any necessary technical adjustments of connection points, customer facilities and consumer appliances. By itself, this provision is not directly related to the setting of tariffs and is therefore beyond the scope of Regulation (EU) 2017/460. Furthermore, in section 19a(1) third sentence Energy Industry Act the legislator stipulates that these costs must be spread nationally, which logically can only be achieved via the transmission system operators across the entire system, so the assumption of all costs incurred at distribution network level by the transmission system operators is already laid down. This, too, initially affects only the cost side, not the tariffs governed by Regulation (EU) 2017/460. However, conversion of the given costs into tariffs needs to be discussed and measured against the yardsticks set in Regulation (EU) 2017/460.
- 231 According to Article 4(1) second sentence of Regulation (EU) 2017/460, the market area conversion charge is classified as a non-transmission service. Within the meaning of Article 4(1) first sentence (a) of Regulation (EU) 2017/460, the conversion costs are not based on the cost drivers of capacity and distance and only to a minor extent are related to investment in infrastructure which is part of the regulated asset base for the provision of transmission services within the meaning of Article 4(1) first sentence (b) of Regulation (EU) 2017/460. The key cost driver is in fact connected customers' consumer appliances requiring conversion. Firstly, costs arise here for the adjustment of the appliances themselves, ie usually involving the exchange of a nozzle. Secondly, significant personnel and organisational costs arise because information campaigns are required to prepare the population of the affected areas for the conversion, and technical staff have to be sent out to visit every single household within a conversion area to register existing appliances, make the necessary changes and finally check safety and quality, all within a narrow time frame. Most consumer appliances are located in the network areas of downstream distribution system operators, who carry out the conversion work, and the relevant costs are therefore allocated solely via the balancing mechanism within the transmission system operators' exit tariffs. The transmission system operators themselves are obliged only to carry

out conversions at certain industrial customers with a direct connection to the transmission system; in this case too, however, this does not affect their own asset base but that of the connected customers. The regulated asset base of transmission system operators is affected only to the extent where technical adjustments need to be made to the transmission system, for example if the conversion changes the direction of flow without the system having been prepared beforehand, or if downstream network operators currently undergoing conversion need to be supplied partly with L-gas and partly with H-gas and an additional connection line has to be installed for that purpose. However, such costs constitute only a small proportion of the total conversion costs. The redistribution levy added to the tariff is merely an abstract value within which the costs for all transmission system operators are accounted for on a pro-rata basis.

232 The details of the allocation mechanism must be determined by agreement between the transmission system operators and the affected distribution network operators. At the time of the adoption of this decision, this is set out in the relevant provisions made in the Cooperation Agreement between the Operators of Gas Supply Networks in Germany (KOV) (version dated 30 September 2019) which, in the opinion of the Ruling Chamber, meets the requirements of both this decision and of those set out in Article 4(4) of Regulation (EU) 2017/460.

233 In accordance with Article 4(4) third sentence of Regulation (EU) 2017/460 the market area conversion costs are recovered from all network users at exit points with the exception of interconnection points and storage points because all network users benefit from this service. All affected customers benefit from the system conversion and the associated increased liquidity in the German market area. This applies irrespective of the possibility of converting L-gas to H-gas free of charge, which already exists, in accordance with Decision BK7-11-002 dated 27 March 2012 (Konni Gas), as this economic and/or balancing option cannot be considered separately from its technical and physical prerequisites and only the conversion of the networks ensures that gas can continue to be traded on a permanent basis across the entire market area. In the opinion of the Ruling Chamber, transit customers, in contrast, do not benefit from the market area conversion, or at least only to a negligible degree. Essentially the conversion does not relate to the networks themselves but to German final customers' consumer appliances connected to those networks, customers who are not supplied by transit customers anyway. Furthermore, the interconnection points in the former L-gas networks are typically used only for imports, whereas the offtake to neighbouring countries' market areas previously affected by the market area conversion charge generally takes place exclusively in H-gas networks, which do not require conversion. Even after the conversion, in light of the geographical and network-related operational circumstances the transit of H-gas through Germany will continue to take place through historical H-gas networks and not through former L-gas networks. Cross-subsidisation of domestic customers through cross-border trade via the market area conversion charge is ruled out with this arrangement. In addition, the Ruling Chamber has decided to exempt the storage points from the charge. Otherwise gas that is first put into storage and then

later withdrawn to end users would in effect be subject to the charge twice. Moreover, storage facilities are also used by transit customers, so they would indirectly be drawn in to financing the gas conversion.

