Amended version of 31 March 2021

effective from 1 October 2021

Cooperation Agreement between the Operators of Gas Supply Networks in Germany

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Whereas

The parties to this Agreement (hereinafter referred to individually as a "Party" or collectively as the "Parties") have an obligation under section 20(1b) of the German Energy Industry Act of 7 July 2005 (*EnWG*) to cooperate on a binding basis for the purpose of providing access to the German gas supply networks to the extent that is necessary to enable Shippers to carry out gas transports under a single entry agreement and a single exit agreement, even if this involves transporting gas through several interconnected networks, except where such cooperation is technically impossible or commercially unreasonable. Section 20(1b) of the Energy Industry Act further requires the Parties to jointly develop standard provisions for contracts providing network access to third parties.

Moreover, section 8(6) of the German Gas Third-Party Access Regulations (*GasNZV*, hereinafter referred to as the "Access Regulations") imposes an obligation on the Parties to enter into a cooperation agreement setting out the detailed rules that are to govern their cooperation and that are necessary to provide transportation services across various interconnected networks on reasonable terms and in a transparent, non-discriminatory and efficient manner that allows for bulk transactions to be processed.

Now, therefore, the Parties have agreed as follows:

Part 1 General Provisions

1 Scope of Cooperation

1. By entering into this Agreement, the Parties undertake to cooperate to the extent that is technically possible and commercially reasonable with a view to providing transportation services across various interconnected networks on reasonable terms and in a transparent, non-discriminatory and efficient manner that allows for bulk transactions to be processed, and they agree to be bound by the provisions set out herein.

   These include, among others, rules for the cooperation between Network Operators and between a Network Operator and the Market Area Manager in relation to the pass-through of network charges and biogas costs, Inter-System Capacity Applications, system interconnection, energy balancing and the administration of Balancing Groups, joint marketing of Capacity, use of linepack and the procurement and use of gas for system balancing purposes.

2. Each Network Operator is responsible for one or more gas supply networks to and from which gas is delivered and offtaken, and which are classified as upstream or downstream from one another. The provisions set out herein differentiate between Transmission System Operators (TSOs), Distribution System Operators (DSOs) who operate entry/exit systems, and Distribution System Operators who operate postage-stamp tariff systems in accordance with section 18 of the German Gas Network Tariff Regulations (*GasNEV*, hereinafter referred to as the "Tariff Regulations").

3. The TSOs shall form a market area in accordance with sections 20 and 21 of the Access Regulations and shall for designate an entity that is to act as the Market Area Manager for this market area and as such perform the respective functions outlined in the Access

Regulations. In the market area a Virtual Trading Point (VTP) shall be established where gas can be traded and gas quantities can be transferred between Balancing Groups. Market participants who use the VTP shall be liable to pay a fee. In order to determine this fee, the Market Area Manager shall conduct annual market consultations on the VTP services offered. The Market Area Manager is also Party to this Cooperation Agreement.

4. The provisions set out herein shall also apply to entities who operate closed distribution networks within the scope of section 110 of the Energy Industry Act, subject to the proviso that sections 18, 19, 21a, 22(1), 23a, 32(2), 33, 35 and 52 of the Energy Industry Act, including any regulations and/or administrative rulings adopted in relation thereto, shall not apply to such entities.

2 Contractual Framework

1. The Parties hereby agree and undertake to apply the standard provisions listed in paragraph (2) below in all contracts granting network access to third parties pursuant to sentence 7 of section 20(1b) of the Energy Industry Act.

2. The appendices to this Agreement set forth standard terms and conditions for the following types of contract:

   a) Entry/Exit Agreement for Transportation Services on Entry/Exit Systems, to be entered into by TSOs and Shippers (Appendix 1)

   b) Entry/Exit Agreement for Transportation Services on Entry/Exit Systems, to be entered into by DSOs operating entry/exit systems and Shippers (Appendix 2)

   c) Supplier Framework Agreement, to be entered into by DSOs operating postage-stamp tariff systems or operators of closed distribution networks within the scope of section 110 of the Energy Industry Act and Suppliers in their capacity as Shippers (Appendix 3)

   d) Balancing Group Contract, including an appendix setting out supplementary provisions for Biogas Balancing Group Contracts, to be concluded between the Market Area Manager and Balancing Group Managers (Appendix 4)

   e) Agreement on the Linking of Balancing Groups pursuant to Section 17(3) of the Balancing Group Contract Terms & Conditions, to be concluded between the Market Area Manager and Balancing Group Managers (Appendix 5)

   f) Connection and Use of Connection Agreement for Biogas Plants, to be entered into by Network Operators and relevant Connection Customers and/or Connection Users (Appendix 6)

   g) Biogas Entry Agreement for the Injection of Biogas into Distribution Networks, to be entered into by DSOs and Shippers who transport biogas (Appendix 7)

3. Supplementary terms and conditions relating to any of the standard contracts listed in paragraph (2) above may only be adopted insofar as they relate to the matters listed below for that type of contract and only where this is required to provide additional rules supplementing those set out in the standard terms and conditions, provided they do not conflict with the standard terms and conditions set forth in relation thereto. Any and all

such supplementary terms and conditions shall be set out separately from the standard terms and conditions.

a) Entry/Exit Agreement for Transportation Services on Entry/Exit Systems, to be entered into by TSOs and Shippers (Appendix 1)

- rules for the assignment of discounted and undiscounted Capacity to individual accounts by means of different shipper codes in accordance with the administrative rulings on the regular decision on the reference price method as well as the other points referred to in Article 26 (1) of Regulation (EU) 2017/460 for transmission system operators (Ref. BK9-19/610-NCG)(section 7(7))
- provisions imposing a requirement on Shippers to specify 24 consecutive hourly quantities in their nominations and/or granting them the option to nominate daily quantities (section 13(3))
- provisions granting Shippers the option to submit over-nominations with the nominating Balancing Group Managers as a Shipper without a pro rata allocation to several Shippers (section 13d(2), sentence 5)
- alternative flow management arrangements other than the usual nomination process (section 14)
- specification of allocation rules (section 22(1) and (3))
- tariffs and payment terms (section 25(10))
- invoicing and payments on account (section 26(1), sentence 1)
- penalty payments for Capacity overruns (section 30(4))
- specification of intervals and due dates for advance payments (section 36a(11))
- arrangements for the use of IT portals provided by the TSO, e.g. for the purpose of submitting nominations
- operational rules for Entry/Exit Points capable of switching between different gas qualities
- rules for the allocation of incremental Capacity within the meaning of Article 3(1) of Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and repealing Regulation (EU) No 984/2013 as amended at the date this Cooperation Agreement enters into force, including any security to be provided by network users and information on how possible delays in the availability of the relevant Capacity or the event of a disruption to the relevant project are dealt with contractually. The provisions of this Cooperation Agreement shall be without prejudice to any supplementary terms and conditions for the allocation of new technical Capacity at Market Area Interconnection Points and Cross-Border Interconnection Points pursuant to Article 2(3) of Commission Regulation (EU) No 984/2013 of 14 October 2013 as amended at 1 October 2016 as well as to any transportation contracts for new technical Capacity in effect on the date on which the Cooperation Agreement dated 30 October 2017 entered into force.

b) Entry/Exit Agreement for Transportation Services on Entry/Exit Systems, to be entered into by DSOs operating entry/exit systems and Shippers (Appendix 2)

- rules for the assignment of discounted and undiscounted Capacity to individual accounts by means of different shipper codes (Section 6(6)) in accordance with the ruling of the Federal Network Agency on specifications for the conversion of annual Capacity charges to within-year Capacity charges for capacity rights with a duration of less than one year and specifications for the calculation of transportation tariffs in accordance with Section 15(2) to (7) of GasNEV, the Gas Network Tariff Regulations (BEATE 2.0, BK9-18/608 amended by decision of 16.10.2020 (ref. BK9-20/608)))
- additional Capacity products and services provided in relation thereto (section 7(2))
- nominations (section 9) and other nomination channels (section 10(2),)
- tariffs and payment terms (section 19(10) and section 20(1))
- regulations on invoicing and payments on account (section 20 (1) sentence 1)
- penalty payments for Capacity overruns (section 24(4))
- specification of intervals and due dates for advance payments (section 31(9))
- specification of quantity reconciliation method
- price sheets
- arrangements for the use of IT portals provided by the Network Operator, e.g. for the purpose of submitting nominations

c) Supplier Framework Agreement, to be entered into by DSOs operating postage-stamp tariff systems or operators of closed distribution networks within the scope of section 110 of the Energy Industry Act and Suppliers in their capacity as Shippers (Appendix 3)

- additional arrangements governing the process for the interruption and restoration of transportation services or the flow of gas at connection points on the instruction of the Shipper (section 11(6) and (11))
- tariffs and payment terms (section 8(3) and (12))
- charging arrangements for RLM Exit Points (section 9) – specification of billing period, calculation of Capacity and commodity charges, charging rules for periods falling outside the regular billing period
- charging arrangements for Exit Points other than RLM Exit Points (section 9)
- specification of the demand estimation method applied in respect of Exit Points where allocations are calculated using standard load profiles (“SLP Method”; Appendix 5)
- price sheets (Appendix 1);

d) Balancing Group Contract, including an appendix setting out supplementary provisions for Biogas Balancing Group Contracts, to be concluded between the Market Area Manager and Balancing Group Managers (Appendix 4), and Agreement on the Linking of Balancing Groups pursuant to Section 5(3) of the Balancing Group Contract Terms & Conditions, to be concluded between the Market Area Manager and Balancing Group Managers (Appendix 5)

aa) general aspects
- rules for the formation of contracts for the linking of Balancing Groups (section 17(4))
- gas quantity transfers between Balancing Subgroups (section 9(1))
- tariffs and terms of payment, intervals for payments on account/advance payments (section 29(2) and (section 32(1))
- formats and data exchange (section 38)

bb) contract for the apportionment of quantities between different Master Balancing Groups

cc) price sheet

dd) terms for the admission of users to online contract formation services and/or to the portal (section 3(2))

e) Connection and Use of Connection Agreement for Biogas Plants, to be entered into by Network Operators and relevant Connection Customers and/or Connection Users (Appendix 6)

- details on the charging of connection costs (section 8)
- specification of individual amounts in relation to limitations of liability in cases of minor negligence where liability for financial loss or damage to property suffered in the course of the connection works is limited to such foreseeable loss or damage as is typical for the relevant type of contract (section 21(3))
- details relating to the description of the connection and the Technical Connection Conditions (Appendix 1)
- additional details relating to the site plan (Appendix 2)
- measurement arrangements (Appendix 3)
- interruption matrix (Appendix 4)

f) Biogas Entry Agreement for the Injection of Biogas into Distribution Networks, to be entered into by DSOs and Shippers who transport biogas (Appendix 7)

- contractual arrangements for the interruption of transportation services (section 9(1)(lit. c))
- details relating to the Technical Connection Conditions (Appendix 1)
- measurement arrangements (Appendix 2)
- interruption matrix (Appendix 4)

4. The provisions applied by a Party may differ from the standard terms and conditions listed in paragraph (2) above only where and to the extent that such variation has been permitted expressly in the relevant Appendix 1 to 7 or below. Any and all such variations shall also be set out separately from the standard terms and conditions.

In relation to the Entry/Exit Agreement for Transportation Services on Entry/Exit Systems, to be entered into by TSOs and Shippers (Annex 1):

- rules for bundled Capacity products offered at Cross-Border Interconnection Points under the administrative ruling on gas Capacity management and auction procedures handed down by the Federal Network Agency on 24 February 2011 (so-called "KARLA Gas" decision; ref: BK7-10-001), or under any other administrative ruling by the Federal Network Agency that repeals or supplements this ruling
- exceptions for Cross-Border Interconnection Points pursuant to sentence 3 of section 1(6)
- differing rules for the assignment of discounted and undiscounted Capacity to individual accounts by means of different shipper codes (section 7(7))
- submission channel for Capacity status notices (section 12(16))
- variations from the provisions set out in Common Business Practice (CBP) "Harmonisation of the Nomination and Matching Process" (section 13(9))
- rules for the allocation of incremental Capacity within the meaning of Article 3(1) of Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and repealing Regulation (EU) No 984/2013 as amended at the date this Cooperation Agreement enters into force, including any security to be provided by network users and information on how possible delays in the availability of the relevant Capacity or the event of a disruption to the relevant project are dealt with contractually. The provisions of this Cooperation Agreement shall be without prejudice to variations in supplementary terms and conditions regarding the rules for the allocation of new technical Capacity at Market Area Interconnection Points and Cross-Border Interconnection Points pursuant to Article 2(3) of Commission Regulation (EU) No 984/2013 of 14 October 2013 as amended at 1 October 2016 as well as to any transportation contracts for new technical Capacity in effect on the date on which the Cooperation Agreement dated 30 October 2017 entered into force.

5. The Connection and Use of Connection Agreement for Biogas Plants, to be entered into by Network Operators and relevant Connection Customers and/or Connection Users, as amended with effect from 1 October 2012, may only be applied to connections in respect of which, effective 1 October 2012, a contract offer is required to be submitted under sentence 3 of section 33(6) of the Access Regulations. The Parties have no obligation to apply the standard contract as amended with effect from 1 October 2012 (Appendix 6) to any Connection and Use of Connection Agreements offered and/or entered into before that date. This shall be without prejudice to any changes that may be required to comply with mandatory statutory, regulatory or administrative provisions.

3 Best Practice Guidelines

1. Guidance on how to construe the provisions set out in this Cooperation Agreement and descriptions of the relevant processes are provided in separate best practice guidelines which are adopted jointly by the associations BDEW, VKU and GEODE. Market participants who comply with the following best practice guidelines:

   a) Best Practice Guidelines for Gas Balancing Group Management

b) Best Practice Guidelines for the Use of Standard Load Profiles for Gas Demand Estimation Purposes

c) Best Practice Guidelines for Biogas Balancing

d) Best Practice Guidelines for Implementation of the Pass-Through Mechanism for Biogas Costs

e) Best Practice Guidelines for the Gas Quality Switchover Process

f) Best Practice Guidelines for the Prevention of Gas Supply Emergencies, and

g) Best Practice Guidelines for Network Operator Transfer Processes

each as amended from time to time, shall be deemed to be in compliance with this Cooperation Agreement. In case of doubt the provisions set out in this Cooperation Agreement shall prevail. In relation to the Best Practice Guidelines for Network Operator Transfer Processes listed at h) above this presumption shall only apply insofar as the guidelines relate to gas matters; provisions that only apply to electricity are not governed by this Cooperation Agreement, which relates to gas only.

2. In good time before 1 April and 1 October each year, BDEW, VKU and GEODE shall review whether any of the best practice guidelines require any changes. All necessary changes shall be adopted so as to enable implementation by the above-mentioned dates whilst allowing for a reasonable implementation period, which should normally not be less than 3 months.

3. Changes required to be implemented at short notice due to legal requirements may be introduced outside the periods defined in paragraph (2) above.

4. All changes made to any of the best practice guidelines shall be notified to the Parties by BDEW, VKU and GEODE in a written form pursuant to section 126b of the German Civil Code (*BGB*; "Text Form"); for the purpose of such notice, it is sufficient if a link is provided to a website which sets out the exact wording of the changes made.

4 Definitions

For the purposes of this Agreement, the following definitions apply:

1. "**Switchover Supply Effective Date**" as used in relation to a Gas Quality Switchover process, means the date from which high CV gas is actually delivered at the relevant end users' Exit Points.

2. "**Connection User**" has the meaning given in section 1(3) of the German Regulations for Connections to Low-Pressure Gas Supply Networks (*NDAV*) and is to be construed accordingly in relation to medium-pressure and high-pressure networks.

3. "**Design Temperature**" means the temperature as defined for the relevant climate zone in Table 1a of Annex 1 to the DIN EN 12831 standard.

4. "**Exit Network Operator**" means any Network Operator with whom a Shipper has entered into an exit agreement pursuant to sentence 1 of section 3(1) of the Access Regulations, including exit agreements signed in the form of Supplier Framework Agreements.

5. “**Exit Point**” means any point within the market area where a Shipper can offtake gas from a Network Operator’s network for the purpose of supplying that gas to end users or injecting it into storage, or any point where gas may be transported across national borders. Where several Exit Points on a transmission system have been combined to form a zone pursuant to section 11(2) of the Access Regulations, such group of Exit Points is also deemed to constitute an Exit Point within the meaning of this definition.

6. “**Switchover Balancing Effective Date**” as used in relation to a Gas Quality Switchover process, means the exact switchover date relevant for energy balancing purposes which falls inside the notified Switchover Period and which corresponds to the first day of the first month from which all relevant gas quantities will be allocated to Balancing Groups for high CV gas only.

7. “**Balancing CV**” means the predefined calorific value (CV) used for energy balancing purposes which represents an estimate approximating the final calorific value which is applied for consumption and transportation billing purposes (“**Billing CV**”) in a CV Zone. The Balancing CV is subject to monthly reviews, where necessary. A “**CV Zone**” is a network area in respect of which the same Billing CV applies.

8. “**Balancing Group Number**” refers to a unique number assigned to a Balancing Group Manager by a Market Area Manager in relation to a Balancing Group and which principally serves as a reference to identify nominations and renominations made in respect of gas quantities.

9. “**Biogas Processing Facility**” means any processing facility used to upgrade biogas to natural gas quality that falls within the scope of section 32, No. 3 of the Access Regulations.

10. “**Biogas Entry Network Operator**” means any Network Operator to whose network a Biogas Processing Facility is connected.

11. “**Entry Network Operator**” means any Network Operator with whom a Shipper has entered into an entry agreement pursuant to sentence 1 of section 3(1) of the Access Regulations.

12. “**Entry Point**” means any point within the market area where a Shipper may deliver gas to a Network Operator’s network from another country, a domestic source, a production facility, an LNG or biogas plant or a storage facility. Where several Entry Points on a transmission system have been combined to form a zone pursuant to section 11(2) of the Access Regulations, such group of Entry Points is also deemed to constitute an Entry Point within the meaning of this definition.

13. “**External System Balancing Tool**” means any balancing tool within the meaning of section 27(2) of the Access Regulations (with each balancing action that is taken using such a tool being referred to as an “**External System Balancing Action**”).

14. “**GaBi Gas 2.0**” means the administrative ruling on gas balancing handed down by the Federal Network Agency on 19 December 2014 (ref: BK7-14-020).

15. “**Gas Year**” means the period commencing at 06:00 hours on 1 October of each calendar year and ending at 06:00 hours on 1 October of the following calendar year.

16. “**Internal System Balancing Tool**” means any balancing tool within the meaning of section 27(1) of the Access Regulations (with each balancing action that is taken using such a tool being referred to as an “**Internal System Balancing Action**”).

17. “**Capacity**” means the maximum hourly flow rate at an Entry Point or Exit Point expressed in kWh/h.

18. “**Capacity Booking Platform**” means the joint booking platform operated by the TSOs.

19. “**KARLA Gas**” means the administrative ruling on gas Capacity management and auction procedures handed down by the Federal Network Agency on 24 February 2011 (ref: BK7-10-001), or any other administrative ruling by the Federal Network Agency that repeals or supplements this ruling.

20. “**Flow Commitment**” means any contractual arrangements entered into under section 9(3), sentence 2, No. 1 of the Access Regulations.

21. “**M**” in relation to a month means the “**Delivery Month**”. “Delivery Month” refers to the period commencing at 06:00 hours on the first day of the relevant Delivery Month and ending at 06:00 hours on the first day of the following month. Where the registered supply start date falls on a day other than the first day of a month, the Delivery Month commences at 06:00 hours on the first day of the relevant supply period. For registered supply end dates falling on a day other than the last day of a month, the Delivery Month ends at 06:00 hours on the following day.

22. “**Network Balancing Account**” means an account in which all inputs delivered to a network on a day are recorded and compared against all allocated offtakes delivered from that network to end users, downstream networks, storage facilities and networks in other countries on that day.

