Ruling Chamber 9

BK9-18/610-NCG

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) No 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) No 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) No 2017/460 applicable to all transmission system operators operating in the NetConnect Germany entry-exit system (REGENT-NCG),

Parties summoned:

Gazprom Marketing & Trading Ltd., 20 Triton Street, London NW1 3BF, United Kingdom, represented by the Chairman of the Board of Directors Mikhail Sereda

- Parties summoned re 1) -

Gazprom export LLC, Ostrovskogo Sq. 2a letter "A", Saint Petersburg 191023, Russia, represented by its Director General Elena Burmistrova,

- Parties summoned re 2) -

Legal representatives of the parties summoned re 2): Gleiss Lutz Hootz Hirsch PartmbB Rechtsanwälte, Steuerberater (Head Office Stuttgart, AG Stuttgart PR 136)

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SWISSGAS AG, Grütlistraße 44, CH-8027 Zürich (Switzerland), represented by its CEO Ruedi Rohrbach and Director of Energy Christoph Geiger,

- Parties summoned re 3) -

Legal representatives of the parties summoned re 3): Becker Büttner Held Rechtsanwälte Wirtschaftsprüfer Steuerberater PartGmbB (Head Office: Munich, AG Munich PR 627)

Uniper Global Commodities SE, Holzstraße 6, 40221 Düsseldorf, legally represented by the Managing Board,

- Parties summoned re 4) -

EWE Gasspeicher GmbH, Moslestraße 7, 26122 Oldenburg, legally represented by the management,

- Parties summoned re 5) -

EnBW Energie Baden-Württemberg AG, Durlacher Allee 93, 76131 Karlsruhe, legally represented by the Managing Board,

- Parties summoned re 6) -

Uniper Energy Storage GmbH, Ruhrallee 80, 45136 Essen, legally represented by the management,

- Parties summoned re 7) -

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, legally represented by the Managing Board,

- Parties summoned re 8) -

Legal representatives of the parties summoned re 8): Manfred Ungemach, Lawyer, Kaiser-Wilhelm-Ring 40, 40545 Düsseldorf,

WINGAS GmbH, Königstor 20, 34117 Kassel, legally represented by the management,

- Parties summoned re 9) -

GAS CONNECT AUSTRIA GmbH, Florisdorfer Hauptstraße 1, 1210 Vienna, Austria, legally represented by the management,

- Parties summoned re 10) -

Legal representatives of the parties summoned re 10): Lawyers Ulrich Quack and Dr Oliver Fleischmann, Wilmer Cutler Pickering Hale and Dorr LLP, Friedrichstr. 95, 10117 Berlin

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

represented by

the Chair	Helmut Fuß,
the Vice Chair	Anne Zeidler
the Vice Chair	Dr. Ulrike Schimmel

decided on 29 March 2019:

1. The reference price methodology to be used by the transmission system operators operating in the NetConnect Germany entry-exit system 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).
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 in so far as a 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 capacity products with an attached condition (capacity products with conditional firmness). Discounting must not reduce capacity charges for capacity products with conditional firmness to below the capacity charge for the interruptible standard capacity product with the lowest discount at this point. These provisions for transmission tariffs for capacity products with conditional firmness 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) No 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) or the entry point at the underground storage facility Haidach (network point 700069-8021-1) are 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. If capacity products with access to the virtual trading point are offered at these points, general tariff structures apply, not benchmarking, if and insofar as access to the virtual trading point is used.

        (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. No other discounts at storage facilities are to be applied to these tariffs.

        (3) If evidence is provided to the Bundesnetzagentur that a longer imputed duration of use is appropriate, further reduced tariffs can be determined accordingly. In this case, the end user, as the petitioner, must enter into a contract with bayernets GmbH which obliges the former to pay the difference between the actual revenues generated from bookings made at the reduced tariff and the annual total cost of building the direct pipeline which were taken into account for calculating the reduced tariff. The duration of this contractual obligation must correspond to the

assumed imputed duration of use. The contract setting out the obligation must be submitted to the Bundesnetzagentur.

(4) 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) No 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. If capacity products with access to the virtual trading point are offered at these points, general tariff structures apply, not benchmarking, if and insofar as access to the virtual trading point is used.

(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) If evidence is provided to the Bundesnetzagentur that a longer imputed duration of use is appropriate, further reduced tariffs can be determined accordingly. In this case, the storage facility operator, as the petitioner, must enter into a contract with bayernets GmbH which obliges the former to pay the difference between the actual revenues generated from bookings made at the reduced tariff and the annual total cost of building the direct pipeline which were taken into account for calculating the reduced tariff. The duration of this contractual obligation must

correspond to the assumed imputed duration of use. The contract setting out the obligation must be submitted to the Bundesnetzagentur.

(4) 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.

(5) Gas volumes put into storage using these reduced tariffs must not be transported into the NetConnect Germany market area using entry capacities discounted according to operative provision 2. The relevant gas volumes may only be transported back into the Austrian market area or to the interconnection point of the end user Wacker Chemie AG or may be imported into the NetConnect Germany market area using a non-discounted entry capacity. The network operator bayernets GmbH must be given the relevant evidence for this by the petitioner at the Haidach storage facility.

4. Rescaling in accordance with Article 6(4)(c) of Regulation (EU) No 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) No 2017/460.

   a) Every year, the transmission system operators of the two German market areas 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) No 2017/460.

a) Every year, the transmission system operators of the two German market areas 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 January 2020.

10.

a) If, prior to the repetition of this procedure in accordance with Article 27(5) fourth sentence Regulation (EU) No 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 NetConnect Germany market area, and which could make it necessary to reassess the points listed in Article 26(1) of Regulation (EU) No 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) No 2017/460, the transmission system operators operating in the NetConnect Germany entry-exit system must publish a joint report after the conclusion of each calendar year, by 31 January of the following calendar year, starting with the 2020 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. In addition to the above, an interim report must be published by 31 August 2019 which in particular details the yearly capacity auctions in July 2020 and the quarterly capacity auctions in August 2019 with joint application of the reference price methodology. The reporting obligation ends with the issuing of the subsequent decision in accordance with Article 27(5) fourth sentence of Regulation (EU) No 2017/460.

11. 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) No 2017/460 for all transmission system operators operating in the NetConnect Germany entry-exit system.

I. Proceedings

2 Notification of the opening of proceedings was given in the Official Gazette 05/2018 of 14 March 2018 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) No 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 Preliminary decisions for the procedure set out in Articles 26 and 27 of Regulation (EU) No 2017/460 were taken with the determination of the requirements for implementation of the network codes on harmonised transmission tariff structures (Regulation (EU) No 2017/460) and on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013 (Regulation (EU) No 2017/459) in the incentive regulation dated 19 July 2017 (BK9-17/609). Among other things, the transmission system operators were obliged to submit all documents necessary for the cost allocation assessments according to Article 5 of Regulation (EU) No 2017/460 and for assessment of the final consultation according to Article 26(1) of Regulation (EU) No 2017/460 to the Bundesnetzagentur by 31 January 2018; the documents had to be complete and submitted in both German and English.

5 The transmission system operators have fulfilled this obligation. The Bundesnetzagentur evaluated the submitted reports and examined the data entry forms to check for uniform and correct data reporting. Where necessary, the transmission system operators were asked to correct the data.

6 Based on the submitted reports and data entry forms, the Bundesnetzagentur developed the present decision in accordance with Article 27(4) of Regulation (EU) No 2017/460.

II. Pre-consultation

7 The draft decision in German was published on 16 May 2018 on the Bundesnetzagentur website for pre-consultation. The publication was accompanied by a brief statement that the final consultation required under Article 26(1) of Regulation (EU) No 2017/460 would begin and then

run for two months after an English-language version had also been published on the website and in the Official Gazette. Legally binding, however, is solely the German version.

8 This publication and the final consultation, by analogy with section 73(1a) first sentence Energy Industry Act and section 28(2) para 4 of the Administrative Procedure Act (VwVfG), take the place of the individual hearing required in principle under section 67(1) Energy Industry Act for each person addressed.

9 Thirty-four comments on the draft determination were received. They were published on the Bundesnetzagentur website in a version from which any confidential industrial and business information had been removed. The submitted comments were essentially as follows:

1. Determination of a reference price methodology in accordance with Article 26(1)(a) of Regulation (EU) No 2017/460 (operative provision 1)

a) Determination of the uniform postage stamp method as the reference price methodology

10 The determination of the uniform postage stamp reference price methodology with respect to the criteria in Article 7 of Regulation (EU) No 2017/460 was largely welcomed. Against the background of the contract-path-independent entry-exit system, taking account of distances as a cost driver was largely viewed critically.

11 On the other hand it was stated that the cost drivers of distance and capacity should be taken into account in the reference price methodology owing to the not insubstantial proportion of cross-system network use. Charges on the basis of the capacity weighted distance reference price methodology would exhibit a greater degree of cost-reflectivity compared with uniform postage stamp charges.

b) Entry-exit split

12 The indirect determination of the entry-exit split was assessed in different ways.

13 One fraction judged the defined entry-exit split of 31.94/68.06 for the NCG market area and 38.21/61.79 for GASPOOL to be appropriate. If need be, further easing on the entry side to increase liquidity would be appropriate, because when the entry-exit split is calculated it would be necessary to take account of the fact that the technical facilities on the exit side are more cost-intensive than on the entry side. Accordingly, more costs ought to be allocated to the exit side than was the case with a purely capacity weighted entry-exit split.

14 Another fraction was in favour of an entry-exit split of 50/50, which they state would be an appropriate cost allocation. A higher entry postage stamp would therefore have to be set, and a

lower exit postage stamp. Otherwise network users on the entry side would not share the costs to the same extent as network users on the exit side.

c) Other questions

15 Comments were submitted pertaining to the question (not covered in this determination) as to whether the reference price methodology should be applied jointly or separately, and to the compensation mechanism.

2. Discounts at storage facilities according to Article 26(1)(a)(ii) of Regulation (EU) No 2017/460 (operative provision 2)

a) Level of discount

16 Setting a discount of 75% at storage facility connection points was largely welcomed. This was said to be a good compromise between the conflicting objectives.

17 Other market participants, to differing degrees, called for higher discounts, on the basis of various arguments: given the contribution it would make to security of supply and usefulness to the system, an even higher discount or even full exemption from network tariffs would be justified. This was applicable to L-gas storage facilities in particular. No charges should accrue at storage facilities at all. This was the only way of taking appropriate account of the network orientation of storage facilities. The argument that otherwise other network users would be excessively burdened was inconsistent, it was stated, because this would happen with the socialisation of the costs on the basis of the uniform postage stamp reference price methodology anyway. Points at storage facilities should be granted a discount of at least 95%, because the use of storage facilities meant that no additional network infrastructure would be used. If a discount at storage facilities were set at 75% there would still be a distortion with regard to the fact that only an entry and exit tariff would apply in the case of the competing flexible balancing product in the form of gas imported via LNG terminals.

18 Other market participants advocated more flexible solutions. A rigid arrangement on discounts at storage facilities would not be advisable for reasons of network orientation and implications for security of supply. Opportunities and potential within the context of the energy transition or sector coupling should be considered. Although these participants shared the Bundesnetzagentur's view that storage facilities can have a network-benefiting effect, this would only be the case, they stated, if the storage facilities were indeed available when needed. It should also be noted that according to the network development plans significant investment would be required for the provision of capacity at storage facilities, and a discounted tariff is already envisaged via the storage product TaK (temperature-dependent capacity). This situation, and the fact that the network is also utilised when use is made of a storage facility and

considerable distances would need to be covered in the case of such facilities in Southern Germany in particular, were stated to be reasons in favour of setting a flexible discount with a range from 50 to 75%. The upper limit for appropriate discounting would in any case be 75%.

19 Another group of market participants in turn criticised the raising of the discount to 75%. With regard to the discounting of storage facility connection points, the monetary implications of raising the discount from 50% to 75% would need to be shown. Increasing it to 75% would appear to be arbitrary, since a discount of 50% had been justified with similar considerations in the past. Balancing diverging demands from the market involving calls for a discount of between 50% and 100% was not an admissible argument in terms of energy management. Instead it should be explained why a discount of 75% would lead to higher storage levels at the end of winter. The required degree of security of supply was already provided by tendering for long-term options. No further cross-subsidisation would therefore be appropriate.

b) Storage facilities with access to more than one market area

20 The discontinuation of the rebooking charge and the design of the arrangements for storage facilities with access to more than one market area are largely viewed critically.

(1) Exclusion from discounting

21 Ruling out discounting at storage facilities that are connected to more than one transmission network or distribution network and thus allow access to different entry and exit systems should only be permitted if a transfer of gas volumes is actually occurring or has occurred. The abstract possibility is not sufficient for this, it was stated.

22 One comment indicated that an alternative to an interconnection point would be available only if the tariff for crossing the border at the market area or cross-border interconnection point is higher than the actual network tariff that would have to be paid in the event of the transfer of the volumes via the storage facility, or also that an alternative would only be possible given technical and commercial equivalence to the use of an interconnection point. Since transfer from one market to another via a storage facility also always requires a storage usage contract for pecuniary interest, no such alternative had ever existed. In consequence, the discount would always have to be granted when specific gas volumes were not actually used for crossing to another market area. In part this is based on the fact that the transfer would have to take place on the same day as the gas is put into storage in order to justify the absence of a discount. Otherwise gas volumes could remain in the storage facility in bottleneck situations even though they would be physically available to eliminate the bottleneck (in the neighbouring market area).

23 It needed to be clarified, the comment continued, that in the case of storage facilities with access to more than one market area the storage facility operator would not generally have to decide whether or not the facility can be used for cross-border flows but that this differentiation

could also be made at the level of network or storage facility users or the corresponding accounts. The discount should always be granted when specific gas volumes are not ultimately withdrawn across borders but instead remain in the same market area, even if in this case cross-border offtake would have been possible.

24 The Decision should unambiguously determine which contracting party has to furnish the evidence vis-à-vis the transmission system operator that the transfer option has not been used. The existing ruling on this should be continued.

(2) Loss of the rebooking option

25 The rebooking charge hitherto set for the ex post reimbursement of a previously granted discount should be retained. Although the provisions of Regulation (EU) No 2017/460 do not include any such mechanism, they do not rule it out. The fact that the provision on such a charge contained in a draft version was deleted was said not to be a manifestation of restricted regulatory freedom but of enhanced regulatory freedom for the regulatory authorities. While the shaping of the previous arrangement was completely disproportionate, removing it would constitute market foreclosure and inadmissible point-to-point tarification. The prohibition of rebooking was also described as questionable for reasons of security of supply.

26 The consequence would be that even if only a small proportion of gas stored in Germany were to be withdrawn outside Germany, overall no discounting would be possible. This would constitute a devaluation of previous investments or storage usage fees and discrimination against cross-border storage facilities. It should be possible to cross to another market area at what is in effect the general tariff by rebooking volumes stored at a discount.

(3) Dealing with undiscounted injected volumes

27 As a result of the loss of the rebooking charge for undiscounted volumes in cross-market-area storage facilities it was said not to be clear whether gas volumes put into storage without a discount could be withdrawn with a discount. There was said to be no clarification that even when gas is put into storage with no discount it would be permissible to take it out of storage into the German market area with a discount.

c) Seasonal factors at storage facilities

28 The application of seasonal factors at storage facilities was assessed in different ways. On the one hand it was stated that transmission system operators should continue to be permitted to apply seasonal factors at entry and exit points at storage facilities. These would be compatible with Regulation (EU) No 2017/460, because it would not be a matter of an additional or divergent year-round discount. However, a higher discount would incentivise storage use as such but not necessarily network-benefiting (seasonal) use. If seasonal factors at storage

facilities were dropped, there would be a worry that costs would rise in the form of load flow commitments or long-term options.

29 Other market participants saw the abolition of seasonal factors at storage facilities as justified. The significant incentives for network-benefiting storage use were already in place as a consequence of corresponding price signals in the market. In a functioning market the corresponding price signals would encourage network-benefiting behaviour, as was shown last winter, for example.

3. Conditional firm capacity products according to Article 4(2) of Regulation (EU) No 2017/460 (operative provision 3)

30 Opinions differed on the shaping of the provisions for conditional firm capacity products. Generally there was a demand that an objectively verifiable assessment of the value of conditional firm capacity products should form the basis for discounting.

31 The great majority of members of EFET were in favour of the tariff for interruptible capacities representing the lower limit for other capacity products and that there should be no exceptions to this. However, all of the members were of the opinion that not only historical interruptions should be taken into account in the calculation of discounts for interruptible capacities.

32 Other market participants, on the other hand, called for exceptions from this principle with different approaches and arguments: because of the joint application of the reference price methodology, it would have to be possible to set the discount for capacity products with allocation restrictions that were beneficial to the network and avoided unnecessary expansion costs at approximately 40%. With regard to capacity products with conditional firmness, in individual cases capacity products without access to the virtual trading point (VTP) such as short-distance products or firm capacity with limited allocability (BZK) would be lower quality than products with interruptible access to the VTP. Transmission system operators should have the freedom to earmark higher discounts accordingly. With regard to the discounts for conditional firm capacity products, criticism was expressed that the decision on this offer remains with the transmission system operators. This would not be consistent with the sovereign stipulation of fundamentally uniform tariffs. Linking to the tariff for interruptible capacity products when determining the tariffs for conditional firm capacity products would not be appropriate. If this discount proved to be only very small, it would be necessary to ask whether the lack of access to the VTP did not in fact represent the greater restriction.

33 A higher discount for conditional firm capacity products in the form of firm, dynamically allocable capacity (DZK) must be possible because this discount would be particularly affected by the standardisation of the tariffs. The reference price methodology applies only to capacity products with unconditional firmness and the discount for interruptible capacity products with access to the VTP would not be an appropriate yardstick for products that are in part dependent on the

transport path and grant only interruptible access to the VTP. DZK products not only avoided unnecessary network expansion, they also (in contrast with BZK) contributed to increased liquidity in the market areas. There would be a worry that with the intended design 28% of all German transmission system operators' revenue for cross-border flows could be lost. As a result of the foreseeable merger of the market areas, flexible possibilities ought to be created to map the capacity model that will become more complex and to avoid unnecessary network expansion. Because of the better predictability of the flows, DZK would put the transmission system operators in a position to reduce the degree to which flow scenarios are taken into account in capacity planning and in individual cases avoid network expansion costs that would otherwise be required. In light of alternative international transport routes, separate discounting of DZK products and the implications of this would need to be examined more closely. At points where BZK or DZK are marketed instead of firm, freely allocable capacity (FZK) the risk of interruption would be greatly reduced. The derivation of the tariff for interruptible capacity should therefore also take account of the fictitious interruption risk that would apply if all capacities were marketed as FZK.

34 Specifically with regard to short-distance tariffs, some market participants expressed the opinion that a higher discount for certain short distances was discriminatory and brought with it the risk that the uniform postage stamp tariff would in part be replaced by distance-dependent tariffs. Ultimately this would contradict the stipulation that the reference price methodology must be commonly applied.

35 Other market participants had a critical view of the design of the discounting of short-distance products. The raising of tariffs at the Haidach storage facility in the case of short-distance tariffs was not appropriate, they stated. It ought to be taken into account that no firm and free allocable capacity is bookable at these points because the network topology does not allow this without expansion. At present a discount amounting to up to 98% was granted in the case of conditional firm capacity products. It was not apparent why a tariff structure of this nature would now no longer be permissible. Certain regions such as the region of Überackern, Burghausen and Haidach would need to be looked at in greater detail. If no firm access to the VTP were available at certain points, it would have to be possible to take this into account in setting the discount. The discount should be based on the costs of network expansion that would otherwise arise to create corresponding firm capacity. The same would also apply to certain individual final consumers on the border with Austria. In light of the foreseeable interruptions at the Haidach storage facility it should be expected that there will be no bookings of interruptible capacity and accordingly the discount both for interruptible capacity and indirectly for short-distance products would turn out to be too small. It was not appropriate not to allow further discounting where there is exclusive access to the Austrian market area using a pipeline only 1.1 km long. Aspects of security of supply were also affected, they stated.

4. 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) No 2017/460 (operative provision 4)

36 The adjustment factor in the form of a multiplier was welcomed, although the derivation should be made transparent. It was thought to be unclear exactly what factors had been included in the calculation, ie whether only discounts for storage facilities and conditional capacity products had been included or also multipliers. It was also still not clear whether the factor would have to be redefined, and when. It was to be expected that a certain consistency would be established in this regard once the methodology had been in use for more than a year.

5. Transmission services and non-transmission services according to Article 26(1)(c)(ii) of Regulation (EU) No 2017/460 (operative provision 5 to 8)

a) Market area conversion charge (operative provision 5)

37 The costs borne at all exit points relating to the market area conversion charge were largely criticised. To some extent even the existence of the prerequisite of a non-transmission service within the meaning of Regulation (EU) No 2017/460 was disputed. Article 4(1) of Regulation (EU) No 2017/460 requires that at least one of the criteria be met in order for a service to be classified as a non-transmission service. With regard to Article 4(1)(a) of Regulation (EU) No 2017/460, the Ruling Chamber correctly denied the existence of the prerequisite, and with regard to Article 4(1)(b) of Regulation (EU) No 2017/460 it stated that the costs are related only slightly to the regulated asset base. Since activities on the transmission system operators' own network arose only in individual or exceptional cases, however, the existence of the prerequisite of Article 4(1)(b) of Regulation (EU) No 2017/460 was also to be denied. The definition of a non-transmission service within the meaning of Article 3 second sentence (15) of Regulation (EU) No 2017/460 was said not to be met. There was no regulated service performed by transmission system operators. The market area conversion charge was instead a balancing mechanism for allocating costs that largely arise in the area of the distribution system operators. Any obligations under national law to allocate the costs were not relevant. With no possibility of classification as a transmission service, it would not be possible for the market area conversion charge to be levied by transmission system operators. It was said that in any case the level of costs was not covered by Regulation (EU) No 2017/460 because the costs were very largely those of distribution system operators.

38 The decision that the costs of market area conversion should be borne by all network users was said not to be covered by Regulation (EU) No 2017/460 because this service was not to the benefit of all network users. The Ruling Chamber's reasoning behind this was said to be arbitrary. It was questionable whether market area conversion actually led to an increase in

liquidity in the respective market areas. On the contrary: if the suppliers did not increase the volumes of H-gas that would then be required, a restriction of liquidity would have to be expected. It was not apparent from the reasoning to what extent cross-border trade would actually benefit from the conversion of L-gas areas. Furthermore, no deliberations were made in relation to network users who solely procure H-gas to supply final customers in foreign networks. It was doubtful that transit customers who book only H-gas points would benefit from increased market liquidity and that cross-border trade would not be impeded. Whatever the case, this would need to be justified by means of a cost benefit analysis.

39 The assumption that all network users benefited from increased liquidity did not apply. It was already the case in the current system, with the Konni Gas determination, that a conversion system was in place in the German gas market under which L-gas can be converted to H-gas in balancing. Since H-gas demand can therefore already be met by L-gas today, no improvements to liquidity were to be expected. Also, the assertion that all network users would benefit from assumed liquidity was too sweeping. This did not apply to customers who are solely transit customers and book capacity products without (firm) access to the VTP. Other deliberations in the draft determination were not correct either. Converting the L-gas infrastructure to H-gas would if necessary enable this structure to be used for H-gas imported via the Netherlands. However, these entry points' network users who might benefit are precisely the ones not participating in the market are conversion charge.

40 After all, there was no material connection with the specific conversion costs arising largely for German end users and the foreign network users subject to the market area conversion charge, in particular those who use the German networks merely for transit or who obtain their gas at German VTPs to supply foreign end users. This inadmissible cross-subsidisation could easily be avoided if cross-border and market area interconnection points and storage facilities were excluded from the market area conversion charge.

41 Imposing the market area conversion charge for exit points at storage facilities would be unjustified double charging, which would not be compatible with Regulation (EU) No 2017/460. Charging at cross-border and market area interconnection points would not be appropriate either. It would be in accordance with the spirit of the market area conversion charge if just the domestic end users were to bear the costs of the market area conversion on the basis of solidarity, regardless of whether they are connected in L-gas or H-gas areas.

42 Only a few positive assessments of the draft determination were given in respect of this point. Market area conversion was described as being a task for the gas sector as a whole. Customers with cross-border transports also benefit from the conversion, because otherwise the networks in today's L-gas areas would no longer be usable. Supplying additional H-gas would also secure the long-term utilisation of network infrastructure abroad and the sales markets of the H-gas producers.

b) Meter operation including metering (operative provision 7)

43 The draft determination was largely viewed critically in respect of this point. The arrangements to be determined regarding meter operation and metering should take account of the fact that connection users can also commission third parties as meter operators in accordance with section 5 Messstellenbetriebsgesetz (Federal Law on Metering Point Operation – MsbG). In these cases it would not be permissible to charge pro-rata costs for meter operation and metering via the capacity charge. Otherwise it would not make sense for connection owners to designate a third party. Market entry by third parties must not be hampered by the tariff structure, however, either. It would be more appropriate if the costs of meter operation were levied cost-reflectively at the exit points to corresponding end users and downstream network operators where the transmission system operator assumes the market role of meter operator. It should also be borne in mind that in some cases end users or downstream network operators are owners of the metering facilities at the connection and interconnection points to the transmission system operators. Furthermore, capacity booking was not a suitable cost driver. In fact the size, number and type of the meters were decisive for cost allocation and the determination of tariffs.

44 A few comments were made that classifying meter operation including metering as a transmission service was not appropriate. In light of the extremely low relevance – both relative and absolute – of the costs of metering and their nature as overheads, the principles of MsbG were not affected in the absence of a measurable influence on the tariffs.

6. Other information

45 To improve the transparency of the indicative tariffs, further information would be required about the development of the revenue caps and the booking behaviour. The previously published models on the development of tariffs did not do justice to the requirements of Regulation (EU) No 2017/460. Investments that have already been confirmed and the development of capacities resulting from the market area merger should also be taken into account when forecasting the tariffs. A forecast should also be drawn up for the eventuality that the current tariff system remains in place unchanged.

46 Publication of all point-specific capacities and distances would be necessary in order to compare the uniform postage stamp and capacity weighted distance reference price methodologies in a transparent manner. Transparency should also be increased yet further, for example by giving a binding definition of expected contracted capacity.

III. Further course of proceedings

47 On 16 May 2018 the Bundesnetzagentur notified the regulatory authorities of the federal states in accordance with section 55(1) second sentence Energy Industry Act that it had initiated

proceedings and had offered the opportunity to comment on the intended determination in accordance with section 58(1) second sentence Energy Industry Act. Likewise on 16 May 2018, the Bundeskartellamt was given opportunity to state its views on the intended determination in accordance with section 58(1) second sentence Energy Industry Act.

48 On 26 April 2018 the Committee of representatives of the federal state regulatory authorities was given the opportunity to comment in accordance with section 60a(2) first sentence Energy Industry Act. Additionally, the texts of the determination with annexes were transmitted to the Committee on 16 May 2018 for deliberation in the Committee meeting of 14 June 2018.

49 With the decisions of 2 July 2018, the parties summoned to 1) and 2) were summoned to the proceedings in response to their application of 15 June 2018.

50 The draft decision (the German version and, in addition, the English version) was published on 17 October 2018 in the Official Gazette 20/2018 and on the Bundesnetzagentur website. This initiated the final consultation within the meaning of Article 26(1) and (2) of Regulation (EU) No 2017/460. At the same time, the consultation documents were submitted to the Agency within the meaning of Article 1(1) of Regulation (EC) No 713/2009 (hereinafter "ACER"). The consultation was scheduled to last for two months.

51 On 7 November 2018, a workshop took place at the Bundesnetzagentur for the BK9-18/607 (AMELIE), BK9-18/608 (BEATE 2.0), BK9-18/610-NCG (REGENT-NCG), BK9-18/611-GP (REGENT-GP) and BK9-18/612 (MARGIT) determination proceedings.

52 During the workshop the transmission system operators Fluxys TENP GmbH, GASCADE Gastransport GmbH, GRTgaz Deutschland GmbH and Open Grid Europe GmbH proposed an alternative reference price methodology and submitted an expert opinion on this from Frontier Economics Ltd. The expert opinion stated that the reference price methodology had to create a balance between incentives aimed at making the market as liquid as possible and incentives aimed at efficient network usage. The latter would require a reference price methodology with cost-reflective tariffs as far as possible. The proposed uniform postage stamp reference price methodology did not take sufficient account of the heterogeneous nature of the transmission system operators in Germany. The supply services provided by nationwide domestic supply and the cross-border transportation of gas were each associated with a different type of cost structure. In view of this, a uniform postage stamp reference price methodology would not be appropriate. The higher cost of cross-border gas transportation it would generate compared with the previous tariff system could cause a volume risk. Ultimately, this would result in higher network costs for domestic end users, too. However, it would be possible and necessary to make a distinction at the level of the exit points. This would allow a postage stamp tariff specific to the type of network point to be implemented. As before, this would still mean joint tarification on the part of the transmission system operators but would involve creating four postage stamp tariffs for the following groups of network point types:

53 1. entry points (excluding storage facilities)
2. entry-exit points at storage facilities
3. exit points to final consumers and to downstream operators (intra-system)
4. exit points at market area interconnection points and cross-border interconnection points (cross-system)

54 Making a distinction of this kind would result in cost-reflective tarification, while at the same time largely retaining the transparency provided by the postage stamp system.