234 Higher or lower revenues from the allocation mechanism are balanced by means of special mechanisms. An annual comparison between forecasted and actual values is carried out for each transmission system operator for differences arising from divergences in the incurred costs and the respective difference is taken into account in the charge in the next year but one in each case. Differences arising from divergences in the booked capacities are likewise balanced via a comparison of forecasted and actual values in which every year each transmission system operator calculates the differences between forecasted and booked capacities and the resulting higher and lower revenues from the charge so that they can be balanced within the framework of the charge itself and not via the regulatory account in interaction with higher and lower revenues from transmission services. The interest is calculated in accordance with section 5(2) of the Incentive Regulation Ordinance (ARegV). Thirdly, compensation payments will be made between the transmission system operators in the market area in order to prevent individual transmission system operators from obtaining higher or lower revenues from the charge than correspond to the conversion costs specifically arising in their network area.

235 The transmission system operators did not provide any information about the expected level of the market area conversion costs within the framework of the survey to collect data. The Ruling Chamber therefore took the conversion costs reported for 2020 amounting to €179,168,392.21 as a basis and extrapolated them to the appliances to be converted in 2021. According to the transmission system operators' implementation report on the Gas Network Development Plan 2018–2028, the conversion of 395,800 appliances burning gaseous fuels is planned for 2020 and the conversion of 542,000 appliances burning gaseous fuels is planned for 2021. On the generalised assumption that the relation between conversion costs and the number of appliances will remain the same, the expected volume of costs for 2021 is €245,349,339.52. On this basis and on the basis of the capacity forecasts submitted by the transmission system operators, the Ruling Chamber calculated the indicative tariff for the market area conversion charge which, like its share in the allowed total revenues in the market area, is obtained from Annexes 1 and 5.

## **2. Biogas charge (operative provision 6)**

236 The directives set out in operative provision 6 are based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence, Article 26(1)(c)(ii), Article 4(1) and (4) of Regulation (EU) 2017/460.

- 237 In the case of biogas, too, the German legislator's fundamental decision to impose certain costs on network operators in accordance with section 20a GasNEV and sections 33 ff GasNZV and to process these by spreading them nationally in accordance with section 20b GasNEV is beyond the scope of Regulation (EU) 2017/460 with regard to the costs to be borne by the transmission system operators. Again, the conversion of these transmission costs into specific tariffs must be explained.
- 238 According to Article 4(1) second sentence of Regulation (EU) 2017/460, the biogas charge is classified as a non-transmission service. Within the meaning of Article 4(1) first sentence (a) of Regulation (EU) 2017/460, the Biogas costs are not based on the cost drivers of capacity and distance and only to a minor extent are related to investment in infrastructure which is part of the regulated asset base for the provision of transmission services within the meaning of Article 4(1) first sentence (b) of Regulation (EU) 2017/460. Instead, the key cost drivers are the biogas facilities connected to the network. According to section 33(1) GasNZV, the network operators must ensure that biogas facilities are connected to the network, and as a rule they bear 75% of the costs of this. The biogas input facility constructed in this process and its connecting line to the existing network undoubtedly constitute investments in the network operator's asset base. In addition, according to section 33(2) GasNZV the network operator is responsible for maintenance and operation of the network connection and the input facility. These are not investments but operational costs, even though they are clearly related to the input facility belonging to the regulated asset base. According to section 34(2) third and fourth sentences and section 33(10) GasNZV, the network operator must take all economically reasonable measures to ensure biogas input throughout the year and if necessary must increase the capacity of the network accordingly or even build facilities for gas recompression or deodorisation for the purpose of feeding it back into upstream networks. These measures are investments and can add considerably to the regulated asset base. Section 35 GasNZV obliges the market area managers to set up extended balancing for biogas input and output. This gives rise to operational costs only, which furthermore initially do not affect the network operators but their designated market area managers; however, the costs are nevertheless distributed via the biogas charge. According to section 36(3) and (4) GasNZV the network operators are responsible for certain aspects of chemical processing of biogas prior to injection into the network and for odorisation and metering, at their own expense. Partly these costs are related to investment in the regulated asset base because the input facility to be built has to satisfy the technical prerequisites required to fulfil these tasks; the remaining costs are ongoing operational costs. In the final analysis, in accordance with section 20 GasNEV the network operator pays the shipper who directly inputs biogas into the system a tariff of €0.007 per kilowatt hour for a period of ten years from the commissioning of the respective network connection. This provision was introduced by the regulator because in the case of decentralised input of biogas the networks upstream of the input point are not used and thus network tariffs are avoided. These avoided

network tariffs are reimbursed to the shipper by the network operator into whose network the biogas is fed at a flat rate of €0.007 per kWh. This applies irrespective of the network level into which the biogas is input, ie also at the transmission system level. The stated costs are obviously not linked to the regulated asset base. They are also not directly linked to capacity, because they are based only on the volume of injected gas. In summary it can be stated that some elements (as a rule those that are particularly important) of the biogas charge are connected to investments in the regulated asset base. However, as in the case of market area conversion, these costs are very largely those of distribution network operators, and are therefore not the regulated asset base of transmission system operators. Only a very small proportion of biogas facilities is directly connected to the transmission system. Accordingly, the biogas charge reflects only a very small proportion of costs resulting from investments in the asset base of transmission system operators. Moreover, it is also the case here that the redistribution levy to be collected from each transmission service operator is calculated on the basis of an overall analysis of all biogas costs borne by the transmission systems and is only indirectly linked to the transmission system operator's individual costs.