23. “**NBA Balancing Object**” means a separate balancing object which is used to take account of linepack changes and/or operational balancing accounts (OBA) when determining the quantities to be recorded in the associated Network Balancing Account.

24. “**Residual Load**” refers to the difference between the gas quantity determined as having flowed onto a network on a day and the gas quantity determined as having flowed from that network on that day to RLM Exit Points (aggregate RLM Exit Point load), downstream networks, storage facilities, where applicable adjusted to account for linepack changes, and networks in other countries.

25. “**RLM Exit Point With A Flat Allocation Profile**” (“**RLMmT**”) refers to any Exit Point equipped with a supply meter installation which records hourly consumption (“**RLM Exit Point**”) in respect of which the Market Area Manager divides the daily sum of all hourly offtakes allocated at such point by the number of hours in the relevant gas day to create a flat allocation profile comprising equal hourly quantities.

26. “**RLM Exit Point With A Structured Allocation Profile**” (“**RLMoT**”) refers to any RLM Exit Point in respect of which the Market Area Manager uses the actual hourly offtakes allocated at such point.

27. “**Balancing Subgroup**” means an account registered in relation to a Balancing Group which allows the relevant Balancing Group Manager to allocate inputs and offtakes to individual Shippers and/or to maintain a clear overview of certain quantities.

28. “**D**” in relation to a day means the “**Delivery Day**”, i.e. the period commencing at 06:00 hours on that day and ending at 06:00 hours on the following day.

29. “**Switchover Technical Implementation Date**” as used in relation to a Gas Quality Switchover process, means the date during the notified Switchover Period from which high CV gas will be delivered to the relevant segment of the relevant TSO’s network.

30. “**Interruptible Capacity**” means Capacity that is offered by a Network Operator on an interruptible basis. Transportation services using Interruptible Capacity may be interrupted by the Network Operator.

31. “**Virtual Exit Point**” refers to a non-bookable Exit Point in a Balancing Group via which gas can be transferred to another Balancing Group.

32. “**Virtual Entry Point**” refers to a non-bookable Entry Point in a Balancing Group via which gas can be transferred from another Balancing Group.

33. “**Maximum Hourly Supply Rate**” in relation to an Entry or Exit Point connected to a distribution network that operates a postage-stamp tariff system, means the maximum possible hourly gas flow as determined for that point at the network’s design conditions.

34. “**Business Day**” as used in relation to any deadline, and as opposed to the definition given in section 2, No. 16 of the Access Regulations, means any day other than a Saturday, Sunday or public holiday. Any day recognised as a public holiday in any German state shall be considered a national holiday. The 24th and 31st of December shall always be deemed to be public holidays.

Part 2 Market Area

5 Assignment of Entry and Exit Points to the Market Area

All entry and exit points located in Germany are allocated to the nationwide market area.

6 Pass-Through of Network Costs/Charges

1. The charges levied by upstream Network Operators shall be passed on to downstream Network Operators in accordance with the rules described below.

2. Each Network Operator who is not a TSO shall create a cost pool named “Pass-Through Costs”. In this cost pool the Network Operator shall record all network charges payable to upstream Network Operators under the provisions of Chapter 1 of Part 3 below (Inter-System Capacity Rules). Where at any system interconnection point connecting its network to upstream networks a Network Operator also levies entry charges for gas deliveries to its own network, the applicable unit rates shall be multiplied by the amount of Capacity booked at that point and recorded in an additional cost pool named “Network Entry Costs”. The cost pool “Network Entry Costs” shall not be included in the cost pool “Pass-Through Costs” but is part of the Network Operator's own network costs.

3. The costs recorded in the cost pool “Pass-Through Costs” shall be fully passed on by the Network Operator, regardless of whether the amounts recorded therein relate to:

    - different upstream networks;

- commodity, Capacity or standing charges, or unit Capacity charges, or
- biogas costs recoverable under section 7 below, or
- Gas Quality Switchover costs recoverable under section 10 below.

4. The tariff components derived from the cost pool “Pass-Through Costs” shall be calculated in accordance with the rules applying to any other tariff components to be determined on the basis of the relevant share of allowed revenue pursuant to section 21 of the Gas Network Charges Ordinance (GasNEV), hereinafter also referred to as Tariff Regulations.

   a) Network Operators who offer Capacity bookings: The cost pool “Network Entry Costs” and the cost pool “Pass-Through Costs” (in EUR) shall each be divided by the aggregate amount of exit Capacity upon which the tariff calculations for the Network Operator's network have been based. The unit rate calculated on the basis of the entry tariffs shall be added to the Network Operator's exit tariffs to give the new tariff system for the Network Operator's own network. The unit rate derived from the costs/charges passed on from the upstream network shall be added to the exit tariffs applied under the Network Operator's new tariff system, whereupon it shall be published as the Network Operator's tariff system including pass-through costs from upstream networks.

   b) DSOs who operate postage-stamp tariff systems: DSOs who apply tariffs under section 20(2) of the GasNEV shall first deduct from the cost pool “Pass-Through Costs” the share of the costs incurred for the use of upstream networks that is attributable to those tariffs, which shall be calculated based on the annual peak demand measured at the respective end user's connection point, and allocate the relevant costs directly to the tariffs levied under section 20(2) of the Tariff Regulations as part of the costs incurred for the use of upstream networks. The remaining share of the cost pool “Pass-Through Costs” shall be incorporated into the Network Operator's postage-stamp tariff system.

   Notwithstanding the foregoing, in relation to operators of closed distribution networks within the scope of section 110 of the Energy Industry Act the pass-through mechanism for network costs/charges described herein shall not operate on the basis of allowed revenue but rather on the basis of the revenue calculated for the purpose of determining the tariffs applicable for use of the closed distribution network.

5. By 30 September each year at the latest, each TSO shall give notice in Text Form to the downstream Network Operators directly connected to its network to notify them of the tariffs the TSO will apply in the following calendar year or of any changes made in relation thereto. In the event that by 30 September in any year the applicable tariffs have not yet been determined, the notice shall specify the anticipated rates as calculated on the basis of the allowed revenue recoverable in the following year. The final tariffs applicable in the following calendar year shall be published no later than by 2 December each year.

6. DSOs who are directly connected to a TSO and who are themselves connected to other, lower-level downstream DSOs shall in turn give notice in Text Form to their lower-level downstream DSOs to notify them of their own anticipated tariffs once they are known, but no later than by 6 October each year, with the final tariffs to be published no later than by 12 December each year. All other downstream DSOs shall provide notice of their preliminary tariffs no later than 10 October and publish their final tariffs no later than

16 December each year. Sentence 2 of paragraph (5) above shall apply accordingly. Where due to complex cascading structures the above notice periods cannot be complied with in individual cases, the Network Operators involved shall consult with one another. Section 21 (2) GasNEV shall remain unaffected.

7 Pass-Through of Biogas Costs

1. All costs incurred by Network Operators in connection with the injection of biogas into their networks shall be passed on to all other networks in Germany (see section 20b of the Tariff Regulations).

2. Each Biogas Entry Network Operator shall report its biogas costs as defined in section 20b of the Tariff Regulations to the relevant TSO (the “Upstream Biogas Cost Reporting Process”).

   a) Each Biogas Entry Network Operator shall estimate the biogas costs as defined in section 20b of the Tariff Regulations it expects to incur in the following calendar year (Y+1). For this purpose, the Biogas Entry Network Operator shall only take into account such costs as are certain to arise based on the information available. This shall particularly be the case, without limitation, where a contract has already been entered into. By 31 August each year, each Biogas Entry Network Operator shall submit its biogas cost estimate for the following calendar year (Y+1) directly to the TSO to whose network the network of the Biogas Entry Network Operator is connected, whether directly or indirectly through a series of other networks. By the same date, i.e. 31 August each year, each Biogas Entry Network Operator shall also notify that TSO of the actual biogas costs the Biogas Entry Network Operator incurred in the preceding year (Y-1).

   b) In parallel with their submissions to the TSOs, Biogas Entry Network Operators shall also submit their biogas cost estimates for the following calendar year (Y+1) and their actual biogas costs in the preceding year (Y-1) to the Federal Network Agency. A data submission template for the reporting of biogas costs pursuant to section 20b of the Tariff Regulations is provided by the Federal Network Agency on its website (http://www.bundesnetzagentur.de).

3. The TSO shall divide each submitted biogas cost estimate into 12 identical monthly amounts and reimburse those amounts to the relevant Biogas Entry Network Operator over the course of the calendar year following conclusion of the Upstream Biogas Cost Reporting Process (Y+1) by way of monthly payments (“Biogas Cost Reimbursement”).

4. Upon conclusion of the Upstream Biogas Cost Reporting Process pursuant to paragraph (2) above, the TSO shall calculate the sum of all biogas costs to be recovered in its network area under section 20b of the Tariff Regulations (the “Total Recoverable Biogas Costs”).

   a) The Total Recoverable Biogas Costs comprise the following items:

      - the TSO's own biogas cost estimate for the following calendar year (Y+1) as determined pursuant to paragraph (2) above,

- the biogas cost estimates for the following calendar year (Y+1) submitted by downstream Network Operators pursuant to paragraph (2)(lit. a) above,
- the difference between the actual costs incurred in the preceding year (Y-1), and the cost estimates submitted for that year, and
- the excess or shortfall in revenues from the differences resulting from a deviation between the capacities of the preceding year (Y-1), on which the calculation is based, and the capacities actually marketed in the preceding year (Y-1), taking into account possible compensation amounts pursuant to Section 7 lit. b.

b) The differences between actual costs and the cost estimates of the preceding year of the Network Operators concerned and the excess or shortfall in revenues of the transmission system operator due to the differences resulting from a change in marketed capacity in the preceding year shall bear interest at the average amount committed in the calendar year to be compensated. The average amount committed is calculated as the average of the amounts at the beginning and end of the year. The interest rate is based on the average of the current yield of fixed-interest securities of domestic issuers published by the Deutsche Bundesbank over the last ten completed calendar years.

5. On the basis of the Total Recoverable Biogas Costs determined for the market area, the TSOs shall determine the amount to be recovered nationally ("National Total Recoverable Biogas Costs") and also the total Capacity contracted throughout Germany by Shippers and downstream Network Operators in the following calendar year (Y+1).

   a) The TSOs shall notify each other and the Federal Network Agency of the Total Recoverable Biogas Costs determined for the following calendar year (Y+1) pursuant to paragraph (4) above and of the Capacity of all TSOs expected to be contracted by Shippers and downstream Network Operators in the following calendar year (Y+1). For this purpose, the TSOs shall consider the Capacity at all Exit Points on the relevant networks other than Exit Points to storage facilities or Cross-Border Interconnection Points.

   b) On the basis of their own respective costs and the costs notified pursuant to paragraph (5)(a) above, the TSOs shall calculate the National Total Recoverable Biogas Costs for the following calendar year (Y+1) and also the relevant amount of the total Capacity of all TSOs expected to be contracted throughout Germany by Shippers and downstream Network Operators ("National Total Capacity Holdings") in the following calendar year (Y+1). The result shall be notified to each TSO and to the Federal Network Agency.

   c) To account for the fact that several TSOs operate in the market area, the amount of the National Total Recoverable Biogas Costs and of the National Total Capacity Holdings may be calculated by the Market Area Manager or by a third party authorised to do so by the TSOs. A TSO may also be appointed to act as the third party within the meaning of the foregoing provision.

6. On the basis of the National Total Recoverable Biogas Costs and the National Total Capacity Holdings also determined pursuant to paragraph (5)(lit. b) above, the TSOs shall calculate a uniform national pass-through amount per unit (the "Unit Biogas Pass-Through

Amount") which shall be levied throughout Germany in the following calendar year (Y+1) to recover the Total Recoverable Biogas Costs as defined in section 20b of the Tariff Regulations.

a) The TSOs shall calculate the Unit Biogas Pass-Through Amount by dividing the National Total Recoverable Biogas Costs by the National Total Capacity Holdings expected in the following calendar year (Y+1).

b) To account for the fact that several TSOs are operating in the market area, the TSOs may authorise the Market Area Manager or a third party to calculate the Unit Biogas Pass-Through Amount on their behalf. A TSO may also be appointed to act as the third party within the meaning of the foregoing provision. In this case, the Market Area Manager or the third party authorised by the TSOs shall notify the TSOs of the Unit Biogas Pass-Through Amount to be applied in the following calendar year (Y+1).

7. The Total Recoverable Biogas Costs shall then be recovered nationally through the exit tariffs levied by the Network Operators. For this purpose, each TSO shall offset the costs it has incurred in connection with biogas injections into its network against any revenue raised in connection therewith ("Biogas Cost Settlement").

a) Each TSO shall charge the Unit Biogas Pass-Through Amount as determined pursuant to paragraph (6) above in addition to its exit tariffs. By 1 October each year, each TSO shall publish the new Unit Biogas Pass-Through Amount in €/(kWh/h)/a applicable from 1 January of the following calendar year (Y+1).

   The additional Unit Biogas Pass-Through Amount shall not be applied at Exit Points to storage facilities connected to the networks of the TSOs and at Cross-Border Interconnection Points.

   The TSOs shall apply the revenues they earn from downstream Network Operators through Inter-System Capacity charges and the additional revenues generated from biogas neutrality charges applied at end-user connection points to cover the costs incurred in connection with biogas injections into the networks.

b) Where a TSO expects that it will generate a surplus after deducting its own costs and the costs incurred in its downstream networks from the revenues it raises from biogas neutrality charges, it shall make monthly settlement payments to those other TSOs whose revenues from biogas neutrality charges are insufficient to recover the costs incurred in their own and downstream networks.

c) To account for the fact that several TSOs are operating in the market area, the TSOs may authorise the Market Area Manager or a third party to calculate the settlement payments required to be made under paragraph (7)(b) above on their behalf. A TSO may also be appointed to act as the third party within the meaning of the foregoing provision.

   In this case the Market Area Manager or authorised third party shall as part of their calculations to determine the Unit Biogas Pass-Through Amount for the following calendar year (Y+1) calculate the over- and underrecovery amounts for each TSO together with the resulting amounts of the monthly settlement payments. The Market Area Manager or authorised third party shall then notify the TSOs of the relevant amounts.

Where the settlement payments are made to the Market Area Manager or the third party authorised by the TSOs, the Market Area Manager or third party shall pay the settlement amount to those TSOs whose revenues under paragraph (7)(a) above are insufficient to recover the biogas costs incurred in their own and downstream networks.

d) The Unit Biogas Pass-Through Amount shall be passed on to all relevant Exit Points (including end-user connection points), starting with the TSO's network, in accordance with the rules outlined in section 6 above, which shall apply mutatis mutandis.

e) DSOs who operate entry/exit systems shall pass on the Unit Biogas Pass-Through Amount to all Exit Points in accordance with the entry/exit system rules and shall thus only apply it to Capacity. DSOs who operate postage-stamp tariff systems shall incorporate the Unit Biogas Pass-Through Amount in their postage-stamp or other tariff system pursuant to section 18 or 20 of the Tariff Regulations, respectively, as part of the network charges charged by their upstream Network Operator(s), which include the Unit Biogas Pass-Through Amount. The general approach to this process shall be the same as under the pass-through mechanism for other network costs/charges passed on by upstream Network Operators.

f) Exit Network Operators shall receive higher network charges that have been adjusted to include the Unit Biogas Pass-Through Amount from network users (Shippers, end users) and shall pay their higher monthly Inter-System Capacity invoices including the Unit Biogas Pass-Through Amount to their upstream Network Operators.

All changes to exit tariffs required under the pass-through mechanism described herein shall be made as of the effective date of the new network tariffs, i.e. with effect from 1 January each year.

8. Any and all differences arising between the biogas cost estimates and the actual biogas costs incurred by distribution system operators shall be settled as follows ("Biogas Cost Adjustment"):

a) Each TSO shall determine the difference between the actual biogas costs incurred in the preceding year (Y-1) as reported for that year by each Biogas Entry Network Operator and the actual Biogas Cost Reimbursement paid to that Biogas Entry Network Operator on the basis of its cost estimate for the preceding year (Y-1). These differences arising from the reconciliation shall bear interest in accordance with section 4(b). The difference thus determined shall be offset against the monthly Biogas Cost Reimbursement payments to be made to the relevant Biogas Entry Network Operator in the following calendar year (Y+1). At the same time, the TSO shall adjust the Unit Biogas Pass-Through Amount for the following calendar year (Y+1) by adding or deducting the difference.

b) To account for the fact that several TSOs are operating in the market area, the TSOs may authorise the Market Area Manager or a third party to carry out the above calculations pursuant to lit. a). A TSO may also be appointed to act as the third party within the meaning of the foregoing provision.

8 Gas Quality Switchover Process

1. Where due to technical requirements a network must be permanently converted from low CV to high CV gas quality pursuant to section 19a of the Energy Industry Act, the relevant TSO shall initiate the necessary process (referred to as a "**Gas Quality Switchover**").

2. The Network Operators affected by a Gas Quality Switchover shall produce and decide on a joint concept for implementation ("**Gas Quality Switchover Concept**") in the course of the Network Development Plan (NDP) process or as part of the implementation report to be produced in relation thereto, as the case may be. The Gas Quality Switchover Concept shall specify the network areas to be permanently converted, the relevant affected RLM customers and the chronological order in which the network areas are to be switched over, with due regard to the availability of alternative high CV gas supplies and suitable Flow Commitment options available to the TSOs. Insofar as any adjacent Network Operators are affected, they shall be notified in advance to inform them about the content of the Gas Quality Switchover Concept, which shall be agreed with those Network Operators where possible. The Gas Quality Switchover Concept shall be presented as part of the NDP or the NDP implementation report, as the case may be, to serve as a point of reference and provide a basis for discussion. The relevant TSO shall determine the dates from which the required supply Capacity for high CV gas must be made available and by which the switchover works must be completed for all affected network areas. In the years between the NDP publication dates the annual Gas Quality Switchover Concept shall be published as an appendix to the corresponding NDP implementation report. If any such Gas Quality Switchover Concept introduces any changes compared to the Gas Quality Switchover Concept published as part of the NDP last consulted and if those changes relate to the first 5 years of the period under review in that NDP, they shall be consulted with the downstream Network Operators affected.

3. No later than 2 years and 8 months before the planned start of a Switchover Period pursuant to section 22(4)(2) below, the Network Operators affected shall agree an implementation schedule ("**Switchover Schedule**") with their directly connected downstream Network Operators which shall take account of the binding measures to be taken and their chronological order and which shall specify binding dates for each Switchover Area. In particular, without limitation, the Switchover Schedule shall specify the anticipated Switchover Technical Implementation Date so as to allow the downstream Network Operators involved to invite tenders for the necessary modification works on their networks in a timely manner and to duly publish the anticipated Switchover Technical Implementation Date with at least two years' advance notice as required. Each Switchover Schedule shall cover one "**Switchover Area**", which is defined as an area where the prevailing mechanical flow conditions are such that dependencies exist between individual system interconnection points and/or connection points which make it necessary for those points to be switched over together. Where a Switchover Area encompasses system interconnection points and/or connection points of several downstream Network Operators directly connected to the relevant network and/or if the relevant system interconnection points are served by more than one TSO, the Parties involved (upstream Network Operator(s), directly connected downstream Network Operator(s)) should agree a multilateral Switchover Schedule. Where required, directly connected end users who use gas for non-standard applications ("**Non-**

Standard End User") and Storage System Operators (SSOs) may also be involved in the process and be a party to any Switchover Schedule.