55 As an alternative to the proposed postage stamp tariff per type of network point, the expert report proposed going beyond this and setting a tariff for exchange points within a market area or providing for a separate, higher discount for firm, dynamically allocable capacity products, which account for the majority of cross-border transportation.

56 During the workshop, the participants were asked to submit comments, in writing, on the expert opinion introduced into the consultation process by the TSOs Fluxys TENP GmbH, GASCADE Gastransport GmbH, GRTgaz Deutschland GmbH and Open Grid Europe GmbH.

57 At the workshop, a reporting duty on volume risk in accordance with operative provision 10(b) was put up for discussion by the Bundesnetzagentur.

58 Following the workshop, the Bundesnetzagentur additionally published indicative calculations on the possible outcome of a postage stamp tariff per type of network point. However, due to the advanced stage of the proceedings, the transmission system operators were not asked to update the figures and thus the capacity assumptions the calculations were based on were restrictive. This resulted in the following indicative reference prices:

NetConnect Germany	Postage stamp tariff per type of network point	Relative deviation from uniform postage stamp tariff of €4.21
Entry points (excluding storage facilities)	€4.19	-0.48%
Entry and exit points at storage facilities	€4.18	-0.71%
Exit points (intra-system)	€4.34	+3.09%
Exit points (cross-system)	€3.68	-12.59%

GASPOOL	Postage stamp tariff per type of network point	Relative deviation from uniform postage stamp tariff of €3.27
Entry points (excluding storage facilities)	€2.91	-11.01%
Entry and exit points at storage facilities	€3.20	-2.06%
Exit points (intra-system)	€3.60	+9.96%
Exit points (cross-system)	€3.20	-2.16%

59 In addition, the Ruling Chamber drew attention to the following points: The proposal was implemented using the weighted capacities, adjusted by discounts and multipliers, to allocate the permitted transmission services revenue per specific network operator to the individual point types. Following this approach, the shortfall in revenue caused by the storage discount was divided among all the point types, which appeared appropriate to the Ruling Chamber. The Ruling Chamber found, however, that there should be at least some justification as to why, for example, discounts from conditional firm capacity products, such as dynamically allocable capacity products or firm capacity with restricted allocability, were to be distributed to all point types. The Ruling Chamber pointed out that the differences between NetConnect Germany and GASPOOL compared with a uniform postage stamp tariff should be addressed in the responses. Furthermore, the Ruling Chamber pointed out that in the case of NetConnect Germany the results of the cost allocation assessment in accordance with Article 5 of Regulation (EU) No 2017/460 triggered an obligation to provide justification for the results. In this particular case, the comparison index of 11.56% was disadvantageous for intra-system network use. In the case of GASPOOL, the comparison index of 7.86% did not trigger a justification obligation.

60 For details, reference should be made to the material published on the internet.

61 With the decisions of 14 November 2018, the parties summoned to 3) and 4) were summoned to the proceedings in response to their application of 24 October 2018. With the decisions of 7 December 2018, the parties summoned to 5) and 6) were summoned to the proceedings in response to their application of 21 November 2018.

62 On 13 December 2018 a decision was passed declaring the Vitzeroda market area interconnection point operated by Ferngas Netzgesellschaft mbH to be the significant point (BK7-18-089).

63 With the decision of 19 December 2018, the party summoned to 7) was summoned to the proceedings in response to their application of 12 December 2018.

IV. Final consultation

64 At the end of the specified consultation period, 47 comments had been received. They were published on the Bundesnetzagentur website in a version from which any confidential industrial and business information had been removed, together with a summary of the comments. Whether adding to or diverging from the comments from the pre-consultation, the key submissions were as follows:

1. Determination of a reference price methodology in accordance with Article 26(1)(a) of Regulation (EU) No 2017/460 (operative provision 1)

65 A large number of responses with opposing views were received on the determination of a reference price methodology. Some market participants were in favour of the consulted, uniform postage stamp tariff, others preferred the postage stamp tariff per type of network point as proposed by some transmission system operators. Only occasionally were there demands for the distance to be included in the reference price methodology as a cost driver. Comments were also received on whether the reference price methodology should be applied jointly or separately. In detail:

a) The uniform postage stamp reference price methodology

66 Some market participants expressly welcomed the setting of a uniform postage stamp as the reference price methodology for the following reasons:

67 This would largely meet the requirements of Regulation (EC) 715/2009 especially given the point model independent of the transport route. The postage stamp reference price model would remove the distortions in the previous system that arose from having different tariffs within a market area. Moreover, this would support the introduction of virtual interconnection points.

68 A uniform postage stamp tariff would mean equal pricing for access to the market area irrespective of the network operator. This would end the geographical steering effect caused by the network charges. This type of tariff system would especially make sense where a gas network is meshed and features fewer unidirectional flows as in Germany. Moreover, it would probably be the least complicated approach for network users as they would no longer have to take account of the different charges at different points as is the case at present. Furthermore, it could be assumed that a uniform reference price methodology would lead to less volatility of network charges and would thus improve predictability.

69 Another factor in favour of the postage stamp reference price methodology was that due to the larger portfolio the method would be slower to respond to changes in the cost base. In both the gas and electricity sectors there would be harmonisation at the transmission system level, which would improve predictability for market participants. Another significant factor was the legal certainty of the reference price methodology for avoiding any possible risks of rescission of contract.

b) Reference price methodology of a postage stamp tariff per type of network point and criticism of the uniform postage stamp

70 The transmission system operators that proposed the postage stamp tariff per type of network point essentially gave the following reasons:

71 The distinction made in the postage stamp tariff per type of network point had already been set out in Regulation (EU) No 2017/460, where a distinction is made between intra-system and cross-system network use. Where possible, standardised allocation of capacity bookings would take place based on the type of network point. Differentiated tarification would be possible and appropriate in particular at the exit point. Contrary to this, the proposed uniform postage stamp reference price methodology would not take any cost allocation into consideration.

72 No legal requirement arises out of Regulation (EU) No 2017/460 for only the uniform postage stamp to be set within the scope of a joint reference price methodology.

73 In some specific aspects the postage stamp tariff per type of network point would be more suitable for meeting the requirements of Article 7 of Regulation (EU) No 2017/460. The postage stamp tariff per type of network point would be fully transparent and comprehensible, thus it would meet the criterion in Article 7 second sentence (a) of Regulation (EU) No 2017/460. The postage stamp tariff per type of network point would meet the criterion of being cost-oriented in Article 7 second sentence (b) of Regulation (EU) No 2017/460 better than a uniform postage stamp tariff, especially as it was particularly important that the reference price methodology reflected the costs incurred in providing a specific transmission service. Contrary to the view of the Bundesnetzagentur, it would not be sufficient in this respect to focus solely on the total costs of an entry-exit system or of a market area. This was made clear by recital 3 of Regulation (EU) No 2017/460 whereby the reference price methodology had to cover specific cost drivers to ensure a certain level of cost reflectivity. The Bundesnetzagentur justified waiving the differentiation for the reason that even the virtual trading point would be accessible with every capacity booking. However, this would not take into account that booking an interconnection point would enable access to the virtual trading point at lower costs than, for example, booking capacity for a final consumer. Thus a distinction should be made in the tarification even if capacity products are identical as regards accessibility to the virtual trading point.

74 A distinction is made in Article 3(8) and (9) of Regulation (EU) No 2017/460 between intra-system and cross-system network use. Making a distinction of this kind in the reference price methodology would not be a move away from a two-contract model but instead would enable a cost allocation that is as appropriate as possible, especially for exit points. Contrary to the Bundesnetzagentur's statements, a postage stamp tariff per type of network point would allow more accurate allocation of costs when determining a reference price methodology.

75 Insofar as the Bundesnetzagentur justified the uniform postage stamp reference price methodology on the grounds that it prevented inappropriate and non-transparent cost allocation, it would have to concede the same for a postage stamp tariff per type of network point.

76 Article 13 of Regulation (EU) No 715/2009 also sets out that only the actual costs of an efficient network operator may be taken into account. These could be understood to be only the costs incurred when providing specific transmission services, such as for transit. This would not be compatible with the cross-subsidisation of domestic network users.

77 Applying the uniform postage stamp reference price methodology would be contrary to Article 7 second sentence (c) of Regulation (EU) No 2017/460 and lead to undue cross-subsidisation among those network users differentiated within the postage stamp tariff per type of network point. The unequal circumstances would therefore also have to be treated unequally.

78 In addition to Article 5 of Regulation (EU) No 2017/460, Article 10(3)(a)(ii) of Regulation (EU) No 2017/460 expressly stipulates that cross-subsidisation between intra-system and cross-system network use should be avoided. These stipulations would be better met by the postage stamp tariff per type of network point.

79 The reference price methodology of the postage stamp tariff per type of network point would minimise the volume risk in accordance with Article 7 second sentence (c) of Regulation (EU) No 2017/460 and ensure market liquidity in line with Article 13(2) of Regulation (EU) No 715/2009. Contrary to the uniform postage stamp reference price methodology, it would not lead to a distortion of cross-border trade by tariffs for transit bookings that included cross-subsidisation to the benefit of domestic customers.

80 After all, contrary to the uniform postage stamp reference price methodology, the postage stamp tariff per type of network point would comply with the requirements of Article 13 of Regulation (EU) No 2017/460 with regard to providing incentives for investment. This requirement would be compatible with Article 41(8) of Directive 2009/73/EC, according to which it should be ensured that appropriate incentives to increase efficiencies are granted when setting the tariffs for network use. If a uniform, excessive tariff were charged for cost-effective transport, this would set the wrong kind of economic incentives as there would be no incentives for any network use at minimum overall costs or for a cost-effective network expansion

81 The uniform postage stamp reference price methodology requirement would be disproportionate in light of Article 14(1) of the German Basic Law (Grundgesetz - GG) and Article 12(1) GG, under which transmission system operators have freedom of ownership and occupation.

82 There was no need for the uniform postage stamp reference price methodology under the principle of proportionality. The postage stamp tariff per type of network point would offer a milder yet better means of meeting the legal requirements of Regulation (EU) No 2017/460. At any rate, in relation to the public interest measures pursued, the uniform postage stamp reference price methodology would be a disproportionate level of interference regarding transmission system operators who partially or mainly conduct transit services. There would be no justification for the proposed cross-subsidisation of domestic network users in contravention of the principle of cost-reflectivity. It would also have to be taken into consideration that in the event of a volume risk this advantage for domestic network users would only be temporary and in fact would be detrimental to both domestic and foreign end users in the event of an increase in transit costs.

83 In addition, other market participants were in favour of the postage stamp tariff per type of network point reference price methodology, although some did point out the need for further consultation:

84 Although a final assessment of the proposed postage stamp tariff per type of network point would be difficult, for instance as regards the calculations for the adjustment factors, the proposal was welcomed as it took account of cross-border trade and volume risks by reducing transit and entry tariffs. Although it was not possible to assess the price elasticity of transit customers or possible alternative routes, the transmission system operators' fears regarding volume risks were at least comprehensible. Subject to reconsultation, the reference price methodology of postage stamp per type of network point was permissible and should be seen as valid. This methodology would meet the criteria of Regulation (EU) No 2017/460 better than the proposed uniform postage stamp reference price methodology.

85 According to a legal opinion submitted, the postage stamp tariff per type of network point would meet the criteria in Article 7 second sentence of Regulation (EU) No 2017/460 better than the proposed uniform postage stamp reference price methodology. In this respect it would still have to be proven that the transit cost structure on the one hand and the supply of final consumers on the other hand were actually distinct. Legally secure implementation, however, would require another two-month consultation to give all market participants an opportunity to comment on the final draft. Allowing for another month to draw up the determinations would lead to a three-month delay in the proceedings. However, this would still allow the tarification proceedings to be concluded on time by 15 October 2019, becoming effective as of 1 January 2020.

86 Some market participants pointed out that the tariffs arising out of the postage stamp tariff per type of network point would have a positive impact on domestic and neighbouring virtual trading

points. Thus lower entry tariffs could be expected to cause an increase in liquidity and competition. Domestic final consumers would also benefit from falling wholesale prices, which could compensate for the rising costs of domestic exit points.

87 Furthermore, a number of individual aspects were put forward:

88 Some respondents pointed out that, in contrast with Austria, Italy or France, for example, in Germany there was no clear demarcation of the role of the transmission system operator with respect to transmission and regional distribution.

89 The Bundesnetzagentur's approach was said to be inconsistent. For instance, the cost driver analysis for the efficiency benchmarking of transmission system operators used cost drivers other than booked capacity. This inconsistency had not been corrected.

90 The application of a uniform tariff to entry and exit points would be legally impossible and incorrect. According to the European requirements in Article 13 of Regulation (EU) No 715/2009, the tariffs per entry or exit point were to be set separately from each other. Article 6(4)(c) of Regulation (EU) No 2017/460 also stipulates that uniform tariffs may be set only as an exception within a homogeneous group of points. From a technical point of view, on average entry points would have a significantly higher technically available capacity than exit points. This would be associated with a different cost structure in each case, which is why the tariffs at entry-exit systems would also have to vary. This would also apply within the exit points for the different types of exit points.

91 Some respondents argued that a serious intervention, such as that of a uniform postage stamp tariff, would have to be examined for its economic impact. This type of examination should be initiated and published by the Bundesnetzagentur.

c) Criticism of the uniform postage stamp tariff regarding tariff increases

92 Some respondents raised the issue of cross-border trade with respect to tariff increases at certain borders, such as with Austria, France, Italy and Switzerland. At the same time the importance of the German market areas for transporting gas and the effect on the prices set for downstream markets was argued.

93 For instance, the TENP system represented the main supply route for Italy to connect to liquid trading markets. Any tariff increases for this route would lead to an increase in Italian wholesale prices. On critical days this could lead to new price difference peaks between the Italian and north-west European markets. It was also feared that bookings for supplying the Italian market could be replaced by alternative supply routes.

94 Tariff increases at the Waidhaus and Medelsheim points would not be comprehensible and would pose an obstacle to the integration of the European gas market and to supplying French customers with Russian gas. A possible solution to the problem would be to grant generous

discounts for conditional firm capacity products, which account for a large part of the transit business.

95 In part respondents pointed out that any tariff increases resulting from the introduction of a postage stamp tariff had to be drawn up proportionately. Limiting the tariff increase to 10% per year was considered appropriate. Under the Network Charges Modernisation Act, this type of alignment would take place over five years for electricity grid fees charged by transmission system operators.

96 Some respondents also discussed the effects that a potential loss of bookings would have on the liquidity of the German trading market. It was said that tariff increases at entry points would reduce liquidity.

d) Criticism of the postage stamp tariff per type of network point

97 Numerous comments were also received from market participants criticising the reference price methodology of the postage stamp tariff per type of network point. Comments were not restricted to the content of the methodology but also criticised the late presentation of the proposal. The comments focussed on the cost allocation, in particular:

98 Respondents pointed out that the postage stamp per type of network point reference price methodology was an attempt to allocate costs more accurately by means of different point types. Given the fact that the legal certainty of the reference price methodology was an important aspect, the setting of a postage stamp tariff per type of network point was questionable. Respondents stated that it should be discussed whether forming clusters would achieve cost allocation by causation or whether the allocation would instead introduce discrimination between customer groups. For example, it was unclear how to deal with final consumers or downstream municipal utility companies connected to the transit pipelines. It would also have to be decided for the coming tariff periods whether a tariff increase due to a reduction in bookings should be distributed generally or within the respective cluster. In the first case, the specific goal of avoiding the volume risk for domestic customers would not be reached. The failed cost allocation assessment for the NetConnect Germany market area in accordance with Article 5 of Regulation (EU) No 2017/460 also had to be discussed.

99 At the workshop the Bundesnetzagentur and the transmission system operators both stressed that direct cost allocation to types of network point was not possible. This would make a categorisation of costs necessary, which in comparison with the postage stamp reference price methodology and contrary to Article 7 of Regulation (EU) No 2017/460 would entail greater potential discrimination and a risk of non-permitted cross-subsidisation. It would be more appropriate to make a distinction on the basis of network advantages, as done for storage facilities in the form of a discount.

100 With respect to the reference price methodology of postage stamp per type of network point, respondents pointed out that there had been no comprehensible explanation so far as to which costs would actually be allocable to "transit" and how this cost allocation by causation would be better reached with four postage stamps than with one uniform postage stamp. This raised the question of whether the present network tariff system resulted more in cross-subsidisation of the "transit" by other network users.

101 Market participants were critical of the expert report's assumptions on possible alternative routes and the volume risk. In this context the impact of tariff increases on domestic demand was commented upon.

102 In the documents presented, there was no obvious evidence of a risk that transit bookings would be lost should a uniform postage stamp reference price methodology be introduced. It was also doubtful whether any decline in bookings could be traced back to this. Even in the past, long-term transport contracts that were due to expire had been replaced by non-yearly capacity bookings. Bypassing Germany would only be possible by increased deployment of LNG, which would even imply a welcome diversification of sources. The assumption that any tariff changes in the range of 10% would cause gas traders to fundamentally change their transport routes was considered far-fetched.

103 Respondents demanded a critical examination of whether demand price elasticity was generally much higher for transit customers than for captive domestic customers. In any event, respondents found that the assumptions on the substitutability of long-term transit bookings were not quantified or well-founded. Based on the information so far, placing greater burdens on domestic customers to safeguard against the volume risk was not justified or reasonable, particularly in view of the fact that this would affect "captive" customers.

104 Some respondents were concerned about the effects of the postage stamp tariff per type of network point on the entry points.

105 In principle, respondents welcomed low entry tariffs as this increased liquidity in the gas market, which both transit customers and domestic customers could benefit from equally. The fact that any reduction in entry tariffs would vary greatly between the two market areas would still have to be evaluated.

106 Another market player posed the question why, according to the study's logic, domestic customers should also benefit from this reduction at the entry points.

107 Respondents also noted that the reference price methodology of the postage stamp tariff per type of network point was more susceptible to errors in forecasting and was subject to greater fluctuation in network tariffs. In particular, the network point type of the storage facilities was to be critically assessed. In this regard, strong annual fluctuations in capacity bookings and thus strongly fluctuating tariffs should be expected if, for instance, on account of a warm winter less

storage was to be expected in the following summer. If this were to be followed by a cold winter with an increase in actual bookings, these would then be higher priced (for no objective reason). These types of problem would not occur with the uniform postage stamp reference price methodology.

108 Finally, several respondents drew attention to the fact that the proposal was introduced at a late date:

109 The manner in which the postage stamp tariff per type of network point was introduced into the consultation did not meet the requirements of Article 26 of Regulation (EU) No 2017/460. Details were missing as to the exact derivation or grouping of the network points, as well as details regarding the adjustment factors that this method would employ. This weakened the legal certainty of the postage stamp tariff per type of network point. In addition, the proposal was introduced late to the consultation.

e) Tariff exemption for biogas among others

110 Several respondents noted that the requirements in accordance with section 118 of the German Energy Industry Act (Energiewirtschaftsgesetz - EnWG) had been implemented with respect to entry privileges.

111 Such privileges were positively assessed on their merits by some market participants. Nevertheless there was also criticism as to why technology-neutral wording had not been chosen. With respect to pending major projects, the future impacts could no longer be disregarded.

112 Some market participants were against the tariff exemption for certain technologies; it was considered to be unauthorised discrimination and violated the principle of cost-reflectivity.

f) Joint application of the reference price methodology

113 As in the pre-consultation, comments were received relating to the question (not covered in this determination) as to whether the reference price methodology should be applied jointly or separately. In part respondents argued that a separate application was imperative:

114 Given the national statutory provisions, only the specification of a separately applicable reference price methodology could be lawful. The Gas Network Charges Ordinance (GasNEV) and the Incentive Regulation Ordinance (ARegV) provide for tariffs to be set individually by each network operator. Only the continuance of the separate tarification of the transmission system operators as practised at present would be legally permissible, which would result in a discretionary reduction to zero. Should European law provide for two alternatives and if one of those was not compatible with national law, the authority would automatically have to stipulate the alternative that was compatible with national law. Nothing else would apply in the event that

European law provided for a basic rule and the possibility of an exception to this. In the present constellation, therefore, use would have to be made of applying an exception under Article 10(2) of Regulation (EU) No 2017/460.

115 It was further pointed out that this cannot be ignored on the grounds that Article 10(3) of Regulation (EU) No 2017/460 provides for an effective compensation mechanism in the event that the reference price methodology is to be applied separately. Unlike in the past, the provision referred to above now provides a basis of authorisation for any such compensation mechanism. Since the compensation mechanism was intended to prevent any disadvantageous effect on the transmission services revenue, the mechanism would have to be linked to the mutually rendered gas goods or services.

116 The joint application of a reference price methodology would breach European anti-trust law according to Articles 101 and 102 TFEU. The authority to set a separately applicable reference price methodology would have to be exercised in any case if the joint application would lead to a breach of application in the Member State. Hence Regulation (EU) No 2017/460 therefore clearly sets out in recital 10 that the application of Articles 101 and 102 TFEU should be without prejudice.

117 A joint tarification would be in conflict with European competition law. Contrary to Article 102 second paragraph (a) TFEU, agreed prices would arise that would never have arisen through competition as they are not in relation to the economic value of the service. In this respect respondents referred to the statements on the heterogeneity of transmission system operators in Germany. Within the meaning of Article 102 TFEU, tarification would also be capable of affecting trade between the Member States.

118 However, comments were also received that were explicitly in favour of the joint application of the reference price methodology.

119 Only through the joint application of the reference price methodology would proper conformity between the network access system and the tariff system be achieved. As the transmission system operators would anyway be obliged to offer full cooperation, this must also extend to tarification.

2. Discounts at storage facilities pursuant to Article 26(1)(a)(ii) of Regulation (EU) No 2017/460 (operative provision 2)

120 The comments on storage discounts are essentially the same as those from the pre-consultation. The option of seasonal factors at storage facilities was positively received in part, yet was also criticised.

121 Respondents pointed out that incentives for storage use beneficial to the system were already available via the market price. Any additional assurance required to ensure storage levels to

benefit the network should be provided through the existing tools (flow commitments and long-term options) in a transparent manner.

122 As it would be impossible to make long-term temperature forecasts, it would also be impossible in advance to set seasonal factors at a level benefiting the network. Standard seasonal factors should be excluded at all points.

3. Conditional firm capacity products according to Article 4(2) of Regulation (EU) No 2017/460 (operative provision 3)

123 The arrangements for conditional firm capacity products were viewed critically. As in the pre-consultation, respondents stated that a distinction would have to be made in certain situations that justified doing so.

124 Comments were made additionally and in more detail on the terminal situation at the Burghausen network node.

125 Based on firm capacity with restricted allocability products at the Haidach storage facility, there would be an increase in tariffs by a factor of more than 50 in comparison with the previous tariffing. The previous tariffing took account of the low level of transport capacity in this area. This arrangement would conflict with the principle of cost-reflective tarification. Cost differences should not arise out of a value comparison of products, for instance comparing restricted allocability firm capacity with interruptible capacity, but should only be the result of the costs incurred in each case. Respondents also argued that even if the value of the product could be taken as a basis, the tarification would still not be correct. Viewed objectively, an interruptible capacity product that was merely interrupted one day a year and that was able to cover a distance of 1,000 km would not be of less value than a product that merely permitted a transportable distance of 1.1 km.

126 The Haidach gas storage facility, which is located in Austria and is connected only via the German transmission system, was predominantly filled through transport from Austria and largely emptied through transport to Austria as can be seen by capacity bookings in the past. This storage facility also played an important role in ensuring security of gas supply in Austria and had already been called upon in crisis situations, such as during the "Ukraine gas crisis" of 2009. Increasing the transport tariffs by a factor of more than 50 would result in a tariff increase above the current CEGH summer-winter spread. The use of the storage facility for the Austrian gas market would therefore become prohibitively expensive. Contrary to the principle of cost-reflectivity, this would give rise to a distortion of cross-border trade. Although it would be technically possible to connect the Haidach storage facility directly to the Austria transmission system, this has never been implemented for technical reasons in connection with existing tariffs.

127 An end consumer affected by this at the Burghausen network node commented extensively on the economic consequences of the decision, and also claimed that the continued existence of the gas-fired power plant at Burghausen, which was classified as systemically relevant by the Bundesnetzagentur, was at risk.

128 However, it was also argued that any such discount had to be appropriate and should not be any more than twice as high as the discount for interruptible products.

129 In this connection it was also claimed that any discount for conditional firm capacity products would have to take into account that restrictions in the allocation option as per German practice would be limited to the network area of the respective network operator. This would lead to enormous restrictions of use vis-à-vis firm and freely allocable capacity. It would not be justifiable to attribute more costs to these capacity products unless allocation options applicable to all network operators had been implemented. This had been contemplated in the KASPAR determination of Ruling Chamber 7 of the Bundesnetzagentur (BK7-18-052).

4. 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) No 2017/460 (operative provision 4)

130 One respondent called for more transparency in the adjustment factor. For instance, the share of the various different discounts in the adjustment factor should be disclosed. The annual adjustment to the adjustment factor should be made transparent by the transmission system operators.

5. Transmission services and non-transmission services according to Article 26(1)(c)(ii) of Regulation (EU) No 2017/460 (operative provision 5 to 8)

a) Market area conversion charge (operative provision 5)

131 Many market participants welcomed the discontinuation of the market area conversion charge at interconnection points. However, there was also a criticism of this change from the pre-consultation.

132 A respondent claimed there was no reason to release the interconnection points from the market area conversion charge as this charge was a non-transmission service. For this to be the case, it would be sufficient for one of the criteria in Article 4 (1) first sentence (a) or (b) of Regulation (EU) No 2017/460 to be fulfilled. At any rate, this would apply inasmuch as the market area conversion also caused investment costs in the transmission systems. However, costs from distribution system operators would also have to be passed on to the interconnection points, pursuant to section 19a Energy Industry Act (EnWG). In any event, the costs incurred by the transmission system operators would have to be passed on to the interconnection points.

133 It was also claimed that the market area conversion would be of benefit to users of interconnection points and therefore should also be charged at these points for the following reasons: Firstly, the market area conversion was a European task for the entire gas sector. Secondly, users of interconnection points were not pure transit customers. Domestic companies supplying foreign customers with gas procured in Germany could also fall under this classification. In any event, transit customers also benefited from the rise in liquidity caused by the market area conversion. The fact that the historic L-gas networks were mostly used for imports to Germany was just coincidence and should not have an effect on tariffs. In addition, it was conceivable that, contrary to expectations, transit customers could use former L-gas networks in future. In any case, these network users made use of the H-gas pipelines that would have to be installed during the market area conversion, that is to say, transit customers would generally benefit from the effect on capacity of such pipelines.

134 In addition, many market participants were also in favour of the abolition of the market area conversion charge at storage facilities:

135 This was considered to constitute non-justified double charging, as the charge would again be payable for subsequent gas offtake at the customer. In addition, contrary to the aim of the draft determination, transit flows that incorporated interim storage would not be exempt from the charge. Any such arrangement would be in line with the intention of the charge, which was to distribute the costs of the market area conversion equally between all final consumers.

136 Neither storage facility network users nor transit customers benefited from a rise in market area liquidity. Indeed, the use of storage facilities, and the relevant costs incurred, were justified on the basis of market congestion. An increase in liquidity would therefore have a detrimental effect on storage business.

137 Provided the charge was also used to finance the conversion costs of L-gas storage facilities, the charge could at best be levied for storage facilities' own use (especially for compressor use).

138 Respondents also suggested that estimates on the development of the market area conversion charge should be published to improve predictability.

b) Meter operation including metering (operative provision 7)

139 The changes made to the arrangements on metering operations from the pre-consultation were positively received. It was merely pointed out that the metering infrastructure could be the property of a downstream distribution system operator, in which case the costs would be reflected in the network charges of the distribution system operator.

6. Report on volume risk (operative provision 10)

140 The introduction of a reporting duty on volume risk received a mixed welcome. Some respondents highlighted the positive aspects of a reporting duty.

141 In the event that a decline in cross-border bookings resulted in significant tariff increases for customers located in Germany, this should be avoided. For this reason respondents welcomed the proposed monitoring of booking trends. This could help identify the risks from setting uniform tariffs and address these risks in the periodic consultation in accordance with Article 26 of Regulation (EU) No 2017/460. The data and analyses collection should be published.

142 However, various aspects of the reporting duty were subject to criticism, including the following:

143 The proposed reporting duty on volume risk did not adequately reflect this risk. If long-term capacity agreements were to be cancelled, it was doubtful they would be concluded anew with the same scope, even if the regulatory authority were to make an adjustment in the tariff provisions. This would primarily be the case if other Member States were to carry out restructuring and expansion measures in the meantime and would secure them using long-term capacity bookings.

144 Any possible shifts in volume could be triggered by the tariff levels but also by other factors not known to the transmission system operators. A qualitative assessment of the volume shifts by the transmission system operators should be rejected, particularly as it would not be possible to clearly prove causality. The respondents did not expect that uniform assessment would be possible because of the differing positions and polices of the companies involved. In addition, due to the very short review period in the first reports, false conclusions might be reached.

145 Another aspect raised by the respondents was that the report should also state whether the within-day capacity bookings were classified as additional bookings or whether these bookings were merely relocated from the day-ahead capacity.