- 239 The details of the allocation mechanism must be determined by agreement between the transmission system operators and the affected distribution network operators. At the time of the adoption of this decision, this is set out in the relevant provisions made in the Cooperation Agreement between the Operators of Gas Supply Networks in Germany (KOV) (version dated 30/09/2019) which, in the opinion of the Ruling Chamber, meets the requirements of both this decision and of those set out in Article 4(4) of Regulation (EU) 2017/460.
- 240 In accordance with Article 4(4) third sentence of Regulation (EU) 2017/460 the costs of biogas input incurred by the transmission system operators are recovered from all network users because all network users benefit from this service. All customers benefit from the decentralised input of biogas and the associated increased liquidity in their respective market area. However, interconnection points are excluded from this. As promoting biogas input not only increases liquidity in the networks but in consequence also acts as an economic support mechanism for biogas production in Germany, whereas companies with production facilities outside Germany are unable to benefit from it, in order to avoid any discriminatory effects it appears appropriate to charge the relevant costs exclusively to exit points within Germany. Exit points to storage facilities are also excluded. Storage facilities already contribute to the decentralisation of natural gas supply and should therefore not bear additional costs.
- 241 Higher or lower revenues from the allocation mechanism are balanced by means of special mechanisms. An annual comparison between forecasted and actual values is carried out for each transmission system operator for differences arising from divergences in the incurred costs and the respective difference is taken into account in the charge in the next year but one in each case. Differences arising from divergences in the booked capacities are likewise balanced via a comparison of forecasted and actual values in which every year each transmission system

operator calculates the differences between forecasted and booked capacities and the resulting higher and lower revenues from the charge so that they can be balanced within the framework of the charge itself and not via the regulatory account in interaction with higher and lower revenues from transmission services. The interest is calculated in accordance with section 5(2) of the Incentive Regulation Ordinance (ARegV). Thirdly, compensation payments will be made between the transmission system operators in the market area in order to prevent individual transmission system operators from obtaining higher or lower revenues from the charge than correspond to the biogas costs specifically arising in their network area.

242 The transmission system operators did not provide any information about the expected level of the biogas costs within the framework of the survey to collect data. The Ruling Chamber therefore took the costs reported for 2020 amounting to €196,503,617.96 as a basis. Comparisons with figures from the preceding years show that these costs currently fluctuate only slightly and no general cost-reducing or cost-raising trend is discernible in their development, so the volume of costs can probably be considered to be representative for the near future too. On this basis and on the basis of the capacity forecasts submitted by the transmission system operators, the Ruling Chamber calculated the indicative tariff for the biogas charge which, like its share in the allowed total revenues in the market area, is obtained from Annexes 1 and 5.

### **3. Meter operation including metering (operative provision 7)**

243 The directives set out in operative provision 7 are based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence, Article 26(1)(c)(ii), Article 4(1) of Regulation (EU) 2017/460.

244 According to Article 4(1) second sentence of Regulation (EU) 2017/460, meter operation including metering is classified as a non-transmission service at exit points to end users and to downstream distribution networks but as a transmission service at all other points. The costs of meter operation are not caused by the cost driver of distance, but at least in part by the cost driver of capacity within the meaning of Article 4(1) first sentence (a) of Regulation (EU) 2017/460. As a rule, the larger the exit capacity at a specific point in the network, the more capable and therefore more cost-intensive the existing infrastructure for metering must be, even if as far as the Ruling Chamber is aware this correlation is not always inevitable, at least on the cost side. Furthermore, normally these costs are linked to investments in infrastructure, namely the above-mentioned metering infrastructure, which is part of the regulated asset base within the meaning of Article 4(1) first sentence (b) of Regulation (EU) 2017/460. However, this correlation, too, does not always apply, since some transmission system operators merely run their metering stations operationally without obtaining ownership of them. Moreover, the costs of metering associated with meter operation, which account for a quite considerable proportion of metering station operating costs for many transmission system operators, are neither attributable to the

cost drivers of capacity and distance nor are they linked to investment in infrastructure. Since the criteria of Article 4(1) first sentence of Regulation (EU) 2017/460 are thus not clearly met, according to Article 4(1) second sentence of Regulation (EU) 2017/460 classification is incumbent upon the Ruling Chamber.