Each Switchover Schedule shall include but not necessarily be limited to the following key provisions:

Provision of further details and/or additional rules to supplement those set out in relation to Gas Quality Switchover processes in this Cooperation Agreement as amended from time to time (especially sections 8 to 10 and 22(4) and 22(5) of this Cooperation Agreement),

- definition of the Switchover Area and of the dependencies existing for the switchover of individual system interconnection points and/or connection points,
- coordination and determination of the month in which the Switchover Technical Implementation Date is expected to fall,
- process for the further specification of the Switchover Technical Implementation Date,
- responsibilities and cooperation and notice obligations,
- where applicable, specific Capacity and pressure constraints for the switchover process if other than those which apply during normal operations,
- where an existing exit zone of any TSO will be split up: the conditions for use of the individual system interconnection points previously combined in that exit zone throughout the duration of the switchover process if other than those which apply during normal operations,
- rules for the agreement of a new Switchover Technical Implementation Date in case of delays other than negligently or wilfully caused delays within the meaning of paragraph (4) below, especially, without limitation, in the event that the switchover works cannot be carried out as planned due to a lack of qualified specialist service providers,
- applicability of relevant general provisions of this Cooperation Agreement (section 54 on force majeure, section 55 on liability, section 56 on transfer of rights and obligations, section 58 on severability, section 59 on confidentiality) to the Switchover Schedule.

4. In order to guarantee that all switchover works can be completed in compliance with the agreed Switchover Schedule, the affected Network Operators, directly connected Non-Standard End Users and SSOs, if any, shall not cause any delays in relation to the binding dates agreed, neither negligently nor wilfully.

5. When implementing a Gas Quality Switchover at the system interconnection points and Exit Points of a Network Operator the Parties involved shall ensure that on completion of all switchover works in the relevant network area the respective Inter-System Capacity, Maximum Hourly Supply Rate and/or Exit Point Capacity held at those points will be maintained in an amount that at least corresponds, in energy terms, to the respective amount previously confirmed and that they will be made available using the same type of Capacity product as had previously been agreed in relation thereto.

6. The Gas Quality Switchover process is not aimed at developing the low CV gas network so as to maintain the current level of entry Capacity available for deliveries to the remaining low CV gas networks of the TSOs. The plans are such that delivery capability will be maintained on a scale with existing domestic gas production Capacity as required in the future.

9 Costs Recoverable under the Pass-Through Mechanism for Gas Quality Switchover Costs

1. All relevant costs shall be determined according to the following principles:

   a) Each Network Operator who is required to permanently convert its network to high CV gas quality (hereinafter referred to as a "**Switching Network Operator**") shall carry out a device survey to determine whether and to what extent the gas appliances and customer installations on its network require technical modifications. The nature and execution of the necessary technical modifications shall be determined at the reasonable discretion of the Switching Network Operator in compliance with generally accepted technical standards. Appropriate consideration shall be given to the interests of the end user affected where and to the extent possible.

   b) On completion of the review referred to in subparagraph (a) above, the Switching Network Operator shall initiate the required and necessary modifications to the gas appliances and customer installations of SLP customers (i.e. non-daily metered customers whose daily demand is estimated based on standard load profiles) who use gas for standard applications. The costs for the required modification works identified shall in each case be determined by the Network Operator on whose network the relevant works will be carried out. Only necessary and reasonable costs shall be incurred.

   c) Modification works relating to RLM and SLP customers who operate customer installations within the scope of section 19a of the Energy Industry Act and use gas for non-standard applications shall be initiated by the Switching Network Operator. All required modification works shall be agreed between the Switching Network Operator and the operator of the customer installation. Only necessary and reasonable costs shall be incurred. Where various solutions are available, the Switching Network Operator shall as a rule select the most cost-effective option. If so agreed with the operator of the relevant customer installation, the modification works may also be carried out by the operator of the customer installation. The foregoing shall have no effect on the bearing of costs pursuant to Article 19a (1) sentence 1 of the Energy Industry Act (*EnWG*). The Switching Network Operator shall document the modification works and the related costs in writing in a suitable manner and submit the documentation to the competent regulatory authority on request. If the costs per connection exceed a threshold of €10,000, the Switching Network Operator shall notify the competent regulatory authority in advance of the necessary technical modification works and the associated costs. If in the course of subsequent Gas Quality Switchover processes the €10,000 threshold should turn out to be inappropriate, a new appropriate threshold shall be agreed in consultation with the competent regulatory authority.

d) For the purpose and in the course of all modification works at individual connections and system interconnection points appropriate consideration shall be given to the interests of the relevant connection customer or Network Operator where and to the extent possible. The Switching Network Operator shall be entitled to recover all necessary costs incurred for the modification of connections and system interconnection points due to measures required for a change in gas quality under section 19a of the Energy Industry Act under the cost pass-through mechanism operated in relation thereto.

e) The recoverable switchover costs of a Switching Network Operator shall be the costs incurred by that Switching Network Operator due to a technically necessary switchover process aimed at permanently converting the Switching Network Operator's network from low CV to high CV gas quality pursuant to section 19a of the Energy Industry Act as determined in accordance with the provisions of the Gas Network Charges Ordinance (GasNEV) and the Incentive Regulation Ordinance (ARegV) , and shall include but not be limited to the cost items defined in paragraph (2) below. Where and to the extent that any recoverable costs have already been included in the Network Operator's cost base relevant for determining allowed revenue or in any other neutrality charge or pass-through amount (e.g. biogas neutrality charge), they shall be separated therefrom in an appropriate manner.

f) In order to determine the costs that are incurred due to time differences between the Switchover Supply Effective Date and the Switchover Balancing Effective Date, the Network Operator shall submit the aggregate allocations for all Exit Points where the Switchover Supply Effective Date differs from the Switchover Balancing Effective Date to the Market Area Manager. The relevant data shall be provided on a daily basis and submitted once for the entire period falling between the Switchover Supply Effective Date and the Switchover Balancing Effective Date after expiry of the applicable clearing deadlines but no later than by the date M+3 months in an electronic format compatible with standard software for further processing. The Market Area Manager shall determine the monetary value of the daily quantities thus received by applying the daily price spread between Quality-Specific Products for the delivery of high CV and low CV gas, respectively, traded at rank 2 of the merit order applied by the Market Area Manager for the purpose of carrying out External System Balancing Actions, and shall financially settle the resulting amounts with the Switching Network Operator. All amounts thus settled shall be taken into account by the Switching Network Operator when determining its recoverable switchover costs.

2. The switchover costs recoverable under the pass-through mechanism for Gas Quality Switchover costs include but are not limited to:

- project costs incurred by Network Operators, particularly in relation to the determination of the nature and extent of required modifications to connections, customer installations, gas appliances and the device survey
- costs for modification works pursuant to section 9(1)(lit. a) to (lit. c) above
- costs incurred under cost reimbursement claims under section 19a(3) of the Energy Industry Act as well as costs incurred under regulations issued under section 19a(3) of the Energy Industry Act

- costs relating to any temporary auxiliary supply of gas required in the course of technical Gas Quality Switchover works carried out by a Network Operator, except where they can be capitalised and carried as an asset
- costs incurred due to time differences between the Switchover Supply Effective Date and the Switchover Balancing Effective Date as determined pursuant to section 9(1)(lit. f) above
- costs incurred for additional technical measures, such as costs for the construction and decommissioning of temporary high CV gas connecting pipelines, technical plant and equipment or pipeline relocations (subject to proof of their relevance), except where they can be capitalised and carried as an asset
- modifications to gas delivery stations connecting with plant operators, except where they can be capitalised and carried as an asset
- costs incurred by a TSO or DSO in relation to any investment carried out for the purpose of expanding, reinforcing or restructuring its network, particularly, without limitation, new permanent pipelines, compressor stations and pressure control and measurement stations, except to the extent that an investment allowance within the meaning of paragraph (4) below has been granted in respect thereof under section 23 of the Incentive Regulations. Once these costs may be included in the cost base relevant for determining allowed revenue, they will be recovered through the general transportation charges levied by the relevant Network Operator and may no longer be charged under the pass-through mechanism for Gas Quality Switchover costs. Under the rules applicable since 1 January 2018 DSOs' costs for such investments must be recovered via the annual capital cost reconciliation process in accordance with section 10a of the Incentive Regulations, subject to the transitional arrangements set out in section 34(7) of the Incentive Regulations.
- the differences determined in the course of the annual reconciliation between planned and actual costs, subject to a two-year time lag.

3. All recoverable costs shall be verifiably documented by the relevant Network Operator, who shall submit that documentation to the competent regulatory authority. All costs shall be documented using a standardised format. The format and scope of the cost documentation required shall be agreed with the competent regulatory authority.
4. Costs incurred by a TSO or DSO for investments made in the course of a Gas Quality Switchover process which qualify for an investment allowance under section 23 of the Incentive Regulations and which have been approved as such by the competent regulatory authority are recovered through the general transportation tariffs levied by the respective Network Operator and may not be recovered under the pass-through mechanism for switchover costs.

10 Pass-Through Mechanism for Recoverable Gas Quality Switchover Costs

1. All costs incurred by Network Operators in relation to technically necessary measures aimed at permanently converting their networks from low CV to high CV gas quality pursuant to section 19a of the Energy Industry Act shall be passed on to all other networks within Germany.

2. Once a year, each Switching Network Operator shall report its switchover costs pursuant to section 19a of the Energy Industry Act to the relevant TSO (the "**Upstream Switchover Cost Reporting Process**").

   a) Each Switching Network Operator shall plan the recoverable switchover costs it expects to incur in the planned Switchover Period. For this purpose, the Switching Network Operator shall only take into account such costs as are certain to arise based on the information available. By 31 August each year, each Switching Network Operator shall submit its switchover cost estimate for the following calendar year (Y+1) directly to the TSO to whose network the network of the Switching Network Operator is connected, whether directly or indirectly through a series of other networks. By the same date, i.e. 31 August each year, each Switching Network Operator shall also notify that TSO of the actual switchover costs the Switching Network Operator incurred in the preceding year (Y-1). Where a Market Area Overlap exists on the network of a Switching Network Operator

   b) In parallel with their submissions to the TSOs, the Switching Network Operators shall also submit their switchover cost plans for the following calendar year (Y+1) and their actual switchover costs in the preceding year (Y-1) to the competent regulatory authority. A data submission template for the reporting of switchover costs pursuant to section 19a of the Energy Industry Act is provided by the competent regulatory authority on its website.

3. The TSO shall divide the planned switchover costs submitted by each Switching Network Operator into 12 identical monthly amounts and reimburse those amounts to the relevant Switching Network Operator over the course of the calendar year following conclusion of the Upstream Switchover Cost Reporting Process (Y+1) by way of monthly payments ("**Switchover Cost Reimbursement**").

4. Upon conclusion of the Upstream Switchover Cost Reporting Process pursuant to paragraph (2) above, the TSO shall calculate the sum of all switchover costs to be recovered in its network area under section 19a of the Energy Industry Act (the "**Total Recoverable Switchover Costs**").

   a) The Total Recoverable Switchover Costs comprise the following items:

      - the TSO's own planned switchover costs for the following calendar year (Y+1) as determined pursuant to paragraph (2)(lit. a) above,
      - the switchover costs planned for the following calendar year (Y+1) as submitted by downstream Network Operators pursuant to paragraph (2)(lit. a) above, and
      - the difference between the actual switchover costs incurred in the preceding year (Y-1) and
      - the excess or shortfall in revenues from the differences resulting from a deviation between the capacities of the preceding year (Y-1) on which the calculation is based and the capacities actually marketed in the preceding year (Y-1), taking into account possible compensation amounts pursuant to Section 7 lit. b).

   b) The differences between actual costs and the cost estimates of the preceding year of the Network Operators concerned and the excess or shortfall in revenues of the

transmission system operator due to the differences resulting from a change in marketed capacity in the preceding year shall bear interest at the average amount committed in the calendar year to be compensated. The average amount committed is calculated as the average of the amounts at the beginning and end of the year. The interest rate is based on the average of the current yield of fixed-interest securities of domestic issuers published by the Deutsche Bundesbank over the last ten completed calendar years.

5. On the basis of the Market Area Total Recoverable Switchover Costs, the TSOs shall determine the amount to be recovered nationally ("**National Total Recoverable Switchover Costs**") and also the total Capacity contracted throughout Germany by Shippers and downstream Network Operators in the following calendar year (Y+1).

   a) The TSOs shall notify each other of the Market Area Total Recoverable Switchover Costs for the following calendar year (Y+1) pursuant to paragraph (4) above and of the total Capacity of all TSOs to be contracted by Shippers and downstream Network Operators in the following calendar year (Y+1). For this purpose, the TSOs shall consider the Capacity at all Exit Points on the relevant networks whereby exit points to storage facilities and at border crossing points shall not be considered.

   b) On the basis of their own respective costs and the costs notified pursuant to paragraph (5)(a) above, the TSOs shall calculate the National Total Recoverable Switchover Costs for the following calendar year (Y+1) and also the relevant amount of the total Capacity of all TSOs expected to be contracted throughout Germany by Shippers and downstream Network Operators ("**National Total Capacity Holdings**") in the following calendar year (Y+1). The result shall be notified to each TSO.

   c) To account for the fact that the Gas Quality Switchover process involves several TSOs, the amount of the National Total Recoverable Switchover Costs and of the National Total Capacity Holdings may be calculated by a third party authorised to do so by the TSOs. A TSO may also be appointed to act as a third party within the meaning of the foregoing provision.

6. On the basis of the National Total Recoverable Switchover Costs determined pursuant to paragraph (5)(lit. b) above and the National Total Capacity Holdings also determined pursuant to paragraph (5)(lit. b) above, the TSOs shall calculate a uniform national pass-through amount per unit (the "**Unit Switchover Pass-Through Amount**") which shall be levied throughout Germany in the following calendar year (Y+1) to recover the National Total Recoverable Switchover Costs in accordance with section 19a of the Energy Industry Act.

   a) The TSOs shall calculate the Unit Switchover Pass-Through Amount by dividing the National Total Recoverable Switchover Costs by the National Total Capacity Holdings expected in the following calendar year (Y+1).

   b) To account for the fact that the Gas Quality Switchover process involves several TSOs, the TSOs may authorise a third party to calculate the Unit Switchover Pass-Through Amount on their behalf. Any TSO may also be appointed to act as a third party within the meaning of the foregoing provision. The TSOs and/or the third party (as the case may be) shall notify each other of the Unit Switchover Pass-Through Amount to be

applied throughout Germany in the following calendar year (Y+1), and shall also, without undue delay after the applicable Unit Switchover Pass-Through Amount has been determined, report it to the Federal Network Agency along with the information determined pursuant to paragraph (5)(a) and (b) above.

7. The National Total Recoverable Switchover Costs shall then be recovered nationally through the exit tariffs levied by the Network Operators. For this purpose, each TSO shall offset the switchover costs it has incurred against the revenue, if any, it has raised from Gas Quality Switchover neutrality charges ("**Switchover Cost Settlement**").

   a) Each TSO shall charge the Unit Switchover Pass-Through Amount as determined pursuant to paragraph (6) above in addition to its exit tariffs. By 1 October each year, each TSO shall publish the new Unit Switchover Pass-Through Amount in €/(kWh/h) applicable from 1 January of the following calendar year (Y+1). In addition, the TSO shall publish the national switchover costs planned for the year Y+1 and the actual national switchover costs incurred in the year Y-1 in aggregated form.

      Exit points to storage facilities in the network of the transmission system operators and border crossing points do not receive a surcharge comprising the Gas Quality Switchover neutrality charge. The TSOs shall apply the revenues they earn from Gas Quality Switchover neutrality charges, including those received from downstream Network Operators through Inter-System Capacity charges, to cover the Gas Quality Switchover costs incurred.

   b) By 15 October each year, the monthly settlement payments required between the TSOs shall be calculated in accordance with the provisions set out in sentences 2 and 3 below. For this purpose, each TSO shall first compare its estimate of the revenues it expects to generate from Gas Quality Switchover neutrality charges pursuant to paragraph (7)(lit. a) above against the Total Recoverable Switchover Costs determined pursuant to paragraph (4)(lit. a) above. Where a TSO expects that it will generate a surplus, it shall by the 15th day of each month make settlement payments to those other TSOs whose estimated revenues from Gas Quality Switchover neutrality charges pursuant to paragraph (7)(lit. a) above are insufficient to recover the Total Recoverable Switchover Costs determined pursuant to paragraph (4)(lit. a) above. These monthly settlement payments shall be reported to the TSOs and to the entity authorised to determine the pass-through costs for the purpose of determining the Unit Switchover Pass-Through Amount applicable in the following calendar year (Y+1).

   c) The Unit Switchover Pass-Through Amount shall be passed on to all relevant Exit Points, starting with the TSO's network, in accordance with the rules outlined in section 6 above, which shall apply mutatis mutandis.

   d) DSOs who operate entry/exit systems shall pass on the Unit Switchover Pass-Through Amount as such. DSOs who operate postage-stamp tariff systems shall incorporate the Unit Switchover Pass-Through Amount in their postage-stamp or other tariff system pursuant to section 18 or 20 of the Tariff Regulations, respectively, as part of the network charges charged by their upstream Network Operator(s), which include the Unit Switchover Pass-Through Amount. The general approach to this process shall be the same as under the pass-through mechanism for other network costs/charges passed on by upstream Network Operators.

e) Exit Network Operators shall receive higher network charges that have been adjusted to include the Unit Switchover Pass-Through Amount from network users and downstream Network Operators, if any, and shall in turn pay higher monthly network charges including the Unit Switchover Pass-Through Amount to their upstream Network Operators. All changes to tariffs required under the pass-through mechanism described herein shall be made as of the effective date of the new network tariffs, i.e. with effect from 1 January each year.

8. Any and all differences arising between planned and actual switchover costs shall be settled between the Parties involved ("**Switchover Cost Adjustment**").

   a) Each TSO shall determine the difference between the actual switchover costs incurred in the preceding year (Y-1) as reported for that year by each Switching Network Operator and the actual Switchover Cost Reimbursement paid to that Switching Network Operator on the basis of its cost plan for the preceding year (Y-1). These differences arising from the reconciliation shall bear interest in accordance with section 4(b). The difference thus determined shall be offset against the monthly Switchover Cost Reimbursement payments to be made to the relevant Switching Network Operator in the following calendar year (Y+1). At the same time, the TSO shall adjust the Unit Switchover Pass-Through Amount for the following calendar year (Y+1) by adding or deducting the difference.

   b) To account for the fact that several TSOs are affected by the switchover, the TSOs may authorise a third party to carry out the above the calculation according to lit. a). A TSO may also be appointed to act as a third party within the meaning of the foregoing provision.

9. Once all switchover works have been completed in respect of a network area, the Switching Network Operator and the relevant TSO shall produce a final invoice between them and settle the relevant invoice amount within a reasonable payment period. The amount billed in this final invoice shall be taken into account under the pass-through mechanism in the following year.

Part 3 Cooperation among the Network Operators and with the Market Area Manager

Chapter 1 Inter-System Capacity Rules

11 Capacity Application Process

1. Once a year, each downstream Network Operator who is not a TSO and whose network is directly connected to the network(s) of one or several upstream Network Operator(s) operating entry/exit systems shall apply to each such upstream Network Operator for the maximum amount of firm exit Capacity as calculated pursuant to sections 13 and 14 below that the downstream Network Operator requires to be made available in the following calendar year (the "Inter-System Capacity Year") at the system interconnection point(s) and/or exit zone(s) connecting the relevant upstream and downstream networks in order to be able to carry out gas transports (each such Capacity an "Inter-System Capacity" and each such application an "Inter-System Capacity Application"). Upon acceptance of an

Inter-System Capacity Application by the upstream Network Operator pursuant to paragraph (4) below, the upstream Network Operator shall have an obligation to make the contractually agreed amount of Capacity available at the relevant system interconnection point(s) and/or exit zone(s), and to apply to its own upstream Network Operator(s), if any, for the required amount of exit Capacity. Where the upstream Network Operator is a DSO who operates a postage-stamp tariff system, section 8(4) of the Access Regulations and section 20 below shall apply.

Inter-System Capacity Applications shall be submitted online or using a data form and shall at least specify the amount of Capacity applied for, to be specified separately for system interconnection point or exit zone, and the time period in respect of which the application is made.