146 Comments received regarding the deadlines for the report stated that the effects of determining a reference price methodology should be subject to regular monitoring. However, the deadlines were considered to be too tight to allow this. The market area merger was supposed to take place on 1 October 2021. Thus in the last quarter of the 2021 tariff year, the tariffs for a joint market area would apply. These tariffs would have to be published 30 days before the 2020 annual auction. Consequently a REGENT 2.0 for the entire German market area would have to be finalised by March 2020 to allow the tariffs to be calculated by May 2020. The proposed dates for the monitoring, however, were based on the determination being finalised in March 2021.

7. Other information

147 One respondent welcomed the extended tariff forecast in the determination including the bilingual explanatory comments. Another market participant criticised the fact that the draft decision did not specifically deal with the deviation between the tariffs that were previously separately formed and the indicative tariffs that significantly differed from them.

V. Further course of proceedings, comments by the Bundeskartellamt and by ACER

148 On 1 December 2018 the Bundeskartellamt submitted comments on the determination proceedings with regard to potential impacts on competition. These stated that it could not be completely ruled out that determining a uniform reference price methodology would have a negative impact on competition. Using this methodology could result in uniform tariffs, significantly compromising or even eliminating any residual competition between the transmission system operators. Within the legal framework allowing for exempted agreements set out in section 2 Competition Act (GWB) and Article 101(3) TFEU, the following aspects, among others, could be used as reference points for efficiency effects: the impact of revenue cap regulation on pricing incentives and on the utilisation of existing capacities, the impact of such utilisation effects on the relative level of network tariffs charged by individual transmission system operators, the retroactive impact of these tariff effects on wholesale markets (in particular with regard to the vulnerability of traditional market positions and market liquidity), the distributional effects of the revenue cap regulation and the impact of simulating a competitive environment using various incentive regulation mechanisms.

149 With the decisions of 15 January 2019, the parties summoned to 8) and to 9) were summoned to the proceedings in response to their applications of 21 December 2018 and 27 December 2018.

150 On 13 February 2019, ACER published a statement in accordance with Article 27(2) and (3) of Regulation (EU) No 2017/460, in which ACER analysed the draft decisions of 17 October 2018 with respect to the criteria set out in Article 27(2) of Regulation (EU) No 2017/460.

151 In the interest of completeness, ACER requested a more detailed justification of the use of forecasted capacity bookings as the sole cost driver, a comparison of the tariffs in 2019 and 2020 and information clarifying the application period of the determination. In addition, ACER recommended that a sufficiently detailed representation of the transmission network structure be made the object of the decision.

152 ACER also stated that it found it impossible to deliver a full assessment of the reference price methodology using the criteria listed in Article 7 of Regulation (EU) No 2017/460. According to the analysis, the uniform postage stamp reference price methodology is transparent, non-discriminatory and in principle meets the criteria relating to the volume risk. Furthermore, ACER

supported the joint application of the reference price methodology against the background of the impending market area merger. However, ACER stated that it had not been possible to assess aspects of cost-reflectivity, prevention of cross-subsidisation and distortion of cross-border trade. The Bundesnetzagentur would have to carry out more extensive assessments in order to enable this to happen. In particular it would be necessary to include an examination of the infrastructure unit costs relating to cross-system and intra-system network use and of the complexity of the transmission systems with respect to meshing. The impact of the reference price methodology on tariffs in comparison to the previous tariff period, especially in the case of tariff increases at interconnection points, should also be assessed.

153 Calculations relating to the capacity weighted distance reference price methodology should, if possible, be carried out using the same input parameters as for the uniform postage stamp reference price methodology (such as those relating to discounts at storage facilities). ACER also recommended that the cost allocation assessment according to Article 5 of Regulation (EU) No 2017/460 for the capacity weighted distance reference price methodology should take distance into account as a cost driver.

154 With regard to the possible event of a volume risk, the potential decline in bookings should be discussed.

155 In the opinion of ACER, a more detailed justification is necessary as to why the entry-exit split should not be determined ex ante.

156 As regards non-transmission services, ACER called for a more detailed explanation of biogas costs and a review of the system for balancing revenues relating to the various non-transmission services. As regards meter operation and metering at internal order points to downstream network operators, a non-discriminatory system should be established in view of the fact that the ownership structures may differ at these points.

157 Entry privileges for biogas and power-to-gas were viewed critically by ACER.

158 On 18 February 2019 a summary of the comments from the final consultation was published in English as stipulated in Article 26(3) second sentence of Regulation (EU) No 2017/460.

159 From 11 March 2019 until 18 March 2019 additional consultations took place on the benchmarking arrangements according to operative provision 3(a) and (b), during which all transmission system operators and parties summoned were invited to submit comments, as were E-Control and ACER.

160 Although most of the respondents welcomed the assessment of competitive situations by the Bundesnetzagentur, they also stated that it should not be restricted to specific points. Instead, a generally applicable mechanism should be defined which enabled all transmission system operators to respond to competitive situations.

161 Other market participants voiced criticism that preference was given to domestic network users. Furthermore, there was said to an incentive effect in favour of investment in areas close to borders.

162 A uniform indicative tariff of €0.13 per kWh/h/a obtained after benchmarking was suggested for the Überackern 2 and underground storage facility Haidach entry points. This tariff should also be applied if gas is supplied to the interconnection point of the end user Wacker Chemie AG. However, in economic terms there should be equivalence with the regulations that have been consulted on so that the exit tariff for the Wacker Chemie AG interconnection point should be set at a high level accordingly (indicative tariff of €0.71 per kWh/h/a). The effect would ultimately be the same and it would avoid confusion and mistakes being made when booking entry capacities.

163 Some respondents criticised the restrictions imposed on the regulations determining longer durations of use and claimed that, for instance, ending storage facility use prematurely was unrealistic. Other respondents gave various reasons why they thought the assumed project costs were too high.

164 Respondents claimed that the situation at the Haidach storage facility also affected Open Grid Europe GmbH, which has a corresponding storage connection point, Haiming III, and also operates the Überackern AGB network point, a cross-border interconnection point in the Burghausen network node. Appropriate investments had been made to connect the storage facility, and these would be devalued by benchmarking.

165 With regard to the cross-border situation at the Haidach storage facility, it would be inconceivable that gas volumes imported from Austria at lower tariffs would be put into storage and afterwards exported to the NetConnect Germany market area with a capacity discount of 75%.

166 Furthermore, the 7Fields storage facility demonstrated that storage facilities located in Austria could be run economically even without special tariffs. Respondents claimed that the arrangement distorted competition at storage facilities.

167 In response to the question of whether the installation of a direct pipeline really was imminent, respondents stated that this could fall at the first hurdle if even a single landowner failed to consent. A factor of five should be used for compensation payments.

168 With regard to the end user Wacker Chemie AG, respondents put forward that although this company was the connection owner and connection user, all end users at the Burghausen site to whom gas was forwarded or supplied were affected by the determination. Therefore all end users at this industrial site should be classified as petitioners.

169 Respondents also argued that project costs should be set at a lower level, in particular due the possibility of creating a consortium with the storage facility operator to build the pipeline, and

that, likewise, the composite interest rate level was too high. They also claimed that it would not be appropriate to recalculate tariffs where the duration of use was longer than four years. Instead, the annuity should be fixed for the entire duration of use.

170 With the decision of 28 March 2019, the parties summoned to 10) were summoned to the proceedings in response to their application of 11 March 2019.

VI. Other information

171 These determination proceedings do not cover the question of whether in derogation of Article 10(1) of Regulation (EU) No 2017/460 the reference price methodology is to be applied separately, Article 10(2)(a) of Regulation (EU) No 2017/460, which as a general principle according to Article 10(4) of Regulation (EU) No 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 a market area (BK9-18/607, "AMELIE"), 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) No 2017/460.

172 For further details, reference is made to the content of the implementing acts.

B.

173 Through this determination, in accordance with Article 27(4) of Regulation (EU) No 2017/460 the Bundesnetzagentur is issuing a motivated decision on all points stated in Article 26(1) of Regulation (EU) No 2017/460 relevant to the NetConnect Germany entry-exit system/market area. The term "entry-exit system" corresponds to the term "market area" in section 2 para 10 GasNZV.

174 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) No 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) No 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) No 2017/460 (operative provision 1)

175 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) No 2017/460.

176 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) No 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) No 2017/460). In principle, the transmission services revenue shall be recovered by capacity-based transmission tariffs (Article 4(3) first sentence of Regulation (EU) No 2017/460).

1. Description of the reference price methodology according to Article 26(1)(a) of Regulation (EU) No 2017/460

177 Article 26(1)(a) of Regulation (EU) No 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 contrast with determination BK9-17/609 dated 19 July 2017, 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) No 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) No 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) No 2017/460

178 According to Article 26(1)(a)(i)(1) and (2) of Regulation (EU) No 2017/460, a description is required of the indicative information set out in Article 30(1)(a) of Regulation (EU) No 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) No 2017/460).

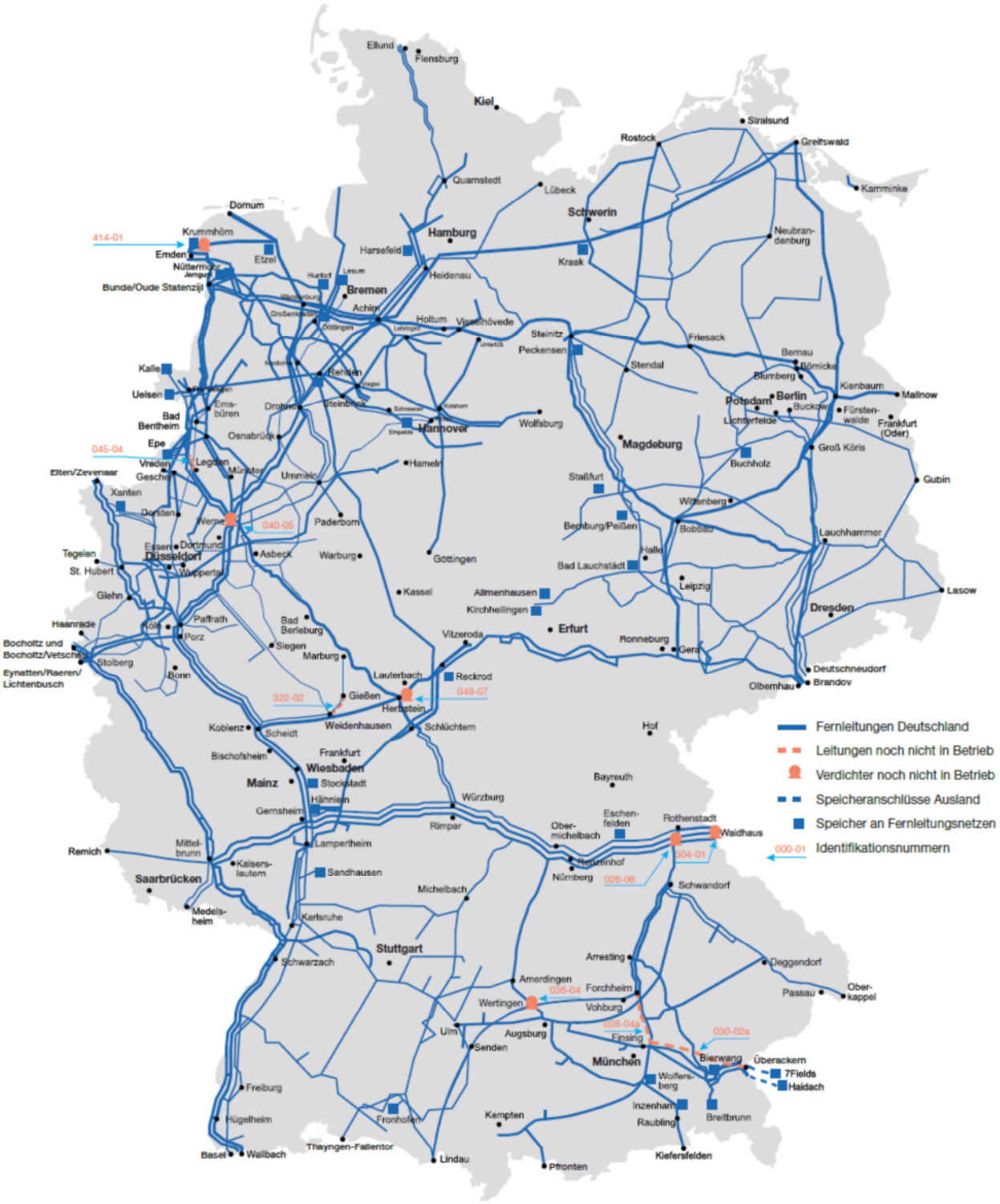
179 In order to fulfil this requirement the Bundesnetzagentur conducted a survey on the average contracted non-adjusted capacity forecasted for the calendar year 2020 at all entry and exit points. The total of these capacities for the NetConnect Germany market area is shown in Annex 1. According to Article 26(1)(a)(i)(1) of Regulation (EU) No 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) No 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) No 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) No 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) No 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. Taking into account the actual booking behaviour of network users reflects real demand as closely as possible to the current point in time, whereas using technical capacity would mean using a rigid, invariable parameter which is the result of an investment decision made some time in the past and which would not reliably reflect current, potentially different system use in each individual case.

180 In addition to the relevant indicative information, according to Article 26(1)(a)(i)(2) of Regulation (EU) No 2017/460 the assumptions applied are also subject to consultation. Operative provision 7 of the determination of 19 July 2017 (BK9-17/609) obliged the transmission system operators to estimate the capacity forecasts for 2020, among other things. In accordance with this provision, the transmission system operators extrapolated the booked or ordered capacities for 2018 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. The Bundesnetzagentur has no indication that this capacity estimate is incorrect.

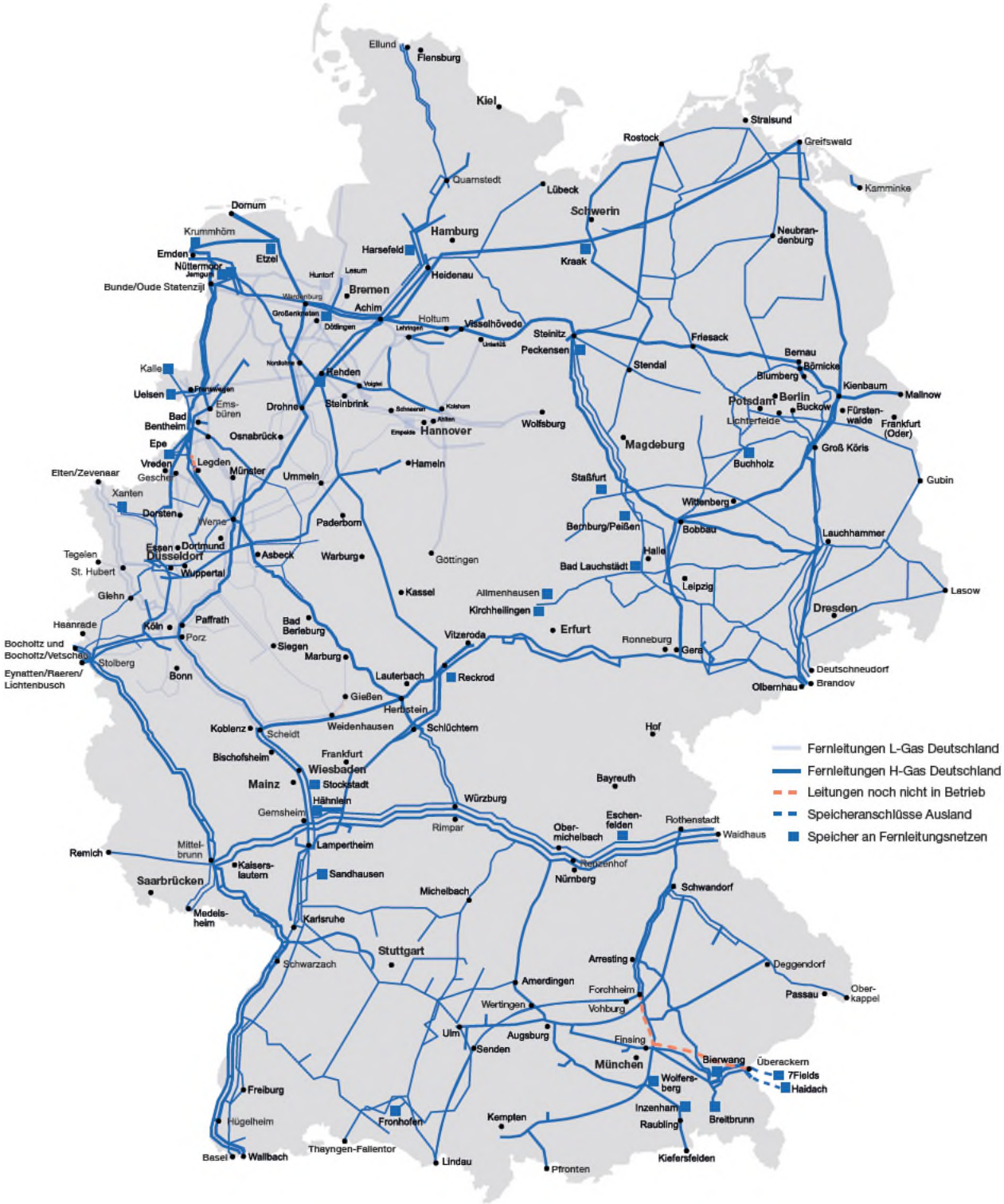
181 Insofar as Article 26(1)(a)(i) of Regulation (EU) No 2017/460 refers to Article 30(1)(a)(iv) of Regulation (EU) No 2017/460, it must be noted that a structural representation of the transmission network with an appropriate level of detail is not a parameter used in the reference price methodology 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) No 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 draft 2018–2028 Gas Network Development Plan, which present an overview of the entire German transmission system showing both gas qualities and both market areas:

182 *Start network for modelling the 2018–2028 Gas Network Development Plan as of 31 December 2017, source: transmission system operators, draft 2018–2028 Gas Network Development Plan of 29 March 2018, page 60.*

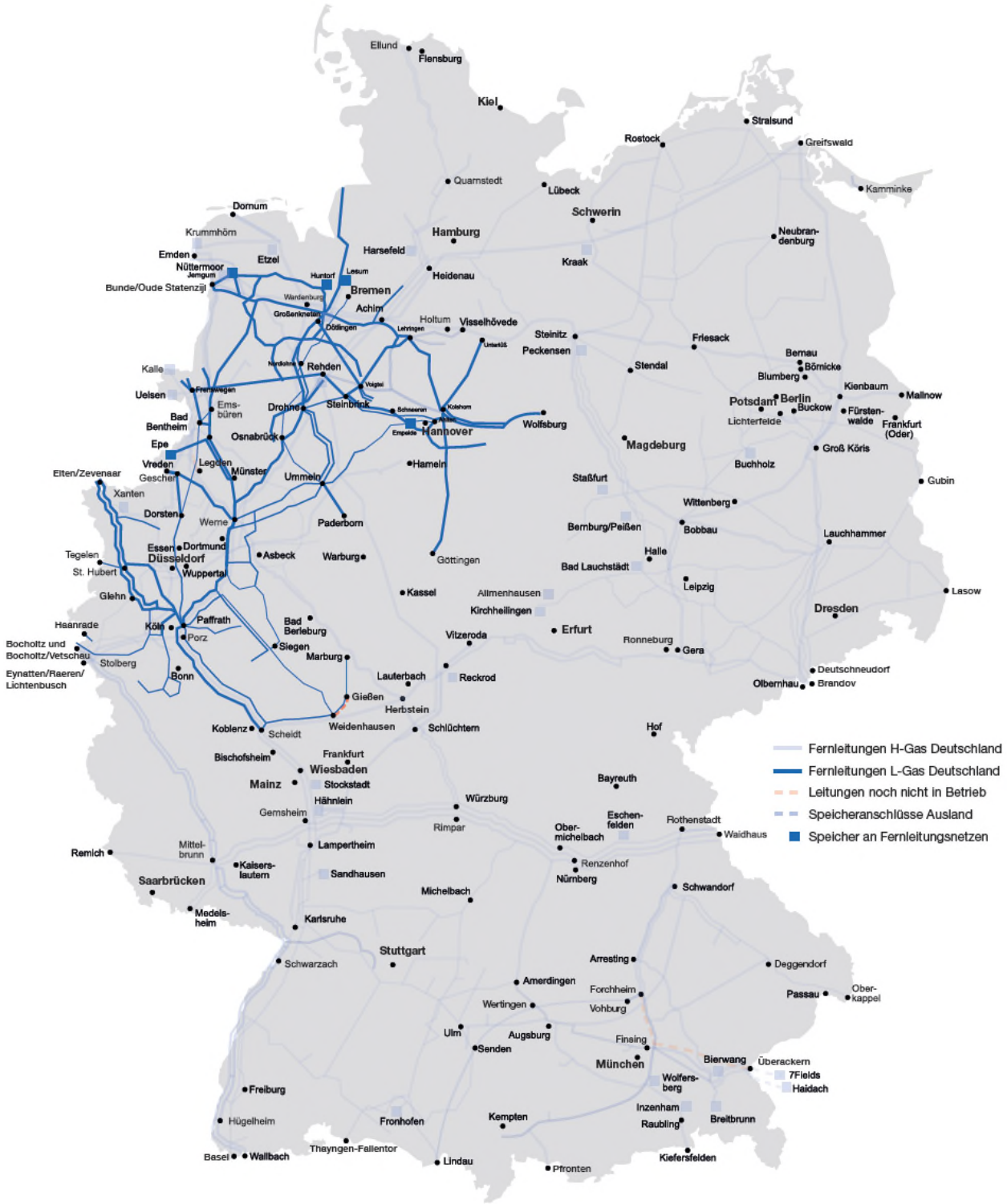


183 Complementing the above, the figures below present an overview of the corresponding H-gas and L-gas structures. This is important insofar as the reference price methodology to be determined here is to be applied to cross-quality market areas. The cross-quality nature of the market areas is relevant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

184 *H-gas transport network as of 31 December 2017, source: transmission system operators, draft 2018–2028 Gas Network Development Plan of 29 March 2018, page 55.*

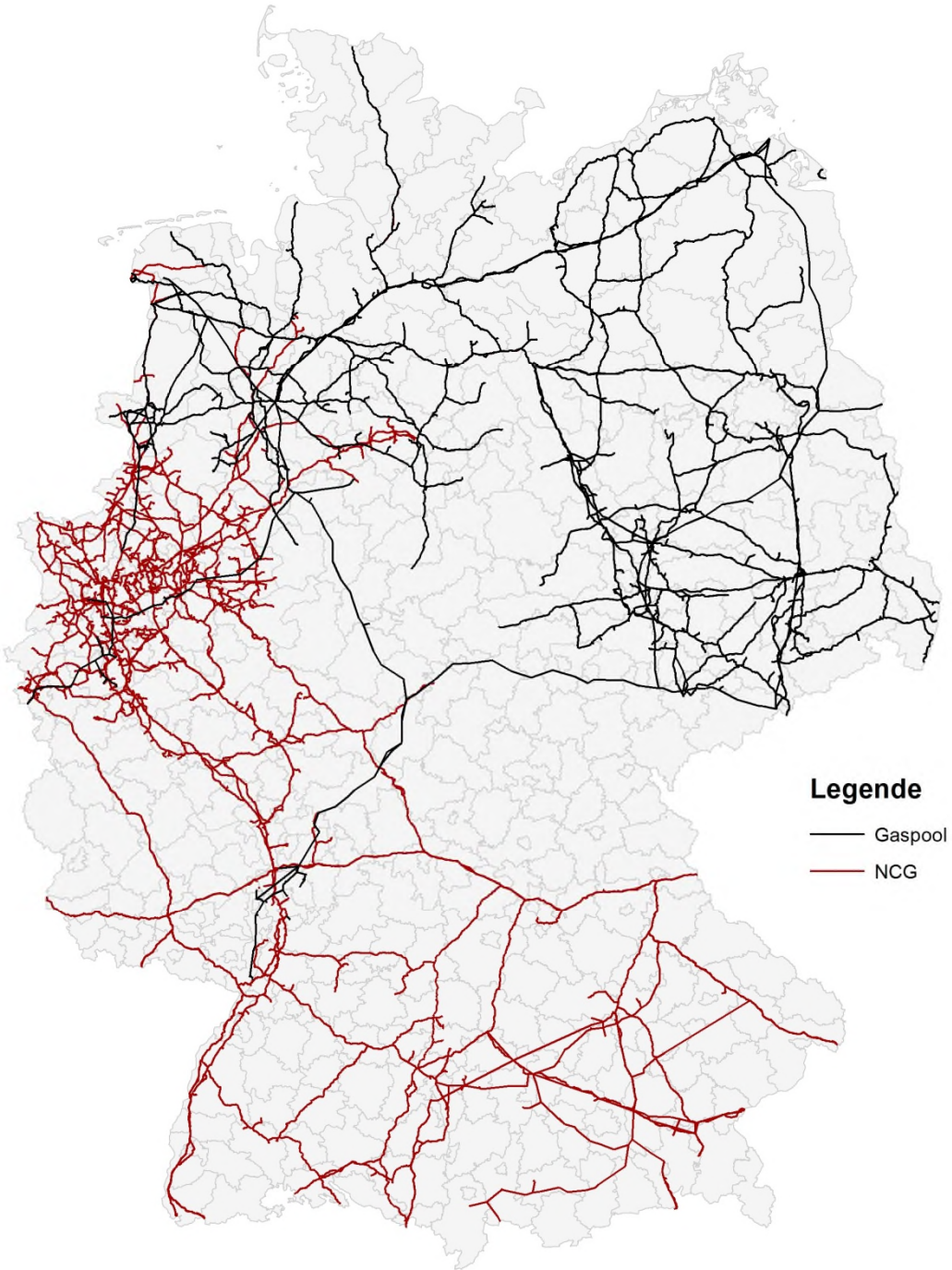


185 *L-gas transport network as of 31 December 2017, source: transmission system operators, draft 2018–2028 Gas Network Development Plan of 29 March 2018, page 56.*



186 In addition to the above, the Bundesnetzagentur also has extensive data on the structure of the transmission system, visualised below by way of example. The structures of the NetConnect Germany and GASPOOL market areas are each shown separately.

187 *Depiction of transmission system structure shown separately for each market area (source: Data collection for efficiency benchmarking of transmission system operators for the third regulatory period, as of 31 December 2015)*



3. Indicative reference prices according to Article 26(1)(a)(iii) of Regulation (EU) No 2017/460

188 According to Article 26(1)(a)(iii) of Regulation (EU) No 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) No 2017/460 is shown in Annex 1 for the NetConnect Germany market area 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) No 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. This price is different from the reference price calculated by the transmission system operators, for example because of differences in the assumed level of discounts at storage facilities referred to in Article 9(1) of Regulation (EU) No 2017/460.

189 Mergers of interconnection points in accordance with Article 19(9) of Regulation (EU) No 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) No 2017/460

190 Article 26(1)(a)(iv) of Regulation (EU) No 2017/460 stipulates that the results and components of the cost allocation assessments set out in Article 5 of Regulation (EU) No 2017/460 and the details of these components are subject to consultation.

191 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) No 2017/460). Intra-system network use, as defined in Article 3 second sentence para 8 of Regulation (EU) No 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) No 2017/460, means transporting gas within an entry-exit system to customers connected to another entry-exit system.

192 According to Article 5(1) of Regulation (EU) No 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) No 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) No 2017/460 based on the forecasted contracted capacity.

193 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.

194 The following types of entry point are specified:

NKP (GÜP) – cross-border interconnection point
NKP (MÜP) – market area interconnection point
NAP (Ez) – connection of domestic production facilities
NAP (Sp) – storage
NAP (Bio) – biogas input and power-to-gas
NAP (LNG) – liquid natural gas

195 The following types of exit points are specified:

NKP (GÜP) – cross-border interconnection point
NKP (MÜP) – market area interconnection point
NKP (iB) – internal booking of a downstream distribution system operator
NAP (Sp) – storage
NAP (Lv) – end user connection

196 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) No 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.

197 The derivation of the forecasted capacities has already been explained in the context of Article 26(1)(a)(i) of Regulation (EU) No 2017/460. The key factor for the cost allocation

assessment according to Article 5 of Regulation (EU) No 2017/460 is the split of forecasted revenue between intra-system and cross-system network use.

198 Annex 1 of the determination of 19 July 2017 (BK9-17/609) stipulates that the transmission system operators must specify 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) No 2017/460. As the adjustments relevant for the year 2020 had not yet been set, it was possible to use the adjustment factors relevant for the year 2018. Given the setting of a multiplier of 2.0 for within-day capacity products by the MARGIT (BK9-18/612) and BEATE 2.0 (BK9-18/608) determinations, only minor changes arise in the allocation of revenues which make a reassessment of cost allocations as referred to in Article 5 of Regulation (EU) No 2017/460 unnecessary. The Ruling Chamber dispensed with a supplementary cost allocation assessment in accordance with Article 5 of Regulation (EU) No 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) No 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.

199 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) No 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) No 2017/460). According to these definitions, transporting gas between the NetConnect Germany and GASPOOL market areas is classified as cross-system network use. On the exit side, therefore, the revenue at cross-border and market area interconnection points is allocable to cross-system network use. 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) No 2017/460 generally shows for entry points.