245 With regard to exit points to end users, classification as a non-transmission service makes sense because these are not purely internal network control measures but operations that are caused by individual clearly definable consumers or by the network customers supplying gas to those consumers. The costs incurred as a result should therefore also be allocated to those customers. Furthermore, designating separate tariffs for meter operation leads to transparency and facilitates comparability with other providers of the same service, such that the connected end user is able to take a well founded decision on whether to have meter operation carried out by the network operator or to commission a different meter operator in accordance with section 5(1) MsbG.

246 The transmission system operators must determine the relevant cost drivers for meter operation at end users in their respective system and allocate them appropriately to the individual exit points. In this context, in addition to the meter operation tariffs, separate tariffs for metering according to a separate methodology can be determined and designated if such differentiation is appropriate according to the cost structures and the design of the services provided. The meter operation tariffs (and if applicable metering tariffs) must satisfy the criteria set out in Article 4(4) second sentence of Regulation (EU) 2017/460. Otherwise the Ruling Chamber leaves the decision on the design of the tariff methodology to be used to the individual transmission system operators. It does this firstly against the background that the evolved structures in metering and the methods of tariff setting used to date that have emerged on that basis differ very widely in some cases and attempts at standardisation by the Ruling Chamber have proved to be difficult and frequently not expedient. Secondly, demand for regulatory intervention in meter operation is less apparent than in other areas. Since MsbG entered into force, network operators no longer have a natural monopoly in meter operation but are in a competitive relationship with other independent meter operators. This is intended to ensure the formation of appropriate prices by means of market mechanisms, which is why restraint is advisable for regulatory intervention by the state. Market disruption is threatened if at all by cross-subsidisation of meter operation from other regulated business areas, although this is not a question of tariff methodology but of cost allocation, which is subject to supervision by the Bundesnetzagentur anyway. In the course of data collection in preparation for this decision, all transmission system operators who operate metering stations at connection points to end users explained the methodologies they currently use to form the relevant tariffs to the Ruling Chamber. In this process the Ruling Chamber did not become aware of any arrangements that in its estimation are not cost-reflective, non-discriminatory, objective and transparent or lead to cross-subsidisation between network users.

247 Higher or lower revenues that can arise when the number of connection users for whom meter operation is carried out by the network operator change in the course of time are balanced using a separate regulatory account. This is necessary in order to prevent the transmission tariffs being influenced by differences relating to meter operation. Meter operation is used only by a clearly definable group within the totality of network customers; this group alone has to cover the costs of meter operation, which is why positive and negative effects from any differences arising from this must be allocated among this group. A separate regulatory account is not inconsistent with Article 19(4) of Regulation (EU) 2017/460. Although according to this each transmission system operator is to use only one regulatory account, this provision – as does Chapter IV of Regulation (EU) 2017/460 as a whole – relates solely to transmission services revenue that is to be reconciled using such an account. Article 17(3) of Regulation (EU) 2017/460 thus establishes that these requirements may be applied *mutatis mutandis* to non-transmission services revenue. There are no further provisions on how this is to happen in detail or on what the relationship should be between the reconciliation of non-transmission services revenue and the reconciliation of transmission services revenue in this case. Since as a matter of principle it is not mandatory to use the regulatory account for non-transmission services and alternative compensation mechanisms are also permitted, setting up a separate regulatory account that operates in an identical manner cannot be impermissible. Moreover, only this arrangement satisfies the provisions of Article 4(4) second sentence (a) and Article 7 second sentence (c) of Regulation (EU) 2017/460, according to which both the reference price relevant for transmission services and the non-transmission tariffs must be set without cross-subsidisation, including mutual cross-subsidisation. The provisions of section 5 ARegV on running and auditing the regulatory account are applied equally to both accounts without change; it is only with respect to the distribution of the balances in accordance with section 5(3) second sentence ARegV that in addition to the raising or lowering of the (still uniform) revenue cap there will in future be a differentiation according to amounts that need to be taken into account when forming transmission tariffs and when forming meter operation tariffs.

248 Notwithstanding the above, for a transitional period processing will still be carried out using the previous regulatory account together with reconciliation of the differences from transmission services. As far as the Ruling Chamber is aware, the delineation between the costs for meter operation or metering and other costs has hitherto varied greatly between the individual transmission system operators and was not necessarily carried out in line with the principles set out in this decision. In order to keep the system changeover free of resultant effects, the separation of metering station operating costs and transmission costs in the regulatory account will not take place until they have been differentiated according to uniform, clear rules, but will not be carried out for difference still to be reconciled that have already accrued on the regulatory account at the time when this decision enters into force. Separate distribution will therefore be

taken into account for the first time in the tariffs for the calendar year 2022, which will incorporate the values from the calendar year 2020 determined in the calendar year 2021.