2. If a downstream Network Operator's network has several system interconnection points with any of its upstream networks, those points shall be grouped to form exit zones where technically and commercially reasonable. Where several system interconnection points have been grouped to form an exit zone, all Inter-System Capacity Applications made in respect of those points shall be related to that exit zone. The rules for how the Capacity applied for in respect of an exit zone may be used at the individual system interconnection points combined in that exit zone shall be agreed between the upstream and downstream Network Operators involved. Further details relating to the designated exit zones shall be governed by a separate contract.

3. Downstream Network Operators directly connected to a TSO shall submit their Inter-System Capacity Applications to that TSO no later than 15 July each year. The dates by which all other, lower-level downstream Network Operators shall submit their respective Inter-System Capacity Applications shall in turn be agreed between the higher-level downstream Network Operators directly connected to the TSO and their respective downstream Network Operators but shall be set so as to ensure that the deadline specified in sentence 1 above is met.

4. Upon receiving a complete Inter-System Capacity Application from a downstream Network Operator directly connected to its network, the TSO shall respond within 10 Business Days following the end of the application period as set out in paragraph (3) above by issuing an acceptance or rejection notice to that downstream Network Operator. The dates by which the higher-level downstream Network Operators directly connected to the TSO shall confirm the Inter-System Capacity Applications of their lower-level downstream Network Operators shall be agreed between the higher-level and lower-level downstream Network Operators.

5. Inter-System Capacity Applications shall be accepted to the extent that the amount of Capacity applied for by the downstream Network Operator does not exceed the relevant amount of firm Capacity to be made available on a permanent basis for the supply of gas to end users directly or indirectly assigned to the market area (“Permanent Firm Capacity”) as last contractually agreed in respect of the calendar year immediately preceding the Inter-System Capacity Year, and/or (as the case may be) to the extent that the amount of Capacity applied for corresponds to the amount specified in an acceptance notice issued by the TSO pursuant to section 16(4) below. The relevant amount of Permanent Firm

Capacity within the meaning of this provision shall be the amount as last contractually agreed following the most recent within-year Capacity revision, if any.

6. Where an Inter-System Capacity Application is rejected, such rejection may only be declared in respect of the amount of Capacity that exceeds the above quantity.

   Where an Inter-System Capacity Application is accepted in part only, the relevant TSO shall conduct a review to assess the individual case in question. The result of this review shall be notified to the downstream Network Operator no later than 15 October of the relevant year.

7. If the demand for additional Permanent Firm Capacity (within the meaning of paragraph (5) above) exceeds the additional Capacity available for Inter-System Capacity Applications on the upstream Network Operator's network, the additional Capacity available shall be allocated in the following order having due regard to the specific mechanical flow conditions prevailing on the network(s) affected:

   a) Capacity required to supply protected customers as defined in section 53a of the Energy Industry Act,

   b) Capacity required to supply significant gas-fired power stations within the meaning of sections 13c and 16(2a) of the Energy Industry Act,

   c) conversion of Interruptible or Fixed-Term Firm Capacity holdings to Permanent Firm Capacity holdings in chronological order of the Inter-System Capacity Year in respect of which the relevant Capacity has been agreed, starting with the Inter-System Capacity Year 2012. Any Capacity revisions made in the course of each Inter-System Capacity Year pursuant to section 15 below shall not be considered in this process. Only the minimum amount of Fixed-Term Firm or Interruptible Capacity held in the relevant Inter-System Capacity Year and the following Inter-System Capacity Years, if any, shall be taken into account. For the purpose of conversion, Interruptible and Fixed-Term Firm Capacity holdings shall have the same priority.

   d) other Capacity requirements.

      If the total Capacity applied for within one of the groups listed at a) to d) cannot be fully satisfied, the relevant Capacity shall be allocated pro rata based on the amount of Capacity required in respect of that group which is not yet held as Permanent Firm Capacity.

8. In the course of the Inter-System Capacity Application process upstream Network Operators may agree with their downstream Network Operators that the amount of Capacity applied for by the downstream Network Operator which exceeds the Permanent Firm Capacity amount within the meaning of paragraph (5) above shall be made available on a firm basis but for a specified duration only (Fixed-Term Firm Capacity) or on an interruptible basis (Interruptible Capacity) for such time and to such extent as the upstream Network Operator does not confirm the downstream Network Operator's Inter-System Capacity Application in full. Fixed-Term Firm Capacity shall be allocated in the order specified in paragraph (7) above. Paragraph (7)(c) shall apply accordingly where Interruptible Capacity is to be converted to Fixed-Term Firm Capacity.
   Fixed-Term Firm Capacity may only be agreed:

- where the relevant Capacity is secured by way of Flow Commitments that are in effect for a limited period of time only,
- where the relevant Capacity is secured by way of load shifting and the required Capacity can only be made available at the relevant system interconnection point on a temporary basis,
- where the inputs to the system at Cross-Border Interconnection Points and storage connection points required to supply the downstream Network Operator's network cannot be secured for a sufficiently long period, or
- where Capacity for the supply of low CV gas cannot be contractually agreed on a firm and permanent basis due to specific circumstances that have arisen in the course of the Gas Quality Switchover process.

In the case of Fixed-Term Firm and Interruptible Capacity, the upstream Network Operator shall give the reasons why the relevant Capacity can only be made available for a specified duration or only on an interruptible basis by reference to the specific circumstances prevailing on the upstream Network Operator's network including their impact on the downstream Network Operator's network. The upstream Network Operator shall also provide an estimate of the date from which the relevant Capacity might be made available as Permanent Firm Capacity.

Offers for Fixed-Term Firm or Interruptible Capacity shall be made by 15 October in any year in line with the provisions set out in paragraph (6) above. Where any such offer is not rejected in whole or in part by the downstream Network Operator within a period of 10 Business Days, the downstream Network Operator shall insofar be deemed to have accepted the offer. Downstream Network Operators who operate entry/exit systems shall in turn offer such Fixed-Term Firm Capacity or Interruptible Capacity to the lower-level downstream Network Operators directly connected to their network no later than by the end of the second Business Day following the date 15 October. Where any such offer is not rejected in whole or in part by a lower-level downstream Network Operator within a period of 5 Business Days, the lower-level downstream Network Operator shall insofar be deemed to have accepted the offer. In relation to any Interruptible Capacity holding confirmed with effect from 15 October of any year, upstream Network Operators may also offer to their downstream Network Operators the option of converting such Interruptible Capacity to firm or Fixed-Term Firm Capacity at any time after 15 October having regard to the order stipulated in paragraph (7) above. Where any such offer is not rejected in whole or in part by the downstream Network Operator within a period of 10 Business Days, the downstream Network Operator shall insofar be deemed to have accepted the offer. The proportion of Interruptible and Fixed-Term Firm Capacity holdings will be appropriately taken into account by the TSOs when determining Capacity requirements for the purpose of preparing their Gas Network Development Plan.

Where any Interruptible Capacity holding is to be interrupted, the TSO shall give at least 3 hours' prior notice thereof to the relevant downstream Network Operator directly connected to the TSO's network, except where this is not possible for operational reasons. More detailed arrangements relating to the operational aspects of the interruption process shall be agreed bilaterally between the Network Operators involved.

9. Each year for the following Inter-System Capacity Year, the TSO shall publish on its website the following details of the Inter-System Capacity Applications received by the TSO from the downstream Network Operators directly connected to the TSO's network for each system interconnection point or exit zone designated pursuant to paragraph (2) above, in each case specifying the identity of the downstream Network Operator:

    - the amount of Inter-System Capacity applied for by the downstream Network Operator under sentence 1 of paragraph (3) above,
    - the amount of Permanent Firm Capacity agreed between the TSO and the downstream Network Operator under paragraph (5) or sentence 3 of paragraph (6) above,
    - the amount of Fixed-Term Firm Capacity offered by the TSO under sentence 1 of paragraph (8) above,
    - the amount of Fixed-Term Firm Capacity agreed between the TSO and the downstream Network Operator under sentence 1 of paragraph (8) above,
    - the amount of Interruptible Capacity offered by the TSO under sentence 1 of paragraph (8) above,
    - the amount of Interruptible Capacity agreed between the TSO and the downstream Network Operator under sentence 1 of paragraph (8) above,
    - the estimated proportion of the downstream Network Operator's Inter-System Capacity Application which relates to the aggregate demand of protected customers within the meaning of section 53a of the Energy Industry Act as submitted by the downstream Network Operator under section 21(1) below,
    - the aggregate hourly demand rate agreed in respect of significant gas-fired power stations within the meaning of sections 13c and 16(2a) of the Energy Industry Act in the relevant contracts entered into with the respective Shippers and/or end users as submitted by the downstream Network Operator under section 21(1) below.

    The above information shall be published by no later than 15 November each year on the basis of the information available at the time of publication using a standardised, machine-readable format to be agreed between the TSOs. If at any time after 15 October in any year the upstream Network Operator converts any Capacity holding that was initially confirmed as Interruptible to a firm or Fixed-Term Firm Capacity holding, the relevant information published by the upstream Network Operator shall be revised in a timely manner. The published information will not be updated to reflect any Capacity revisions agreed in the course of the current Inter-System Capacity Year pursuant to section 15 below.

10. Where an upstream Network Operator has grounds to believe that the amount of Capacity applied for by a downstream Network Operator is incorrect, the downstream Network Operator shall upon a request to this effect by the upstream Network Operator submit a statement to the upstream Network Operator which has been issued by an independent expert commissioned by the downstream Network Operator and which confirms that the amount of Capacity applied for has been duly determined in compliance with the provisions of sections 13 and 14 below. The costs incurred for the commissioning of the

independent expert shall be borne by the upstream Network Operator where the expert finds that the Capacity amount has been duly determined; in all other cases the costs shall be borne by the downstream Network Operator. The Inter-System Capacity Application submitted by the downstream Network Operator shall continue to apply until such time as proof is established that the relevant amount of Capacity is incorrect. Where an Inter-System Capacity Application is found to be incorrect, it shall be revised in accordance with section 15(1) below.

11. Where gas flows in the reverse direction, the market roles performed by the upstream and downstream Network Operators involved will remain unchanged. For such purpose the downstream Network Operator shall apply for entry Capacity to the upstream Network Operator's network in the course of the Inter-System Capacity Application process. Where the reverse flow is necessary to flow biogas onto the upstream Network Operator's network as provided under sentence 4 of section 34(2) of the Access Regulations, no charges shall be levied.

12 Capacity Reduction Tools

1. Downstream Network Operators may make use of the following tools, especially with a view to reducing the amount of Inter-System Capacity to be applied for in upstream networks or the Maximum Hourly Supply Rate to be notified to upstream Network Operators pursuant to section 20 below:

   a) Flow Commitments guaranteeing certain flows at Entry Points from production facilities, biogas plants and storage facilities other than network storage,

   b) linepack, and

   c) network storage.

2. Where a downstream Network Operator has relied on any Capacity reduction tool within the meaning of paragraph (1) above to reduce its Inter-System Capacity Application or Maximum Hourly Supply Rate notification, those tools shall be utilised in the manner upon which the calculations for the Inter-System Capacity or Maximum Hourly Supply Rate requirements were based.

13 Calculation of Gross Capacity Requirement

Each downstream Network Operator shall on its own responsibility calculate the amount of Capacity required to be applied for under section 11(1) above in accordance with the procedure set out below, exercising the degree of care that can be expected in gas industry matters:

1. The downstream Network Operator shall determine the measured hourly gas flow at all system interconnection points connecting its network to the network(s) of upstream Network Operators for the 36 months up to 1 April on the basis of the relevant meter readings. Where for any period all relevant data is not available or not of sufficient quality, appropriate Default Substitute Values shall be applied in respect of that period. In the case of new or planned system interconnection points, the Network Operators involved shall agree appropriate Default Substitute Values.

2. The relevant calculations shall be carried out separately for each system interconnection point, except where several system interconnection points have been grouped to form an exit zone, in which case the Network Operator shall calculate the aggregate hourly flow at those points. Where a downstream Network Operator is connected to more than one upstream network at any single system interconnection point, the downstream Network Operator shall first calculate the aggregate hourly flow for all system interconnection points and/or exit zones before then carrying out the calculations described in paragraphs (3) to (5) below in order to determine its total gross Capacity requirement.

3. Where the aggregate hourly flow as determined pursuant to paragraph (2) above was influenced by linepack effects, storage flows, biogas injections or inputs from production facilities, it shall be adjusted so as to obtain the gross flow as it would have been without those effects.

4. Where significantly large RLM Exit Points exist whose demand is only weakly correlated with temperature, the overall quality of the regression model can be improved by deducting the flow at those Exit Points from the aggregate hourly flow as determined pursuant to the above paragraphs. In this case the hourly demand rates at those Exit Points shall be added to the gross Capacity requirement given by the regression model with due regard to the simultaneity of the relevant flows.

5. The Network Operator shall then perform a regression analysis on the relevant data pairs by plotting the peak hourly flow on each relevant day against the corresponding arithmetic mean of the temperatures prevailing on that day. The gross Capacity requirement shall be determined as the value given by the regression model at Design Temperature.

   The regression analysis shall be carried out using a linear regression model. It shall be based on the data pairs obtained for the 120 coldest days observed in the period set out in paragraph (1) above.

   The temperature data shall be obtained from a suitable temperature recording station that is representative of the relevant climate zone and which operates according to meteorological standards.

   The Design Temperature shall correspond to the temperature defined for the climate zone relevant for the Exit Points of the downstream network according to Table 1a of Annex 1 to the DIN EN 12831 standard as at July 2008. Where the Exit Points of the downstream network are located in various climate zones, the downstream Network Operator shall determine the Design Temperature to be used.

6. If the regression analysis shows that the 120 data pairs pursuant to paragraph (5) above are only weakly correlated with temperature, the actual peak demand observed in the preceding 36 months may be used as an alternative, which amount shall then be applied for in the Inter-System Capacity Application with due regard to any Capacity-reducing effects and any future load or flow changes which are certain to arise based on the information available. Weak temperature correlation may be deemed to be given where the absolute value of the correlation coefficient is below 0.5.

   Where this peak demand falls outside the data pairs obtained for the 120 coldest days (e.g. summer peak), the downstream Network Operator shall determine an appropriate amount for its Inter-System Capacity Application.

14 Determination of the (Net) Capacity Requirement to be Applied for under Section 11

1. The downstream Network Operator shall adjust its gross Capacity requirement by taking account of the following effects expected in the Inter-System Capacity Year:

   - connection of new loads
   - permanent disconnection of existing loads and
   - permanent changes in hourly demand rates at Exit Points or at system interconnection points with downstream networks.

   The adjustments to be made in accordance with sentence 1 above may also be effected by adjusting the input data used for the regression analysis accordingly.

2. The gross Capacity requirement may be adjusted to reflect use of the tools listed in section 12(1) where it is certain that they will be available to reduce the Network Operator's Capacity requirements throughout the entire period in respect of which the Inter-System Capacity Application is made.

3. For the purpose of determining the amounts of Capacity to be applied for the Network Operator shall also have due regard to the simultaneity of the relevant flows.

4. The amount thus determined is referred to as the “Net Capacity Requirement” and shall be applied for by the Network Operator in its Inter-System Capacity Application to be made under section 11 above.

15 Capacity Revision Process

1. Where any within-year adjustments must be made to the amount of Inter-System Capacity held or (as the case may be) Maximum Hourly Supply Rate notified by a downstream Network Operator pursuant to paragraphs (2) or (3) below, the downstream Network Operator shall submit a revised Inter-System Capacity Application or Maximum Hourly Supply Rate notification to its upstream Network Operator for the remainder of the current calendar year, starting with the following month. Upon receiving a revised Inter-System Capacity Application from a downstream Network Operator directly connected to its network, the TSO shall respond within 5 Business Days of receiving such revised Inter-System Capacity Application by issuing an acceptance or rejection notice to that downstream Network Operator.

   Downstream Network Operators directly connected to a TSO shall submit their revised Inter-System Capacity Applications to the TSO by the 10th Business Day of the preceding month. The dates by which any other, lower-level downstream Network Operators connected to such downstream Network Operator's network shall submit their respective revised Inter-System Capacity Applications or Maximum Hourly Supply Rate notifications shall be agreed between the higher-level downstream Network Operator and the lower-level downstream Network Operators connected to its network.

2. Where the amount of Inter-System Capacity or Maximum Hourly Supply Rate required by a downstream Network Operator changes at any time after the end of the Inter-System Capacity Application period set out in section 11(3) above, that downstream Network Operator shall revise its Inter-System Capacity Application or Maximum Hourly Supply

Rate notification for the remainder of the current calendar year in accordance with paragraph (1) above. The respective amounts shall only be revised where the relevant changes represent additional or reduced Capacity requirements (, new connections, permanent disconnections, permanent changes in hourly demand rates at Exit Points or at system interconnection points with downstream networks). Revisions shall also be made where the amount of Inter-System Capacity originally applied for or the Maximum Hourly Supply Rate originally notified is found to be incorrect.

In the case of network transfers, mergers or spin-offs the Network Operators involved shall notify the relevant upstream Network Operator(s) of the transfer of the relevant Inter-System Capacity or Maximum Hourly Supply Rate holdings at the system interconnection points and/or exit zones affected and shall revise the relevant amounts of Inter-System Capacity or Maximum Hourly Supply Rate accordingly, where required. Where the upstream Network Operator had accepted the relevant Inter-System Capacity Application or Maximum Hourly Supply Rate notification of the transferring Network Operator in part only and has confirmed a portion of the transferring Network Operator's Inter-System Capacity Application or Maximum Hourly Supply Rate notification on an Interruptible or Fixed-Term Firm basis, the transferring Network Operator shall also transfer those portions on an Interruptible or Fixed-Term Firm basis.

No revision shall be required in the case of an Inter-System Capacity or Maximum Hourly Supply Rate overrun which was due to temperatures falling below the Design Temperature, an event of force majeure or unplanned linepack changes effected on the instruction of the Market Area Manager.

The downstream Network Operator shall have no obligation to revise the amount of its Inter-System Capacity or Maximum Hourly Supply Rate on a within-year basis where and to the extent that the downstream Network Operator considers that the relevant change in its Capacity or Maximum Hourly Supply Rate requirement is of only minor impact.

3. Section 11(11) shall apply accordingly.

16 Long-Term Demand Forecasting

1. In each odd-numbered calendar year in the course of the Inter-System Capacity Application or (as the case may be) Maximum Hourly Supply Rate notification process under sections 8(3) and 8(4) of the Access Regulations, respectively, the downstream Network Operator shall produce a non-binding forecast of the amount of Capacity or Maximum Hourly Supply Rate it will require in the 10 years following the Inter-System Capacity Year or the year to which the Maximum Hourly Supply Rate notification relates, which forecast shall be developed in accordance with good gas industry practice. Each such forecast shall be derived on the basis of the Network Operator's Inter-System Capacity Application or notified Maximum Hourly Supply Rate, which shall be carried forward so as to give a total forecast period of 11 years. Where the downstream Network Operator is aware of any information which indicates an increase or reduction in the downstream Network Operator's Capacity or Maximum Hourly Supply Rate requirements in the 10 years following the Inter-System Capacity Year or the year to which the Maximum Hourly Supply Rate notification relates, the downstream Network Operator shall

revise its forecast upwards or downwards accordingly. Upstream Network Operators who are not a TSO shall take the forecasts provided by downstream Network Operators into account when developing their own forecasts.

2. Downstream Network Operators who are directly connected to a TSO shall validate their forecasts using a forecast information form provided by the TSO. In this forecast information form the downstream Network Operator shall specify the following information:

   - demand trends (total demand levels/hourly demand rates) for different sectors (residential; commercial; industrial and power generation), to be indicated using the categories “declining”, “constant” and “rising”, including a short explanation. For the purpose of indicating the relevant trends, the downstream Network Operator shall on its own responsibility consider the following aspects, exercising the degree of care that can be expected in gas industry matters: The evolution of total demand levels and hourly demand rates shall always be reviewed by the downstream Network Operator on a case-by-case basis. In particular, without limitation, the downstream Network Operator shall take specific regional circumstances into account. The downstream Network Operator shall also consider possible future changes in total demand levels and hourly demand rates, for example changes due to regional growth, densification measures in the residential, commercial and industrial sectors, the connection of new power stations and known changes in hourly demand rates at RLM Exit Points. Furthermore, the downstream Network Operator shall factor in potential reductions in demand resulting from a permanent disconnection of existing loads. The Network Operator should also estimate the extent to which demand might go down as a result of retrofit measures carried out in existing buildings;
   - Capacity reduction tools segmented by type of plant or contract, including the amount of Capacity applied as a reduction in each year for the purpose of determining the Inter-System Capacity Application and/or the long-term demand forecast (with linepack developments to be indicated as trends);
   - specific projects, if any, that lead to an increase in Capacity requirements.