200 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 20% allocated to cross-system network use in the NetConnect Germany market area and around 27% in the GASPOOL market area)
- equally attributed, 50% to intra-system and 50% to cross-system network use
- attributed only to cross-system network use.

201 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) No 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. The transmission system operators used this method of revenue splitting in most cases (on the assumption that exit points at storage facilities are allocated to intra-system network use, see above). However, in a few cases they made use of the possibility provided for in Annex 1 of the determination of 19 July 2017 (BK9-17/609) which allows for a more precise allocation of revenue, for example through restrictions to products with allocation restrictions. In the GASPOOL market area, the splitting was also based on the adjusted price-weighted capacities, taking account of the original storage facility discount of only 50%. This information provided by the transmission system operators was also taken into account as a cost allocation assessment variant.

202 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) No 2017/460. An index of 15.33% 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 20% 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) No 2017/460.

5. Assessment of the reference price methodology according to Article 26(1)(a)(v) of Regulation (EU) No 2017/460

203 According to Article 26(1)(a)(v) of Regulation (EU) No 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) No 2017/460. In addition, in accordance with Article 26(1)(a)(vi) of Regulation (EU) No 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) No 2017/460, a comparison against the latter must be carried out together with a comparison of the respective reference prices.

204 Article 7 of Regulation (EU) No 2017/460 stipulates that the reference price methodology shall comply with Article 13 of Regulation (EC) No 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) No 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.

205 Article 13(1) of Regulation (EC) No 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)

No 715/2009 stipulates that tariffs for network access must neither restrict market liquidity nor distort trade across borders of different transmission systems.

206 Some of the requirements set out in Article 7 second sentence of Regulation (EU) No 2017/460 correspond to those set out in Article 13 of Regulation (EC) No 715/2009 or are only marginally different, while other requirements are mentioned exclusively in Article 7 second sentence of Regulation (EU) No 2017/460 or exclusively in Article 13 of Regulation (EC) No 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) No 2017/460 prescribes that the proposed methodology must be compared against the capacity weighted reference price methodology detailed in Article 8 of Regulation (EU) No 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) No 2017/460 and Article 13 of Regulation (EC) No 715/2009. In addition, the postage stamp per type of network point reference price methodology proposed by some network operators during the workshop held on 7 November 2018 was assessed for comparison using the above criteria.

207 However, comments were presented claiming to the effect that this methodology had been introduced too late into the consultation process and in incomplete form. It is correct that the minimum consultation period of two months provided for under Article 26(2) first sentence of Regulation (EU) No 2017/460 was available for this reference price methodology. This could easily have been avoided if the proposal had been put forward during pre-consultation. The purpose of this pre-consultation was in particular to enable market participants to introduce into the proceedings, at an early stage, all aspects which in their view were significant for the decision under Article 26 of Regulation (EU) No 2017/460.

208 It was also not possible to make up for the shorter consultation period by re-opening the consultation – regardless of the fact that the Bundesnetzagentur has discretionary powers over the proceedings anyway. Contrary to the opinion of one respondent, pursuant to Regulation (EU) No 2017/460 it is obligatory to publish definitive tariffs not by 15 October 2019 but earlier, by the beginning of June 2019 for the 2019/2020 gas year (see Articles 29 and 32 of Regulation (EU) No 2017/460). The Ruling Chamber is of the opinion that it is necessary to arrive at the decisions referred to in Articles 10, 26, 27 and 28 of Regulation (EU) No 2017/460 in good time before June 2019. This is the only way to ensure that transmission system operators have an adequate length of time for the joint determination of tariffs, which requires the transmission system operators not only to consult but also to enter into contracts with each other. Re-opening the consultation would have slowed down the proceedings to the extent that the earliest possible date for a decision to be made would have been the end of May/early June 2019 (taking 7 November 2018 as the starting point, one month would have to be allowed for data collection, one month for preparation of a new draft version, two months for consultation, two months

waiting for comments from ACER and a further month for the final decision making process). This would have meant that there would have been a delay in the decision being made.

209 Some market participants criticised not only the consultation period for being too short but also 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.

210 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. This having been said, 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.

211 Specifically:

a) Article 7 second sentence (a) of Regulation (EU) No 2017/460

212 According to Article 7 second sentence (a) of Regulation (EU) No 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) No 715/2009 for transparency of tariffs or of the methodologies used to calculate them.

213 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) No 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.

214 Compared to the above, the capacity weighted reference price methodology detailed in Article 8 of Regulation (EU) No 2017/460 does not meet the requirements set out in Article 7 second sentence (a) of Regulation (EU) No 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) No 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) No 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) No 2017/460) for the purpose of simplifying the calculation of the reference price methodology in accordance with Article 8 of Regulation (EU) No 2017/460 facilitates the calculation, in effect the results obtained are to a degree only seemingly accurate.

215 Furthermore, the capacity weighted reference price methodology described in Article 8 of Regulation (EU) No 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.

216 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) No 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.

217 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.

218 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) No 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 are mentioned in the entry for the workshop of 7 November 2018. 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) No 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) No 2017/460. In any case, these necessary intermediate steps increase the complexity of the methodology.

219 The uniform postage stamp reference price methodology thus meets the requirements set out in Article 7 second sentence (a) of Regulation (EU) No 2017/460 because it enables network users to reproduce the calculation of reference prices and their accurate forecast. The capacity weighted reference price methodology set out in Article 8 of Regulation (EU) No 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) No 2017/460

220 Article 7 second sentence (b) of Regulation (EU) No 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) No 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).

221 The qualifying bracketed adjunct to the actual costs in Article 13 of Regulation (EC) No 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 Ruling Chamber is of the opinion that the reference price methodology could be determined independently of actual costs, as was suggested in some comments. On the contrary, the degree of cost-reflectivity is a key element in ensuring that the reference price methodology is appropriate. Following the final consultation and after receiving the comments from ACER on 15 February 2019, the Ruling Camber broadened its deliberations on cost-reflectivity, in particular with regard to the complexity of transmission systems.

(1) Complexity of the transmission system

222 The postage stamp reference price methodology meets this requirement against the background of the complexity of the NetConnect Germany market area. The NetConnect Germany market area is a highly complex system consisting of 6 transmission system operators who cooperate in all matters. The transmission system operators operate a transmission network which is more than 21,000 km long with 149 physical entry points and 77 bookable entry points as well as 2,553 physical exit points and 873 bookable or orderable exit 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 (6,418) and mesh points (1,152). The data on which this information is based is the transmission system operator efficiency comparison for the third regulatory period.

223 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) No 2017/460.

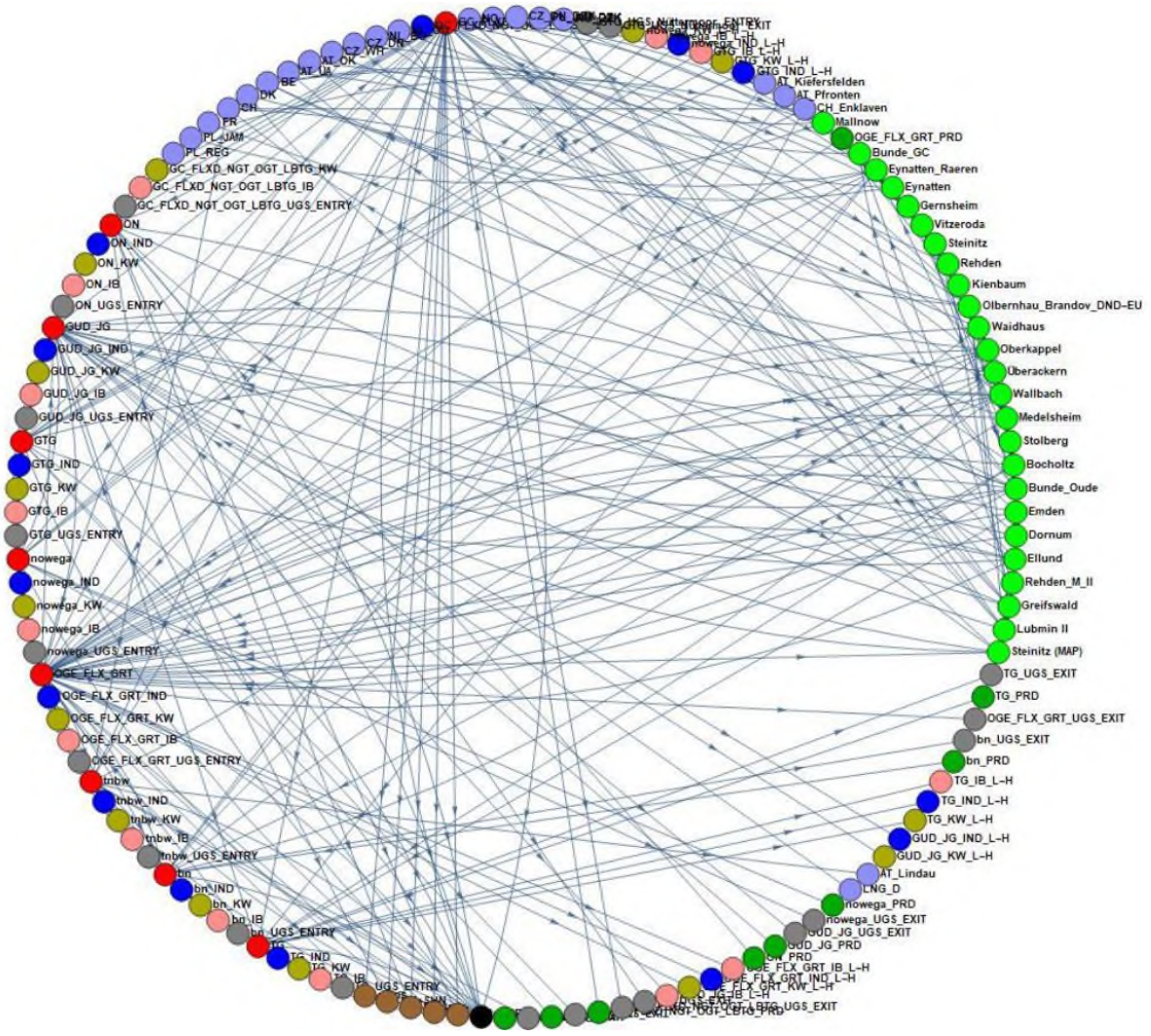
224 The Ruling Chamber is firmly of the opinion that, even compared to other European countries, the NetConnect Germany and GASPOOL market areas are extremely complex transmission systems. An indication of this complexity, apart from the above-mentioned metrics, is the extensive flexibility of these systems. The networks are able to transport gas on a firm basis from every neighbouring country or adjacent market area 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 areas are an important location for interim gas storage. These fundamental considerations in themselves demonstrate that the German market areas are highly meshed and flexibly designed.

225 The number of possible combinations of entry and exit points can also be used 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. A future merger of these two market areas, planned for 1 October 2021, will increase the number of possible combinations to 948,780.[1] 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.[2]

226 The underlying node-edge model is illustrated by the transmission system operators' graphical representation shown below.[3] 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.

[1] 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, slide 26, date of download: 13 February 2019.
[2] Ibid.
[3] Ibid.



227 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 obstacles. It is necessary to describe these proceedings in order to understand the deliberations of the Ruling Chamber, leading ultimately to uniform tarification:

228 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.

229 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.

230 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.

231 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.

232 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.

233 Subsequently, the Ruling Chamber examined the so-called "forward and reverse cost 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.

234 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.

235 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.

236 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.

237 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.

238 For this reason, the Ruling Chamber refrained from using the intended "forward and reverse cost 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) No 2017/460, such a mechanism would be mandatory as of 1 January 2020 in the event of any reference price methodology being applied separately.

239 This timeline demonstrates two distinct issues: firstly, in the highly complex NetConnect Germany and Gaspool market areas 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.

240 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 claim that separate tarification, for instance in 2019, constitutes an unrestrictedly cost-reflective approach.

241 The shortcomings of this assessment against the background of the previous tarification methodology are set out below, preceded by additional details of the complexity of the market areas.

242 The Ruling Chamber is well aware of the complexity of the market areas, 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.

243 As mentioned above, the numbers for these parameters (aggregated according to market area in light of the reference price methodology to be jointly applied) are high (6,418 branches and 1,152 mesh points in the NetConnect Germany market area and 1,197 branches and 146 mesh points in the GASPOOL market area).

244 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.

245 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 NetConnect Germany and GASPOOL market areas are 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 can be mastered with the aid of complex market areas.

246 These deliberations are further intensified by the forthcoming market area merger expected to take place 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. As this determination will be valid for a short period, expected to be less than two years, a simplified tariff methodology is appropriate and can later be transferred to the joint market area.

(2) Share of conditional firm capacity products

247 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 5 lists the capacities booked in 2019, categorised according to market areas and individual types of network points. The list includes freely allocable capacity (FZK), cumulatively all conditional firm capacity products (capacity products with conditional firmness and allocability (bFZK), products with firm, dynamically allocable capacity (DZK) and firm capacity products with restricted allocability (BZK)) 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. The data are based on the transmission system operators' forecasts for tarification for 2019.

248 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, in the NetConnect Germany market area, around 50% of bookings at interconnection points on the entry side and around 40% 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 (5%) of bookings by end users. The data also show that the majority of bookings (around 80 to 90%) at entry and exit points to and from storage facilities in the NetConnect Germany market area are made using these products. However, in large part these bookings at end users and storage facilities are now reflected by the benchmarking according to operative provisions 3.a)) and 3.b)(5)) and are therefore no longer included within the scope of the reference price methodology.

249 Likewise, in the GASPOOL market area a significant proportion of bookings at interconnection points is made using conditional firm capacity products (around 50% at entry points and around 35% at exit points), while such products do not feature at internal order points or points to final consumers. At entry and exit points to and from storage facilities in the GASPOOL market area, the majority of bookings also comprise unconditional firm capacities.

250 To summarise: at interconnection points a significant proportion but not the majority of bookings are made using conditional firm capacity products. This is not the case or only rarely the case at domestic exit points, while the situation at storage points in the two market areas is inconsistent.

251 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 NetConnect Germany and GASPOOL market areas. Viewing the situation as a whole, this is evident from the fact that the great majority of bookings at entry and exit points are made using firm, freely allocable capacity products, namely around 75% in the NetConnect Germany market area and around 79% in the Gaspool market area (again measured as a proportion of all capacity bookings not including interruptible capacities). The overall picture shows that bookings of conditional firm capacity products are in any event not the norm. The market areas are 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)).

252 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.

253 Despite receiving repeated comments on this matter, 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 corresponding 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 areas:

254 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 operator Gasunie Deutschland Transport Services GmbH.

255 Another example is Fluxys TENP GmbH, where roughly 56% of bookings are conditional firm capacity products, a proportion which shows that this pipeline, too, is in principle 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 to be built 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.

256 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 70%), this

also shows that at the same time a not insignificant proportion of all capacities in the market area are freely allocable.

257 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 areas. It is not possible to draw any conclusions from this that the market areas are assessed as having a low degree of complexity.

258 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 at €2.79 per kWh/h/a.

259 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 Köris, 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.

260 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 areas. Thus, the majority of products have, at the least, interruptible access to the virtual trading point. In cases where BZK products do not have such access, however, in future there should always be interruptible access to the virtual trading point according to the KASPAR proceedings (BK7-18-052), currently the subject of consultation. In conjunction with the relatively low probability of interruptions in the market areas (see Annex I of the simultaneously issued determination BK9-18/612 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 in principle integrated into the market area.

261 Inasmuch as the firmness depends on specific 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.

262 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.

(3) Cost and tariff structures in 2019

263 The Ruling Chamber is of the opinion that the cost structure of individual transmission system operators cannot be invoked categorically against these deliberations on the complexity of the market areas. It is conceivable that relatively large-diameter pipelines generally enable unit costs per unit of capacity to be lower. In principle, therefore, a hypothetical pure transit is associated with lower unit costs than distribution across a wide area. However, as already explained it is doubtful that whether there are pipelines in the German market areas that can be categorised as for transit only, since all pipelines are integrated into the market areas, the purpose of which is to enable freely allocable capacities to be offered. The very term "transit pipeline" therefore contradicts the fundamental concept of a market area.

264 Nevertheless, the Ruling Chamber is responding to the suggestion from ACER to analyse the transmission system operators' cost structures in more detail. In the opinion of ACER, the 2019 tariffs – the year in which separate tarification is taking place without any compensation mechanism – can be used as a yardstick for approximate comparison of the specific costs associated with intra-system and cross-system network use (recital 44 in the comments from ACER date 13 February 2019).

265 Firstly, the fundamental objection to this argument is that there can be no cost-reflective cost allocation on the basis of separate tariff calculation in a market area with more than one transmission system operator. In legal terms, this is already clear from Article 10(3) second sentence of Regulation (EU) No 2017/460, which stipulates that a compensation mechanism must be established in an arrangement of this nature. Such a mechanism – which, as stated above, has not been in place up to now – would result in revenues being switched between the transmission system operators. It is therefore not possible to draw any fundamental conclusions on the costs associated with a particular gas service within a market area on this basis.

266 As an addendum to the consultation versions, the Ruling Chamber carried out a comparison of the actual tariffs in 2019 and the indicative tariffs for 2020. An overview is shown in Annex 6. It lists the input parameters for tarification in the form of forecasted, unadjusted capacity bookings per individual transmission system operator within both market areas, and the respective allowed transmission system revenue. One reference price per transmission system operator is shown for 2019. If an individual transmission system operator has not had a uniform reference price in 2019, an average price weighted on the basis of the capacity forecast is shown instead. The latter applies to the transmission system operators Thyssengas GmbH, ONTRAS Gastransport GmbH, bayernets GmbH and Fluxys Deutschland GmbH.

267 In this context it should be noted that some transmission system operators in the GASPOOL market area do not include reference prices in their price sheets or in their validation calculations because these network operators do not offer FZK (this applies to NEL Gastransport GmbH, Fluxys Deutschland GmbH, Lubmin-Brandov Gastransport GmbH and

OPAL Gastransport GmbH & Co. KG). This would therefore distort any comparison with the joint reference price for the year 2020. In order to reflect this situation appropriately, the Ruling Chamber increased the corresponding tariffs by 11.11% (rounded). This is equivalent to a deduction of 10% from the hypothetical reference price which is usually applied to corresponding products. There is a similar approach at the network operator OPAL Gastransport GmbH & Co. KG, which shows a hypothetical reference price in its price sheet for 2019 using these factors.

268 As discussed above, certain pipeline structures are associated with lower unit costs. However, as demonstrated in the following, various circumstances dictate that it is not possible to draw from this the simple conclusion that these lower unit costs would have to be reflected one-to-one in the tariffs. In this connection, the Ruling Chamber looked at transmission system operators who have strikingly low reference prices in a separate analysis in 2019:

269 The transmission system operator Open Grid Europe GmbH identifies capacities in the GASPOOL market area with a reference price of only €1.84 per kWh/h/a in 2019. These are capacities which were previously marketed by jordgas Transport GmbH and as a result of network transfers are now marketed by Open Grid Europe GmbH. However, the structure of the transmission system operated by former jordgas Transport GmbH is a perfect example of why it is not appropriate to look at this situation out of context. This network operator, for instance, had only one entry interconnection point (Dornum) and otherwise entry and exit points at the Etzel storage facility. This means that the gas volumes fed into this network necessarily have to be delivered elsewhere via other transmission system operators with different cost structures, but on which Open Grid Europe GmbH is reliant in the GASPOOL market area. Therefore, what appears to be a low reference price, at €1.84 per kWh/h/a, cannot be seen in isolation. In fact, an additional compensation mechanism would need to be discussed, which would result in an increase in the tariff. The precise extent of what this increase would need to be is beyond the scope of this decision.

270 In the GASPOOL market area, the transmission system operator NEL Gastransport GmbH identifies capacities with a hypothetical reference price of only €2.24 per kWh/h/a in 2019. However, this network operator markets entry capacities at the Greifswald interconnection point almost exclusively in the form of DZK, which can be combined with points in the networks operated by GASCADE Gastransport GmbH and Gasunie Deutschland Transport Services GmbH (see above). Looking solely at the costs incurred by NEL Gastransport GmbH in isolation is therefore not appropriate. It is also striking that the transmission system operators NEL Gastransport GmbH and Fluxys Deutschland GmbH identify very different tariffs, even though both companies operate the NEL pipeline with a different share of the pipeline's total capacity. Fluxys Deutschland GmbH discloses a hypothetical reference price of €4.40 per kWh/h/a in 2019 and expects a reference price (calculated separately) of €3.78 for 2020, ie far higher than

a uniform postage stamp tariff of €3.27 per kWh/h/a. These examples clearly illustrate that looking at previous levels of tariffs cannot form the basis for reliable conclusions on ensuring cost-reflective tarification for an entire market area.

271 In the GASPOOL market area, the transmission system operator Lubmin-Brandov Gastransport GmbH identifies capacities with a hypothetical reference price of only €2.08 per kWh/h/a in 2019. However, this relates exclusively to entry capacities at the Lubmin interconnection point in the form of DZK. Usage is restricted in this case due to the possibility of transfer to the adjacent transmission systems in Groß Köris, operated by the market area-wide network operators GASCADE Gastransport GmbH and ONTRAS Gastransport GmbH. This is another example of why it is not appropriate to look at tariffs in isolation.

272 In the GASPOOL market area, the transmission system operator GTG Nord identifies capacities with a reference price of only €1.16 per kWh/h/a in 2019. This network operator uses the bookings and orders on the exit side almost exclusively for gas supply to downstream network operators. On the entry side, the capacities booked with the network operator are almost exclusively temperature-dependent bFZK and DZK with corresponding allocation restrictions. This example shows that pipelines do not necessarily have to be so-called transit pipelines in order to benefit from one or the other tariff system.

273 In the GASPOOL market area, the transmission system operator OPAL Gastransport GmbH identifies capacities with a hypothetical reference price of only €0.61 per kWh/h/a in 2019. On the entry side, the majority of the bookings consist of conditional firm capacities (DZK) at the Greifswald interconnection point. Only interruptible capacities are marketed on the exit side, at the Brandov interconnection point. No freely allocable capacities are marketed at all. The restrictions on the DZK capacities stipulate that corresponding exit points within the transmission system must be allocated to ONTRAS Gastransport GmbH. This is another example of a situation that cannot be looked at in isolation. Furthermore, special circumstances arise on the OPAL pipeline as a result of the capacities being divided into three segments: exempt from regulation, partially exempt from regulation and, in the case under examination here, fully subject to regulation. In the partially regulated segment the reference price is €2.79 per kWh/h/a, therefore significantly closer to a uniform reference price of €3.27 for 2020. Furthermore, the low reference price in the regulated segment is partly attributable to special factors resulting from the effects of the regulatory account.

274 In the NetConnect Germany market area, the transmission system operator GRTgaz Deutschland GmbH identifies capacities with a reference price of €2.23 per kWh/h/a in 2019. This is almost exclusively based on bookings at interconnection points to Czechia, France and Austria and to the GASPOOL market area. The bookings consist of firm, freely allocable capacities (approx. 28%), DZK (approx. 60%) and bFZK (approx. 12%; shares calculated without interruptible capacities in each case). Firstly it must be noted that almost a third of these

capacities are freely allocable and therefore integrated into the market area. As a rule, capacity products with conditional firmness and allocability (bFZK) are firm and freely allocable within the entire market area and have access to the virtual trading point. They are only categorised as interruptible capacities in cases where, as a result of the current nominations within the market area, the physical flow at the Rimpar and Gernsheim stations in a northerly direction into the Open Grid Europe GmbH system exceeds a certain limit set by Open Grid Europe GmbH and where the day ahead forecast for the daily mean temperature at the weather station in Essen was above zero degrees Celsius. These conditions show the complexity of interconnectivity between individual networks, even in the case of pipelines which appear to be for transit only, such as the MEGAL pipeline.

275 GRTgaz Deutschland GmbH's DZK products are only firm if transport between entry and exit capacities in the GRTgaz Deutschland GmbH network is balanced. It is possible to consider this to be a transit service within the NetConnect Germany market area. However, this assessment would be incomplete, since DZK products always also grant interruptible access to the virtual trading point. As the probability of these products being interrupted is generally very low, there is a notable economic value in this, which, given joint tarification, correctly no longer reflects just the costs of GRTgaz Deutschland GmbH. Also, this assessment must include the fact that all conditional firm capacity products are discounted compared to the reference price (see section B.III for the level of discount).

276 Another aspect that can be illustrated using the MEGAL pipeline as an example is the constellation of transmission companies. Numerous relatively large-diameter pipelines in the German market areas are marketed jointly by multiple transmission system operators. In addition to the MEGAL pipeline (GRTgaz Deutschland GmbH and Open Grid Europe GmbH), this also applies to the OPAL pipeline (OPAL Gastransport GmbH & Co. KG with Lubmin-Brandov Gastransport GmbH), the NEL pipeline (NEL Gastransport GmbH, Fluxys Deutschland GmbH and Gasunie Deutschland Transport Services GmbH), the TENP pipeline (Open Grid Europe GmbH and Fluxys TENP GmbH), the NETG pipeline (Open Grid Europe GmbH and Thyssengas GmbH), the DEUDAN pipeline (Open Grid Europe GmbH and Gasunie Deutschland Transport Services GmbH) and the NETRA pipeline (Gasunie Deutschland Transport Services GmbH and Open Grid Europe GmbH). There are also pipelines of which several transmission system operators own only a very small share each. The above, namely a situation where significant transmission system infrastructure is jointly operated by several transmission system operators, already shows that it is hardly appropriate to look at the costs in isolation in order to address the issue of the prices at which this infrastructure should be marketed in a joint market area. In addition, the respective transmission system operators are obliged to the best of their abilities to make the shares of capacity allocated to them in these jointly owned pipelines available to the other partners if it has not been possible to market them themselves. This can have the effect that a transmission system operator with seemingly low

costs on an interruptible basis is able to co-market the share of another transmission system operator's joint pipeline. This situation clearly demonstrates that looking at tariffs separately and allocating costs to individual network operators appears not to be appropriate. However, in future this problem will be mitigated due to the introduction of virtual interconnection points at which a uniform mixed tariff has to be applied.

277 Finally, with regard to GRTgaz Deutschland GmbH, the difference in the reference price in a comparison between 2019 and 2020 when calculated separately is another aspect which illustrates that only limited conclusions can be drawn on the cost-reflectivity of tariff systems on the basis of separate tarification in the past. Whereas GRTgaz Deutschland GmbH has a reference price of €2.23 per kWh/h/a for 2019, this is expected to increase on an indicative basis to €3.16 per kWh/h/a for 2020. This increase of approximately 42% is apparently the result of the assumed level of capacity bookings being revised significantly downward and a slight increase in the revenue cap for 2020. In 2018 the reference price was €2.89 per kWh/h/a. Such price fluctuations for a so-called transit pipeline clearly illustrate the unsuitability of drawing conclusions from this for a cost-reflective tariff methodology.

278 It is thus apparent that, even in the case of a transmission system operator such as GRTgaz Deutschland GmbH, the capacity and revenue situation over time within a market area of such complexity cannot be used to question the appropriateness of the uniform postage stamp reference price methodology.

279 From a technical standpoint it should also be noted that the MEGAL pipeline enables bidirectional flows. This is therefore not a pipeline system that exclusively supplies France by way of East-West flows.

280 However, apart from the transmission system operators discussed above, with low reference prices for 2019, there are other transmission system operators who only operate larger pipelines and, in relative terms, have strikingly high tariffs.

281 In the GASPOOL market area, the transmission system operator Fluxys Deutschland GmbH identifies capacities with a hypothetical reference price of €4.40 per kWh/h/a for 2019, which is significantly higher than the uniform postage stamp reference price for 2020, at €3.27 per kWh/h/a. Likewise for 2020, Fluxys Deutschland GmbH reported a reference price of €3.78 per kWh/h/a on an indicative basis calculated separately. Comparing this with the relatively cheaper tariffs of NEL Gastransport GmbH, which operates the NEL pipeline jointly with Fluxys Deutschland GmbH, clearly shows that separate tarification is not appropriate, especially for transmission companies within a joint market area. This comparison also shows that no conclusions as to the unit costs of various gas services can be drawn from tariffs set in the past.

282 Another example of a transmission system operator with high and widely fluctuating tariffs is Fluxys TENP GmbH which, together with Open Grid Europe GmbH, operates the TENP

pipeline, with its cross-border interconnection points Bocholtz (Netherlands), Eynatten (Belgium) and Wallbach (Switzerland). The reference price here in 2018 was €1.63 per kWh/h/a. However, due to corrosion damage, one of the two TENP lines had to be shut down in some places. As a result, only approximately 50% of capacity was available at the Wallbach interconnection point. Originally it was planned for the pipeline to be fully operational by 1 April 2019, but the date had to be put back until 1 October 2020. In the draft 2018–2028 Network Development Plan the transmission system operators suggested the closure would potentially be even longer.

283 Accordingly, the capacity forecast was lower, resulting in a reference price of €3.30 per kWh/h/a for 2019, more than double the previous tariff. At the time when the data was submitted, Fluxys TENP GmbH plainly expected the full capacities would be available on the TENP in 2020; it identifies an indicative reference price, calculated separately, of €1.68 per kWh/h/a. However, as the full capacity will not be available until 1 October 2020 at the earliest, it is not likely that such a reference price would be possible.