249 The indicative meter operation tariffs for the individual exit points to end users notified to the Ruling Chamber by the transmission system operators and their share of the allowed total revenue for each transmission system operator are apparent from Annexes 1 and 4.

250 In addition, the Ruling Chamber has decided that meter operation at exit points to downstream distribution networks should also be classed as a non-transmission service insofar as it is not carried out by the distribution system operator but by the transmission system operator. Otherwise there would be unequal treatment of end customers who are directly connected to the transmission network compared with those supplied via the distribution network. The former would then not only finance meter operation that relates to themselves but also meter operation that is carried out exclusively for the customers in a specific distribution network. In contrast with the exit points to individual end users, however, in this case MsbG is not applied, so the transmission system operator is not in competition with competing metering service providers. The precise design of the tariff system cannot therefore be handed over to the transmission system operators themselves in this case, simply relying on market mechanisms. The Ruling Chamber is thus ruling that the costs of a metering station at the interconnection point to a distribution network are to be borne by the respective distribution network operator. This provision allocates the costs directly to the corresponding originator of the costs, and furthermore is non-discriminatory and thanks to its simplicity is objective and transparent. The resulting non-transmission tariff is to be paid within the framework of the internal ordering process by the distribution system operators, who can then pass it on to their own customers in the form of upstream network costs.

251 A ruling on the regulatory account or on other compensation mechanisms can be dispensed with. Since the tariffs to be paid by the respective customer correspond precisely to the costs incurred by the customer, no higher or lower revenues are to be expected.

252 The indicative meter operation tariffs for the individual exit points to downstream distribution networks notified to the Ruling Chamber by the transmission system operators and their share of the allowed total revenue for each transmission system operator are apparent from Annexes 1 and 4.

253 In contrast, the operation of metering stations at interconnection points and storage points is classified as a transmission service. These are procedures that are not attributable to individual network customers but relate to a multiplicity of network users in each case. In this respect too, point-specific allocation would be possible in order to charge the relevant costs to at least those network users who use the respective points on a cost-reflective basis. However, it is not possible to justify why there should be such precise cost allocation for meter operation whereas all other costs, for instance for the use of specific pipeline sections, are shared evenly across all

users as a general transport tariff. No impediment to competition can be considered in metering either, because MsbG does not apply anyway at the relevant exit points and there is no market for competing meter operators owing to a lack of potential clients (apart from the network operators themselves).

#### **4. Alternative nomination procedure (operative provision 8)**

- 254 The directives set out in operative provision 8 are based on section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence, Article 26(1)(c)(ii), Article 4(1) of Regulation (EU) 2017/460.
- 255 The alternative nomination procedure according to section 15(3) GasNZV is classified as a non-transmission service. It is not a transmission service according to Article 4(1) first sentence of Regulation (EU) 2017/460. Within the meaning of Article 4(1) first sentence (a) of Regulation (EU) 2017/460, the costs of the alternative nomination procedure are not based on the cost drivers of capacity and distance and are not related to investment in infrastructure which is part of the regulated asset base for the provision of transmission services within the meaning of Article 4(1) first sentence (b) of Regulation (EU) 2017/460. This is a procedure that has only an economic, not a technical link to gas transport.
- 256 In accordance with Article 4(4) second sentence (a) of Regulation (EU) 2017/460, it is cost-reflective and non-discriminatory that those network users who use an alternative nomination procedure themselves or through their balancing group manager shall be expected to bear the costs of this procedure. In addition, it is objective and transparent and does not cause cross-subsidisation within the meaning of Article 4(4) second sentence (b) of Regulation (EU) 2017/460.
- 257 The indicative tariffs for the alternative nomination procedure and the proportion of the allowed total revenue for the individual transmission system operators are obtained from Annex 5. In the course of data collection for the consultation process, only one transmission system operator submitted information on tariffs for alternative nomination procedures. The Ruling Chamber assumes that such a procedure would cause similar costs for all network operators. It therefore considers the submitted data to be representative and has set it as an indicative tariff for all other network operators as well. Nevertheless, all transmission system operators stated unanimously that they do not expect tariffs from alternative nomination procedures in 2021. The percentage of the allowed revenue is therefore shown as 0%.