   The TSOs shall agree a common template for the forecast information form and provide this form to the downstream Network Operators directly connected to their networks no later than 1 June in each odd-numbered year.

   Upstream Network Operators who are not a TSO shall also make the forecast information form available to the downstream Network Operators connected to their networks. Each downstream Network Operator shall validate the projected amount of Capacity or (as the case may be) Maximum Hourly Supply Rate for its upstream Network Operator(s) using the forecast information form.

3. The TSOs shall take account of the Capacity information thus received in determining long-term Capacity requirements in accordance with section 17 of the Access Regulations and in preparing the Gas Network Development Plan (NDP) required under section 15a of the Energy Industry Act, except where a downstream Network Operator has failed to submit the information to be provided under sentences 2 to 5 of paragraph (2) above. In the latter case the relevant TSO shall determine an appropriate forecast. Where even after receiving the information to be provided under sentences 2 to 5 of paragraph (2) above a

TSO considers the forecast submitted by a downstream Network Operator directly connected to its network to be implausible, it shall state the concrete reasons for its believing so with specific reference to the forecast in question, provide its own forecast and give the downstream Network Operator an opportunity to comment and, where applicable, revise its forecast within a reasonable period of time. If the downstream Network Operator fails to submit a response by the relevant deadline or if its response is insufficient, the TSO shall have the right to replace the downstream Network Operator's forecast with an appropriate revised forecast which shall be provided to the downstream Network Operator for the downstream Network Operator's information. In all other cases the forecast provided by the downstream Network Operator shall prevail and be taken into account.

4. In the course of the Inter-System Capacity Application process or (as the case may be) in determining the Maximum Hourly Supply Rate pursuant to section 11(3) above, downstream Network Operators may submit binding requests for additional Capacity required in excess of the amount of Inter-System Capacity as duly calculated pursuant to sections 13 and 14 above, particularly, without limitation, where needed to secure Capacity for large-scale construction projects (e.g. power stations, large industrial sites). Such additional Capacity may be requested for terms of no less than four years commencing within the two calendar years following the Inter-System Capacity Year. The downstream Network Operator shall submit documentation corresponding to the documentation described in section 38(2) of the Access Regulations which describes the construction project in question and which confirms the additional requirements resulting therefrom.

   Upon receiving a request for additional Inter-System Capacity from one of its downstream Network Operators, the TSO shall respond following conclusion of the Inter-System Capacity Application process by issuing an acceptance or rejection notice to the downstream Network Operator by no later than 15 November of the relevant year. The dates by which higher-level downstream Network Operators directly connected to the TSO shall confirm requests for additional Inter-System Capacity submitted by their lower-level downstream Network Operators shall be agreed between the higher-level and lower-level downstream Network Operators.

   Upon acceptance of a request for additional Inter-System Capacity by the upstream Network Operator, the upstream Network Operator shall have an obligation to make the amount of Capacity specified in the binding request for additional Inter-System Capacity available on a firm and permanent basis from 1 January of the calendar year agreed for utilisation of the relevant Capacity.

5. Where a request for additional Inter-System Capacity relating to high CV gas is rejected in accordance with sentence 4 of paragraph (4) above, the downstream Network Operator affected shall have the right to submit a request to the relevant TSO for the relevant amount of additional Capacity to be provided on a binding basis as part of the NDP planning process pursuant to section 15a of the Energy Industry Act. This option shall only apply, however, where the downstream Network Operator had previously reported this Capacity as part of the long-term demand forecasting process described in sentence 1 of paragraph (1) above and only to the extent that it has been taken into account by the TSO in accordance with sentence 1 of paragraph (3) above. Any such request may be

submitted by the downstream Network Operator together with its request under sentence 1 of paragraph (4) above, subject to the provisions set out in paragraphs (4) and (5). Additional Capacity requests from a downstream Network Operator to a TSO pursuant to this paragraph must be for a term of no less than ten years commencing on the date on which all network development projects that need to be carried out on the networks upstream of the requesting Network Operator's network in order to provide the requested additional Capacity (collectively referred to as the "Required NDP Projects") are commissioned. To this end the downstream Network Operator shall by no later than 15 January of the following year submit an application to the relevant TSO in accordance with the provisions for ordinary Inter-System Capacity Applications as set out in section 11 above as well as in accordance with this paragraph (5) and paragraphs (6) and (7) below which will be subject to the condition precedent that the relevant Gas NDP becomes binding in accordance with section 15a of the Energy Industry Act with respect to all Required NDP Projects.

The TSO shall have an obligation to accept the downstream Network Operator's application and to initiate all steps required to make the additional Capacity available as part of the Gas NDP process.

Once the relevant NDP has become binding in accordance with section 15a of the Energy Industry Act with respect to all Required NDP Projects, the condition precedent shall be deemed to be satisfied and the downstream Network Operator's application shall take effect. The additional Capacity shall be made available by the TSO no later than from the date on which all Required NDP Projects have been fully commissioned, in accordance with the timing described in the relevant Gas NDP, except where the commissioning of the Required NDP Projects is delayed for reasons for which the TSO cannot be held responsible. The relevant Capacity must be made available by the TSO to the relevant downstream Network Operator on a permanent and firm basis throughout the agreed term. In analogy with sections 15a and 15b of the Energy Industry Act, the TSO shall inform the downstream Network Operator of the anticipated date from which the additional Capacity will be available as well as of any delays.

6. Downstream Network Operators shall have the right to return any additional Inter-System Capacity made available pursuant to paragraphs (4) and (5) above in whole or in part to the upstream Network Operator during its term, where possible by the deadline for submission of Inter-System Capacity Applications as set out in section 11(3) above in the year preceding the start date specified in the request for additional Inter-System Capacity. If the upstream Network Operator is able to make the Capacity available at other points and allocate it to other parties, the downstream Network Operator shall be released from its payment obligation.

7. Throughout the term agreed in respect of an additional amount of Inter-System Capacity confirmed by the upstream Network Operator in accordance with paragraphs (4) and (5) above, the downstream Network Operator shall when determining the gross Capacity requirement deduct the relevant quantity in accordance with sentence 1 of section 13(4) above and shall then re-add it in accordance with sentence 2 of section 13(4) above. After the end of the agreed term the additional Inter-System Capacity shall no longer be treated separately; section 11(5) above shall then apply to the total Capacity requirements including the additional requirements.

17 Linepack

1. If a DSO is able to provide linepack flexibility by increasing the density of the volume of gas in its network, it shall in the course of its operational flow control activities manage the linepack in its network with a view to reducing within-day load peaks at the system interconnection points and/or exit zones connecting its network with upstream networks, and thus minimise the maximum hourly volume of gas flowing onto its network. This requirement shall not apply where it would be technically impossible or commercially unreasonable for the DSO to do so.
2. Linepack flexibility shall be used as an Internal System Balancing Tool in the most efficient manner possible.
3. Neither the making available of Internal System Balancing Tools nor their actual utilisation shall be remunerated separately for the time being, neither bilaterally between the Network Operators nor by the Market Area Manager.
4. Operational and technical details shall be agreed bilaterally between the upstream and downstream Network Operators involved under the coordination of the relevant TSO with a view to achieving the aims set out in paragraph (1) above. If there are substantial changes to the topology of a downstream Network Operator's network, the downstream Network Operator shall notify its TSO thereof. Upon request, Exit Network Operators shall notify their respective upstream Network Operator(s) and the Market Area Manager of whether they make active use of any linepack flexibility available; this information shall be binding on the Exit Network Operator concerned. When responding to such a request the Exit Network Operator shall specify the following information:
   - the maximum hourly change in linepack (additions/reductions) possible;
   - the working gas volume available in excess of the daily working gas volume (weekly schedule) and
   - the available daily working gas volume.
5. Where the Network Operator is required to submit Flow Profile Notices pursuant to section 28(2) below, it shall take linepack changes into account for this purpose.
6. On request by the Market Area Manager, Exit Network Operators shall submit the daily linepack changes by M+12 Business Days (specifying positive and negative signs for all changes).

18 Tariffs and Charges

1. Upstream Network Operators shall issue monthly invoices to their downstream Network Operators on the basis of the upstream Network Operator's network tariffs which shall be applied to the amount of Inter-System Capacity currently held or (as the case may be) the proportion of the Maximum Hourly Supply Rate actually used by that downstream Network Operator plus taxes and other public charges payable in respect thereof.

   TSOs shall charge the pass-through amounts recoverable under section 7 for biogas and under section 10 for the Gas Quality Switchover process to the downstream Network Operator(s) directly connected to the TSO’s network in addition to the network tariffs payable under section 6(4)(a) above. In all other cases the network charges invoiced to

downstream Network Operators shall include the biogas and Gas Quality Switchover pass-through amounts, which are passed on to downstream Network Operators as part of the applicable network tariffs.

2. If the level of the tariffs charged pursuant to paragraph (1) above changes due to statutory provisions and/or administrative decisions and/or court decisions, the changed tariffs as determined in compliance with the relevant statutory provision and/or administrative decision and/or court decision shall apply from the date on which that statutory provision and/or decision takes effect; where the tariffs change due to an administrative decision the changed tariffs shall apply from the date the decision becomes enforceable.

3. Where an upstream Network Operator's allowed revenue is determined or adjusted under the incentive regulation regime, the upstream Network Operator shall have the right to raise the original network tariffs applicable in respect of Inter-System Capacity Applications with effect from 1 January of the following calendar year where and to the extent that the allowed revenue thus determined or adjusted so permits. The upstream Network Operator shall have an obligation to reduce its network tariffs where and to the extent that the allowed revenue thus determined or adjusted so mandates. If the upstream Network Operator is a transmission system operator, the latter is also entitled to adjust the network charges in accordance with Regulation (EU) 2017/460 of 16 March 2017 ("NC TAR") as well as its transposition in national law annually by 1 January of the following calendar year. In addition, the transmission system operator may also adjust the network charges during the year in the cases referred to in Article 12 (3) NC TAR. This shall also apply in the event of a corresponding court or administrative decision in connection with the NC TAR requirements or their transposition into national law. Where the upstream Network Operator changes its network tariffs (price sheets), it shall give notice thereof to its downstream Network Operator(s) in Text Form in good time before 1 January and in compliance with the relevant notice periods required by law.

4. Except as otherwise stipulated herein, upstream Network Operators shall have the right and obligation to change their tariffs, individual components thereof and/or any charges to be levied in addition thereto with immediate effect where and to the extent necessary to reflect a change in or introduction of taxes and/or other public charges or neutrality or pass-through charges imposed by a public body which relate to the transportation of gas insofar as they are not included in the upstream Network Operator's allowed revenue.

5. Upstream Network Operators shall issue their invoices for network charges pursuant to paragraph (1) above to their downstream Network Operators by the 1st Business Day of the month to which the charges relate. Payment must be made by the 15th calendar day of that month using a fixed value date.

6. If the gas flow received by a downstream Network Operator exceeds its Inter-System Capacity entitlement, such overrun shall be charged in respect of the month in which the overrun occurred at the applicable tariff pursuant to paragraph (1) published for that month. Where a Capacity overrun was caused by a particular flow profile which was implemented by the downstream Network Operator pursuant to an agreement between the Network Operators and/or with the Market Area Manager, the downstream Network Operator shall not incur a charge.

7. Where an Inter-System Capacity or (as the case may be) Maximum Hourly Supply Rate overrun occurs, the downstream Network Operator shall be liable to the upstream Network Operator to pay a reasonable penalty in line with accepted market practice as published on the upstream Network Operator's website, which shall be payable in respect of the full amount by which the downstream Network Operator exceeded its Inter-System Capacity or Maximum Hourly Supply Rate entitlement, except where the downstream Network Operator has duly determined the amount of Inter-System Capacity or Maximum Hourly Supply Rate originally applied for or notified in respect of the relevant year in accordance with the principles set forth in sections 13 and 14 above and where it has revised that amount in compliance with the provisions of section 15 above where necessary. The downstream Network Operator shall also pay a reasonable penalty in line with accepted market practice in respect of an Inter-System Capacity or Maximum Hourly Supply Rate overrun even where it has duly determined the amount of its Inter-System Capacity Application or Maximum Hourly Supply Rate notification where and to the extent that it can demand payment of a penalty in respect of that Inter-System Capacity or Maximum Hourly Supply Rate overrun from its own downstream Network Operators under this paragraph (7) or from Shippers.

   The downstream Network Operator shall further pay a reasonable penalty in line with accepted market practice as defined in sentence 1 above where and to the extent that it culpably fails to implement any interruption potential notified to the upstream Network Operator under section 21(1) and instructed to be implemented by the upstream Network Operator under section 21(4) or (6).

   Nothing in this paragraph shall preclude the upstream Network Operator from asserting a claim for any loss or damage suffered by the upstream Network Operator as a consequence of the overrun in question. Any such claim for damages shall be offset against any penalty payments already made in respect of that overrun.

19 Invoicing and Payment

1. If there is a distinct possibility that an invoice issued to a Network Operator contains an obvious error, the Network Operator shall have the right to postpone or refuse payment.
2. Each Network Operator shall have the right to charge a general late payment fee to compensate for any loss or damage it suffers as a consequence of any default. The other Network Operator in each case, however, shall have the right to submit evidence that the actual loss or damage suffered by that Network Operator as a consequence of the default in question was lower than the amount charged as a general late payment fee.
3. If any invoice amount or the data upon which an invoice is based is found to be erroneous, any excess payment made by the relevant downstream Network Operator shall be reimbursed by the upstream Network Operator and any outstanding amount shall be paid by the relevant downstream Network Operator. Invoices may be corrected within a period of 3 years from the date on which the invoice to be corrected was received, after which point in time no corrections shall be permitted.
4. Downstream Network Operators shall not be entitled to declare a set-off against any claim held by their upstream Network Operator unless the downstream Network Operator's

claim is undisputed or an enforceable judgment has been rendered in respect of that claim.

20 Notification of Maximum Hourly Supply Rate Requirements to Upstream DSOs Operating a Postage-Stamp Tariff System

1. Where the upstream Network Operator is a DSO who operates a postage-stamp tariff system, the downstream Network Operator shall not be required to submit an Inter-System Capacity Application to that upstream Network Operator. Once a year within the deadlines set out in section 11(3) above, the downstream Network Operator shall submit its long-term demand forecast as determined pursuant to section 16 above and notify the upstream Network Operator of the Maximum Hourly Supply Rate it requires at the system interconnection points and/or exit zones connecting the relevant upstream and downstream networks separately.
2. The downstream Network Operator shall determine the required Maximum Hourly Supply Rate according to the calculation method described in sections 13 and 14 above, exercising the degree of care that can be expected in gas industry matters. Upon a request to that effect by the upstream Network Operator, the downstream Network Operator shall disclose to the upstream Network Operator the amount by which the Maximum Hourly Supply Rate has been adjusted to take account of changes in hourly demand pursuant to section 14(1) above.
3. The upstream Network Operator shall confirm the Maximum Hourly Supply Rate notification to the extent that the amount stated therein does not exceed the Maximum Hourly Supply Rate confirmed in respect of the preceding year. Where a Maximum Hourly Supply Rate notification specifies a higher amount, the upstream Network Operator shall carry out a review to assess whether it is able to confirm the higher supply rate. To the extent that the upstream Network Operator is unable to secure the firm Capacity required to provide the higher requested Maximum Hourly Supply Rate in full, it shall confirm the remaining portion of the requested Maximum Hourly Supply Rate to the downstream Network Operator on an Interruptible or Fixed-Term basis. In this case the downstream Network Operator shall examine whether it can take any measures in respect of its own network to reduce its Capacity requirements (e.g. interruption agreements).
4. All relevant charges shall be billed on the basis of the downstream Network Operator's actual utilisation of the upstream Network Operator's network under the applicable postage-stamp tariff system. Where the requirements for application of a special tariff under section 20(2) of the Tariff Regulations are met, the relevant charges shall be billed accordingly.
5. Except as otherwise provided in paragraphs (1) to (4) above, the provisions on Inter-System Capacity Applications set out in this Chapter 1 shall apply accordingly.

21 Responsibility for Overall Gas Supply System

1. Once a year, together with its Inter-System Capacity Application or Maximum Hourly Supply Rate notification (as the case may be) and within the deadlines specified in

section 11(3) above, each downstream Network Operator shall provide to its upstream Network Operator(s) the data listed below, with all data to be provided in kWh/h and in aggregated form for each exit zone or system interconnection point (as the case may be), in each case having regard to the simultaneity of all relevant flows:

- the estimated proportion of the downstream Network Operator's Inter-System Capacity Application or Maximum Hourly Supply Rate notification which relates to the demand of protected customers within the meaning of section 53a of the Energy Industry Act,
- the demand rates agreed in respect of significant gas-fired power stations within the meaning of sections 13c and 16(2a) of the Energy Industry Act as specified in contracts with Shippers and/or end users,
- the demand rates agreed under contractual interruption arrangements pursuant to section 14b of the Energy Industry Act, and
- where applicable, any other estimated flow rates required by the Network Operator to maintain the stability of its distribution system under the prevailing pressure conditions in order to be able to uphold the supply of gas to protected customers and (where instructed) to significant gas-fired power stations.

The downstream Network Operator shall report the above data to its upstream Network Operator(s), who shall in turn aggregate the data with its own data and submit the aggregate data to its own upstream Network Operator(s).

Contract amendments of a significant nature shall be notified to the upstream Network Operator(s) by the relevant Network Operator without undue delay.

2. For the purpose of complying with their statutory obligations the Network Operators shall have appropriate communication channels in place as required under the DVGW rules (in particular, without limitation, Code of Practice GW 1200 and Code of Practice G 2000), ensuring at least 24/7 availability via email, and shall exchange the necessary contact details of their respective contacts. Any and all changes in these contact details shall be notified without undue delay. By 30 September each year, each Network Operator, starting with the TSO, shall test the communications processes in place between the Network Operator and its directly connected downstream Network Operator(s).

3. If any event or circumstance within the meaning of section 16 of the Energy Industry Act affecting the network of a TSO threatens to endanger or disturb the safety or reliability of the gas supply system to an extent that, based on the gas flows scheduled by the TSO, it may become necessary to interrupt or curtail the flow of gas to its downstream Network Operators, that TSO shall without undue delay notify the Market Area Manager and the downstream Network Operators directly connected to its network in the network areas potentially affected to inform them of the occurrence of this situation, and again once this situation is resolved. The downstream Network Operators affected shall forward this information to their own downstream Network Operators without undue delay. Each downstream Network Operator shall acknowledge receipt of this information to its upstream Network Operator(s) without undue delay.

   Each affected downstream Network Operator shall on receiving information pursuant to sentence 1 estimate the interruption potential currently available and report this to its

upstream Network Operator without undue delay. The interruption potential shall be determined by calculating the current mean daily gas flow in kWh/h, factoring in any consumption information available and deducting the demand or flow rates corresponding to

- the estimated proportional demand of protected customers within the meaning of section 53a of the Energy Industry Act,
- significant gas-fired power stations within the meaning of sections 13c and 16(2a) of the Energy Industry Act, provided the relevant electricity transmission system operator has issued instructions to uphold the gas supply under section 16(2a) of the Energy Industry Act and the affected downstream Network Operator is aware thereof, and
- where applicable, any other estimated flow rates required by the Network Operator to maintain the stability of its distribution system under the prevailing pressure conditions in order to be able to uphold the supply of gas to protected customers and (where instructed) to significant gas-fired power stations.