284 Developments such as these show that extreme distortions of tariffs can occur if tariffs are set for each transmission system operator, in particular on older, largely depreciated pipelines. The network operator Open Grid Europe GmbH, on the other hand, does not experience such price fluctuations because it uses the uniform postage stamp reference price methodology in its network area in 2019.

285 In any case, Open Grid Europe GmbH is the largest network operator within the NetConnect Germany market area, since the company accounts for approximately 50% of booked capacities and approximately 60% of revenues from transmission services. In addition, Open Grid Europe GmbH is a representative cross-section of the market area as a whole in terms of capacity bookings at different point types. Thus, some 43% of capacity bookings on the entry and exit side in the market area as a whole are made at interconnection points, while the proportion for Open Grid Europe GmbH is roughly 40%. The proportions of bookings at end users, storage facilities and downstream network operators are also comparable, each differing only by a few percentage points from the shares of bookings in the whole market area. In addition, Open Grid Europe GmbH – as explained – owns a significant share of the large transit pipelines in the NetConnect Germany market area. However, up to now, Open Grid Europe GmbH has itself been using a postage stamp tariff which is comparable to the indicative jointly calculated postage stamp tariff (€4.21 per kWh/h/a for 2020), at least with respect to the level of the tariff. Thus, Open Grid Europe GmbH identifies a reference price of €4.09 per kWh/h/a for 2019 and an indicative reference price of €4.50 per kWh/h/a for 2020. If, therefore, conclusions on cost-reflective joint tarification within the market area are to be drawn from the previous price values, this tends to suggest that a jointly applied uniform postage stamp is appropriate.

286 GASCADE Gastransport GmbH is the largest transmission system operator in the GASPOOL market area in terms of the share of booked capacities (approximately 46% in 2019, 41% in

2020) and also of transmission services revenue (30% in 2019, 33% in 2020). In this case too, in comparison with the GASPOOL market area this transmission system operator has comparable shares of point types among its total capacity bookings. For instance, in the GASPOOL market area approximately 40% of capacity bookings apply to interconnection points, while the equivalent share at GASCADE Gastransport GmbH is 46%. GASCADE Gastransport GmbH also uses a postage stamp reference price methodology for 2019 and calculates a reference price (€2.64 per kWh/h/a) that is ostensibly around 20% below the joint reference price calculated on an indicative basis for 2020. However, it must be borne in mind that the assumptions for 2020 in the GASPOOL market area were for capacities to be approximately 7% lower and transmission services revenue approximately 6% higher (see Annex 6). Once adjustments are made for these effects, therefore, GASCADE Gastransport GmbH also already has a comparable reference price for 2019.

287 From these circumstances therefore, too, it can really only be deduced that a postage stamp system is appropriate. Almost all transmission system operators are using a uniform postage stamp methodology for 2019 anyway, including those transmission system operators which introduced the proposal for a postage stamp tariff per type of network point into the proceedings.

288 No convincing arguments against the uniform postage stamp reference price methodology can therefore be derived from the 2019 cost and revenue structures either.

(4) Comparison of tariffs for 2019 and 2020

289 Following the suggestion put forward by ACER, the Ruling Chamber is including a broader comparison of the tariffs for the years 2019 and 2020 in its deliberations (cf Article 26(1)(d) in conjunction with Article 30(2)(a)(i) of Regulation (EU) No 2017/460). Annex 3 shows the point-specific reference prices for 2019, while Annex 7 contains an overview of the reference prices for each point type. The 2019 reference prices were weighted on the basis of the forecasted capacity bookings at the relevant points. As described above, the individual reference prices for 2019 were determined separately using different reference price methodologies (but usually postage stamp models) without a compensation mechanism.

290 The procedure for adjusting and weighting the 2019 prices was as explained in section (3). This was necessary in order to ensure that the average prices per point type for 2019 are comparable to the reference price for 2020.

291 Fundamental changes to the tariffs occur here irrespective of the reference price methodology. For instance, for 2020, the transmission system operators in the GASPOOL market area assumed a decrease in contracted capacities of approximately 7% compared to 2019 based on a jointly calculated uniform postage stamp reference price methodology. At the same time,

transmission services revenue was assumed to rise by approximately 6% compared to 2019 (see Annex 6). This alone tends to result in corresponding increases in tariffs.

292 Similarly, the transmission service operators in the NetConnect Germany market area assumed a decrease in contracted capacities of around 6% and an increase in transmission services revenue of around 2% (see Annex 6). This, too, tends to result in corresponding tariff increases. Another factor resulting in a general increase in reference prices is the increased discount at storage facilities for 2020.

293 It is apparent even from the shifts in capacities and revenues described above that comparing the tariffs for 2019 with those for 2020 is not a simple matter. In particular, differences in the assumed utilisation of transmission systems can lead to considerable changes in tariffs. For instance, GRTgaz Deutschland GmbH assumed a decrease in capacities of approximately 25% for 2020, regardless of whether a reference price methodology is applied jointly or separately. In the opinion of the Ruling Chamber, this example clearly shows that the resulting tariff fluctuation of 40% on an indicative basis on a so-called transit pipeline is a factor which tends to support the use of a uniform postage stamp reference price methodology.

294 Annex 7 then shows the development of reference prices from 2019 to 2020 per point type. In the NetConnect Germany market area there are increases in tariffs overall. The increases at interconnection points are larger (20% at entry points in the form of cross-border interconnection points, 30% at exit points in the form of cross-border interconnection points) than the increases for end users (2%) or the internal bookings (1%). The reference price at entry and exit points at storage facilities rises by 22% and 20% respectively.

295 In the GASPOOL market area, the increase at cross-border interconnection points is 23% for entry points and 13% for exit points. Tariffs at market area interconnection points on the exit side (which otherwise in terms of booking levels are of very little relevance) increase by 23%. In contrast, there is only a 1% increase in tariffs at exit points to end users. At internal order points to downstream network operators, tariffs decrease by 9%. The reference price at entry and exit points at storage facilities rises by 15% and 12% respectively.

296 On the one hand, these comparisons illustrate that using a joint uniform reference price methodology benefits domestic points at the expense of interconnection points, when compared with the past. On the other hand, however, as already described several times above, this is a comparison that does not take into account that the previous form of tarification does not provide for a compensation mechanism between the transmission system operators. Such a compensation mechanism would have to take into account that, as described above, in particular previously low-cost transmission system operators benefit from being integrated into the relevant market area without having to pay an appropriate share of total costs. This applies especially to the apparently low-cost operators mentioned above which market entry capacities only, and are necessarily dependent on other transmission system operators, and also to

transmission system operators which market shares of transmission companies without having to bear the corresponding costs.

297 The uniform postage stamp reference price methodology ensures that just such a contribution to the costs is actually made, albeit without allocating costs directly. However, as shown by the deliberations on the complexity of the transmission systems, partly in light of the meshed structures and mutual services rendered between the transmission system operators it would not be possible to carry out any such allocation appropriately due to the resultant predominant nature of overhead costs in the German transmission system. During the consultations on this determination, too, no workable or appropriate approach to the potential design of any such allocation was put forward. The proposal of a postage stamp tariff per type of network point will still be addressed.

298 The Ruling Chamber therefore adheres to its previous deliberations on the introduction of a uniform postage stamp as the reference price methodology.

(5) The uniform postage stamp reference price methodology

299 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) No 715/2009). According to recital 3 of Regulation (EU) No 2017/460, after the introduction of the concept of the entry-exit system by Regulation (EC) No 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. Under this framework, the transmission system operator decides the most efficient way of flowing gas through the system.

300 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) No 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.

301 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 German market areas. No concrete proposals for any such mechanism for cost allocation were put forward during the repeated consultations. 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.

302 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.

303 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) No 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) No 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.

304 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.

305 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) No 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.

306 Ultimately, the provisions in Article 8 of Regulation (EU) No 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.

307 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 the course of the proceedings the input privilege was extended to include 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.

308 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.

309 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) No 2017/460 is considerably more complex in terms of methodology, it does not achieve greater cost-reflectivity given the circumstances of the NetConnect Germany market area.

(6) The postage stamp per type of network point reference price methodology

310 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.

311 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 complex entry and exit systems with a large number of cooperating transmission system

operators, the transmission system operators also always provide services to each other to a certain degree.

312 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) No 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) No 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) No 2017/460 show that, particularly on the entry side, differentiation is only possible by making very sweeping assumptions.

313 In this regard, recital 3 of Regulation (EU) No 2017/460 makes it clear that, after the introduction of the concept of the entry-exit system by Regulation (EC) No 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) No 2017/460 and an appropriate discount on the reference price must be granted. Moreover, DZK products in any case allow interruptible access to the VTP, so as a general principle there cannot be assumed to be an ideal transit flow in this case.

314 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 and market area 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.

315 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.

316 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.

317 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.

318 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.

319 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. The fact that the transmission system operator Open Grid Europe GmbH in particular accounts for the majority of the NetConnect Germany market area and in terms of share of capacity in the individual point types is almost identical to the market area as a whole (see margin number 285) means that there would de facto be no consequences regarding tariff differentiation compared to the uniform postage stamp because of the largest network operator in the NetConnect Germany market area. This, too, suggests that the postage stamp per type of network point

reference price methodology does not provide for a logical allocation of costs to the individual point types.

320 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) No 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) No 2017/460 themselves. However, in the case of exit points that take the form of cross-border and market area interconnection points, for example, this is not readily apparent. In this regard, despite the Ruling Chamber drawing attention to it, no substantiated comments were received following the final consultation.

321 With regard to the impending merger of the market areas in accordance with section 21(1) second sentence of the Gas Network Access Ordinance (GasNZV) by no later than 1 April 2022, the Ruling Chamber is also aiming for uniform reference price methodologies for the NetConnect Germany and GASPOOL market areas. Although the proposed postage stamp per type of network point reference price methodology would represent a uniform methodology in conceptual terms, in effect different developments in reference prices arise when compared with the postage stamp reference price methodology. According to the calculations carried out subject to reservations by Ruling Chamber 9 for the workshop on 7 November 2018, while the developments arising between the market areas were not in opposite directions, they did display significant deviations. Whereas in the NetConnect Germany market area for example the reference price at the entry points would remain almost unchanged in comparison with the uniform postage stamp, in the GASPOOL market area there would be a deduction of more than 10%.

322 The different developments at the exit points in the form of cross-border and market area interconnection points also give rise to doubts as to whether the objectives pursued with the proposed postage stamp per type of network point reference price methodology can be achieved at all. The deduction at these points in the NetConnect Germany market area is thus more than 10%, while in the GASPOOL market area it is only a little over 2%. Against the background that the network operators submitting the proposal for both market areas uniformly argue that there will be significantly lower costs at these point types, it is not evident that the proposed methodology tallies with this assumption to a sufficient degree.

323 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.

(7) Other reference price methodologies

324 In addition to the uniform postage stamp, postage stamp per type of network point and capacity weighted distance reference price methodologies, 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.

325 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 hundreds of thousands of values for the NetConnect Germany and GASPOOL market areas, and following the merger of the market areas almost one million.

326 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) No 2017/460

327 According to Article 7 second sentence (c) of Regulation (EU) No 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) No 2017/460. This specifies the requirement set out in Article 13 of Regulation (EC) No 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.

328 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.

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

330 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.

331 The capacity weighted distance reference price methodology set out in Article 8 of Regulation (EU) No 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) No 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) No 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.

332 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 and market area 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) No 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. Finally, within the proposed postage stamp per type of network point reference price methodology it would be necessary to offer a more detailed justification of why the relative price differentiation between the NetConnect Germany and GASPOOL market areas would be so large, given identical technical and cost accounting assumptions.

333 Furthermore, according to Article 7 second sentence (c) of Regulation (EU) No 2017/460 the cost allocation assessment according to Article 5 of Regulation (EU) No 2017/460 must be taken into account when examining whether a reference price methodology is non-discriminatory and prevents undue cross-subsidisation. It is apparent here that according to the non-binding calculations carried out by the Ruling Chamber at least in the NetConnect Germany market area the obligation to provide justification pursuant to Article 5(6) of Regulation (EU) No 2017/460 is triggered. As discussed, the indicated cross-subsidisation to the detriment of intra-system network use cannot be clearly justified. On account of the outlined merger of the market areas, this consideration, even if in a milder form, is equally relevant to the GASPOOL entry and exit system. Despite the Ruling Chamber pointing this out, no substantiated comments on this aspect were received.

334 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) No 2017/460.

d) Article 7 second sentence (d) of Regulation (EU) No 2017/460

335 Article 7 second sentence (d) of Regulation (EU) No 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) No 715/2009.

336 Recital 6 of Regulation (EU) No 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.

337 However, within the NetConnect Germany entry-exit system it is not the case that significantly more gas is transported into other systems than for consumption into 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) No 2017/460 is at all relevant for the reference price methodology established for the NetConnect Germany entry-exit system.

338 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) No 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) No 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) No 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.

339 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.

340 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) No 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) No 2017/460. With regard to the regulatory account, Article 19(4) of Regulation (EU) No 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.

341 Compared to the postage stamp reference price methodology, the capacity weighted distance reference price methodology detailed in Article 8 of Regulation (EU) No 2017/460 does not meet the criterion set out in Article 7 second sentence (d) of Regulation (EU) No 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) No 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.

342 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)).

343 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) No 2017/460 than the capacity weighted distance reference price methodology set out in Article 8 of Regulation (EU) No 2017/460.

344 In the course of the 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.

345 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.

346 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 the 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.

347 The Ruling Chamber is convinced that a specific ex ante assessment of the volume risk and of the trend for gas flows in Europe 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.

348 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) No 2017/460 on the basis of the actual developments. Pursuant to Article 27(5) fourth sentence of Regulation (EU) No 2017/460, the decision on the reference price methodology and on the other points mentioned in Article 26(1) of Regulation (EU) No 2017/460 shall be taken at regular intervals. A new decision on the reference price methodology, among other things, will be required as soon as early 2020 in light of the imminent merger of the market areas. Against this background, the findings from the reports can be incorporated promptly in 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.

349 Finally, on account of the different price developments in the NetConnect Germany and GASPOOL market areas and 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 proposed reference price methodology. Furthermore, comparing the tariffs from 2019 and 2020 reveals that even with the separate pricing as practised to date (the cost-reflectivity of which is also put forward by transmission system operators who propose 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)(4)).

350 In the comments, 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.

351 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 the volume risk.

e) Article 7 second sentence (e) of Regulation (EU) No 2017/460

352 Article 7 second sentence (e) of Regulation (EU) No 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) No 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) No 715/2009 stipulates that tariffs for network access must neither restrict market liquidity nor distort trade across borders of different transmission systems.

353 The wording gives rise to different requirements for the reference price methodology for various aspects. Article 7 second sentence (e) of Regulation (EU) No 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) No 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) No 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) No 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 within member states (such as market area interconnection points between the NetConnect Germany and GASPOOL market areas) 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, regardless of whether such trade crosses the border of a member state or not. For reasons of non-discrimination, in the assessment detailed in Article 7 of Regulation (EU) No 2017/460 there should be no distinction as to whether trade between entry and exit systems relates to one or more member states; the reference price methodology should not differentiate in this regard.

354 Ultimately these issues are not crucial in terms of their actual significance because, relative to the likely capacity bookings, the proportion of forecasted booked capacities at market area borders within Germany amounts to only approximately 3% of total bookings.

355 Given these assumptions, the question therefore arises of whether the reference price methodology and the associated setting of tariffs at cross-border and market area 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) No 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) No 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) No 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) No 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) No 2017/460).

356 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) No 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) No 715/2009).

357 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.

358 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) No 2017/460 suggest no disadvantage arises for cross-system network use.

359 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 0.01% 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.

360 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) No 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) No 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) No 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) No 2017/460 less well than the postage stamp reference price methodology.

361 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.

362 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) No 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) No 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) No 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).

363 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. Besides, as far as the GASPOOL market area is concerned no clear price signal in this regard is apparent anyway with the proposed postage stamp per type of network point reference price methodology. Essentially, therefore, in this case the entry points are reduced in price to the detriment of domestic exit points; however, in effect all network users (with the exception of those who meet their needs only at the VTP) benefit from reduced-price entry points. 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) No 2017/460, because it does not distort cross-border trade through equal treatment.

364 Finally (even if not within the framework of the reference price methodology but in the context of the non-transmission service of the market area conversion charge) the burden on cross-border trade is reduced by the removal of the market area conversion charge at interconnection points. Even if this aspect does not derive from the reference price methodology, it cannot be completely disregarded when the methodology is determined because of the not inconsiderable financial repercussions. If a comparison is made with the 2019 tariffs, therefore, it would also be necessary to take into account that in 2019 a market area conversion charge of €0.32 per kWh/h/a still has to be added to these tariffs at interconnection points, whereas this charge at

an indicative rate of €0.65 per kWh/h/a no longer applies at interconnection points from 2020 onwards.

f) Interim result for Article 7 second sentence (a) to (e) of Regulation (EU) No 2017/460

365 Taking an overall view of the criteria listed in Article 7 second sentence (a) to (e) of Regulation (EU) No 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) No 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) No 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) No 715/2009

366 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) No 2017/460 derive from the reference in Article 7 first sentence of Regulation (EU) No 2017/460 to Article 13(1) of Regulation (EC) No 715/2009. Namely, Article 13(1) of Regulation (EC) No 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.

367 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) No 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) No 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

368 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.

369 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.

370 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. Insofar as comments refer to the status quo of separate tarification, this situation is already legally impermissible owing to the lack of a compensation mechanism (for further details see sections B.I.5.b)(3) and B.I.5.b)(4)). 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 proposed postage stamp tariff per type of network point do not meet the requirements to the same extent, as set out. Besides, in the present proceedings the postage stamp per type of network point reference price methodology suffers from being submitted late and in incomplete form to the consultation process, for which incidentally the Ruling Chamber assigned generous lead times and deadlines for the submission of comments.

371 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) No 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) No 2017/460.

372 Furthermore, in legal terms the provisions of Regulation (EU) No 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) No 2017/460

373 According to Article 26(1)(a)(vi) of Regulation (EU) No 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) No 2017/460, a comparison of the respective indicative reference prices must be carried out, Article 26(1)(a)(iii) of Regulation (EU) No 2017/460.

374 Annex 3 shows the point-specific reference prices calculated using the capacity weighted distance reference price methodology according to Article 8 of Regulation (EU) No 2017/460

(after rescaling in accordance with Article 6(4)(c) of Regulation (EU) No 2017/460). The reference prices resulting from the postage stamp reference price methodology are also shown in Annex 3. The prices are shown respectively before and after rescaling in accordance with Article 6(4)(c) of Regulation (EU) No 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) No 2017/460. The individual price differences can be taken from Annex 3, in particular in relation to the price differences at interconnection points.

375 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.

376 If the calculations of the capacity weighted distance reference price methodology were carried out by the transmission system operators with a discount at storage facilities of 50, adjusting the discount to 75% would merely lead to higher reference prices overall at interconnection points too.

377 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) No 2017/460.

378 In the NetConnect Germany market area, for example, on average €9.27 per pro 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 €8.42 per kWh/h/a according to a uniform postage stamp). An average of €6.63 pro kWh/h/a would have to be paid for the GASPOOL market area instead of €6.53 per kWh/h/a.

379 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 €4.21 per kWh/h/a, ie €8.42 per kWh/h/a. Using the capacity weighted distance approach, a total reference price of €9.29 per kWh/h/a is obtained given a 50/50 entry-exit split or approximately €8.40 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) No 2017/460

380 The requirements set out in Article 26(1)(b) in conjunction with Article 30(1)(b)(i), (iv) and (v) of Regulation (EU) No 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) No 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) No 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.

381 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 areas 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. 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) No 2017/460

382 According to Article 26(1)(d) in conjunction with Article 30(2) of Regulation (EU) No 2017/460, an indicative consultation is to be carried out on a simplified tariff model.

383 With regard to the provisions set out in Article 30(2)(a)(ii) and (2)(b) of Regulation (EU) No 2017/460, the Ruling Chamber has made a simplified tariff model available in Annex 4 which

can be used to estimate the development of transmission tariffs for the remainder of the time in the third regulatory period. This involves a simplified simulation of the merger of the two market areas set out in section 21(1) second sentence GasNZV that is to be implemented at the latest by 1 April 2022, in which the capacities at market area interconnection points are disregarded in the calculation of the reference prices. At present, the Ruling Chamber is unable to estimate how other capacities will develop as a result of the market merger and other circumstances. Reference prices for separate market areas are also shown, as indicative information. 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 2021 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 2020 and in so doing include the implementation of the provisions of Regulation (EU) No 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.

384 The reference prices valid for the tariff year 2019 are also shown in annex 3. These derive from individual calculations by the transmission system operators and are based on reference price methodologies that are not necessarily uniform.

II. Discounts at storage facilities according to Article 26(1)(a)(ii) of Regulation (EU) No 2017/460 (operative provision 2)

385 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) No 2017/460. Article 9(1) of Regulation (EU) No 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) No2017/460, 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.

386 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.

387 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, on switching market area 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) No 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.

388 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.

389 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, 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) No 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%.

390 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 discounted market area switching, a discounted border crossing or swaps within the storage facility followed by discounted market area switching or 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) No 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) No 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 market area switching or crossing a border at an interconnection point than the network user who uses the storage facility as a "discounted" interconnection point.

391 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) No 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 and within one and the same market area; 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 other market areas or 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.

392 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. Whereas in the past in the case of volumes put into storage with a discount this would have required a rebooking charge for the switch to another market area that may be necessary for this purpose, henceforth in this arrangement it is necessary to book discounted entry capacity in the original market area and capacity for the market area switch.

393 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 into the same market area, that user is free to do so. Compulsion to rebook a discounted capacity is not appropriate.

394 If it can be proven that quantities stored without a discount are fed back into the original 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) No 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 into the original 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.

395 In contrast with the situation according to the previously applicable national provisions under the determination dated 24 March 2015, file reference BK9-14/608, there is now no longer a possibility of offsetting any discrimination – potentially only ex post – resulting from discounted market area switching or border crossing by applying the rebooking fee, as it is referred to in the above determination. Regardless of the fact that, as far as the Ruling Chamber is aware, very little use was made of the possibility of rebooking under the regime of the determination dated 24 March 2015, file reference BK9-14/608, Article 9(1) of Regulation (EU) No 2017/460 includes no provisions for avoiding or offsetting any such discrimination by means of a tariff charged in addition to the transmission tariff. This can be seen from the history of the regulation: originally, Article 9(1) of Regulation (EU) No 2017/460 was supposed to include a passage stating that it should be possible to use discounting, taking into account a transfer charge, when setting transmission tariffs at entry points from and exit points to storage facilities which are connected to more than one transmission or distribution network. However, this passage was deleted and

replaced by the version currently in force, in which no mention of this type of charge is made any more; this makes it evident that there is no provision for such a mechanism in Regulation (EU) No 2017/460. Furthermore, the wording in recital 4 of the regulation according to which these mechanisms to avoid such discrimination should be included suggests that any kind of discrimination should be avoided from the outset and not offset ex post through the use of certain instruments.

396 It may happen that network and storage facility users have assigned gas volumes in storage facilities to a discount account on the assumption that these volumes can be used flexibly upon payment of a rebooking charge. However, given the discontinuation of the rebooking charge, for legal reasons this option will no longer exist in the expected form. In light of this change to the regime, the Ruling Chamber no longer considers it appropriate that these volumes can be assigned to an undiscounted account on a one-off basis as of 1 January 2020.

397 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) No 2017/460 governs the application of seasonal factors, this relates to interconnection points only. From the legal perspective, according to Regulation (EU) No 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 shall be 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. Conditional firm capacity products according to Article 4(2) of Regulation (EU) No 2017/460 and benchmarking according to Article 6(4)(a) of Regulation (EU) No 2017/460 (operative provision 3)

398 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) No 2017/460 in conjunction with Article 13 of Regulation (EC) No 715/2009.

a) Conditional firm capacity products according to Article 4(2) of Regulation (EU) No 2017/460

399 According to Article 4(2) of Regulation (EU) No 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) No 2017/460 contains no further provisions. However, benchmarks for the determination of discounting may be taken from Article 7 of Regulation (EU) No 2017/460 in conjunction with Article 13(1) of Regulation (EC) No 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.

400 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. Examples of products to be considered, therefore, are capacity products with conditional firmness and 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.

401 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.

402 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) No 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) No 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.

403 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) No 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.

404 The provision specified in operative provision 3 does not contradict the requirements set by Article 7 of Regulation (EU) No 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) No 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) No 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) No 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) No 2017/460 for objectively even lower quality interruptible standard capacity products. Non-discrimination within the meaning of Article 7(c) of Regulation (EU) No 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.

405 As the discontinuation of capacity products which do not allow any access to the virtual trading point is imminent anyway, full orientation of the tariffs for conditional capacity products with the reference price is appropriate without exception.

406 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) No 2017/460 (BK9-18/612). 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) No 2017/460.

b) Benchmarking in accordance with Article 6(4)(a) of Regulation (EU) No 2017/460

407 In accordance with Article 6(4)(a) of Regulation (EU) No 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.

408 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.

409 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 NetConnect Germany market area they do not have unrestricted access to the virtual trading point. The previous tariffing provided for heavily discounted tariffs for so-called short-distance products/BZK with bayernets GmbH, which merely enabled access to the Austrian market area.

410 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.

411 Both astora GmbH & Co. KG and GSA LLC market the Haidach storage facility, which is located on Austrian territory and is connected to the NetConnect Germany 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.

412 The previous form of tarification 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).

413 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 NetConnect Germany 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) No 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 NetConnect Germany 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.

414 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.

415 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.

416 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).

417 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.

418 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.

419 Compared with the version that has been the subject of consultation, the design of the tarification for the corresponding entry capacities at the Überackern 2 and underground storage facility Haidach points was harmonised. The tariff deriving from operative provision 3(b) is always to be used for the relevant restricted products there. 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.

420 The tariffs determined on the basis of this imputed duration of use are not subject to any further conditions. However, if evidence is provided to the Bundesnetzagentur that a longer imputed duration of use is appropriate, further reduced tariffs can be determined accordingly. In order to eliminate the risk that corresponding bookings are not made and bayernets GmbH does not receive the assumed amount of coverage, in this case the respective petitioner or petitioners must however commit to meeting the difference between the actual revenues and the estimated

total annual costs for the entire period of the assumed duration of use. If there is a shortfall over the assumed imputed term of more than four years, the Bundesnetzagentur will always view this as recoverable revenue within the context of the examination of the regulatory account in accordance with section 5 of the Incentive Regulation Ordinance (ARegV). The network operator should therefore take or demand all economically reasonable measures to ensure contract fulfilment on the part of the petitioner or petitioners by means of a corresponding security.

421 It is not possible to present a counter-argument to these provisions that for example storage facility operation is long term anyway and there is no need for any such corresponding obligation, because if storage facility operation is indeed long term and corresponding bookings are made, the obligation in effect does not constitute a burden to the petitioner.

422 The relevant agreement must be submitted to the Bundesnetzagentur. This enables the Bundesnetzagentur to examine whether an extended duration of use was appropriately applied in accordance with the provisions on benchmarking and the preconditions required for this were met.

423 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. If there is an initial assumption of an imputed duration of use of more than four years, the nature of the petitioner's associated payment obligation must be made accordingly dynamic. 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.

424 Tariffs reduced because of benchmarking are valid only with a combination of the entry and exit points identified in the operative part. Reduced access to the rest of the market area, including on an interruptible basis, must be ruled out because such access would not be possible via the hypothetical direct pipeline. 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.

425 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) No 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.

426 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 position economically as they would be if they were directly connected to another market area.

427 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) No 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.

428 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) No 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 specific demonstrable competitive situations were presented to the Bundesnetzagentur in the course of the proceedings.

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) No 2017/460 (operative provision 4)

429 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) No 2017/460.

430 Adjustments in accordance with Article 6(4)(c) of Regulation (EU) No 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) No 2017/460 at entry and exit points from/to storage facilities, multipliers according to Articles 13 and 14 of Regulation (EU) No 2017/460 or discounts according to Article 16 of Regulation (EU) No 2017/460 for weighting the capacities.

431 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) No 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.

432 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) No 2017/460.

V. Transmission services and non-transmission services according to Article 26(1)(c)(ii) of Regulation (EU) No 2017/460 (operative provision 5 to 8)

433 According to Article 4 of Regulation (EU) No 2017/460, tariffs must be charged for transmission services and for non-transmission services. According to Article 3 para 12 of Regulation (EU) No 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) No 312/2014 that are provided by the transmission system operators. According to Article 4(1) of Regulation (EU) No 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) No 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) No 2017/460: "non-transmission service"), and thus covers a broader scope of application. According to Article 4(4) of Regulation (EU) No 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)

434 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) No 2017/460.

435 Against the background of Regulation (EU) No 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) No 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) No 2017/460. However, conversion of the given costs into tariffs needs to be discussed and measured against the yardsticks set in Regulation (EU) No 2017/460.

436 According to Article 4(1) second sentence of Regulation (EU) No 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) No 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) No 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.

437 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 March 2018) which, in the opinion of the Ruling Chamber, largely meets the requirements of both this decision and of those set out in Article 4(4) of Regulation (EU) No 2017/460 and merely requires adaptation to the extent that interconnection points and storage points are to be excluded from the market area conversion charge and a comparison between forecasted and actual values is to be introduce for differences from incorrect capacity forecasts.