## **VI. Duration of applicability of the decision according to Article 27(5) of Regulation (EU) 2017/460 (operative provision 9)**

- 258 The directives in operative provision 9 are issued on the basis of section 29(1) Energy Industry Act in conjunction with section 56(1) first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 27(4) first sentence and Article 27(5) of Regulation (EU) 2017/460.
- 259 According to Article 27(5) fourth sentence of Regulation (EU) 2017/460 the procedure pursuant to Articles 26 and 27 of Regulation (EU) 2017/460, including the calculation and publication of tariffs, which was to be carried out for the first time by 31 May 2019, is to be repeated at least every five years. Although the most recent decisions by the Ruling Chamber pursuant to Article 27 of Regulation (EU) 2017/460 were only taken on 29 March 2019 (BK9-18/610-NCG and BK9-18/611-GP), the Ruling Chamber decided to repeat the procedure after just one year. The background to this is the merger of the two current market areas Net Connect Germany and Gaspool to form a joint market area for the whole of Germany that is expected to take place on 1 October 2021. Firstly the market areas over which the validity of the two decisions extends will no longer exist from that date onwards, such that their temporal scope will formally end. Secondly, the merger will lead to a significant change in the capacity framework as a result of which it appears appropriate to carry out a review of the established reference price methodology and another cost allocation assessment in accordance with Article 5 of Regulation (EU) 2017/460. Since the booking forecasts that were available at the time of the adoption of the decision are subject to considerable uncertainty on account of the structural changes, in the course of 2020 on the basis of another data survey the Ruling Chamber intends to reach a decision on whether there is need for another determination of the reference price methodology in 2021 which will take effect in the period from 2022. Should it establish that there is no such corresponding need, this decision will remain valid until it is replaced by a successor decision in accordance with Article 27(5) fourth sentence of Regulation (EU) 2017/460 with effect for 2026 at the latest.
- 260 To clarify it must be mentioned that this determination does not govern the start or duration of regulatory periods and tariff periods. According to section 3(2) of the Incentive Regulation Ordinance (ARegV) the regulatory periods last five years. The third regulatory period runs from 1 January 2018 until 31 December 2022, and the fourth regulatory period will run from 1 January 2023 until 31 December 2027; see section 3(1) ARegV in conjunction with section 34(1b) first sentence ARegV. The tariff period is always the calendar year, section 17(3) first sentence ARegV.

**VII. Obligation to submit information and reporting duty in accordance with section 32(1) para 11 ARegV in conjunction with section 28 first sentence para 3 ARegV (operative provision 10)**

- 261 The instructions set out in operative provision 10 are issued on the basis of section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 ARegV in conjunction with section 28 first sentence para 3 ARegV.
- 262 According to operative provision 10(a), there is an obligation to give notification of the information detailed in Article 26(1) of Regulation (EU) 2017/460. If, prior to the repetition of this procedure in accordance with Article 27(5) fourth sentence Regulation (EU) 2017/460, new circumstances arise which were not considered in this determination, in particular in the form of new conditions for firm capacity products or new non-transmission services for a transmission system operator operating in the German market area, and which could make it necessary to reassess the points listed in Article 26(1) of Regulation (EU) 2017/460, the Bundesnetzagentur must be notified of such circumstances immediately. In addition, according to operative provision 10(b), after the end of a tariff period a report must always be produced with which the volume risk according to Article 7 second sentence (d) of Regulation (EU) 2017/460 can be assessed.
- 263 In order to realise efficient network access and the objectives set out in section 1(1) Energy Industry Act, the regulatory authority may make decisions on the scope, date and form of the data to be collected and submitted according to sections 27 and 28 ARegV by means of a determination in accordance with section 29(1) Energy Industry Act (section 32(1) para 11 ARegV). According to section 28 first sentence para 3 ARegV, the network operators must submit the data needed to assess the network tariffs in accordance with section 17 ARegV, in particular the data contained in the report prescribed in section 28 GasNEV, to the regulatory authority.
- 264 To allow the continuous examination and assessment of in particular network tariffs and tariffs for non-transmission services on the basis of the criteria set out in Regulation (EU) 2017/460, the Bundesnetzagentur must be informed in due time of new circumstances which could potentially trigger an obligation to carry out a renewed consultation according to Article 26 of Regulation (EU) 2017/460. In the event of significant changes, consideration shall be given in particular to bringing forward the consultation to be repeated at least every five years in accordance with Article 27(5) fourth sentence of Regulation (EU) 2017/460. Against this background, a binding reporting obligation as prescribed by operative provision 10(a) is necessary and appropriate.
- 265 In addition, the report pursuant to operative provision 10(b) puts the Bundesnetzagentur into a position to investigate the effects of the established reference price methodology that is to be applied jointly, in particular on the booking behaviour of network users. The report can be a first indication of changes to booking behaviour. Although it is not the case that – as discussed – in

the existing entry and exit system considerably more gas is transported into other systems than for consumption purposes within the system, so pursuant to recital 6 of Regulation (EU) 2017/460 safeguards to shelter captive customers from risks related to large transit flows are not required as such, in the course of previous consultations and legal proceedings the concern was repeatedly expressed to the Bundesnetzagentur that the joint application of the established reference price methodology could lead to a loss of bookings that were allocable to transit. If indications of this emerge from the report, they can be taken into account (in conjunction with further elucidation of developments) in the subsequent determination proceedings that must be undertaken cyclically in accordance with Article 27(5) fourth sentence of Regulation (EU) 2017/460. The reporting duty remains valid in accordance with the term of this determination until pursuant to Article 27(5) of Regulation (EU) 2017/460 a new decision is taken on the reference price methodology and on the other points mentioned in Article 26(1) of Regulation (EU) 2017/460.