Where any event or circumstance within the meaning of section 16 of the Energy Industry Act affecting the network of a TSO threatens to endanger or disturb the safety or reliability of the gas supply system to an extent that, based on the gas flows scheduled by the TSO, it may become necessary to interrupt or curtail the flow of gas to its downstream Network Operators, or where this is already the case, the TSO affected shall notify the German Federal Ministry for Economic Affairs and Energy, the Federal Network Agency and the competent ministries and regulatory authorities of the relevant German state to inform them of the occurrence of this situation. It shall further inform them once this situation is resolved.

Where a TSO submits a request to its downstream Network Operators under section 16(1) of the Energy Industry Act to not exceed the Inter-System Capacity agreed in the Inter-System Capacity Application process and/or to interrupt in whole or in part any Interruptible Capacity so agreed, the downstream Network Operators shall without undue delay take any and all measures within the meaning of section 16(1) of the Energy Industry Act they have at their disposal so as to comply with the Capacity restrictions imposed by the TSO. If a downstream Network Operator is unable to comply with the TSO's request not to exceed its Inter-System Capacity and/or to interrupt any Interruptible Capacity agreed, it shall notify the TSO thereof without undue delay. This notification shall simultaneously be treated as the Network Operator's application to have the potential or actual Capacity overrun approved as the agreed flow profile. Based on the responses received from all downstream Network Operators who have been issued with a request within the meaning of this paragraph (4) and taking into account the gas flows as rescheduled by the TSO on this basis, the TSO shall review

- whether sufficient measures within the meaning of section 16(1) of the Energy Industry Act are in place overall in the affected network areas, or
- whether the potential or actual Capacity overruns requested by downstream Network Operators would give rise to measures within the meaning of section 16(2) of the Energy Industry Act.

4. If the measures pursuant to section 16(1) of the Energy Industry Act in place in the affected network areas do not suffice, the TSO shall issue requests to its downstream Network Operators under section 16(2) of the Energy Industry Act demanding that they reduce their gas flows by a Capacity amount specified by the TSO. Each downstream Network Operator so requested shall then implement the current interruption potential estimated pursuant to paragraph (3) above up to the Capacity reduction amount requested by the TSO without undue delay. If the interruption potential of any Network Operator together with the maximum additional delivery rates available at the connection points to storage or production facilities connected to its network are insufficient to meet the applicable Capacity target, the downstream Network Operator affected shall notify the requesting TSO or upstream Network Operator (as the case may be) thereof without undue delay. The TSO may only demand from its downstream Network Operators that they curtail their Capacity in excess of the interruption potential reported if all other measures pursuant to section 16(1) and (2) of the Energy Industry Act available in the network areas affected, including the interruption potential reported by Network Operators, have been fully exhausted or an order to this effect has been issued by an authorised authority (normally the load distribution divisions at federal or state level designated under the German Gas Load Distribution Regulations (*GasLastV*)).

   The TSO affected shall inform the ministries and authorities specified in paragraph (3) above if relevant measures need to be taken, including information on the nature and scope of these measures, and shall also inform them when the situation is such that the available measures may soon be exhausted as well as once this is actually the case, all in accordance with section 16(2) of the Energy Industry Act.

5. Where the Capacity of a downstream Network Operator is affected under paragraph (5) above and where the Market Area Manager has contracted a balancing product which involves the provision of balancing services through use of the demand-side flexibility available at an RLM Exit Point which affects at least one Exit Point located on the network of the downstream Network Operator and a call order has been issued for the balancing service to be provided, the downstream Network Operator shall take the reduced Capacity into account when reporting its updated interruption potential as required.

6. In compliance with the gas network operators' responsibility for the overall gas supply system under sections 16 and 16a of the Energy Industry Act and in compliance with the statutory obligation of all gas network operators under section 20(1b) of the Energy Industry Act and section 8(6) of the Access Regulations to cooperate for the purpose of enabling cross-network transports, each downstream Network Operator directly connected to the TSO affected shall pass on all measures to be taken pursuant to section 16(1) and (2) of the Energy Industry Act to its own downstream Network Operator(s) proportionally. In situations falling within the scope of section 16(1) of the Energy Industry Act the confirmed Maximum Hourly Supply Rate shall provide the upper Capacity limit. The provisions set out in paragraphs (4) and (5) above shall apply accordingly.

22 Technical Requirements

1. For the purposes of section 20 and Inter-System Capacity Applications pursuant to section 11 above, the technical requirements published for the relevant system interconnection points on the respective Network Operator's website shall apply.

2. Each Party shall have the right to demand that an impartial third party examine whether the gas composition complies with the requirements published by the relevant upstream Network Operator pursuant to paragraph (1). If within one month of either Party receiving such a request from the other Party the Parties fail to reach agreement on the identity of the impartial third party, the examination shall be carried out by the Engler-Bunte-Institute at Karlsruhe University. Where the gas is found to be compliant, the costs incurred for the examination shall be borne by the Party who requested it. In all other cases the other Party shall be required to pay the costs.

3. If the technical requirements must be changed to comply with statutory or regulatory provisions or changes in the technical rules published by the German Technical and Scientific Association for Gas and Water (DVGW), the upstream Network Operator shall notify its downstream Network Operator(s) thereof without undue delay. The upstream Network Operator shall amend the contract affected by the relevant change with effect from the date on which the provisions referred to in sentence 1 above come into force. If the technical requirements must be changed so as to ensure that the upstream Network Operators can comply with their statutory cooperation obligations, each upstream Network Operator shall have the right to implement the relevant changes by giving 4 months' prior notice thereof to its downstream Network Operator(s). If any such change has the effect of restricting the downstream Network Operator in utilising the Inter-System Capacity held by the downstream Network Operator, the downstream Network Operator shall have the right to terminate the relevant contract with effect from the date on which the relevant change comes into force by giving 3 months' prior notice. If notice from the upstream Network Operator pursuant to sentence 1 above is received less than 4 months before the relevant change comes into force, the downstream Network Operator shall have the right to terminate the relevant contract with effect from the date on which the relevant change comes into force without being required to comply with any notice periods.

4. Notwithstanding sentence 3 of paragraph (3) above, upstream Network Operators shall have the right to change gas composition or pressure specifications by giving 3 years and 2 months' prior notice ahead of the start of any Switchover Period.

   Where in the course of a Gas Quality Switchover process the gas composition changes so as to result in a switch from low CV to high CV gas quality, the relevant upstream Network Operator shall notify its downstream Network Operator(s) of the time period, in months, during which the changes in gas composition are planned to be implemented at the relevant system interconnection points ("**Switchover Period**"), which notice shall be given no later than 3 years and 2 months before the start of the relevant Switchover Period.

   Each Network Operator shall publish the anticipated Switchover Technical Implementation Date on its website no later than two years in advance and shall notify all affected connection customers thereof in writing, alerting them to the cost reimbursement provisions set out in section 19a(3) of the Energy Industry Act.

Each Network Operator shall determine the Switchover Balancing Effective Date for the Exit Points on its own network and shall give notice of its Switchover Balancing Effective Date to all downstream Network Operators directly connected to its network, if any, no later than 1 year and 1 month ahead of that date. The Switchover Balancing Effective Date should not differ from the Switchover Supply Effective Date by more than 4 weeks. The relevant TSO shall further consult with its downstream Network Operator(s) to determine the month in which the Switchover Technical Implementation Date is to fall and shall give notice of that date to the downstream Network Operator(s) no later than 1 year and 1 month ahead of that date. When giving notice in accordance with the foregoing sentence, the TSO or upstream Network Operator in each case shall in any event provide sufficient notice so as to ensure that other downstream Network Operators (if any) will also be able to give at least one year and one month's notice when notifying their own downstream Network Operators.

As the switchover planning process progresses, the TSO shall notify its downstream Network Operator(s) without undue delay once the exact date of the Switchover Technical Implementation Date is known. The date on which gas quality will change at the system interconnection points between the TSO and its downstream Network Operators shall be estimated by the TSO on the basis of the Switchover Technical Implementation Date together with all affected downstream Network Operators, Non-Standard End Users, if any, and SSOs, if any, directly connected to the TSO's network.

On completion of the estimation process the TSO shall notify each affected downstream Network Operator directly connected to the TSO's network to inform them of the estimated dates for the gas quality change at the system interconnection points between the TSO and that downstream Network Operator as agreed with all affected downstream Network Operators, Non-Standard End Users, if any, and SSOs, if any, directly connected to the TSO's network.

Where a series of networks are interconnected in a cascading structure, each higher-level downstream Network Operator shall notify all affected lower-level downstream Network Operators connected to its own network without undue delay to inform them of the relevant Switchover Period, Switchover Balancing Effective Date and Switchover Technical Implementation Date. Where an upstream Network Operator has announced a relevant change and where during the applicable notice periods a new Inter-System Capacity contract comes into effect, the running notice periods shall also apply to that contract. Each change in gas composition or pressure specifications shall only apply to the system interconnection points affected. The contract affected by the relevant change shall be revised with effect from the date on which the change in gas composition or pressure specifications takes effect. Where an upstream Network Operator changes gas composition or pressure specifications in accordance with this paragraph, its downstream Network Operator shall have the right to terminate the contract in force in respect of the relevant system interconnection points with effect from the date on which the change in gas composition or pressure specifications takes effect by giving at least one year's prior notice.

5. Notwithstanding the provisions of paragraph (4) above, the Network Operators may agree an earlier Switchover Balancing Effective Date and Switchover Technical Implementation Date including shorter notice periods where in the course of any process of change in gas

quality from low CV to high CV quality it is technically necessary to do so, for example where insufficient low CV gas supplies are available, or where all affected Network Operators and affected Shippers have given their consent. The relevant dates shall be reflected in the Switchover Schedule agreed between the Network Operators.

23 Non-Compliance with Gas Composition or Pressure Specifications

1. If any gas delivered at a system interconnection point by the upstream Network Operator does not comply with the technical requirements relating to gas composition or pressure specifications pursuant to section 22(1) and (2) above (hereinafter referred to as "**Off-Spec Gas**"), the downstream Network Operator shall be entitled to refuse acceptance of such Off-Spec Gas onto its network in whole or in part. In this case the upstream Network Operator shall without undue delay reduce the flow of Off-Spec Gas at that system interconnection point accordingly. Any and all rights the downstream Network Operator may have against the upstream Network Operator shall remain unaffected.
2. Each upstream or downstream Network Operator shall notify its respective downstream or upstream Network Operator(s) without undue delay if it becomes aware or expects that Off-Spec Gas is being or will be delivered at any system interconnection point.

24 Maintenance

1. Each upstream Network Operator shall have the right to perform maintenance (which for the purposes of this Agreement includes routine maintenance, inspections and repairs) on its pipeline system and to carry out measures for the construction of new or the modification, expansion or reinforcement of existing plant and equipment. Where and to the extent that an upstream Network Operator is unable to perform its obligations under this Agreement due to the carrying out of any of the aforementioned measures, that upstream Network Operator shall be released from those obligations. Downstream Network Operators shall have an obligation to cooperate with their upstream Network Operators with a view to facilitating any planned maintenance measures, particularly, without limitation, by way of adjusting the flow or pressure of gas in their own networks. Upstream Network Operators shall give due consideration to the legitimate interests of their downstream Network Operators in planning and carrying out any such measures.
2. Where any measure within the scope of paragraph (1) above will have the effect of restricting in whole or in part a downstream Network Operator's use of its contractually agreed Capacity or where the flow of gas at individual system interconnection points will be affected on a significant scale, the upstream Network Operator shall notify the downstream Network Operator thereof in a suitable manner in good time ahead of the date on which the relevant works will be carried out. The upstream Network Operator shall not have an obligation to give advance notice where due to the prevailing circumstances such notice cannot be given in good time for reasons for which the upstream Network Operator cannot be held responsible or where this would cause a delay in removing any interruptions that have already occurred. In these cases, the upstream Network Operator shall inform the downstream Network Operator afterwards of the reasons why the downstream Network Operator's use of its contractually agreed Capacity was restricted.

3. If the contractually agreed Capacity and/or the flow of gas is curtailed at any system interconnection point for a duration of more than 14 calendar days in any Inter-System Capacity Year due to any measures within the meaning of paragraph (1) above other than measures falling within the scope of section 16(2) of the Energy Industry Act, the relevant downstream Network Operator shall be released from its payment obligations for such time and extent as the curtailment exceeds 14 calendar days. The downstream Network Operator shall further be released from its performance obligations.

4. The above paragraphs shall apply accordingly where an upstream Network Operator is unable to perform its obligations under the relevant contract, whether in whole or in part, due to measures pursuant to paragraph (1) above which are carried out by other upstream Network Operators.

5. Where due to any measure within the scope of paragraph (1) above auxiliary supplies of gas are provided other than by pipeline, the Market Area Manager shall reimburse the costs incurred for the auxiliary supply quantities delivered to the network of the relevant downstream Network Operator at the daily price for RLM Quantity Differences as determined pursuant to section 15 of Appendix 4 in respect of each day on which auxiliary supplies are provided, with the reimbursements being treated as costs for External System Balancing Actions and recorded in the Balancing Neutrality Accounts to be set up pursuant to section 16 of Appendix 4.

25 Data Disclosure and Data Processing

Each Network Operator shall have the right to disclose consumption, billing and contract data to other Network Operators or the Market Area Manager where and for such time as this is necessary to ensure proper performance of the relevant contract. Downstream Network Operators hereby give their consent for Network Operators, or any third party commissioned by a Network Operator, to process the downstream Network Operator's data using automated data processing methods in accordance with the applicable data protection laws. The Network Operator shall inform the Market Area Manager of its respective contact persons for publication on the Market Area Manager's portal accessible to network operators and Balancing Group Managers in compliance with the data protection laws.

Chapter 2 Interconnection between Upstream and Downstream Network Operators

26 Scope of Application

1. This Chapter sets out the technical conditions relating to the flow of gas between gas supply networks operated by upstream and downstream Network Operators. In particular, without limitation, this Chapter provides rules for the operation and modification of the measurement and control equipment (“M&C Equipment”) assigned to individual system interconnection points and rules for the exchange of information between the Parties. Network Operators shall give due regard to the provisions set out in this Chapter when entering into contracts with third parties which are necessary to grant access to their networks to those parties.

2. The provisions of this Chapter shall not apply to Network Operators who at 30 September 2011 had an agreement on interconnection in force between them. Where in any such agreement no provision is made in relation to any matter provided for in this Chapter, the relevant provisions set out in this Chapter shall apply.

3. Where the provisions of this Chapter are applicable, the relevant Network Operators shall enter into a separate contract setting out further details and providing additional rules required to supplement those set out herein ("Supplemental Agreement"). In particular, without limitation, each such Supplemental Agreement shall specify details describing the exact location of the relevant system interconnection points, provisions on the grouping of points into exit zones pursuant to section 11(2) above (where applicable) and the general technical conditions applicable in respect of the relevant system interconnection point and/or exit zone.

27 Operation of M&C Equipment and Maximum Technical Flow Rate

1. All M&C Equipment assigned to a system interconnection point shall be operated and modified in accordance with the applicable statutory provisions and in compliance with generally accepted technical standards, particularly, without limitation, the rules published by DVGW, the standards adopted by the German Institute for Standardization (DIN), the minimum technical requirements defined by the upstream Network Operator and the guidelines agreed in respect of the relevant system interconnection point in the respective Supplemental Agreement, if any.

2. The Maximum Technical Flow Rate at a system interconnection point within the meaning of section 7(1), sentence 3, No. 2 of the Access Regulations shall correspond to the maximum standard volume flow to be transported by the M&C Equipment assigned to that system interconnection point or any other component limiting its transportation capability (e.g. pre-heating) at their design conditions. The Maximum Technical Flow Rate at a system interconnection point is therefore not a determinant of the transportation capability of the upstream or of the downstream network. Downstream Network Operators may increase their Inter-System Capacity Applications up to the amount of the Maximum Technical Flow Rate without becoming liable to pay connection costs to the relevant upstream Network Operator.

28 Data Exchange and Flow Profile Notices

1. Network Operators shall exchange between them any and all information which is required for the purpose of interconnection. Any and all information relating to potential deviations from the general technical conditions agreed in a Supplemental Agreement, including short-term deviations, as well as any and all information relating to any failures or any incidents on the gas supply network of either Network Operator that may affect safety, especially but not limited to those affecting the M&C Equipment assigned to the relevant system interconnection points, must be exchanged without undue delay. For this purpose, each Network Operator shall ensure availability of its relevant contacts in accordance with the DVGW technical rules as outlined in DVGW Code of Practice G 2000.

2. Each Network Operator shall submit to its directly connected upstream Network Operator(s) a notification setting out the expected gas flow for each hour of the next gas

day (“Flow Profile Notice”) if so required by the upstream Network Operator(s) based on technical transportation requirements. If the circumstances underlying a Flow Profile Notice change significantly, the relevant Network Operator shall notify the affected Network Operators of its revised Flow Profile Notice without undue delay.

3. In duly justified individual cases the upstream Network Operator shall have the right to require its downstream Network Operator(s) to submit individual Flow Profile Notices in respect of certain system interconnection points or exit zones.

4. Flow Profile Notices shall be prepared with the degree of care that can be expected in gas industry matters. To this end Network Operators who submit Flow Profile Notices shall on a regular basis validate the quantities or rates of flow stated therein by comparing them against the Inter-System Flow Notifications submitted pursuant to section 46(6) below. The daily differences between the aggregate daily quantities stated in the Flow Profile Notices submitted and the aggregate daily quantities stated in the Inter-System Flow Notifications submitted in respect shall be kept as small as possible.

5. All communications relating to Flow Profile Notices shall be sent in Edig@s format. The Network Operators involved may agree on a bilateral basis to use an alternative electronic format for an interim period.

29 Access and Inspection Rights

Both Network Operators who are connected at a system interconnection point (“Adjacent Network Operators”) shall be entitled to access and inspect the M&C Equipment at the system interconnection point site and to enter the land on which the M&C Equipment is located. Details shall be agreed between the Network Operators and set out in the relevant Supplemental Agreement.

30 Operation of Meter Points

1. Adjacent Network Operators shall specify in their Supplemental Agreement or in a separate data sheet which of the Network Operators will be responsible for operating the meter points at the relevant system interconnection point (including responsibility for measuring the gas flow; with the designated Network Operator below being referred to as the “Meter Operator”), and shall also determine how the measured data is to be recorded and processed. In particular, without limitation, Adjacent Network Operators shall agree how, to what extent and by what technical means data will be made available and documented for flow control, monitoring and billing purposes. Both Network Operators shall have the right to take meter readings at the system interconnection point at any time.

   The downstream Network Operator shall be responsible for all data submissions relating to the flow of gas at the system interconnection point (“Inter-System Flow Notification”) unless this responsibility has been assigned to the upstream Network Operator by agreement between the parties involved. In the latter case the downstream Network Operator shall give notice thereof in Text Form to the Market Area Manager.

   The Network Operator acting as Meter Operator shall provide all meter readings to its Adjacent Network Operator on request and shall have an obligation to consult with the

other Network Operator to determine the gas flow at the system interconnection point. The Network Operator acting as Meter Operator shall notify the other Network Operator of the system interconnection point with a lead time of at least 14 calendar days of any changes to the master data, including but not limited to changes to the installation, changes to the metering and transmission technology and parameters as well as changes to the set gas quality parameters. If prior notification is not possible, it must be given immediately afterwards.

2. For validation purposes, each Adjacent Network Operator shall be entitled vis-à-vis the respective other Adjacent Network Operator to install or have installed its own measurement equipment and additional telemetry facilities, including the communications and/or measurement equipment required in relation thereto, at its own cost.

3. For the purposes of meter point operation, the Network Operator acting as Meter Operator shall be deemed to be the provider of the relevant metering instrument within the meaning of the applicable meter calibration and verification legislation and shall insofar have the responsibility to ensure compliance with all requirements and obligations arising under that legislation. To this extent – provided it also acts as Meter Operator – each Network Operator hereby confirms that these obligations are fulfilled (section 33(2) of the German Measurement and Verification Act (*Mess- und Eichgesetz*)).