438 In accordance with Article 4(4) third sentence of Regulation (EU) No 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 their respective 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, in light of the responses to the consultation 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.

439 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 have hitherto been balanced using the regulatory account of the individual transmission system operators. Especially in light of its discussions with ACER, the Ruling Chamber has arrived at the assessment that this system is not cost-reflective because it leads to higher and lower revenues from the market area conversion being mixed with higher and lower revenues from transport services and thus indirectly all points in the system are affected by the charge. This is why it is now mandating a separate 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. The provisions for the distribution period and for the interest rate correspond to those previously set out in the Cooperation Agreement between the Operators of Gas Supply Networks in Germany for balancing cost differences. There is thus now also immediate balancing for volume differences too, and no longer distribution on an annuity basis over three years. The interest will continue to be calculated in accordance with section 5(2) of the Incentive Regulation Ordinance (ARegV). Thirdly, as before, 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.

440 The indicative tariff for the market area conversion charge and the proportion of the allowed total revenue in each market area are obtained from Annexes 1 and 4.

2. Biogas charge (operative provision 6)

441 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) No 2017/460.

442 In the case of biogas, too, the German regulator'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) No 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.

443 According to Article 4(1) second sentence of Regulation (EU) No 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) No 2017/460, the costs of biogas input 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) No 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 avoid. 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.

444 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 March 2018) which, in the opinion of the Ruling Chamber, meets both the requirements of this decision and those set out in Article 4(4) of Regulation (EU) No 2017/460 and merely requires adaptation to the extent that a comparison between forecasted and actual values is to be introduce for differences from incorrect capacity forecasts.

445 In accordance with Article 4(4) third sentence of Regulation (EU) No 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.

446 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 have hitherto been balanced using the regulatory account of the individual transmission system operators. Especially in light of its discussions with ACER following completion of the consultation proceedings, the Ruling Chamber has arrived at the assessment that this system is not cost-reflective because it leads to higher and lower revenues from biogas support being mixed with higher and lower revenues from transport services and thus indirectly all points in the system are affected by the charge. This is why it is now mandating a separate 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. The provisions for the distribution period and for the interest rate correspond to those previously set out in the Cooperation Agreement between the Operators of Gas Supply Networks in Germany for balancing cost differences. There is thus now also immediate balancing for volume differences too, and no longer distribution on an annuity basis over three years. The interest will continue to be calculated in accordance with section 5(2) of the Incentive Regulation Ordinance (ARegV). Thirdly, as before, 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.

447 The indicative tariff for the biogas charge and the proportion of the allowed total revenue in each market area are obtained from Annexes 1 and 4.

3. Meter operation including metering (operative provision 7)

448 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) No 2017/460.

449 According to Article 4(1) second sentence of Regulation (EU) No 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) No 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) No 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) No 2017/460 are thus not clearly met, according to Article 4(1) second sentence of Regulation (EU) No 2017/460 classification is incumbent upon the Ruling Chamber.

450 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.

451 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) No 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.

452 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) No 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) No 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) No 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) No 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.

453 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.

454 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 3.

455 In addition, the Ruling Chamber – in particular in consideration of relevant information from ACER – 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.

456 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.

457 The Ruling Chamber was no longer able to determine the indicative meter operation tariffs for the individual exit points to the downstream distribution networks in time before the conclusion of the proceedings because it only arrived at a recognition of the necessity of these tariffs, which were not yet provided for in the consultation version, at a very late stage in the proceedings and swift adoption of the decision was required not only because of the deadline pursuant to Article 27(4) first sentence of Regulation (EU) No 2017/460 but in order to give the transmission system operators sufficient time to calculate their tariffs for 2020. As these are exceptional circumstances, the impacts on the splitting of revenues, for example, to those from transmission and non-transmission services are negligible.

458 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)

459 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) No 2017/460.

460 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) No 2017/460. Within the meaning of Article 4(1) first sentence (a) of Regulation (EU) No 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) No 2017/460. This is a procedure that has only an economic, not a technical link to gas transport.

461 In accordance with Article 4(4) second sentence (a) of Regulation (EU) No 2017/460, it is cost-reflective and non-discriminatory that those network users who use the alternative nomination procedure 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) No 2017/460.

462 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 4. In the course of data collection for the consultation process, only two transmission system operators 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 two sets of submitted data to be representative and has set the average as an indicative tariff for all other network operators. Nevertheless, all transmission system operators stated unanimously that they do not expect tariffs from alternative nomination procedures in 2020. The percentage of the allowed revenue is therefore shown as 0% in all cases.

VI. Duration of applicability of the decision according to Article 27(5) of Regulation (EU) No 2017/460 (operative provision 9)

463 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) No 2017/460.

464 According to Article 27(5) first sentence of Regulation (EU) No 2017/460 the procedure, including the calculation and publication of tariffs, pursuant to Articles 26 and 27 of Regulation (EU) No 2017/460 shall be concluded no later than 31 May 2019. The tariffs applying during the ongoing tariff period ending on 31 May 2019 remain applicable until the end of this tariff period, ie the tariffs published with respect to the 2019 tariff period (see section 20(1) first sentence Energy Industry Act with regard to annual tariff setting) remain valid until 31 December 2019. As of 1 January 2020 the tariff provisions according to Regulation (EU) No 2017/460 and the decisions of the Bundesnetzagentur based on that regulation shall apply. Operative provision 9 ensures that the provisions in operative provisions 1 to 8 in accordance with Article 27(5) third sentence of Regulation (EU) No 2017/460 shall apply only from that date forward and that until that date tariff setting can proceed on the basis of hitherto applicable national provisions.

465 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; 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.

466 A further decision under Articles 26 and 27 of Regulation (EU) No 2017/460 must be taken at least every five years, Article 27(5) fourth sentence of Regulation (EU) No 2017/460. However,

the market area merger expected to take place on 1 October 2021 means that an earlier decision is required (for further details see section VII).

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)

467 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.

468 According to operative provision 10(a), there is an obligation to give notification of the information detailed in Article 26(1) of Regulation (EU) No 2017/460. If, prior to the repetition of this procedure in accordance with Article 27(5) fourth sentence of Regulation (EU) No 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 NetConnect Germany market area, and which could make it necessary to reassess the points listed in Article 26(1) Regulation (EU) No 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) No 2017/460 can be assessed.

469 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.

470 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) No 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) No 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) No 2017/460. Against this background, a binding reporting obligation as prescribed by operative provision 10(a) is necessary and appropriate.

471 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) No 2017/460 safeguards to shelter captive customers from risks related to large transit flows are not required as such, in the course of the consultations 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) No 2017/460. The reporting duty remains valid in accordance with the term of this determination until pursuant to Article 27(5) of Regulation (EU) No 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) No 2017/460.

472 Since according to Article 10(1) of Regulation (EU) No 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) No 2017/460 they must jointly fulfil the publication obligations pursuant to Articles 29, 30 of Regulation (EU) No 2017/460, the Ruling Chamber considers a joint reporting duty pursuant to operative provision 10 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.

473 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) No 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).

474 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.

475 An interim report to be published on 31 August 2019 is required to the extent that if it were to be submitted later the report could no longer be taken into account in the decision likely to be taken in early 2020 pursuant to Articles 26 and 27 of Regulation (EU) No 2017/460 regarding the joint market area that is expected to be formed as of October 2021.

476 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 monetary are thus put into a position to better understand the trend in the monetary implications of this ruling.

477 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.

478 In the subsequent decisions under Articles 26 and 27 of Regulation (EU) No 2017/460 it will be necessary to examine in each case whether continuation of the reporting duty is required.

VIII. Other information

479 Annexes 1 to 7 form part of this decision.

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

481 Since the determination is issued in relation to all transmission system operators operating in the NetConnect Germany 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, 29 March 2019

Chair	Vice Chair	Vice Chair
Helmut Fuß	Anne Zeidler	Dr. Ulrike Schimmel

Anlage 1

Annex 1

Sämtliche Angaben sind indikative, unverbindliche Prognosen für das Jahr 2020.
All information comprise indicative, non-binding forecasts for the year 2020.

Rechtsnorm der Verordnung (EU) 2017/460 ("NC TAR") Article of Regulation (EU) 2017/460 ("NC TAR")	Beschreibung Description	Wert Value	Einheit / Prozent Unit / Percentage
Art. 26 (1) a) i) NC TAR, Art. 30 (1) a) ii) NC TAR	Prognostizierte kontrahierte Kapazität Forecasted contracted capacity	332.727.214,21	kWh/h
Art. 26 (1) a) ii) NC TAR, Art. 9 (1) NC TAR	Speicherrabatte Discount for storage	75	%
Art. 26 (1) a) iii) NC TAR	Indikativer Referenzpreis vor Anpassung gemäß Art. 6 (4) c) NC TAR Indicative reference price before rescaling according to Art. 6 (4) c) NC TAR	3,92	€ pro kWh/h/a
	Anpassungsfaktor gemäß Art. 6 (4) c) NC TAR Rescaling factor according to Art. 6 (4) c) NC TAR	1,08	-
	Indikativer Referenzpreis nach Anpassung gemäß Art. 6 (4) c) NC TAR Indicative reference price after rescaling according to Art. 6 (4) c) NC TAR	4,21	€ pro kWh/h/a
Art. 26 (1) b) NC TAR, Art. 30 (1) b) i) NC TAR	Zulässige Erlöse der Fernleitungsnetzbetreiber des Marktgebietes Allowed revenues of the transmission system operators of the entry-exit system	1.560.535.869,23	€
Art. 26 (1) b) NC TAR, Art. 30 (1) b) iv) NC TAR	Davon Erlöse aus Fernleitungsdienstleistungen Of which transmission sercices revenues	1.303.030.999,29	€
Art. 26 (1) b) NC TAR, Art. 30 (1) b) v) (1) NC TAR	Kapazitäts-/Arbeitsaufteilung Capacity-commodity split	100/0	%
Art. 26 (1) b) NC TAR, Art. 30 (1) b) v) (2) NC TAR	Entry-Exit-Split, Hier: Entry Entry-exit split, here: Entry	31,94	%
	Entry-Exit-Split, Hier: Exit Entry-exit split, here: Exit	68,06	%
Art. 26 (1) b) NC TAR, Art. 30 (1) b) v) (3) NC TAR	Systeminterne Netznutzung Intra-system network use	74,96	%
Art. 26 (1) b) NC TAR, Art. 30 (1) b) v) (3) NC TAR	Systemübergreifende Netznutzung Cross-system network use	25,04	%
Art. 26 (1) c) ii) Nr. 2 NC TAR	Anteil der Zielerlöse, die Prognosen zufolge durch Systemdienstleistungsentgelte erzielt werden Share of the allowed revenue forecasted to be recovered from non-transmission service tariffs	256.898.637,21	€
Art. 26 (1) c) ii) Nr. 2 NC TAR	davon Biogas of which biogas	146.022.955,88	€
Art. 26 (1) c) ii) Nr. 2 NC TAR	davon Marktraumumstellung of which market area conversion	110.269.448,61	€
Art. 26 (1) c) ii) Nr. 2 NC TAR	davon Messstellenbetrieb und Messung an Ausspeisepunkten zu Letztverbrauchern of which meter operation and metering at exit points to end user connections	606.232,73	€
Art. 26 (1) c) ii) Nr. 4 NC TAR	Indikative Systemdienstleistungsentgelte - Hier: Biogas Indicative non-transmission tariffs - here: biogas	0,86	€ pro kWh/h/a
Art. 26 (1) c) ii) Nr. 4 NC TAR	Indikative Systemdienstleistungsentgelte - Hier: Marktraumumstellung Indicative non-transmission tariffs - here: market area conversion	0,65	€ pro kWh/h/a

Sämtliche Angaben sind indikative, unverbindliche Prognosen für das Jahr 2020
All information comprise indicative, non-binding forecasts for the year 2020.

Art. 26 (1) a) iv) NC TAR, Art. 5 NC TAR		En(try)/Ex(it)	Art des Punktes Type of point	Technische Kapazität in kWh/h Technical capacity in kWh/h	Prognostizierte kontrahierte Kapazität in kWh/h Forecasted contracted capacity in kWh/h	Erlöse aus Fernleitungsdienstleistungen in € Transmission service revenues in €	Durchschnittspreis bei Referenzpreismethode der kapazitätsgewichteten Distanz (Entry-Exit-Split 50/50) gewichtet mit der prognostizierten kontrahierten Kapazität) in € Average price using capacity weighted distance reference price methodology (Entry-Exit-Split 50/50; weighted with the forecasted contracted capacity) in €	Preisdifferenz zwischen dem indikativen Referenzpreis gemäß vorgesehener Referenzpreismethode sowie bei kapazitätsgewichteter Distanz mit einem Entry-Exit-Split von 50/50 (sowie nach Anpassung gemäß Art. 6 (4) c) NC TAR) Price difference between the indicative reference price according to the proposed reference price methodology and with capacity weighted distance with an entry-exit-split of 50/50 (in each case after rescaling in accordance with Article 6(4)(c) NC TAR)	Durchschnittspreis bei Referenzpreismethode der kapazitätsgewichteten Distanz (Entry-Exit-Split 31,94/68,06; gewichtet mit der prognostizierten kontrahierten Kapazität) in € Average price using capacity weighted distance reference price methodology (Entry-Exit-Split 31,94/68,06; weighted with the forecasted contracted capacity) in €	Preisdifferenz zwischen dem indikativen Referenzpreis gemäß vorgesehener Referenzpreismethode sowie bei kapazitätsgewichteter Distanz mit einem Entry-Exit-Split von 31,94/68,06 (sowie nach Anpassung gemäß Art. 6 (4) c) NC TAR) Price difference between the indicative reference price according to the proposed reference price methodology and with capacity weighted distance with an entry-exit-split of 31,94/68,06 (in each case after rescaling in accordance with Article 6(4)(c) NC TAR)
Bewertung der Kostenzuweisung Entry: • NKP (GÜP) – Grenzübergangspunkt • NKP (MÜP) – Marktgebietsübergangspunkt • NAP (Ei) – Anschluss inländischer Erzeugungsanlagen • NAP (Sp) – Speicher • NAP (Bio) – Biogaseinspeisung sowie Power-to-Gas (PtG) • NAP (LNG) – Flüssiggas Exit: • NKP (GÜP) – Grenzübergangspunkt • NKP (MÜP) – Marktgebietsübergangspunkt • NKP (IB) – interne Belieferung eines nachgelagerten Verteilernetzbetreibers • NAP (Sp) – Speicher • NAP (Le) – Anschluss eines Letztverbrauchers	Cost allocation assessment Entry: • NKP (GÜP) – cross-border interconnection point • NKP (MÜP) – market area interconnection point • NAP (Ei) – connection of domestic production facilities • NAP (Sp) – storage • NAP (Bio) – biogas input and power-to-gas (PtG) • NAP (LNG) – liquid natural gas Exit: • NKP (GÜP) – cross-border interconnection point • NKP (MÜP) – market area interconnection point • NKP (IB) – internal basing of a downstream distribution system operator • NAP (Sp) – storage • NAP (Le) – end user connection	En	NKP (GÜP)	132.905.658,00	88.563.137,97	571.778.586,05	6,59	52%	4,24	1%
		En	NKP (MÜP)	18.579.680,00	8.467.107,23	34.299.454,69	7,13	69%	4,74	13%
		En	NAP (Ei)	6.000,00	6.700,00	30.480,38	7,83	86%	5,20	24%
		En	NAP (Sp)	80.477.424,00	19.058.326,15	10.041.821,57	7,16	70%	4,76	13%
		En	NAP (Bio)	31.670,00	30.270,00	0,00	5,67	35%	3,77	-10%
		En	NAP (LNG)	0,00	0,00	0,00	0,00	0%	0,00	0%
		Ex	NKP (GÜP)	75.306.346,20	42.377.908,45	165.266.691,04	3,68	-13%	5,02	19%
		Ex	NKP (MÜP)	2.685.581,00	14.321,00	75.746,65	3,84	-9%	5,25	25%
		Ex	NKP (IB)	153.679.464,80	156.161.965,80	657.305.851,51	2,94	-30%	4,01	-5%
		Ex	NAP (Sp)	45.859.952,00	10.464.584,18	6.715.765,25	3,43	-19%	4,69	11%
		Ex	NAP (Le)	22.299.448,00	13.663.158,43	57.597.652,17	1,92	-51%	3,95	-5%

Bestandteile der Bewertung Components of the assessment	Werte gemäß Netzbetreiberangaben Values according to input by network operators	Art. 5 (5) NC TAR Exit-Speicher systeminternal Exit to storage intra-system	Art. 5 (5) NC TAR Exit-Speicher anteilig (20 % systemübergreifend) Exit to storage proportional (20 % cross-system)	Art. 5 (5) NC TAR Exit-Speicher 50/50 Exit to storage 50/50	Art. 5 (5) NC TAR Exit-Speicher systemübergreifend Exit to storage cross-system	Werte bei kapazitätsgewichteter Distanz gemäß Art. 6 NC TAR Values in case of capacity weighted distance according to Art. 6 NC TAR
Prognostizierte kontrahierte Kapazität in kWh/h Forecasted contracted capacity in kWh/h	332.727.214,21	332.727.214,21	332.727.214,21	332.727.214,21	332.727.214,21	331.757.484,21
Revenue intra cap in €	976.703.737,34	977.461.257,29	968.315.491,67	954.322.173,19	931.183.089,08	902.907.599,34
Driver intra cap in kWh/h	247.973.035,31	247.973.035,31	243.791.660,42	237.508.441,13	227.043.846,95	247.973.035,31
Revenue cross cap in €	826.327.261,95	825.569.742,00	834.815.507,61	848.708.826,10	871.847.910,20	400.128.399,55
Driver cross cap in kWh/h	84.784.448,90	84.784.448,90	88.965.823,78	95.249.043,08	105.713.637,26	84.784.448,90
Ratio intra cap	3,94	3,94	3,87	4,02	4,10	3,64
Ratio cross cap	3,85	3,84	3,76	3,66	3,52	4,72
Comp cap	2,31%	2,62%	5,35%	9,30%	15,35%	25,79%

Sämtliche Angaben sind indikative, unverbindliche Prognosen für das Jahr 2020
All information comprise indicative, non-binding forecasts for the year 2020.

Art. 26 (1) a) vi) NC TAR, Art. 26 (1) a) iii) NC TAR					Art. 26 (1) a) iii) NC TAR		Art. 26 (1) d) NC TAR, Art. 30 (2) a) i) NC TAR	Art. 26 (1) c) ii) Nr. 2 und 4 NC TAR (Prognostizierte Entgelte für Messstellenbetrieb und Messung an Ausspeisepunkten zu Letztverbrauchern) Art. 26 (1) c) ii) Nr.2 and 4 NC TAR (indicative tariffs for meter operation and metering at exit points to end user connections)			
En(try) / Ex(it)	Fernleitungsnetzbetreiber Transmission system operator	Art des Punktes Type of point	Bezeichnung des Punktes / der Zone Designation of point / zone	Art. 8 NC TAR Indikativer Referenzpreis bei kapazitätsgewichteter Distanz in € pro kWh/h/a Indicative reference price as per capacity weighted distance in € per kWh/h/a	Indikativer Referenzpreis gemäß vorgesehener Referenzpreismethode vor Anpassung gemäß Art. 6 (4) c) NC TAR in € pro kWh/h/a Indicative reference price as per proposed reference price methodology before rescaling according to Art. 6 (4) c) NC TAR in € per kWh/h/a	Indikativer Referenzpreis gemäß vorgesehener Referenzpreismethode nach Anpassung gemäß Art. 6 (4) c) NC TAR in € pro kWh/h/a Indicative reference price as per proposed reference price methodology after rescaling according to Art. 6 (4) c) NC TAR in € per kWh/h/a	Referenzpreis 2019 in € pro kWh/h/a Reference price 2019 in € per kWh/h/a	Prognostiziertes Messstellenbetriebsentgelt an Ausspeisepunkten zu Letztverbrauchern Indicative tariffs for meter operation at exit points to end user connections	Einheit Unit	Prognostiziertes Messentgelt an Ausspeisepunkten zu Letztverbrauchern Indicative tariffs for metering at exit points to end user connections	Einheit Unit
En	Open Grid Europe GmbH	NKP (MÜP)	Achim II	8,26	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Ahlten	7,45	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (EZ)	Bad Bentheim, Dellmannstraße 2	6,05	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Bocholtz	4,84	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Bunder Tief	7,48	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Dornum	8,77	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Drohne NOWAL	6,15	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Ellund	11,73	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Elten	6,06	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Emden EPT	8,07	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (EZ)	Engerhafe	7,85	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Etzel	8,09	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Etzel (Speicher Crystal), Bitzenlander Weg 10	8,09	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Etzel (Speicher ESE),Bitzenlander Weg 5	8,09	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Eynatten-Raeren	4,79	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Friedeburg-Etzel, Bitzenlander Weg 2	8,09	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Friedeburg-Etzel, Schienenstrang, EGL	8,09	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Haiming 2 7F	7,44	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Kienbaum	15,87	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Medelsheim	4,94	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Bio)	Merzig, Waldwieser Straße (Biogas)	5,74	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Oberkappel	8,07	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Oude Statenzijl	7,48	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Remich	6,07	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Bierwang	7,05	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Breitbrunn	7,19	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Epe H	5,71	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Epe L	5,96	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Eschenfelden	5,58	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe H1	5,71	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe L1	5,96	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe L2	5,96	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Speicher Krummhörn	8,00	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Steinbrink	6,33	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Steinitz	10,63	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Tegelen	5,48	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Überackern	7,44	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Vitzeroda MÜP	5,34	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Vreden	5,58	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Waidhaus	6,12	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (GÜP)	Wallbach	6,66	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Wardenburg	7,55	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Zone GASCADE	3,89	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NKP (MÜP)	Zone GUD (L)	5,94	3,92	4,21	4,09				
En	Open Grid Europe GmbH	NAP (Sp)	Zone MND GSG	3,89	3,92	4,21	4,09				
En	Thyssengas GmbH	NKP (MÜP)	Emsbüren	5,84	3,92	4,21	3,20				
En	Thyssengas GmbH	NKP (GÜP)	Emden EMS/ EPT	8,07	3,92	4,21	3,20				
En	Thyssengas GmbH	NAP (Sp)	Leer - Mooräcker - 3 (700096 Nüttermoor H UGS-E)	7,70	3,92	4,21	1,60				
En	Thyssengas GmbH	NAP (Sp)	Leer - Mooräcker - 3 (700098 Jemgum I UGS-E)	7,70	3,92	4,21	1,60				
En	Thyssengas GmbH	NAP (Sp)	Epe - III (UGS-E)	5,71	3,92	4,21	1,60				
En	Thyssengas GmbH	NKP (GÜP)	Zevenaar	6,06	3,92	4,21	3,20				
En	Thyssengas GmbH	NKP (GÜP)	Lichtenbusch	4,79	3,92	4,21	3,20				
En	Thyssengas GmbH	NKP (MÜP)	Broichweiden Süd	4,66	3,92	4,21	3,20				
En	Thyssengas GmbH	NKP (GÜP)	Bocholtz - Vetschau	4,88	3,92	4,21	3,20				
En	Thyssengas GmbH	NAP (Bio)	BGEA - Bergheim - Paffendorf	5,17	3,92	4,21	0,00				
En	Thyssengas GmbH	NAP (Sp)	Gronau - Epe - 11 (UGS-E)	5,71	3,92	4,21	1,60				
En	Thyssengas GmbH	NAP (Sp)	Emlichheim - Kalle - 1 (UGS-E)	6,28	3,92	4,21	1,60				
En	Thyssengas GmbH	NAP (Sp)	Gronau - Epe - 13 (UGS-E)	5,71	3,92	4,21	1,60				
En	Thyssengas GmbH	NAP (Bio)	BGEA - Rosendahl - Hoeven - Brookalle	5,27	3,92	4,21	0,00				
En	Thyssengas GmbH	NAP (Sp)	Epe/Xanten I (UGS-E)	5,71	3,92	4,21	1,60				
En	Fluxys TENP GmbH	NKP (GÜP)	Bocholtz	4,84	3,92	4,21	3,30				
En	Fluxys TENP GmbH	NKP (GÜP)	Eynatten	4,79	3,92	4,21	3,30				
En	Fluxys TENP GmbH	NKP (GÜP)	Wallbach	6,66	3,92	4,21	3,30				
En	GRTgaz Deutschland GmbH	NKP (MÜP)	Gernsheim	3,80	3,92	4,21	2,23				
En	GRTgaz Deutschland GmbH	NKP (GÜP)	Medelsheim	4,94	3,92	4,21	2,23				
En	GRTgaz Deutschland GmbH	NKP (GÜP)	Oberkappel	8,07	3,92	4,21	2,23				
En	GRTgaz Deutschland GmbH	NKP (GÜP)	Waidhaus	6,12	3,92	4,21	2,23				
En	terranets bw GmbH	NKP (MÜP)	Lampertheim IV	3,91	3,92	4,21	4,45				
En	terranets bw GmbH	NAP (Bio)	Hahnennest	6,10	3,92	4,21	4,45				
En	bayernets GmbH	NAP (Sp)	Haiming 2-7F/bn Entnahme	7,44	3,92	4,21	3,15				
En	bayernets GmbH	NAP (Sp)	Haiming 2-RAGES/bn Entnahme	7,44	3,92	4,21	3,15				
En	bayernets GmbH	NAP (Sp)	Inzenham-West USP Entnahme	6,95	3,92	4,21	3,45				
En	bayernets GmbH	NAP (Bio)	Mammendorf BGEA	5,98	3,92	4,21	0,00				
En	bayernets GmbH	NKP (GÜP)	Überackern	7,44	3,92	4,21	3,15				
En	bayernets GmbH	NKP (GÜP)	Überackern 2	7,44	3,92	4,21	3,15				
En	bayernets GmbH	NAP (Sp)	USP Haidach/Entnahme	7,44	3,92	4,21	3,15				

En	beyernets GmbH	NAP (So)	Wolfenberg/LSP Entnahme	6,50	3,92	4,21	3,15				
Ex	Open Grid Europe GmbH	NAP (Lv)	Aarbergen	2,85	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (MÜP)	Achim II	4,02	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Ahlten	4,15	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Alfter, Witzerschlick, Gartenweg	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Andernach, Hafenstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Andernach, Ostlal	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Aßler, Herborner Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Attendorn 2	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Bad Hönningen, Sprudelstraße I und II	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Barsinghausen, Hannoversche Straße	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Barsinghausen, Hermann-Bahlsen-Straße	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bergkamen, Fritz-Kuemann-Straße	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bielefeld, Theesen, Untere Wende	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Boeholtz	3,02	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Bochum, Castroper Straße 226	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bochum, Goldhammer Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bochum, Wohlfahrtstraße 110	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Bonn, Alter Heerweg 2	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bonn, Am Josephinum	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bonn, Gartenstraße 7	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Bonn, Pascalstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Brackwede	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (MÜP)	Bunder Tief	3,68	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Burscheid, Höhestraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Castrop-Rauxel, Von-Hofmann-Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Darmstadt, Taubschehöhenweg	2,55	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Dillenburg 1	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Dillenburg, Am Güterbahnhof	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Dornum	4,15	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Dortmund, Burghofstraße	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Dortmund, Dornfelder Allee	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Dortmund, Oelderstraße 177	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Dortmund, Springorumstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (MÜP)	Drohne NOWAL	3,25	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Hornberg, Eisenbahnstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Huckingen, Ehinger Straße 200	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Huckingen, Mannesmannstraße	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Loerter Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Mündelheim, Krefelder Straße	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Mündelheim, Krefelder Straße - KAP01	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Vierbaher Straße 48	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Wanheimer Straße HKW (700476)	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Werthauser Straße 123 (Kessel)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg, Werthauser Straße 182	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Bruckhausen, Kaiser-Wilhelm-Straße (-I) (700476)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Bruckhausen, Kaiser-Wilhelm-Straße (-L) (700476)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Laar, Friedrich-Ebert-Straße 160 - KAP01 (700476)	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Laar, Friedrich-Ebert-Straße 160 (700476)	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Wanheim, Friemersheimer Str. 40	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Duisburg-Wedau 1	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf 4	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf Oberbilk	2,78	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf, Benrath, Schwanzer Weg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf, Böhlerstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf, Henkelstraße 170	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf, Henkelstraße 170 - KAP01	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Düsseldorf, Oerschbachstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Erftgrheusen, Am Bahnhof	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Ellund	5,64	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Elten	3,41	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Emden EPT	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen 1	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Am Technologiepark (Nord / Station 2)	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Am Technologiepark (Süd / Station 1)	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Gladbecker Straße 404, Prüfstand	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Kemnay, Arendsegelstraße 45	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Ruhrau 50	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen, Ruhrgasstraße 50	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Essen-Ostviertel 1	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Etzel	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (So)	Etzel (Speicher Crystal), Stzenlander Weg 10	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (So)	Etzel (Speicher ESE),Etzenlander Weg 3	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Euskirchen-Stotzheim 2	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Eynatten-Raeren	5,01	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (So)	Friedeburg-Etzel, Etzenlander Weg 2	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Friedeburg-Etzel, Etzenlander Weg 3, Helgas	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Friedeburg-Etzel, Etzenlander Weg 4 Helgas	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (So)	Friedeburg-Etzel, Schienenstrang, E6L	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Friedeburg-Etzel, Schienenstrang, Helgas, E6L	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Gelsenkirchen, Geisenbergstraße	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Gelsenkirchen, Kurt-Schumacher-Str. 100	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Gelsenkirchen, Kurt-Schumacher-Straße 95	2,79	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Gelsenkirchen, Uechtingstraße	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Gevelsberg 1	2,68	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Gevelsberg, Flurstraße	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Gladbeck, Am Wiesenbusch (Glück Auf)	3,48	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Gladbeck, Am Wiesenbusch (Spirans West / Not-NAP)	3,48	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Greverbroich 1	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Großkrotzenburg, Hanauer Landstraße	2,86	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Hagen, Schwerenetraße	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Hagen, Werdstraße 10	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Hagen-Haiden	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Halger, Mahlwerks-Kreutz-Straße	2,78	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (So)	Halming 2 7F	3,51	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Hamm, Hafenstraße	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Hamm, Trianelstraße 1	2,78	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Hattingen, Schmiedestraße 1	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Herborn, Dr.-Siegfried-Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Herborn, Junostraße 1	2,76	3,92	4,21	4,08	7,50	€/d		