266 Since according to Article 10(1) of Regulation (EU) 2017/460 the reference price methodology is to be applied jointly by the transmission system operators and according to Article 10(8) of Regulation (EU) 2017/460 they must jointly fulfil the publication obligations pursuant to Articles 29, 30 of Regulation (EU) 2017/460, the Ruling Chamber considers a joint reporting duty pursuant to operative provision 11 second sentence ff to be expedient too. Given the transmission system operators' obligation to cooperate, as discussed repeatedly in this decision, a coordinated approach of this nature is also appropriate. If individual transmission system operators would like to submit divergent opinions, they are of course free to do so.

267 In addition to technical capacity, the survey relates on the one hand to forecasted average contracted non-adjusted capacity (as is also incorporated in the reference price methodology prior to rescaling according to Article 6(4)(c) of Regulation (EU) 2017/460) and on the other hand to the capacity that is adjusted accordingly by multipliers and discounts (which makes the above-mentioned rescaling necessary).

268 If the transmission system operators find it impossible to explain to what extent the developments are the result of significant changes in technical capacity, the booking behaviour of network users or other factors, reasons for this must be given in the report.

269 Furthermore, the reporting duty requires that the revenue lost as a result of tariff exemptions for biogas and power-to-gas should be shown. The Bundesnetzagentur and the market are thus put into a position to better understand the trend in the monetary implications of this ruling.

270 The report is to be published by the transmission system operators. This is in line with the demand by some market participants from the consultation to make the collected data and analyses publicly accessible. The Ruling Chamber considers this appropriate because the present questions are to be consulted publicly and comprehensively anyway.

271 In the subsequent decisions under Articles 26 and 27 of Regulation (EU) 2017/460 it will be necessary to examine in each case whether continuation of the reporting duty is required.

### **VIII. Data collection (operative provision 11)**

272 The provisions in operative provision 11 are based on section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 in conjunction with section 28 first sentence paras 3 and 4 ARegV, section 30(2) para 7 GasNEV and on section 29(1) Energy Industry Act in conjunction with section 56 first sentence para 2, second and third sentences Energy Industry Act in conjunction with Article 26(1) of Regulation (EU) 2017/460.

273 The Ruling Chamber intends to evaluate at an early stage whether the reference price methodology established with this decision proves to be appropriate following the merger of the two existing German market areas and in particular to what extent the booking forecasts taken into account here, which were made on the basis of uncertain assumptions about the capacity model to be used from October 2021 onwards, correspond to the actual booking situation following the merger. On this basis it will review the cost allocation assessment according to Article 5 of Regulation (EU) 2017/460 and then decide whether the reference price methodology can continue to be used for the envisaged period of five years or a new procedure pursuant to Articles 26 and 27 of Regulation (EU) 2017/460 should be initiated soon in which the data collected in the survey can be used directly.

274 Accordingly, transmission system operators are obliged to submit all completed documents necessary for the cost allocation assessments according to Article 5 of Regulation (EU) 2017/460 and if applicable for assessment of the final consultation according to Article 26 of Regulation (EU) 2017/460 to the Bundesnetzagentur by 1 January 2021. This opens up the possibility for the obligations laid down in this decision to be enforced, after an appropriate warning, by the imposition of a penalty payment pursuant to section 94 Energy Industry Act.

275 In order to ensure speedy analysis of the information provided, the documents required for the analysis must be sent electronically in accordance with section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 in conjunction with section 28 first sentence para 3 and 4 ARegV.

276 Determination of the scope of data to be collected in accordance with section 28 paras 3 and 4 ARegV is based on section 29(1) Energy Industry Act in conjunction with section 32(1) para 11 in conjunction with section 28 first sentence para 3 and 4 ARegV. The transmission of data is necessary in order to ensure that there is a sufficient amount of data for the cost allocation assessment in accordance with Article 5 of Regulation (EU) 2017/460 and if applicable the final consultation in accordance with Article 26 of Regulation (EU) 2017/460. In addition, it is essential for the data to be available in a format that is as structured and as uniform as possible in order to ensure and simplify the analysis of the data by the Bundesnetzagentur. Further requirements

regarding appropriate determination of network tariffs in line with European law are set on the basis of section 29(1) Energy Industry Act in conjunction with section 30(2) para 7 GasNEV. In order to assess whether the tariffs are determined appropriately and in line with European law through Regulation (EU) 2017/460, it is necessary to collect all the information specified in Article 26(1) of Regulation (EU) 2017/460 to conduct the consultation.