4. The Network Operator acting as Meter Operator shall ensure that also all measuring instruments designed for a maximum flow of 150,000 m^3/h or more at standard conditions are duly calibrated and verified, provided the measured data recorded by these instruments is used as an input parameter by any system subject to mandatory verification which is used to determine Billing CVs and other gas composition metrics by way of reconstructing the relevant state of the gas (reconstruction systems).

5. The above provisions shall apply accordingly to any measurement equipment which has been assigned to a system interconnection point but which is not located directly on the system interconnection point site.

31 Reduction or Discontinuation of Gas Flow

1. Possession of the gas quantities to be received at a system interconnection point shall transfer at the relevant system interconnection point.

2. Each Connected Network Operator shall have the right to reduce or discontinue the flow of gas at its system interconnection points at any time, if necessary without giving advance notice thereof, where this is required to avert an imminent danger to the safety of any person or property of significant value or to prevent any other third-party disturbance or negative repercussions on the Network Operator's own or any third-party equipment. Once the reasons for any such reduction or discontinuation of gas flows no longer apply, the Connected Network Operators shall resume the flow of gas without undue delay.

Chapter 3 Joint Marketing of Capacity

32 Joint Marketing of Bundled Capacity at Cross-Border Interconnection Points and Marketing of Additional Capacities

1. Notwithstanding the rules for the allocation of Capacity set out in this Chapter 3, TSOs shall have the right to apply differing procedures for the allocation of bundled Capacity at Cross-Border Interconnection Points provided these procedures are in accordance with the administrative ruling on gas Capacity management and auction procedures handed down by the Federal Network Agency on 24 February 2011 (so-called “KARLA Gas” decision; ref: BK7-10-001) or any other administrative ruling by the Federal Network Agency that repeals or supplements this ruling.
2. The gas TSOs shall market the additional capacities together with the technical capacities in accordance with the Federal Network Agency's decision on the approval of an oversubscription and capacity buy-back system of the TSOs for the offer of additional capacities in the national market area ("KAP+") (Ref. BK7-19-037 of 25.03.2020) or a decision of the Federal Network Agency replacing or supplementing said decision. Annex 1 shall also apply to such additional capacities.

33 Capacity Booking Platform

1. The TSOs shall provide a joint platform for the allocation of Capacity (“**Capacity Booking Platform**”) which shall be operated by the TSOs themselves or by an authorised third party acting on behalf of the TSOs in accordance with the provisions of the Access Regulations and any other applicable regulatory requirements imposed in relation thereto.
2. All entry and exit agreements entered into on the Capacity Booking Platform will be made between the Shippers and TSOs involved in each case. The Capacity Booking Platform as such shall only serve as a marketing platform.
3. The amount of Capacity available shall be determined by the TSOs in accordance with the statutory provisions and offered on the Capacity Booking Platform. The Capacity Booking Platform shall have the capability to implement the auction mechanism described in Article 8 et seq. of Regulation (EU) 2017/459 as well as to allocate Capacity on a first-come-first-served basis.
4. Each TSO shall have the right to offer additional Capacity products on the Capacity Booking Platform, provided they comply with the applicable statutory and regulatory requirements.
5. When purchasing Capacity on the Capacity Booking Platform, Shippers shall have the option of assigning their booked Entry and Exit Points to an existing Balancing (Sub)Group registered with the Market Area Manager by specifying the relevant Balancing (Sub)Group Number.

34 Registration with TSO and Admission as Network User

1. The registration function provided on the Capacity Booking Platform allows Shippers to register with one or several TSOs and to apply for their registration details to be forwarded to the Market Area Manager. Registration details only have to be entered once on the Capacity Booking Platform.

2. Besides requiring Shippers to register, each TSO shall have the right to provide in its supplementary terms and conditions that Shippers must meet additional requirements in order to be admitted as a network user by the TSO.

3. On receiving a complete application for admission as a network user from a Shipper, the relevant TSO shall admit that Shipper as a network user no later than 10 Business Days from the date of receipt of the Shipper's application. If the TSO discovers that the application documents received are incomplete, it shall notify the Shipper thereof without undue delay and specify the outstanding documents to be submitted by the Shipper. If the Shipper fails to submit the outstanding application documents within a period of 180 calendar days, the TSO shall be entitled to cancel the registration process and destroy all application documents received. Only Shippers who have successfully completed the admission process for network users may enter into Capacity contracts with a TSO and use any additional services offered by that TSO. On successful completion of the admission process, the TSO shall notify the Shipper thereof without undue delay.

4. TSOs shall be entitled to review on a regular basis whether the Shippers they have admitted as network users continue to meet the applicable requirements. If any such Shipper is found to no longer meet the requirements for admission as a network user, the Shipper shall be notified thereof without undue delay and requested to re-establish compliance with the relevant requirement within a reasonable period of time.

35 Registration with Market Area Manager and Admission as Balancing Group Manager

1. The Market Area Manager shall use the registration details it receives via the Capacity Booking Platform. Where this is the case, the relevant Shipper will not be required to also register directly with the Market Area Manager. The Market Area Manager shall ensure that Balancing Group Managers can also register directly with the Market Area Manager itself without having to use the Capacity Booking Platform.

2. As concerns the relationship between the Market Area Manager and the Balancing Group Managers, section 34(2) to (4) above shall apply accordingly.

36 Contract Durations

1. In respect of entry or exit agreements that Shippers enter into with TSOs for existing firm entry or exit Capacity at Cross-Border Points and at entry points from and exit points to storage facilities the following rules shall apply:

   a) An amount equal to at least 20% of the technical yearly Capacity at the relevant entry or exit point shall be set aside and offered as follows:

- an amount equal to at least 10% of the technical Capacity at the relevant in entry or exit point shall be offered no earlier than in the annual auction for yearly Capacity held during the fifth Gas Year preceding the start of the relevant Gas Year, and
- a further amount equal to at least 10% of the technical Capacity at the relevant entry or exit point shall first be offered no earlier than in the annual auction for quarterly Capacity held during the Gas Year preceding the start of the relevant Gas Year.

b) If the amount of Capacity available is less than 20% of the technical yearly Capacity, the entire available Capacity shall be set aside and allocated as follows:

- the portion of the available Capacity that is equal to or less than 10% of the technical yearly Capacity shall be offered no earlier than in the annual auction for quarterly Capacity,
- any remaining Capacity exceeding 10% of the technical yearly Capacity shall be offered no earlier than in the annual auction for yearly Capacity held during the fifth Gas Year preceding the start of the relevant Gas Year.

The technical yearly Capacity shall be expressed and considered in kWh/h.

2. In respect of bookings for all other types of Capacity, such as:

a) exit Capacity for the offtake of gas at Exit Points to end users

b) entry Capacity for the delivery of gas at Entry Points from production facilities or LNG plants

c) entry Capacity at Entry Points from biogas injection facilities falling within the scope of Part 6 of the Access Regulations, and

d) Interruptible Capacity

the limitations on contract durations set out in paragraph (1) above shall not apply.

3. Entry or exit agreements within the scope of paragraph (2) above may be entered into:

a) at any time where they are entered into for a term of one year or longer,

b) no earlier than three months before the start of their term where they are entered into for a term of less than a year,

c) no earlier than one month before the start of their term where they are entered into for a term of less than a month,

d) no earlier than two hours (subject to paragraph (4) below) but no later than one hour (subject to paragraph (4) below) before the start of their term where they are entered into for a term of less than a gas day, with the agreed term always starting on the hour.

Entry and exit agreements which are entered into in accordance with paragraphs (a) to (c) above must always comprise entire gas days.

4. The TSO shall have the right to impose a longer lead time than the one-hour lead time set out in paragraph (3)(d) above at individual Exit Points, which in no case, however, may be longer than 3.5 hours on the hour ahead of the start of the relevant term; in particular, without limitation, the TSO may do so to take account of any or several of the system

integrity criteria below, especially in the case of end users that typically use extremely large quantities of gas and have an unpredictable and extremely variable demand profile:

a) the Capacity required at the relevant connection point,

b) where linepack increases are necessary, the possibility of taking the required linepack measures, their availability and the lead time needed to carry them out,

c) the specific technical/operational circumstances prevailing on the network(s) affected, including
   aa) the distance to the nearest facility that can provide the required pressure levels,
   bb) the pipeline diameter,
   cc) the density of high-load end-user connections in the area with an unpredictable and variable gas demand,

d) the demand profile of the end user in question and the extent to which its Capacity utilisation can be predicted.

The lead time may be increased in 15-minute steps; if a longer lead time than the default lead time is to apply at an Exit Point, the TSO shall publish this on its website and provide the reasons for this decision, with reasonable advance notice to be given in each case. The two-hour lead time set out in paragraph (3)(d) above will move accordingly.

The TSO's right under section 8(5) of the Access Regulations to impose an obligation on the parties concerned to submit technical offtake profile notices and to operate within specified technical limits shall remain unaffected.

37 Auction Process

1. On the Capacity Booking Platform operated by the TSOs pursuant to section 12 of the Access Regulations firm entry and exit Capacity at Cross-Border Interconnection Points and Storage Connection Points shall be auctioned in accordance with Articles 8 et seq. of Regulation (EU) No 2017/459 and section 13(1) and (2) of the Access Regulations.
2. The timing of all Capacity auctions for long-term products shall be published in the form of an auction calendar. The amount of Capacity offered in each auction shall be published.
3. Shippers shall have the right to submit more than one bid for each Capacity offered. All bids must specify a quantity in kWh/h, which must be expressed as a whole number. The maximum aggregate bid quantity for all bids placed by a Shipper shall be limited to the amount of Capacity made available in the auction.

38 Reservation of Capacity pursuant to Section 38 of the Access Regulations

1. Operators of gas-fired power stations, storage facilities, LNG plants or production facilities (each such operator below referred to as a "Plant Operator") whose station, plant or facility (each below referred to as a "Plant") is to be connected to a transmission system are entitled to apply to the relevant TSO under section 38 of the Access Regulations to reserve exit or entry Capacity.

2. In accordance with section 38(3) of the Access Regulations, the TSO shall within 2 weeks of the date of receipt of any preliminary request inform the requesting Plant Operator of which documents it will need to further assess the Plant Operator's request and the costs that will be incurred in relation thereto. The Plant Operator shall bear the costs of the inspection pursuant to sentence 1. If within another 2 weeks the Plant Operator provides written notice to the TSO confirming that the TSO is to carry out the necessary steps, a binding contract for the assessment of the Plant Operator's request will be formed between the parties (“Formal Capacity Assessment Request”). The Formal Capacity Assessment Request shall further constitute the Plant Operator's formal application for reservation of the required amount of Capacity as stated in its preliminary request. The TSO shall carry out a Capacity assessment once a complete set of all documents required for this purpose has been received and the associated costs have been paid. The TSO shall respond to the Formal Capacity Assessment Request no later than 2 months from the date on which the complete documents required to carry out the Capacity assessment have been received.

3. Competing applications for Capacity reservations shall be processed in chronological order of the dates on which the complete documents required to process each case have been received by the TSO and shall be taken into account in the Capacity planning process.

4. If the TSO determines that the full amount of Capacity requested by the Plant Operator is available, it shall reserve that Capacity in the name of the Plant Operator.

5. If it is found in the course of the Capacity assessment that the amount of Capacity applied for cannot be reserved in the period requested or in part only, the TSO shall at the request of the relevant Plant Operator examine in accordance with section 39 below whether the Plant Operator is entitled to demand expansion of the network under section 39 of the Access Regulations. Notwithstanding the foregoing, the Plant Operator shall have the right to reserve the amount of Capacity that has been confirmed by the TSO by paying the applicable reservation fee pursuant to paragraph (6) below.

6. The reservation fee payable by the reserving party shall be calculated by multiplying the amount of Capacity to be reserved by the applicable reservation rate per unit as specified in section 38(4) of the Access Regulations; it shall become payable once the Capacity assessment carried out by the TSO delivers a positive result and has been billed:

   The reservation as such shall not take effect until the reservation fee has been received, provided payment is received within 2 weeks of billing.

7. Until the date on which gas is to be first delivered or offtaken as specified pursuant to section 38(2), No. 3 of the Access Regulations, the TSO shall be entitled to allocate the relevant amount of Capacity in accordance with the general rules, i.e. any flow shifts required to make the Capacity available at the system point to be created or expanded shall only apply from that date.

8. Once a reservation takes effect, the relevant Capacity will throughout the duration of the reservation period only be available for booking by the reserving party or by a third party to whom the reserving party has assigned its associated rights. Where the Capacity is booked by a third party to whom the reserving party has assigned its associated rights,

any offset of the reservation fee pursuant to sentence 4 of section 38(4) of the Access Regulations shall be made to the benefit of that third party.

9. A reservation shall expire if the reserved Capacity is not booked within 3 years of the date on which the reservation notice was received. It shall further be forfeited if the reserving party fails to pay the applicable reservation fee. Furthermore, the reserving party shall have the right to terminate its reservation by giving one month's prior notice. Any reservation fee payments already made in respect of the period falling after the date on which the relevant reservation expired or was forfeited shall be refunded. This shall also apply if the reserving party makes a binding booking prior to the date on which the reservation ends. Where the reserved Capacity is booked in part only, the reservation fee corresponding to the non-booked portion will be forfeited.

10. Where the reservation fee is offset under sentence 4 of section 38(4) of the Access Regulations, the reservation fee shall be taken into account without interest.

39 Right to Demand Expansion of Network under Section 39 of the Access Regulations

1. If a Formal Capacity Assessment Request made under section 38 of the Access Regulations cannot be accommodated, whether in whole or in part, it shall at the request of the relevant Plant Operator be examined whether the Plant Operator is entitled to demand expansion of the network under section 39 of the Access Regulations. Where the Formal Capacity Assessment Request pursuant to section 38 of the Access Regulations could be accommodated in part only, the TSO shall discuss with the applicant whether a reservation shall be made in spite of the applicable limitations. The examination of the Plant Operator’s right to demand expansion of the network shall comprise a consideration of the commercial reasonableness and of the necessity of Capacity expansion in accordance with the NDP planning process pursuant to section 15a of the Energy Industry Act.

2. Once the scenario framework underlying the relevant NDP has been approved by the Federal Network Agency pursuant to sentence 7 of section 15a(1) of the Energy Industry Act or, at the latest after payment of the default planning fee pursuant to section 3, an implementation schedule as defined in section 39(2) of the Access Regulations shall be produced without undue delay. This implementation schedule shall become binding upon signature by the TSO and the Plant Operator, but not before the network development projects set out in it have been incorporated into and approved as part of the binding version of the relevant NDP pursuant to sentences 5 and 7 of section 15a(3) of the Energy Industry Act.

3. The Plant Operator shall pay a default planning fee pursuant to section 39(3) of the Access Regulations once the implementation schedule has become binding. The planning fee payable by the Plant Operator shall be calculated by multiplying the amount of Capacity to be added by the applicable rate per unit specified in sentence 2 of section 39(3) of the Access Regulations. It shall be a one-time payment which shall be billed ahead of the start of the planning works.

4. The planning fee will be forfeited if a binding booking is not made in respect of the amount of Capacity agreed in the implementation schedule by the agreed date; this shall not apply

if the Capacity requested by the Plant Operator is booked on a binding and long-term basis by a third party instead. Where the Capacity is booked in part only, the planning fee corresponding to the portion that was not booked by either the Plant Operator or a third party will be forfeited.

5. The binding booking within the meaning of this section 39 does not need to be made by the Plant Operator itself but may also be made by a third party designated by the Plant Operator. In this case any offset to be made in respect of the planning fee shall be made to the benefit of the designated third party. If no booking is made in respect of the relevant amount of Capacity either by the Plant Operator itself or by a third party designated by the Plant Operator, the planning fee will be forfeited unless a binding request for the relevant amount of Capacity that would have been required to connect the Plant in question is received from any other third party. In the latter case the planning fee shall be refunded to the Plant Operator in accordance with sentence 5 of section 39(3) of the Access Regulations.

6. Where the planning fee is offset under sentence 3 or refunded under sentence 5 of section 39(3) of the Access Regulations, the planning fee shall be taken into account without interest.

Part 4 System Balancing and Balancing Groups

Chapter 1 System Balancing Actions and Procurement of Gas for System Balancing Purposes

40 System Balancing Actions and Procurement of Gas for System Balancing Purposes

1. The Market Area Manager shall have an obligation to first resort to the Internal System Balancing Tools available to balance any existing system imbalances. Neither the making available of Internal System Balancing Tools nor their actual utilisation shall be remunerated.

2. The TSOs shall have an obligation to use the available Internal System Balancing Tools in an efficient manner in cooperation with the Market Area Manager with a view to preventing the occurrence of system imbalances that would require External System Balancing Actions to be taken (with any such circumstance hereinafter being referred to as an “External Balancing Requirement”) or with a view to limiting the magnitude of any such system imbalance. Each TSO shall have the right to designate another TSO to whom it has delegated this obligation. They shall thus coordinate Internal System Balancing Actions with the Network Operators in the market area. The foregoing shall be without prejudice to the obligation of downstream Network Operators under section 17 above to use any available linepack flexibility in an efficient manner. Save where otherwise instructed by the TSOs in cooperation with the Market Area Manager, downstream Network Operators shall be deemed to be using Internal System Balancing Tools in an efficient manner with a view to preventing the occurrence of External Balancing Requirements where the linepack flexibility available within a market area is managed so

as to reduce the within-day load peaks at the system interconnection points and/or exit zones connecting their networks with upstream networks.

3. Any additions of liquefied petroleum gas made by a Network Operator for conditioning purposes in the context of biogas injections delivered to its network in order to obtain the required calorific value pursuant to section 36(3) of the Access Regulations shall be used as an Internal System Balancing Tool within the market area.

4. No Capacity shall be reserved in the course of the Inter-System Capacity Application process for the purpose of providing Internal System Balancing Actions. Where a Capacity overrun occurs due to Internal System Balancing Actions which were taken at the request of the Market Area Manager, the Network Operator shall not be liable to pay a charge under section 18(6) above.

5. The Market Area Manager shall procure the gas quantities it requires for the purpose of taking External System Balancing Actions in a transparent, non-discriminatory and market-based process.

6. The Market Area Manager shall take its External System Balancing Actions, and carry out the related procurement activities, in accordance with the following merit order ("Merit Order List" or "MOL"):

   MOL rank 1:

   To meet its External Balancing Requirements, the Market Area Manager shall first and to the extent possible resort to the exchange in the market area to procure the required gas quantities using products which are not subject to specific physical delivery restrictions ("Global System Balancing Action"; MOL 1).

   MOL rank 2:

   Where due to the specific technical requirements prevailing on the network(s) affected MOL 1 products cannot provide the necessary response or where the quantities available are insufficient to meet the Market Area Manager's requirements, the Market Area Manager shall procure the required quantities on the exchange in the market area using the products available that will accommodate the Market Area Manager's specific requirements (e.g. Quality-Specific Products; MOL 2). The Market Area Manager may also use products which have been procured on an exchange in an adjacent foreign market area (also MOL 2).

   The Capacity required to transport gas quantities from or to any such adjacent foreign market area shall be booked by the Market Area Manager on a short-term or interruptible basis to the extent possible having regard to cost efficiency considerations. The transportation costs incurred for the receipt or delivery of gas from or to an adjacent market area shall be appropriately taken into account in the procurement of MOL 2 products.

   MOL rank 3:

   Where due to the specific technical requirements prevailing on the network(s) affected MOL 1 and MOL 2 products cannot provide the necessary response or where the quantities available are insufficient to meet the Market Area Manager's requirements, the

Market Area Manager shall meet its requirements by procuring the required quantities through the balancing platform in its own market area (MOL 3).

The balancing platform in the market area may only be used to procure balancing products which are not traded on the exchange.