Ex	Open Grid Europe GmbH	NAP (Lv)	Hilden, Weststraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe 3	3,05	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe 5	3,05	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe, Das-Schalven-Str. 9	3,05	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe, Das-Schalven-Straße	3,05	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe, Nördliche Rathinchenstraße 1	3,05	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Karlsruhe-Rheinhafen 1	3,05	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Kerkenheiden-Kurheim	3,87	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Kienbaum	6,55	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Kirchen 1	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Köln Nord 2	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Köln-Porz, Portstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Königswinter, Am Ziegelofen	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Krefeld, Düsseldorfer Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Krefeld, Oberschlesienstraße 16	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Krefeld, Oberschlesienstraße 16 - KAP01	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Krefeld, Oberschlesienstraße 16 - KAP02	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Kreuztal, Buschhütten, Mühlenstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Kreuztal, Hammerstraße 11	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Krummhörn-Loquard	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Langenfeld (Rheinland), Industriestraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Legden, Asbecker Straße (Not-NAP)	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Limburg-Staffel, Elzer Straße 23	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Lindlar, Kaiserau 2	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Lindlar, Oberleppe	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Lindlar-Kaiserau, Kaiserau (L 97)	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Lollar, Justus-Liebig-Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Lünen, Josef-Nothmann-Straße	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Lünen, Josef-Rethmann-Straße 4 - KAP01	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Marl, Hilgenbergstraße	2,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Medelsheim	3,17	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Meerbeck-Moers (-I)	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Meerbusch, Nibelsweg	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Menden, Kalköfenstraße 18	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Mettmann, Rumstraße 15-17	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Mettmann, Laubach	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Moers 1	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Moers, Am Haltmannshof	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Moers, Franz-Haniel-Str. 41, NAP-HW	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Moers, Genender Weg	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Moers, Schlägerstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Monheim am Rhein, Alfred-Nobel-Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Mülheim, Friedrich-Ebert-Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Mülheim, Martenstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Mülheim, Wiesenstraße	2,90	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Neuss, Floßhafenstraße 18	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Neuss, Gladbacher Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Neuss, Koblenzer Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Neuwied, Heidenbergstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Nürnberg-Gebersdorf, Hainbergstraße (700476)	3,23	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Oberhausen, Buschhausener Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Oberhausen, Flugstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Oberhausen, Steinbrinkstraße 1 (700476)	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Oberhausen, Weißenseestraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Oberkappel	3,80	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Olpe-Lütringhausen, Dorfstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Osnabrück 2	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Osnabrück, Burg Gretesch	3,46	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Oude Statenzijl	3,68	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Radevormwald, Kreisstege	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Ratingen, Dechenstraße	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Remich	3,55	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Am Langen Siepen	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Bahnstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Berghauser Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Grünerplatz	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Güldenwerther Bahnhofstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Lemperstraße II	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Lindlauer Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Lüdenscheider Str.	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Presover Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Tannenstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid, Wellershausen	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lennep, Hader Str.	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lütringhausen, Alte Pulvermühle	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lütringhausen, Remscheider Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lütringhausen, Rosenstraße	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lütringhausen, Rosenkalkstraße - KAP01	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Remscheid-Lütringhausen, Walter-Freitag-Str. II	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Rinteln, Stoevesandstraße	3,48	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Rüsselsheim, Am Mainstamm	2,85	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Rüsselsheim, Rugbyring, B 43	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Schwerte, Eisenindustriestraße 1	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Siegen, Obere Kebesstraße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Sinn, Friedrich-Ebert-Straße 2-4	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Sinn, Friedrich-Ebert-Straße 9	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Sinn, Unterm Rahnstein 1	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Sinn, Wetzlarer Straße	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Sinn, Wetzlarer Straße 15	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Solingen 1	2,75	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Solingen, Focher Straße	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Ellerweg	3,58	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Breitbrunn	3,48	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Epe H	3,12	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Epe L	3,57	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Eschenfelden	2,84	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe H1	3,12	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe L1	3,57	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Gronau-Epe L2	3,57	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Sp)	Speicher Krummhörn	3,85	3,92	4,21	4,09				

Ex	Open Grid Europe GmbH	NKP (MÜP)	Steinbrink	3,84	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Steinitz	5,07	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Taunusstein, Am Zugmantel (B 417)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Tegelen	5,26	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Tönisvorst, Maysweg 10	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Troisdorf, Mendener Straße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Überackern	3,31	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Vlbeck, Ziegelstraße 1	3,33	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (MÜP)	Vitzeroda MÜP	3,04	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Vohburg, Paarstraße	3,35	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (GÜP)	Vreden	3,14	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Waldhaus	2,75	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (GÜP)	Wallbach	4,21	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Wardenburg	3,62	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Weilerhammer, Flachsiestraße	3,25	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Weinheim, Langmaasweg	2,85	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Werdohl 4	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Werdohl, Plettenberger Str. 12	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Werdohl-Elverlingsen, Auf der Mark 1	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Werne, Evenkamp, Fährenkampweg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Werne, Stockum, Hammer Straße (L)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Wesseling, Brechtstraße	2,85	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wesseling, Dikopsweg	2,85	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wetzlar, Buderusstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wetzlar, Sophienstraße	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wiefelstede-Oringemburg (700476)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wiesbaden, Meins-Kenzi, Anne-Birle-Straße, NAP	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Wietzmarschen, Pferdebahn	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Willich, Krusenstelle	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Willich, Wekelo, NAP-BHKW	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Willich-Anrath, Gartenstraße, NAP-BHKW	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Wipperfürth	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Witten, Arthur-Imhausen Straße 92	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (Lv)	Witten, Gasstraße	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Witten, Mannesmannstraße	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Witten, Schottstraße	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Witten-Annen	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Worms, Mainzer Straße 183	2,65	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wülfrath, Randersbecher Straße 72 (700476)	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NAP (Lv)	Wuppertal, Hahnenfurth, Schleifenweg	2,76	3,92	4,21	4,09	7,50	€/d		
Ex	Open Grid Europe GmbH	NKP (MÜP)	Zone GASCADE	3,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (MÜP)	Zone GUD ID	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NAP (So)	Zone WIND GSG	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Messenkamp	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	AVU H1	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bad Honnef	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bayern 1	3,23	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bergisches Land	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bonn L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bonn L2	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Saar-Pfalz 1	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Saar-Pfalz 2	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hunsdück - Eifel	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Pfeddersheim	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Lampertheim Z1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Dormagen Chempark L	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Leverkusen Chempark L	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Uerdingen, Rheinhausener Straße	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Monheim am Rhein, Alfred-Nobel-Str. 52	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	DEW H1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	DEW L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herdecke, Seeweg	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	ELE H1	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	ELE L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hannover 1	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Butzbach	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hemm	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hessen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	E.ON Mitte H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Franken 1	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ochsm	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Koblenz	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Limburg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	EVUK 2	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	AZ Darmstadt	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Moers	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	RSE L1	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	RSE H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	BSWS-Taunusstein	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Legden, Asbecker Str.	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Remscheid	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Worms-Nord	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Vitzeroda	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	OGR Bayerischer Wald	3,23	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	OGR Hauptnetz West	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	OGR Hauptnetz Ost	3,25	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Großkrotzenburg	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	GUT Süd	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Homberg/ Ohm	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	GUT Nord	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Gerbsen	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wetzlar	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kassel-Eiderand, Am Feldrand	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Grefrath	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Infra Fürth H1	3,23	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Frankfurt, Sindlingen	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hürth	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Frankfurt, Griesheim, Lärchenstraße	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	KMW 1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kitzingen 2	2,85	3,92	4,21	4,09				

Ex	Open Grid Europe GmbH	NKP (IB)	Würzburg II AZ	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Jägerheim III	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nürnberg	3,25	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Gießen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Münster	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	24/7 H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Blumberg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Duisburg Ht.	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Düsseldorf	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Grevenbroich	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	St. Tönis	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Tönisvorst-Vorst, Klein-Kollenburg-Straße I	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Krefeld	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	NRM Ht.	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Oberhausen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Lich	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wasserau	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Köln 1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Köln 2	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	BELKAW I	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Dormagen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Leichlingen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Leverkusen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Marienheide-Reichshof	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Mettmann	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Rommerskirchen-Eckum, Hermesdorf	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Königswinter	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Niederkassel	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Rhein-Sieg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bad Neuheim	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Burscheid	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Delmenhorst-Annenheide	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Diez	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Erkrath	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ewen H1	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Friedberg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Georgsmarienhütte, Kloster Oesede, GO1	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Gronau-Epe H3	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Heiger	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herborn	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herford, Werrestraße (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hilden	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hockenheim, Hubäcker Ring	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Karlsruhe 1	3,03	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kempen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Langenfeld	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wetter	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Marburg-Cölbinden	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nettetal	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Neuss	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Neuwied	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Radevormwald L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Radevormwald-Oberönkfeld	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ratingen L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ratingen H1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Rinteln	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bückeburg	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Stadthagen	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Troisdorf	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Viernheim, Am Straßenheimer Weg	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Weilburg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Willich	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wissen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Witten H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wülfrath H1	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Wuniorf	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Cornelück	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Osnabrück, Schellenbergstraße	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Solingen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Süwag H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Süwag L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Taubburg	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Minfeld 1	3,08	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Philippsburg	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Meerbusch	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Betzdorf / Kirchen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Westerwald Nord	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Westfalen	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ahlen	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Attendorn	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bad Berleburg - Winterberg	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Beckum	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bielefeld 1	3,48	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bohmte-Ostercappeln	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Burbach Neunkirchen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Dorsten	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Freudenberg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Halle	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herlohn	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kamp-Lintfort	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kreuztal	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Lünen H1	2,85	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nachtalt-Wilhingwarde	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nord	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nordort I	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Nordort II	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Olpe	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Petershagen	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Plettenberg	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Porta Westfalica	3,46	3,92	4,21	4,09				

Ex	Open Grid Europe GmbH	NKP (IB)	Rheda-Wiedenbrück	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Schwarte 1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Siegen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Südwestfalen	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Werdohl	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Zone Hagen	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Ahlen, Hammer Straße (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bad Essen 1	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Beckum, Am Stichelbach (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Beim, Am Appelhügel	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bochum, Langendreer, Oesterheidestraße (II)	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Bochum, Stiepel, In den Hegen 99 (II)	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Castrop-Rauxel, Bladenhorst	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Dissen, Zur Schollegge (I)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Gescher, Hochmoor, Kiyer Damm (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Hamm, Uentrop, Auf dem Südfelde (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herringhausen, II (Richtung Porta Westfalica)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Herdecke, Am Bleichstein (II)	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Georgsmarienhütte-Hilter	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kerpen, Lothringer Straße	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Kirchen (Sieg), Brachbach, Industriestraße (II)	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Marl, Rennbachstraße	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Selm, Cappenberg, Cappenberger Damm (II)	2,79	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Sendenhorst, Albersloh-Storp, (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Sohren, DIII	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Stemwede, Reininger Str.	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Steinhagen, (II)	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Velbert, Langenberg	2,65	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	GM-Hütte - Elsendorf	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Billerbeck, Beerlage	3,46	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Haan L1	2,76	3,92	4,21	4,09				
Ex	Open Grid Europe GmbH	NKP (IB)	Haan-Am Weinberg	2,65	3,92	4,21	4,09				
Ex	Thyssengas GmbH	NAP (Lv)	Übach-Palenberg - Carlstraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Übach-Palenberg - 52531 - Carlstraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Stolberg(Rhld.) - 52222 - Münsterbachstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Aachen - STAWAG Stadtwerke Aachen AG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Eschweiler	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Alsdorf - regionetz GmbH - H (und 13 weitere Städte/ Gemeinden)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	enwor I - enwor-energie & wasser vor ort GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Jülich - Forschungszentrum Jülich	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Linnich - Rurallee	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Jülich - 52428 - Rurauenstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Jülich - 52428 - Bahnhofstraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Niederzier - 52382 - Aachener Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Aldenhoven - Industriestraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Jülich - 52428 - Bahnhofstraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Jülich - 52428 - L253	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Jülich - Stadtwerke Jülich GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	NGW VII - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Herzogenrath - 52134 - K29	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Herzogenrath - 52134 - Eygelshovener Straße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Eschweiler - 52249 - S40	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Düren - Veldener Straße III	2,76	3,92	4,21	5,47	1868,89	€/a	190,91	€/a
Ex	Thyssengas GmbH	NKP (IB)	Düren - Leitungspartner GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Inden - regionetz GmbH - III	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Düren - Veldener Straße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Kreuzau - Westnetz GmbH - Kreuzau-Blatzheim	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Düren - NUON Energie und Service GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Bergheim - K22	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Elsdorf - 50189 - Eisenbahnstraße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Bergheim - Westnetz GmbH - III	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Bergheim - Westnetz GmbH - I Bergheim-Horrem-Kerpen	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Elsdorf - Westnetz GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Bergheim - Westnetz GmH - II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Köln - Dieselstraße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Brühl - 50321 - Bergerstraße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wesseling - 50389 - Kronenweg	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Köln - Godorf - Godorfer Hauptstraße 150	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Brühl - Stadtwerke Brühl GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Rhein-Erft - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Köln I - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Köln II - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Bergisch Gladbach - Tannenbergstraße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Engelskirchen - Ortstraße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	BELKAW II - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	BELKAW I - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Wuppertal II - Wuppertaler Stadtwerke AG	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wiehl - 51674 - Bielsteiner Straße	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wiehl - 51674 - Hauptstraße I	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wiehl - 51674 - Hauptstraße II	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Aggertal - Rheinische Netzgesellschaft mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Heinsberg - NUON Energie und Sevice GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Grevenbroich - I	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Mönchengladbach - Öttinger Brauerei	2,76	3,92	4,21	5,47	1119,36	€/a	242,48	€/a
Ex	Thyssengas GmbH	NKP (IB)	NVV II - NEW Netz GmbH (Niederrheinische Versorgung und Verkehr AG)	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	NVV I - NEW Netz GmbH (Niederrheinische Versorgung und Verkehr AG)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Düsseldorf - Reisholz	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Düsseldorf - Netzgesellschaft Düsseldorf mbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Schwalmtal - Dülkener Straße	2,76	3,92	4,21	5,47	92,54	€/a	20,05	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Viersen - Fuchs - Am Bahnhof	2,76	3,92	4,21	5,47	473,91	€/a	103,09	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Viersen - 41749 - Süchteln	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Schwalmtal - NEW Schwalm-Nette Netz GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Viersen - NEW Netz GmbH	2,76	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Duisburg - Diesterwegstraße (Heizzentrale)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Duisburg - Duisburger Straße (Erdgastankstelle)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Duisburg - Willy-Brandt-Ring	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Duisburg I - Stadtwerke Duisburg AG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Essen - Kettwig - August-Thyssen-Straße	2,79	3,92	4,21	5,47	74,76	€/a	262,95	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Neviges	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (IB)	Heiligenhaus - Stadtwerke Heiligenhaus GmbH	2,79	3,92	4,21	5,47				

Ex	Thyssengas GmbH	NKP (ÜB)	Velbert I - Stadtwerke Velbert GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Wuppertal I - Wuppertaler Stadtwerke AG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Mülheim/Ruhr - Gustavstraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Mülheim an der Ruhr - medl GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW V - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Kamp-Lintfort - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Geldern - Stadtwerke Geldern Netz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW VIII - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Duisburg - 47139 - R6	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW III - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW IV - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rheinberg - Xantener Straße IV/V/VI (L)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - Energiestraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - Lutherstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - 46537 - Gerhard-Mollna-Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Voerde (Niederrhein) - Spellener Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Voerde (Niederrhein) - Schlüsselstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - Kreisstraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - Otto-Brenner-Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Dinslaken - Magnusstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Dinslaken - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW I - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rheinberg - Xantener Straße IX	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rheinberg - Xantener Straße I/II/VII/VIII (H)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rheinberg - Xantener Straße VI/VII/IX (H)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rheinberg - Xantener Straße I/II/III (H)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Oberhausen - Oberhausener Netzgesellschaft mbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Goch - Feldstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Kleve - 47533 - B9	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Kalkar - 47546 - Uedemer Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Kalkar - Appeldorn - Reeser Straße 280	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Kalkar - Appeldorn - Reeser Straße 280 II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Goch - Stadtwerke Goch GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Kalkar I - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Kleve I - Stadtwerke Kleve GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW IX - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Kranenburg - Stadtwerke Goch GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - Fackeldeystraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - Fackeldeystraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - Am Halben Mond	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - L16	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - L15	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - Hafenstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - Kupferstraße I	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Emmerich - 46446 - Kupferstraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Kleve - Kellen-Speck - Rheinstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Emmerich - Stadtwerke Emmerich GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Kalkar II - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Wesel - Abeistraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Wesel - 46485 - Holzstraße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW II - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Wesel - Stadtwerke Wesel GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Isselburg - 46419 - K5	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	NGW VI - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Rees - Stadtwerke Rees GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Rees - 46459 - Aspeler Weg	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Bocholt - Bocholter Energie- und Wasserversorgung GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Rhede - Stadtwerke Rhede GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Bochum - Laer - Opelring 1	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Bochum - Querenburg - Schattbachstraße	2,79	3,92	4,21	5,47	284,26	€/a	999,87	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herne, Herzogstraße 28	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Herne, Holsterhauser Straße	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Bochum - Stadtwerke Bochum Netz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Herne - Stadtwerke Herne AG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Recklinghausen - Hellbachstraße II	2,79	3,92	4,21	5,47	1027,70	€/a	104,98	€/a
Ex	Thyssengas GmbH	NAP (LV)	Recklinghausen - Hellbachstraße III	2,79	3,92	4,21	5,47	1214,78	€/a	124,09	€/a
Ex	Thyssengas GmbH	NAP (LV)	Recklinghausen - Hillerheide - Rumplerstraße 14	2,79	3,92	4,21	5,47	1457,73	€/a	148,91	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 350	2,79	3,92	4,21	5,47	14,02	€/a	49,30	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 348 d	2,79	3,92	4,21	5,47	8,78	€/a	30,90	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 349 a	2,79	3,92	4,21	5,47	34,95	€/a	122,93	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 351 a	2,79	3,92	4,21	5,47	8,78	€/a	30,90	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 353	2,79	3,92	4,21	5,47	7,85	€/a	27,61	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 352	2,79	3,92	4,21	5,47	11,96	€/a	42,07	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 352 I	2,79	3,92	4,21	5,47	8,78	€/a	30,90	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 349 b	2,79	3,92	4,21	5,47	4,67	€/a	16,43	€/a
Ex	Thyssengas GmbH	NAP (LV)	Recklinghausen - Hillerheide - Rumplerstraße 14 III	2,79	3,92	4,21	5,47	9,94	€/a	32,87	€/a
Ex	Thyssengas GmbH	NAP (LV)	Recklinghausen - Hillerheide - Rumplerstraße 14 IV	2,79	3,92	4,21	5,47	18,69	€/a	65,74	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Hohewardstraße 343	2,79	3,92	4,21	5,47	571,22	€/a	89,28	€/a
Ex	Thyssengas GmbH	NAP (LV)	Herten - Cranger Straße 2	2,79	3,92	4,21	5,47	166,20	€/a	17,18	€/a
Ex	Thyssengas GmbH	NKP (ÜB)	Herten - Hertener Stadtwerke GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Recklinghausen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Castrop-Rauxel - 44579 - Habinghorst - Moselstraße 1	2,79	3,92	4,21	5,47	1158,71	€/a	118,97	€/a
Ex	Thyssengas GmbH	NAP (LV)	Castrop-Rauxel - Weserstraße II	2,79	3,92	4,21	5,47	1888,89	€/a	190,91	€/a
Ex	Thyssengas GmbH	NKP (ÜB)	Castrop-Rauxel - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Oer-Erkenschwick - 45739 - Hövelkamp	2,79	3,92	4,21	5,47	2149,22	€/a	219,55	€/a
Ex	Thyssengas GmbH	NAP (LV)	Datteln - August-Becker-Straße	2,79	3,92	4,21	5,47	560,67	€/a	57,27	€/a
Ex	Thyssengas GmbH	NAP (LV)	Waltrop - Riphausstraße I	2,79	3,92	4,21	5,47	84,10	€/a	295,83	€/a
Ex	Thyssengas GmbH	NAP (LV)	Datteln - Bahnhofstraße 90	2,79	3,92	4,21	5,47	934,44	€/a	95,46	€/a
Ex	Thyssengas GmbH	NAP (LV)	Datteln - Zur Sellschelbe	2,79	3,92	4,21	5,47	5606,67	€/a	572,74	€/a
Ex	Thyssengas GmbH	NKP (ÜB)	Datteln - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Oer-Erkenschwick - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Waltrop - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Unna - Königsborn - Dorotheenstraße	2,79	3,92	4,21	5,47	2816,45	€/a	287,78	€/a
Ex	Thyssengas GmbH	NAP (LV)	Holzwickede - Bachstraße II	2,79	3,92	4,21	5,47	487,59	€/a	49,81	€/a
Ex	Thyssengas GmbH	NAP (LV)	Holzwickede - Schäferkampstraße III	2,79	3,92	4,21	5,47	2336,11	€/a	238,64	€/a
Ex	Thyssengas GmbH	NAP (LV)	Unna - Königsborn - Parmastraße 17	2,79	3,92	4,21	5,47	3364,00	€/a	343,65	€/a
Ex	Thyssengas GmbH	NKP (ÜB)	Fröndenberg - Stadtwerke Fröndenberg GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Holzwickede - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜB)	Unna - Stadtwerke Unna GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (LV)	Werne - Kraftwerk Gerstelnwerk	2,79	3,92	4,21	5,47				

Ex	Thyssengas GmbH	NAP (Lv)	Bergkamen - Hellweg 36	2,79	3,92	4,21	5,47	262,39	€/a	26,80	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Bergkamen - Erich-Ollenhauer-Straße 10	2,79	3,92	4,21	5,47	1495,11	€/a	152,73	€/a
Ex	Thyssengas GmbH	NKP (iB)	Bergkamen - GSW Gemeinschaftsstadtwerke GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Bönen - GSW Gemeinschaftsstadtwerke GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Kamen - GSW Gemeinschaftsstadtwerke GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Werne - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Marl - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Olfen - Hullerner Straße	2,79	3,92	4,21	5,47	11,21	€/a	1,15	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Lüdinghausen - Am Rohrkamp II	2,79	3,92	4,21	5,47	1137,03	€/a	116,15	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Lüdinghausen	2,79	3,92	4,21	5,47	2896,78	€/a	295,92	€/a
Ex	Thyssengas GmbH	NKP (iB)	Olfen - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Lüdinghausen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Haltern - 45721 - Sythen - Quarzwerkstraße 160	2,79	3,92	4,21	5,47	5606,67	€/a	572,74	€/a
Ex	Thyssengas GmbH	NKP (iB)	Haltern II - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Haltern I - Stadtwerke Haltern GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Borken - Stadtwerke Borken GmbH - Borken Stadt	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Borken - Stadtwerke Borken GmbH - Reken-Velen-Heiden-Borken-Raesfeld	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Dülmen - Stadtwerke Dülmen GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Vreden - Ausbachstraße	2,79	3,92	4,21	5,47	4298,45	€/a	439,10	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Gescher - 48712 - Stadtlohner Straße II	2,79	3,92	4,21	5,47	1999,71	€/a	204,28	€/a
Ex	Thyssengas GmbH	NKP (iB)	Gescher - Stadtwerke Gescher GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Stadtlohn - SVS-Versorgungsbetriebe GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Südlohn - SVS-Versorgungsbetriebe GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Vreden - SVS-Versorgungsbetriebe GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Billerbeck - Josef-Suwelack-Straße	2,79	3,92	4,21	5,47	10278,89	€/a	1050,03	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Rosendahl - Midlicher Straße	2,79	3,92	4,21	5,47	822,87	€/a	84,06	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Billerbeck - Josef-Suwelack-Straße II	2,79	3,92	4,21	5,47	528,79	€/a	114,55	€/a
Ex	Thyssengas GmbH	NKP (iB)	Billerbeck - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Coesfeld - Stadtwerke Coesfeld GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Darup - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Legden - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Rosendahl - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Everswinkel - 48351 - Münsterstraße II	2,79	3,92	4,21	5,47	2261,36	€/a	231,01	€/a
Ex	Thyssengas GmbH	NKP (iB)	Everswinkel - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Greven - Stadtwerke Greven GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Ostbevern - Stadtwerke ETO GmbH & Co. KG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Telgte - Stadtwerke Telgte GmbH & Co. KG	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Ahaus - Stadtwerke Ahaus GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Gronau - Goorbach	2,79	3,92	4,21	5,47	504,60	€/a	51,55	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Gronau - III	2,79	3,92	4,21	5,47	448,53	€/a	45,82	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Nordhorn - Bookfeld	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Gronau - Stadtwerke Gronau GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Heek - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Metelen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Schöppingen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Ochtrup-Stadt - Stadtwerke Ochtrup GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Emsdetten - Stadtwerke Emsdetten GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Nordwalde - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Saerbeck - Gelsenwasser Energienetze GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Steinfurt - Stadtwerke Steinfurt Netz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Rheine - Neuenkirchener Straße	2,79	3,92	4,21	5,47	685,32	€/a	70,01	€/a
Ex	Thyssengas GmbH	NKP (iB)	Neuenkirchen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Rheine - Energie- und Wasserversorgung Rheine GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Salzbergen-Holsterfeld - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Wettringen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Warendorf - Waldenburger Straße	2,79	3,92	4,21	5,47	112,13	€/a	11,45	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Ennigerloh - Zur Anneliese 11	2,79	3,92	4,21	5,47	186,89	€/a	19,09	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sassenberg - 48336 - Füchtorf - Ravensberger Straße II	2,79	3,92	4,21	5,47	2803,33	€/a	286,37	€/a
Ex	Thyssengas GmbH	NKP (iB)	Ennigerloh I - Stadtwerke Ennigerloh GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Sassenberg - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Warendorf - Warendorfer Energieversorgung GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Harsewinkel - 33428 - Marienfeld - Bielefelder Straße 45	2,79	3,92	4,21	5,47	41,12	€/a	144,62	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Harsewinkel - 33428 - Tüllheide II	2,79	3,92	4,21	5,47	2990,22	€/a	305,46	€/a
Ex	Thyssengas GmbH	NKP (iB)	Beelen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Harsewinkel - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Herzebrock-Clarholz - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Oelde - Energieversorgung Oelde GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Rheda-Wiedenbrück - II (AUREA) - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Lippstadt - Beckumer Straße	2,79	3,92	4,21	5,47	396,59	€/a	85,91	€/a
Ex	Thyssengas GmbH	NKP (iB)	Langenberg (Ostwestfalen) - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Wadersloh - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - 58739 - Wimbern - Am Graben 2 II	2,79	3,92	4,21	5,47	93,44	€/a	9,55	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - Wimbern - Mendener Straße 52	2,79	3,92	4,21	5,47	261,64	€/a	26,73	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - Wimbern - Mendener Straße 26	2,79	3,92	4,21	5,47	28,03	€/a	2,86	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - I	2,79	3,92	4,21	5,47	322,76	€/a	32,97	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - 58739 - Hauptstraße 6	2,79	3,92	4,21	5,47	3420,07	€/a	349,37	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - Kirchstraße	2,79	3,92	4,21	5,47	256,04	€/a	26,16	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - 58739 - Erlenstraße 50	2,79	3,92	4,21	5,47	317,71	€/a	32,46	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - Marscheidstraße II	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Wickede - Westerhaar	2,79	3,92	4,21	5,47	833,52	€/a	85,15	€/a
Ex	Thyssengas GmbH	NKP (iB)	Welver - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Werl - Stadtwerke Werl GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Wickede - Gemeindewerke Wickede (Ruhr) GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Möhnesee - Echtrop - Teigelhof II	2,79	3,92	4,21	5,47	21,87	€/a	76,91	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Ense - Oesterweg	2,79	3,92	4,21	5,47	747,56	€/a	76,37	€/a
Ex	Thyssengas GmbH	NKP (iB)	Ense - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Möhnesee - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Lippetal - Niederbauer - Oestinghausener Straße 16 (I)	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Bad Sassendorf - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Lippetal - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Büren - Weine - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Erwitte - Hüchtchenweg	2,79	3,92	4,21	5,47	949,40	€/a	96,98	€/a
Ex	Thyssengas GmbH	NKP (iB)	Erwitte - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Geseke - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (iB)	Anröchte - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - 59759 - Bruchhausen - Bruchhausener Straße 2 I	2,79	3,92	4,21	5,47	6914,89	€/a	706,38	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - 59759 - Bruchhausen - Westring 19-21	2,79	3,92	4,21	5,47	841,00	€/a	85,91	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - 59759 - Bruchhausen - Bruchhausener Straße 2 II	2,79	3,92	4,21	5,47	13,08	€/a	46,02	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - 59759 - Neheim-Hüsten - Heidestraße	2,79	3,92	4,21	5,47	747,56	€/a	76,37	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - 59821 - Hellefelder Straße II	2,79	3,92	4,21	5,47	560,67	€/a	57,27	€/a

Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - Alter Feld 20	2,79	3,92	4,21	5,47	467,22	€/a	47,73	€/a
Ex	Thyssengas GmbH	NKP (ÜS)	Arnsberg - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Arnsberg - II	2,79	3,92	4,21	5,47	4354,51	€/a	444,83	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - 59846 - Hachen - Hachener Straße	2,79	3,92	4,21	5,47	46,72	€/a	4,77	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - 59845 - Hachen - Am Lindhövel I	2,79	3,92	4,21	5,47	342,96	€/a	35,02	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - 59845 - Hachen - Am Lindhövel II	2,79	3,92	4,21	5,47	105,97	€/a	10,82	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - 59845 - Selschader Weg III	2,79	3,92	4,21	5,47	598,04	€/a	61,09	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - Hachen - Am Lindhövel 5a	2,79	3,92	4,21	5,47	41,12	€/a	144,62	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Sundern - Hachen - Am Lindhövel 7a	2,79	3,92	4,21	5,47	41,12	€/a	144,62	€/a
Ex	Thyssengas GmbH	NKP (ÜS)	Sundern I - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜS)	Sundern - II (Hövel) - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Werne/n - Zum Rohrkamp	2,79	3,92	4,21	5,47	2809,88	€/a	286,87	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Werne/n - Werner Brauerei	2,79	3,92	4,21	5,47	1815,92	€/a	393,28	€/a
Ex	Thyssengas GmbH	NKP (ÜS)	Rüthen - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜS)	Werne/n - Werner Verbundgesellschaft mbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Schmallenberg - Windhausen 19	2,79	3,92	4,21	5,47	18,82	€/a	58,16	€/a
Ex	Thyssengas GmbH	NKP (ÜS)	Eslohe - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜS)	Schmallenberg - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Olsberg - Ovenhrop - In den Schten Welden	2,79	3,92	4,21	5,47	353,13	€/a	87,37	€/a
Ex	Thyssengas GmbH	NAP (Lv)	Olsberg - Hüttenstraße	2,79	3,92	4,21	5,47	747,56	€/a	76,37	€/a
Ex	Thyssengas GmbH	NKP (ÜS)	Bestwig - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜS)	Meschede I - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NKP (ÜS)	Olsberg I - Westnetz GmbH	2,79	3,92	4,21	5,47				
Ex	Thyssengas GmbH	NAP (Lv)	Meschede - II	2,79	3,92	4,21	5,47	4672,22	€/a	477,28	€/a
Ex	Thyssengas GmbH	NAP (So)	Leer - Moorfleker - 6 (700096 Jemgum I UGS-A)	2,79	3,92	4,21	1,60				
Ex	Thyssengas GmbH	NAP (So)	Leer - Moorfleker - 2 (700096 Nüttermoor II UGS-A)	2,79	3,92	4,21	1,60				
Ex	Thyssengas GmbH	NAP (So)	Epe - IV (UGS-A)	2,79	3,92	4,21	1,60				
Ex	Thyssengas GmbH	NAP (So)	Epe/Xanten II (UGS-A)	2,79	3,92	4,21	1,60				
Ex	Ruhrgy TENP GmbH	NKP (GÜP)	Eynatten	3,02	3,92	4,21	3,30				
Ex	Ruhrgy TENP GmbH	NKP (GÜP)	Weilbach	4,21	3,92	4,21	3,30				
Ex	GRTgaz Deutschland GmbH	NKP (MÜP)	Sernsheim	2,61	3,92	4,21	2,28				
Ex	GRTgaz Deutschland GmbH	NKP (GÜP)	Medelsheim	3,17	3,92	4,21	2,23				
Ex	GRTgaz Deutschland GmbH	NKP (GÜP)	Oberkappel	3,90	3,92	4,21	2,28				
Ex	GRTgaz Deutschland GmbH	NKP (GÜP)	Waldhaus	2,25	3,92	4,21	2,23				
Ex	GRTgaz Deutschland GmbH	NKP (ÜS)	Remelzin	2,65	3,92	4,21	2,23				
Ex	GRTgaz Deutschland GmbH	NKP (ÜS)	Worms	2,65	3,92	4,21	2,23				
Ex	terranets bw GmbH	NKP (ÜS)	RC Aalen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Baden-Baden	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Bedenova	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Biberach	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC 36/7	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Bruchsal	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Crailsheim	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Elhingen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC EnBW-Nord	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC EnBW-OOR	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC EnBW-Stuttgart	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Erligheim	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Esslingen-Oberkochen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC NGS-Nordbaden	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC NGS-Ost	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Ettlingen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Rastal	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC EVO	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Geggenau	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Heidelberg	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Giengen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Heidenheim	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Heilbronn	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Königsbronn	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Konstanz	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Neckarsulm	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Oberschwaben	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Singen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Sinsten	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Kupferheim	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Pforzheim	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Mühlacker	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Radolfzell	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Rastatt	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Reutlingen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Sindelfi	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Rottweil	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Schramberg	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Schwäbisch-Gmünd	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Schwäbisch-Hall	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Stockach	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Gelsdorf	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Tauberfranken	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Triberg	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Tübingen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Ulm	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Villingen-Schwenningen	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (ÜS)	RC Waldorf	3,05	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (GÜP)	RC Basel	4,14	3,92	4,21	4,43				
Ex	terranets bw GmbH	NKP (GÜP)	RC Lindau	5,75	3,92	4,21	4,43				
Ex	terranets bw GmbH	NAP (Lv)	RC Neuenhelmerfeld 2	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Hornberg	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Audi	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Wittstock-Ost	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Wöslingen	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Eduard Merkle	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Deutsche Terrazzo Verkaufsstelle	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Eheleute Merkle	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Wasserkraftwerke Pulvermühle	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Pflanzenöl-Strom	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Naturenergie Lauter	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC Tullau	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	RC BHKW Hanxennest	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a
Ex	terranets bw GmbH	NAP (Lv)	Papierfabrik Palm	3,05	3,92	4,21	4,43	0,02336	€/(kWh/h)/a	0,0026	€/(kWh/h)/a

Ex	bayernets GmbH	NAP (Lv)	700069-1105-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-1102-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-0402-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-7103-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-2202-7	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NAP (Lv)	700069-1005-7	3,25	3,92	4,21	1,65				
Ex	bayernets GmbH	NAP (Lv)	700069-1007-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-0123-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-3522-2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-8621-2	0,00	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-3105-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-2925-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-5601-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-3604-7	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NAP (Lv)	700069-1028-2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-0509-7	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NAP (Lv)	700069-2607-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-1902-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-2501-7	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-4431-2	3,25	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Lv)	700069-7591-2	3,25	3,92	4,21	4,09	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Lv)	700069-2233-2	3,25	3,92	4,21	4,09	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Lv)	700069-2232-2	3,25	3,92	4,21	4,09	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Lv)	700069-8903-2	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NAP (Lv)	700069-2432-2	3,25	3,92	4,21	4,09	1460,00	€/a	496,40	€/a
Ex	bayernets GmbH	NAP (Lv)	700069-8101-2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-9802-2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Lv)	700069-8205-2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NAP (Sp)	Haiming 2-7F/bn Einpressen	3,51	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Sp)	Haiming 2-RAGES/bn Einpressen	3,51	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Sp)	Inzenham-West USP Einpressen	3,49	3,92	4,21	3,43	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NAP (Sp)	USP Haidach/Einpressen	3,51	3,92	4,21	3,15				
Ex	bayernets GmbH	NAP (Sp)	Wolfersberg/USP Einpressen	3,29	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (GÜP)	Überackern	3,51	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (GÜP)	Überackern 2	3,51	3,92	4,21	3,15	1460,00	€/a	496,40	€/a
Ex	bayernets GmbH	NKP (GÜP)	Zone Kiefersfelden-Pfronten	3,67	3,92	4,21	3,59				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Aichach-Inching	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Aichach-Inching (sn)	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone BEB-Lengthal	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Bierwang-Breitbrunn	3,25	3,92	4,21	3,15	2920,00	€/a	992,80	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Bogen	3,25	3,92	4,21	0,57	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Burghausen-Finsing 1	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Burghausen-Finsing 2	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Forchheim-Finsing	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Hebach	3,25	3,92	4,21	4,09	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Haiming	3,25	3,92	4,21	4,09	5840,00	€/a	1985,60	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Inntal	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Nordumgehung	3,25	3,92	4,21	3,15	2190,00	€/a	744,60	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Oberlandleitung	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Oberlandleitung (sn)	3,25	3,92	4,21	3,15	2190,00	€/a	744,60	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Pastetten	3,25	3,92	4,21	4,09				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Regensburg-Süd	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Südumgehung	3,25	3,92	4,21	3,15	2190,00	€/a	744,60	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Südumgehung (sn)	3,25	3,92	4,21	3,15	2190,00	€/a	744,60	€/a
Ex	bayernets GmbH	NKP (IB)	Ausspeisezone Ulm-Augsburg	3,25	3,92	4,21	3,15	1460,00	€/a	496,40	€/a
Ex	bayernets GmbH	NKP (IB)	Deggendorf Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Denkendorf Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Eching/Viecht Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Gendorf Industriepark	3,25	3,92	4,21	1,65				
Ex	bayernets GmbH	NKP (IB)	Gundihausen Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Industriepark Werk Bobingen	3,28	3,92	4,21	4,09				
Ex	bayernets GmbH	NKP (IB)	Münchnerau-Ost	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Münchnerau-West/Bruckberg	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Nittingen Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Regensburger Energie- und Wasserversorgung	3,25	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	Riedenburg Exit	3,25	3,92	4,21	0,57	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	Rottenburg/Laaber Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Stadtwerke Ingolstadt Netze	3,25	3,92	4,21	3,15				
Ex	bayernets GmbH	NKP (IB)	Stadtwerke Landshut	3,25	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	swa Netze	3,25	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	SWM Infrastruktur	3,25	3,92	4,21	3,15	730,00	€/a	248,20	€/a
Ex	bayernets GmbH	NKP (IB)	SWM Infrastruktur Region	3,25	3,92	4,21	3,15	1460,00	€/a	496,40	€/a
Ex	bayernets GmbH	NKP (IB)	Taufkirchen/Vils Exit	3,25	3,92	4,21	0,57				
Ex	bayernets GmbH	NKP (IB)	Tiefenbach Exit	3,25	3,92	4,21	0,57				

Sämtliche Angaben sind indikative, unverbindliche Prognosen für das Jahr 2020.
All information comprise indicative, non-binding forecasts for the year 2020.

Art. 26 (1) c) ii) Nr. 2 und / and 4 NC TAR	NetConnect Germany	GASPOOL	Gesamt Total
Kosten für Biogas Costs for biogas	104.706.055,23 €	149.548.330,16 €	254.254.385,39 €
Kosten der Marktraumumstellung Market area conversion costs	121.756.672,95 €	70.243.897,88 €	192.000.570,83 €
Kapazitäten relevant für die Biogasumlage in kWh/h Capacities relevant for the biogas charge in kWh/h	169.795.124,23	125.851.232,84	295.646.357,08
Kapazitäten relevant für die Marktraumumstellungsumlage in kWh/h Capacities relevant for the market area conversion charge in kWh/h	169.795.124,23	125.851.232,84	295.646.357,08
Biogasumlage Biogas charge			0,86 €
Marktraumumstellungsumlage Market area conversion charge			0,65 €
Anteilige Erlöse durch die Biogasumlage Proportional revenues from the biogas charge	146.022.955,88 €	108.231.429,52 €	254.254.385,39 €
Anteilige Erlöse durch die Marktraumumstellungsumlage Proportional revenues from the market area conversion charge	110.269.448,61 €	81.731.122,23 €	192.000.570,83 €

Art. 26 (1) c) ii) Nr. 2 und / and 4 NC TAR	
Indikatives Entgelt für Nominierungsersatzverfahren (Ersteinrichtung) Indicative charge for alternative nomination procedure (initial setup)	2.000,00 €
Indikatives Entgelt für Nominierungsersatzverfahren (monatlich) Indicative charge for alternative nomination procedure (monthly)	1.250,00 €
Anteilige Erlöse durch Nominierungsersatzverfahren Proportional revenues from the alternative nomination procedure	- €

Art. 26 (1) d) NC TAR, Art. 30 (2) a) ii) und / and b) NC TAR
Prognose der Referenzpreise
Estimation of reference prices

Jahr Year	Inflationsindex in Höhe 1,8 % (jährliche Veränderung des Verbraucherpreisgesamtindexes in 2017 gemäß destatis.de) abzüglich des generellen sektoralen Produktivitätsfaktors für die dritte Regulierungsperiode in Höhe von 0,49 % (BK4-17-099) Inflation index of 1,8 % (yearly evolution of the consumer price index in 2017 according to destatis.de) minus general sectoral factor for productivity for the third regulatory period of 0,49 % (BK4-17-099)	Geschätzte zulässige Erlöse aus Fernleitungsdienstleistungen vor Inflationierung und Anwendung des generellen sektoralen Produktivitätsfaktors Forecasted transmission service revenue before inflation and application of the general sectoral factor for productivity	Geschätzte zulässige Erlöse aus Fernleitungsdienstleistungen nach Inflationierung und Anwendung des generellen sektoralen Produktivitätsfaktors Forecasted transmission service revenue after inflation and application of the general sectoral factor for productivity	Maximale prognostizierte kontrahierte Kapazität bei Fusion der Marktgebiete in kWh/h Maximum forecasted contracted capacity in case of merger of the entry-exit systems in kWh/h	Maximale prognostizierte kontrahierte Kapazität bei Fusion der Marktgebiete gewichtet mit der Differenz zwischen Referenz- und Reservepreisen in kWh/h Maximum forecasted contracted capacity in case of merger of the entry-exit systems weighted with the different between the relevant reference and reserve prices in kWh/h	Indikativer Referenzpreis nach Anpassung gemäß Art. 6 (4) c) NC TAR bei Fusion der Marktgebiete Indicative reference price after rescaling according to Art. 6 (4) c) NC TAR in case of merger of the entry-exit systems	Indikativer Referenzpreis nach Anpassung gemäß Art. 6 (4) c) NC TAR ohne Fusion Indicative reference price after rescaling according to Art. 6 (4) c) NC TAR without merger NetConnect Germany	Indikativer Referenzpreis nach Anpassung gemäß Art. 6 (4) c) NC TAR ohne Fusion Indicative reference price after rescaling according to Art. 6 (4) c) NC TAR without merger GASPOOL
2020	-	2.222.155.927,69 €	2.222.155.927,69 €	622.481.240,99	574.998.506,56	3,87 €	4,21 €	3,27 €
2021	1,31%	2.222.155.927,69 €	2.251.266.170,34 €	622.481.240,99	574.998.506,56	3,92 €	4,27 €	3,31 €
2022	1,31%	2.222.155.927,69 €	2.280.757.757,17 €	622.481.240,99	574.998.506,56	3,97 €	4,32 €	3,35 €

Annahme zur jährlichen Entwicklung der zulässigen Erlöse aus Fernleitungsdienstleistungen ab 2021 (ausgewiesen nur bei den indikativen Referenzpreisen) Assumption of annual development of allowed transmission services revenue from 2021 (shown only for the indicative reference prices)	0,00%
Annahme zur jährlichen Entwicklung der prognostizierten kontrahierten Kapazität ab 2021 (ausgewiesen nur bei den indikativen Referenzpreisen) Assumption of annual development of forecasted contracted capacity from 2021 (shown only for the indicative reference prices)	0,00%

Bundesweite Angaben

Anlage 5

National data

Annex 5

Datengrundlage: Prognosewerte für das Jahr 2019. Abkürzungen Siehe Anlage 2.
Data basis: forecasted values for the year 2019. Abbreviations see Annex 2.

NetConnect Germany

		NAP (Ez)		NAP (Sp)		NKP (IP (GÜP+MÜP))	
		abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.
Entry	FZK	6.000	100,0%	2.140.720	19,2%	39.520.070	48,2%
	Conditional*	0	0,0%	9.022.843	80,8%	42.534.328	51,8%
	uFZK (Info)	0	-	5.126.663	-	26.013.950	-

		NAP (Lv)		NAP (Sp)		NKP (IP (GÜP+MÜP))		NKP (iB)	
		abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.
Exit	FZK	13.841.012	95,1%	1.177.150	12,9%	24.403.078	59,1%	154.116.010	100,0%
	Conditional*	712.100	4,9%	7.980.156	87,1%	16.895.878	40,9%	€ -	0,0%
	uFZK (Info)	3.112.704	-	2.036.843	-	2.945.875	-	2.641.518	-

Gaspool

		NAP (Ez)		NAP (Sp)		NKP (IP (GÜP+MÜP))	
		abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.
Entry	FZK	3.193.430	51,3%	29.671.820	88,3%	42.727.005	48,8%
	Conditional*	3.029.550	48,7%	3.931.366	11,7%	44.872.507	51,2%
	uFZK (Info)	59.076	-	6.105.354	-	4.372.703	-

		NAP (Lv)		NAP (Sp)		NKP (IP (GÜP+MÜP))		NKP (iB)	
		abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.	abs. (kWh/h)	rel.
Exit	FZK	19.478.403	100,0%	16.213.815	99,1%	24.695.259	64,9%	120.751.273	100,0%
	Conditional*	0	0,0%	139.357	0,9%	13.381.650	35,1%	0	0,0%
	uFZK (Info)	537.682	-	1.706.301	-	1.710.400	-	126.127	-

* Conditional: bFZK, DZK, BZK, TaK

Bundesweite Angaben | **Anlage 6**

National data | **Annex 6**

Datengrundlage: Prognosewerte für die Jahre 2019 und 2020.
Data basis: forecasted values for the years 2019 and 2020.

Referenzpreismethoden (RPM) 2019 je nach Fernleitungsnetzbetreiber. Briefmarke als RPM für 2020.
Reference price methodologies (RPM) for 2019 depending on TSO. Postage stamp as RPM for 2020.

		2019			2020 separate Anwendung RPM 2020 separate application of RPM			2020 gemeinsame Anwendung RPM 2020 joint application of RPM		
		Prognostizierte kontrahierte Kapazität in kWh/h Forecasted contracted capacity in kWh/h	Erlöse aus Fernleitungs dienstleistungen in € Transmission service revenues in €	Durchschnittspreis in € pro kWh/h/a Average price in € per kWh/h/a	Prognostizierte kontrahierte Kapazität in kWh/h Forecasted contracted capacity in kWh/h	Erlöse aus Fernleitungs dienstleistungen in € Transmission service revenues in €	Referenzpreis in € pro kWh/h/a Reference price in € per kWh/h/a	Prognostizierte kontrahierte Kapazität in kWh/h Forecasted contracted capacity in kWh/h	Erlöse aus Fernleitungs dienstleistungen in € Transmission service revenues in €	Referenzpreis in € pro kWh/h/a Reference price in € per kWh/h/a
Gaspool	Open Grid Europe GmbH / Gasunie Deutschland Transport Services GmbH	9.557.712,70	16.620.875,52	1,84	8.979.053,00	17.627.625,00	1,81	8.979.053,00	17.627.625,00	3,27
	GASCADE Gastransport GmbH	153.628.957,74	264.576.489,08	2,64	127.245.494,43	302.598.105,18	2,64	127.245.494,43	302.598.105,18	3,27
	Gasunie Deutschland Transport Services GmbH	48.970.787,48	219.690.853,06	4,45	50.796.913,94	229.717.958,00	4,46	50.796.913,94	229.717.958,00	3,27
	Nowega GmbH	10.953.209,00	42.311.210,27	4,00	11.226.249,00	41.085.696,77	3,80	11.226.249,00	41.085.696,77	3,27
	ONTRAS Gastransport GmbH	55.435.532,70	228.284.917,16	4,33	58.575.976,16	227.281.185,56	3,93	58.575.976,16	227.281.185,56	3,27
	Gastransport Nord GmbH	13.369.422,48	17.848.089,94	1,16	13.942.768,00	18.487.304,91	1,37	13.942.768,00	18.487.304,91	3,27
	Ferngas Netzgesellschaft mbH	5.701.757,15	12.177.734,00	2,14	4.300.000,00	12.758.969,97	2,97	4.300.000,00	12.758.969,97	3,27
	Lubmin-Brandov Gastransport GmbH	5.109.219,00	9.566.182,90	2,08	5.109.219,00	9.562.264,00	1,87	5.109.219,00	9.562.264,00	3,27
	OPAL Gastransport GmbH & Co. KG	6.696.497,27	4.250.249,94	0,61	6.318.320,93	3.898.783,25	0,62	6.318.320,93	3.898.783,25	3,27
	Fluxys Deutschland GmbH	5.437.557,00	21.654.905,92	4,40	6.691.913,00	25.270.000,00	3,78	6.691.913,00	25.270.000,00	3,27
	NEL Gastransport GmbH	15.796.450,00	31.795.125,69	2,24	14.401.846,00	30.837.035,77	2,15	14.401.846,00	30.837.035,77	3,27
	Summe Gaspool	**330.657.102,53**	**868.776.633,47**	**3,10**	**307.587.753,46**	**919.124.928,40**	**3,10**	**307.587.753,46**	**919.124.928,40**	**3,27**
NetConnect Germany	Open Grid Europe GmbH	182.923.466,66	745.878.932,92	4,09	171.415.259,00	785.936.255,16	4,50	171.415.259,00	785.936.255,16	4,21
	Fluxys TENP GmbH	16.001.611,01	58.322.778,78	3,30	35.237.171,00	60.735.002,80	1,68	19.084.237,00	60.735.002,80	4,21
	Thyssengas GmbH	36.919.414,42	172.446.749,12	4,76	36.825.692,00	184.692.482,93	5,20	36.825.692,00	184.692.482,93	4,21
	GRTgaz Deutschland GmbH	40.002.725,22	91.618.936,66	2,23	29.958.418,43	94.031.002,80	3,16	29.958.418,43	94.031.002,80	4,21
	bayernets GmbH	50.877.166,13	81.949.631,67	3,03	58.626.990,63	81.747.102,80	2,94	47.724.427,77	81.747.102,80	4,21
	terranets bw GmbH	27.440.684,85	122.552.857,21	4,43	27.749.450,00	95.889.152,80	3,43	27.749.450,00	95.889.152,80	4,21
	Summe NetConnect Germany	**354.165.068,29**	**1.272.769.886,36**	**3,91**	**359.812.981,07**	**1.303.030.999,29**	**3,85**	**332.757.484,21**	**1.303.030.999,29**	**4,21**

		Differenzen 2019 zu 2020 mit separater RPM Deviations 2019 and 2020 with separate RPM			Differenzen 2019 zu 2020 mit gemeinsamer RPM Deviations 2019 and 2020 with joint RPM			Differenzen 2020 zu 2020 bedingt durch gemeinsame RPM Deviations 2020 to 2020 due joint RPM		
		Prognostizierte kontrahierte Kapazität Forecasted contracted capacity	Erlöse aus Fernleitungs dienstleistungen Transmission service revenues	Referenzpreis Reference price	Prognostizierte kontrahierte Kapazität Forecasted contracted capacity	Erlöse aus Fernleitungs dienstleistungen Transmission service revenues	Referenzpreis Reference price	Prognostizierte kontrahierte Kapazität Forecasted contracted capacity	Erlöse aus Fernleitungs dienstleistungen Transmission service revenues	Referenzpreis Reference price
Gaspool	Open Grid Europe GmbH / Gasunie Deutschland Transport Services GmbH	-6,05%	6,06%	-1,24%	-6,05%	6,06%	77,97%	0,00%	0,00%	80,20%
	GASCADE Gastransport GmbH	-17,17%	14,37%	0,01%	-17,17%	14,37%	23,88%	0,00%	0,00%	23,86%
	Gasunie Deutschland Transport Services GmbH	3,73%	4,56%	0,27%	3,73%	4,56%	-26,55%	0,00%	0,00%	-26,75%
	Nowega GmbH	2,49%	-2,90%	-5,08%	2,49%	-2,90%	-18,24%	0,00%	0,00%	-13,86%
	ONTRAS Gastransport GmbH	5,67%	-0,44%	-9,24%	5,67%	-0,44%	-24,39%	0,00%	0,00%	-16,69%
	Gastransport Nord GmbH	4,29%	3,58%	18,04%	4,29%	3,58%	182,30%	0,00%	0,00%	139,17%
	Ferngas Netzgesellschaft mbH	-24,58%	4,77%	38,65%	-24,58%	4,77%	52,80%	0,00%	0,00%	10,20%
	Lubmin-Brandov Gastransport GmbH	0,00%	-0,04%	-10,00%	0,00%	-0,04%	57,38%	0,00%	0,00%	74,87%
	OPAL Gastransport GmbH & Co. KG	-5,65%	-8,27%	1,16%	-5,65%	-8,27%	436,07%	0,00%	0,00%	429,93%
	Fluxys Deutschland GmbH	23,07%	16,69%	-14,24%	23,07%	16,69%	-25,74%	0,00%	0,00%	-13,41%
	NEL Gastransport GmbH	-8,83%	-3,01%	-4,07%	-8,83%	-3,01%	45,90%	0,00%	0,00%	52,09%
	Summe Gaspool	**-6,98%**	**5,80%**	**-0,18%**	**-6,98%**	**5,80%**	**5,34%**	**0,00%**	**0,00%**	**5,54%**
NetConnect Germany	Open Grid Europe GmbH	-6,29%	5,37%	9,91%	-6,29%	5,37%	2,92%	0,00%	0,00%	-6,36%
	Fluxys TENP GmbH	120,21%	4,14%	-49,03%	19,26%	4,14%	27,58%	-45,84%	0,00%	150,29%
	Thyssengas GmbH	-0,25%	7,10%	9,23%	-0,25%	7,10%	-11,52%	0,00%	0,00%	-18,99%
	GRTgaz Deutschland GmbH	-25,11%	2,63%	41,32%	-25,11%	2,63%	88,41%	0,00%	0,00%	33,32%
	bayernets GmbH	15,23%	-0,25%	-2,94%	-6,20%	-0,25%	39,01%	-18,60%	0,00%	43,22%
	terranets bw GmbH	1,13%	-21,76%	-22,47%	1,13%	-21,76%	-4,91%	0,00%	0,00%	22,65%
	Summe NetConnect Germany	**1,59%**	**2,38%**	**-1,59%**	**-6,04%**	**2,38%**	**7,74%**	**-7,52%**	**0,00%**	**9,49%**

Bundesweite Angaben Anlage 7

National data Annex 7

Datengrundlage: Prognosewerte für die Jahre 2019 und 2020. Abkürzungen Siehe Anlage 2.
Data basis: forecasted values for the years 2019 and 2020. Abbreviations see Annex 2.

Net Connect Germany

Entry/Exit	Art des Punktes Type of point	Durchschnittspreis 2019 in € pro kWh/h/a Average price 2019 in € per kWh/h/a	Referenzpreis 2020 in € pro kWh/h/a Reference price 2020 in € per kWh/h/a	Abweichung Deviation
Entry	NAP (Ez)	4,09	4,21	1%
Entry	NAP (Sp)	2,39	4,21	74%
Entry	NKP (GÜP)	3,38	4,21	23%
Entry	NKP (MÜP)	2,97	4,21	40%
Exit	NAP (Lv)	4,02	4,21	3%
Exit	NAP (Sp)	1,97	4,21	110%
Exit	NKP (GÜP)	2,91	4,21	43%
Exit	NKP (iB)	4,18	4,21	-1%
Exit	NKP (MÜP)	4,09	4,21	1%

Gaspool

Entry/Exit	Art des Punktes Type of point	Durchschnittspreis 2019 in € pro kWh/h/a Average price 2019 in € per kWh/h/a	Referenzpreis 2020 in € pro kWh/h/a Reference price 2020 in € per kWh/h/a	Abweichung Deviation
Entry	NAP (Ez)	4,23	3,27	-23%
Entry	NAP (Sp)	2,85	3,27	15%
Entry	NKP (GÜP)	2,58	3,27	27%
Entry	NKP (MÜP)	4,03	3,27	-19%
Exit	NAP (Lv)	3,54	3,27	-8%
Exit	NAP (Sp)	2,92	3,27	12%
Exit	NKP (GÜP)	2,89	3,27	13%
Exit	NKP (iB)	4,05	3,27	-19%
Exit	NKP (MÜP)	2,67	3,27	23%