277 In accordance with section 29(1) Energy Industry Act in conjunction with section 32(1) para 11, section 28 first sentence paras 3 and 4 ARegV, the Bundesnetzagentur can also make decisions on the design of the data collection and data transmission process, in particular relating to the form of information to be transmitted to it. In exercising this power the Bundesnetzagentur makes it mandatory for the XLSX file that it provides on the internet to be used for completing and transmitting the data entry form. The provision of this uniform data format makes for simplified data entry on the basis of a user-friendly user interface. The data format also ensures that uniform data sets are produced within the respective procedures and is thus an essential prerequisite for swift and reliable performance of the cost allocation assessment according to Article 5 of Regulation (EU) 2017/460 and if applicable the final consultation according to Article 26 of Regulation (EU) 2017/460.

278 The data entry form must be fully and correctly completed with no changes to its structure – for example by unduly inserting or removing individual spreadsheets, columns or rows – before being sent to the Bundesnetzagentur via the Energiedaten-Portal. The files are solely entry forms, made available in write-protected format. This is the only way to ensure swift and reliable further analysis, as has been shown in particular by experience from previous gas network tariff approval procedures and revenue cap determination procedures. The instruction to use the Energiedaten-Portal provided by the Bundesnetzagentur for the transmission of data facilitates the error-free and structured return of data to the greatest extent possible. Written notifications pertaining to changes to individual fields of a data entry form or the sending of parts of a form or a different data entry form by email or on data media will not satisfy the necessary minimum requirements and cannot be taken into consideration for technical and administrative reasons. In the event of a failure to comply with the above-mentioned obligations, the Bundesnetzagentur may also exercise the powers according to section 94 Energy Industry Act. Submitters should not send a paper printout of the data entry form in addition.

279 Insofar as any other files need to be submitted electronically, they must be in a standard format (PDF, Word or similar) and not have any security restrictions (eg copy protection). The instruction rules out the submission of files with security restrictions that ostensibly prevent further processing.

280 The power to collect data also derives from directly applicable provisions under European law in Article 26(1) of Regulation (EU) 2017/460. Where the regulatory authority decides to carry out the consultation referred to in Article 26(1) of Regulation (EU) 2017/460 itself, the logical

conclusion is that a data set must first be requested from the relevant transmission system operators to enable the consultation to take place.

281 The Bundesnetzagentur will review the information in the documents, carry out its own calculations based on the data and add its own deliberations to the documents, for instance on the assessment of the proposed reference price methodology according to Article 7 of Regulation (EU) 2017/460. Prior to publication in the form of final consultation documents, the affected transmission system operators shall be given the opportunity to comment.

## **IX. Other information**

282 Annexes 1 to 8 form part of this decision.

283 Regarding costs, a separate notice will be issued as provided for by section 91 Energy Industry Act.

284 Since the determination is issued in relation to all transmission system operators operating in the German market area within the meaning of section 3 para 5 Energy Industry Act, pursuant to section 73(1a) first sentence Energy Industry Act the Ruling Chamber replaces notification according to section 73(1) first sentence Energy Industry Act with public notification of the determination. According to section 73(1a) second sentence Energy Industry Act this public notification is effected by publication of the operative part of the determination, the notification of appellate remedies and a brief statement that the decision in full has been published on the regulatory authority's website in the Bundesnetzagentur's Official Gazette. In accordance with section 73(1a) third sentence Energy Industry Act the determination is considered to have been served on the day on which two weeks have elapsed since the date of public notification in the regulatory authority's Official Gazette.

### **Notification of appellate remedies**

Complaints against this Decision may be brought within one month of its service. Complaints should be filed with the Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, Tulpenfeld 4, 53113 Bonn. It is sufficient if the complaint is received by the Higher Regional Court of Düsseldorf within the time limit specified (postal address: Cecilienallee 3, 40474 Düsseldorf).

The complaint must be accompanied by a written statement setting out the grounds for complaint. The written statement must be provided within one month of filing the complaint. The period begins with the lodging of the complaint and may be extended by the court of appeal's presiding judge upon request. The statement of grounds must state the extent to which the decision is being contested and its modification or revocation sought and must indicate the facts and evidence on which the complaint is based. The complaint and the grounds for complaint must be signed by a lawyer.

The complaint has no suspensory effect (section 76(1) Energy Industry Act).

Bonn, xx.xx.xxxx

Chair

Vice Chair

Vice Chair

Dr Christian Schütte

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