MOL rank 4:

Where due to the specific technical requirements prevailing on the network(s) affected MOL 1, MOL 2 and MOL 3 products cannot provide the necessary response or where the quantities available are insufficient to meet the Market Area Manager's requirements, the Market Area Manager shall use standardised long-term products and/or flexibility services which have been procured in a market-based, transparent and non-discriminatory public tendering process (MOL 4).

7. All costs and revenues arising in relation to System Balancing Actions and the associated procurement activities shall be recorded in the two Balancing Neutrality Accounts set up pursuant to section 16 of Appendix 4.

41 Information to be Exchanged between Network Operators

1. In order to ensure that System Balancing Actions can be taken in an efficient manner, each Network Operator shall provide or forward (as the case may be) to the Market Area Manager all necessary information requested by the Market Area Manager for the purpose of carrying out System Balancing Actions. To this end, the Market Area Manager shall agree uniform rules in its market area with the Network Operators affected and ensure that these are implemented, subject to a reasonable implementation period.
2. The Network Operators shall provide all necessary information required in connection with the gas quality conversion mechanism to the Market Area Manager.

Chapter 2 Balancing Groups

42 Obligations of the Market Area Manager

1. The Market Area Manager shall provide the option of setting up individual balancing portfolios in its market area (each a “Balancing Group”) so as to allow for all inputs and offtakes allocated to such Balancing Groups in its market area to be recorded for energy balancing purposes. Balancing Groups can only be set up with a Market Area Manager.
2. The Market Area Manager shall make available to the TSOs a list of all Balancing Groups and Balancing Subgroups currently registered, including information on their validity periods, which shall be updated on a daily basis and provided in a format suitable for further electronic processing. This list shall also be made available to a DSO at its request.
3. In the event that a Balancing Group Contract is terminated or cancelled for cause, the Market Area Manager shall notify the TSOs and the DSOs concerned without undue delay by e-mail, stating the balancing group number and the Balancing Group Manager. In addition, the Market Area Manager may inform adjacent TSOs in the same way.
4. The Market Area Manager shall set up two separate neutrality accounts (“Balancing Neutrality Accounts”): one in respect of SLP Exit Points and one in respect of RLM Exit

Points. Other types of Entry or Exit Points shall not be taken into account under the cost/revenue neutrality arrangements.

43 List of Exit Network Operators

As required under the GaBi Gas 2.0 ruling, the Market Area Manager shall publish on the Internet a list of all Exit Network Operators who do not submit the necessary data required for Balancing Group invoicing purposes to the Market Area Manager, whether not at all or not on time, or who do so but only submit incomplete data or data of insufficient quality.

44 Allocation Group Switching in respect of RLM Exit Points

1. Each RLM Exit Point may be assigned to either of two different allocation groups. This shall also apply with respect to RLM Exit Points in relation to which alternative flow management arrangements other than the usual nomination process have been agreed:

   - RLM Exit Points With A Flat Allocation Profile (RLMmT):
     In respect of these RLM Exit Points the Market Area Manager divides the daily sum of all hourly offtakes allocated at the relevant points on a gas day evenly between the individual hours of that gas day, thereby creating a flat load profile throughout the day.
   - RLM Exit Points With A Structured Allocation Profile (RLMoT):
     In respect of these RLM Exit Points the Market Area Manager uses the actual hourly offtakes allocated at the relevant points.

2. Allocation group switches may be effected by way of a formal change in an RLM Exit Point's energy balancing master data or at the time an RLM Exit Point is registered with a Network Operator, with the allocation group switch in both cases to be effected by the relevant Shipper in accordance with the processes and deadlines specified in the administrative ruling on uniform business processes and data formats handed down by the Federal Network Agency (the so-called "GeLi Gas" ruling). Allocation group switches may only be requested and declared in respect of an entire RLM Exit Point; Exit Points cannot be assigned to several allocation groups at once.

3. Offtakes at RLM Exit Points shall by default be allocated using the allocation group "RLMmT". Balancing Group Managers may authorise the relevant Shipper(s) to declare to the relevant Network Operator(s) that one or more of the RLM Exit Points currently belonging to the Balancing Group Manager's Balancing Group are not to be assigned to the allocation group "RLMmT". In this case the relevant RLM Exit Points shall be subject to the allocation rules which apply to the allocation group "RLMoT".

45 Submission of Declaration Lists and Declaration Clearing

1. By the 17th Business Day of each month, each Network Operator shall submit a declaration list for the following month to the Market Area Manager. Each such declaration list shall specify separately for each Balancing (Sub)Group all relevant types of data series that are registered as active in the relevant declaration period and in respect of which declaration is mandatory, i.e. data series types "SLPana", "SLPsyn", "RLMoT" and

"RLMmT". Additional intra-monthly declaration lists may need to be submitted to take account of:

a. supply start and end dates for RLM Exit Points, and

b. declaration clearing processes.

In each of these two cases the relevant Network Operator shall revise its declaration list without undue delay. The Network Operator shall, however, only send those declarations to the Market Area Manager which relate to the Balancing (Sub)Group(s) affected and in respect of which corrections need to be made or which need to be added.

Any such intra-monthly declaration lists shall be submitted to the Market Area Manager by the Network Operator no later than:

a. 21:00 hours on the day D-2 where the relevant declarations relate to SLP data series types,

b. 21:00 hours on the day D-1 where the relevant declarations relate to RLM data series types.

The declaration period in each case shall either run from the day D until the end of the relevant month M or correspond to the actual utilisation period where the latter ends before the end of the month M.

"RLMoT" and "RLMmT" declarations do not have to be submitted by TSOs.

2. The Market Area Manager shall validate the monthly and intra-monthly declaration lists it receives from Network Operators to ensure validity of the Balancing (Sub)Groups listed. In the event that a declaration list contains an invalid Balancing (Sub)Group (invalid Balancing (Sub)Group Number, e.g. due to typographical errors or where a Balancing (Sub)Group Number does not exist), the Market Area Manager shall notify the relevant Network Operator thereof no later than 1 Business Day after receipt of the declaration list affected. If a Balancing Group Manager or Shipper initiates a declaration clearing process, the Network Operator shall review the notice received from the Balancing Group Manager or Shipper without undue delay and where applicable submit a corrected declaration list to the Market Area Manager, which shall only specify those Balancing (Sub)Groups in respect of which corrections need to be made or which need to be added. The Market Area Manager must be able to process the allocations submitted by the Network Operator on the basis of these corrected declarations from the 2nd Business Day following receipt of the corrections at the latest.

46 Submission of Allocations

1. Each day, each Exit Network Operator shall for each Balancing (Sub)Group determine the hourly offtakes made at RLM Exit Points on the previous day. The relevant quantities in kWh shall be calculated on the basis of the corresponding meter readings and converted using the applicable Balancing CV. The Exit Network Operator shall report the hourly offtakes thus established in each case in aggregated form but segmented by RLMmT and RLMoT Exit Points, respectively, by way of an electronic allocation message in the applicable ALOCAT format as modified from time to time, which shall be submitted to the Market Area Manager without undue delay but no later than by 12:00 noon. By the 10th

Business Day following the end of each Delivery Month, each Exit Network Operator shall validate the offtake data submitted and where necessary revise the data in accordance with DVGW Code of Practice G 685 to take account of erroneous or unavailable meter readings (with any such changes hereinafter being referred to as the application of "Default Substitute Values").

2. For the purpose of providing within-day information on offtakes at RLM Exit Points, each Exit Network Operator shall determine the relevant aggregate hourly quantities twice each day:

   - initially for the period between 06:00 and 12:00 hours, with the data to be submitted to the Market Area Manager no later than by 15:00 hours, and
   - a second time for the period between 06:00 and 15:00 hours, with the data to be submitted to the Market Area Manager no later than by 18:00 hours.

   The second within-day data submission shall also include the data from the data period of the first within-day data submission, in updated form where applicable. The relevant quantities in kWh shall be calculated on the basis of the corresponding meter readings and converted using the applicable Balancing CV. The offtakes thus established in each case shall be reported in aggregated form but segmented by RLMmT and RLMoT Exit Points, respectively, by way of an electronic message in the applicable ALOCAT format as modified from time to time. The Exit Network Operator shall allocate these hourly offtakes to the relevant Balancing (Sub)Group(s).

3. The allocations to be made in respect of the following Entry and Exit Points:

   - Entry and Exit Points on national borders ("Cross-Border Interconnection Points"),
   - Entry Points from domestic production facilities or biogas plants, and
   - Entry and Exit Points from or to storage facilities

   shall in each case be determined on a daily basis by the relevant Entry or Exit Network Operator. The Entry or Exit Network Operator (as the case may be) shall allocate the hourly inputs and/or offtakes thus established to the relevant Balancing (Sub)Group(s) and submit these allocations to the Market Area Manager without undue delay but no later than by 12:00 noon. The hourly allocations to be made in respect of Virtual Entry and Exit Points (VTP) shall be determined by the Market Area Manager on a daily basis and allocated to the relevant Balancing (Sub)Group(s).

4. In respect of RLM Exit Points, each Exit Network Operator shall by M+12 Business Days recalculate the hourly offtakes established pursuant to paragraph (1) above on the basis of the applicable Billing CV as determined in accordance with DVGW Code of Practice G 685. Where the compressibility value K needs to be adjusted pursuant to the applicable DVGW Code of Practice, this shall also be taken into account. The Exit Network Operator shall then by M+12 Business Days submit all RLM data series for the entire month to the Market Area Manager, once as determined on the basis of the applicable Balancing CV and once as determined on the basis of the applicable Billing CV, by way of electronic messages in the applicable ALOCAT format as modified from time to time.

5. Each day on the day D-1, each Exit Network Operator shall determine the quantities to be allocated in respect of SLP Exit Points for the Delivery Day D (based on temperature

forecasts when using the synthetic SLP method; when using the analytical SLP method allocations may be calculated based on the actual temperatures recorded on the day D-2) and submit these allocations to the Market Area Manager by 12:00 noon on the day D-1.

The Market Area Manager may offer the option for Exit Network Operators to produce and submit preliminary advance allocations for the days D+1 and D+2 based on a multi-day temperature forecast in addition to its allocations for the day D. Where such preliminary advance allocations are submitted, they may only be used as the primary data source in the event that the Market Area Manager has to create default allocations. Where an Exit Network Operator produces and submits preliminary advance allocations, this shall not release the Exit Network Operator from its obligation to produce and submit daily allocations pursuant to sentence 1 of subparagraph 1 above.

All relevant data shall be submitted in aggregated form for each active Balancing (Sub)Group registered by the Exit Network Operator. In respect of SLP Exit Points, neither Default Substitute Values nor CV adjustments pursuant to Code of Practice G 685 shall be applied. Default Substitute Values may only be applied in the course of an allocation clearing process pursuant to section 47 below.

Exit Network Operators may use correction factors in consultation with the Federal Network Agency with a view to reducing SLP-related imbalances in their Network Balancing Accounts, particularly, without limitation, to compensate for the time lag underlying the analytical SLP method.

Where an Exit Network Operator fails to submit its allocations to the Market Area Manager by 12:00 noon and where that Exit Network Operator has not previously submitted preliminary advance allocations for multiple days pursuant to subparagraph 2 above, the Market Area Manager shall create default allocations instead. To determine these default allocations, the MAM shall divide the quantity recorded for the preceding gas day by the number of hours in that day and then multiply the result by the number of hours in the gas day for which the default allocations are to be created. The default allocations thus established shall be provided to the relevant Exit Network Operator by the Market Area Manager by 15:00 hours on the day D-1.

6. Each day by 17:00 hours, each Network Operator who has been assigned responsibility for submitting Inter-System Flow Notifications pursuant to section 30(1) above (with each such Network Operator below being referred to as the “Flow Reporting Network Operator”) shall submit to the Market Area Manager as well as to its upstream or downstream (as the case may be) Network Operator the aggregate hourly gas flow at the system interconnection points assigned to the upstream network for each Network Balancing Account by way of an electronic message in the applicable ALOCAT format as modified from time to time. Network Operators who are connected to several upstream Network Operators at a single system interconnection point shall as a general rule apportion the meter readings taken at that system interconnection point in proportion to the Inter-System Capacity Applications submitted to each of these upstream Network Operators or according to a method agreed between the Network Operators involved.

   The upstream and downstream Network Operators connected in each case shall inform each other about whether the quantities at their system interconnection points with upstream networks must be apportioned between upstream Network Operators. If this is

the case, the Flow Reporting Network Operator designated pursuant to section 30 (1) above shall submit the relevant data to the Market Area Manager and upstream or downstream (as the case may be) Network Operator no later than by 15:00 hours.

Both Network Operators shall have the right to submit daily inter-system flow data to the Market Area Manager but also an obligation to make this data available to their respective adjacent Network Operator as well. The Market Area Manager shall record all aggregate inter-system flow data series thus received separately in the Network Balancing Account affected. If both adjacent Network Operators have submitted aggregate inter-system flow data series, the allocations submitted by the Flow Reporting Network Operator designated pursuant to section (1) above shall prevail and be used to determine the balance of the respective Network Balancing Accounts.

The daily Inter-System Flow Notifications, which shall be determined on the basis of the preliminary calorific value of the gas delivered to the downstream Network Operator at the relevant system interconnection point(s) ("Network Entry CV"), shall subsequently be replaced with the agreed Inter-System Flow Notifications determined on the basis of the final Network Entry CV as submitted pursuant to paragraph (8) below.

Where a Flow Reporting Network Operator designated pursuant to section 30 (1) above fails to submit an Inter-System Flow Notification, the Market Area Manager shall notify both the affected upstream and downstream Network Operators thereof without undue delay.

Network Operators who add liquefied petroleum gas to their networks in connection with biogas injections pursuant to section 36(3) of the Access Regulations shall report the relevant inputs to the Market Area Manager on a monthly basis by M+12 Business Days in their capacity as Entry Network Operator. This data shall be submitted as hourly quantities.

7. Each month by M+20 Business Days, each Flow Reporting Network Operator designated pursuant to section 30 (1) above shall consult with its adjacent Network Operator to establish the measured hourly gas flows delivered to its network at each relevant system interconnection point, with all relevant quantities to be converted using the applicable final CVs. Network Operators who are connected to several upstream Network Operators at a single system interconnection point shall as a general rule apportion the quantities at that system interconnection point in proportion to the Inter-System Capacity Applications submitted to each of these upstream Network Operators or according to a method agreed between the Network Operators involved.

8. Each month by M+21 Business Days, each Flow Reporting Network Operator designated pursuant to section 30(1) above shall report the data agreed pursuant to paragraph (7) above in aggregated form for all system interconnection points for each Network Balancing Account to the Market Area Manager as well as to its upstream or downstream (as the case may be) Network Operator. During this period, both Network Operators shall have the right to submit revised inter-system flow data series to the Market Area Manager but also an obligation to make these data series available to their respective adjacent Network Operator as well. The Market Area Manager shall record all aggregate inter-system flow data series thus received separately in the Network Balancing Account affected. If both adjacent Network Operators have submitted revised aggregate inter-system flow data

series, the allocations submitted by the Flow Reporting Network Operator designated pursuant to section 30 (1) above shall prevail and be used to determine the balance of the respective Network Balancing Accounts. The Market Area Manager shall record these quantities both as an input to or offtake from (as the case may be) the Network Balancing Account of the Flow Reporting Network Operator and, correspondingly, as an offtake from or input to (as the case may be) the Network Balancing Account of the adjacent Network Operator.

9. Where a Flow Reporting Network Operator designated pursuant to section 30(1) above has failed to submit any of the Inter-System Flow Notifications to be submitted under paragraph (8) above, the Market Area Manager shall notify both affected Network Operators thereof by M+28 Business Days. Both Network Operators shall then have the right to report the quantities to be recorded as an offtake from their respective Network Balancing Account at the relevant system interconnection point to the Market Area Manager before M+2 months - 8 Business Days. Where the upstream Network Operator has not been designated as the Flow Reporting Network Operator pursuant to section 30(1) above, the downstream Network Operator shall have an obligation to provide the relevant data to the upstream Network Operator. The Market Area Manager shall record the quantities thus received both as an offtake from the Network Balancing Account of the reporting Network Operator and, correspondingly, as an input to the Network Balancing Account of the downstream Network Operator.

   Where the upstream Network Operator has been designated as the Flow Reporting Network Operator pursuant to section 30(1) above, the downstream Network Operator shall itself have the right to report the quantities to be recorded as an input to its Network Balancing Account at its system interconnection points with the upstream Network Operator to the Market Area Manager before M+2 months - 8 Business Days. In this case the upstream Network Operator shall have an obligation to provide the relevant data to the downstream Network Operator. The Market Area Manager shall record the quantities thus received both as an input to the Network Balancing Account of the downstream Network Operator and, correspondingly, as an offtake from the Network Balancing Account of the upstream Network Operator.

10. The gas quantities offtaken at Exit Points used by a Network Operator for own use shall be allocated in accordance with the provisions set out in this section 46.

47 Allocation Clearing

1. Allocations previously reported as data series of the types “SLP”, “RLM”, “Entry Biogas”, “Entry Wasserstoff”, “Entryso” and “Exitso” may be revised in the course of an allocation clearing process. An allocation clearing process shall only be run if an allocation clearing case has been established. This shall be the case where following submission of the final allocations – in respect of SLP data series this is 12:00 noon on the day D-1; in respect of RLM data series as well as data series of the types “Entry Biogas”, “Entry Wasserstoff”, “Entryso” and “Exitso” this is the date M+14 Business Days – the applicable thresholds specified in section 13 of Appendix 4 are met. An allocation clearing process may always be carried out irrespective of whether the applicable thresholds are met if the Market Area Manager was unable to process the relevant allocations due to processing problems

within its own sphere of responsibility. The same shall apply irrespective of the specified thresholds where in the course of any month a Network Operator erroneously submitted SLP allocations specifying a quantity of zero or where default SLP allocations have been created by the MAM.

2. Where an allocation clearing process is initiated by a Network Operator, the Network Operator shall without undue delay notify the relevant Balancing Group Manager of the clearing case so as to allow the Balancing Group Manager to in turn review the clearing case without undue delay and to apply to the Market Area Manager to request a number for the clearing process in question (a “Clearing Number”), which in this case shall be a Clearing Number for Balancing Group Managers (a “BGM Clearing Number”). The Market Area Manager shall issue BGM Clearing Numbers to Balancing Group Managers only. The Market Area Manager shall without undue delay notify the relevant Network Operator of all details relevant for the clearing process, among them the Balancing (Sub)Group Number, the date(s), the data series type affected and the quantity in question, with the exception of the Clearing Number. The Network Operator and the Balancing Group Manager(s) and/or Shipper(s) involved shall then consult with each other and where necessary obtain the approval of all market partners affected by the allocation clearing, whereupon (and not before) the Balancing Group Manager shall forward the BGM Clearing Number to the Network Operator without undue delay. On receiving the BGM Clearing Number from the Balancing Group Manager the Network Operator shall without undue delay submit the required CLEARING ALOCAT messages to the Market Area Manager, stating the BGM Clearing Number. Where an allocation clearing process is run in respect of an RLM data series, the Network Operator shall submit two CLEARING ALOCAT messages to the Market Area Manager under the BGM Clearing Number, both of which shall contain the cleared data series for the relevant RLM offtakes, once as determined based on the applicable Balancing CV and once as determined based on the applicable Billing CV. The Market Area Manager shall only process these ALOCAT messages if both ALOCAT messages have been received. If the Market Area Manager has only received one of the two messages (Balancing CV and Billing CV), the relevant RLM allocations shall not be cleared. In the event that the relevant Balancing (Sub)Group had not previously been declared, this shall be effected no later than 2 Business Days prior to the submission of the corresponding clearing allocations.

3. Network Operators wishing to run an allocation clearing process in respect of RLM data series may apply to the Market Area Manager to request a Clearing Number for Network Operators (“NO Clearing Number”) for this purpose. In this case the Market Area Manager shall notify the relevant Balancing Group Manager of the Network Operator's Network Balancing Account number together with the Balancing Group Number, the period and the data series type affected. The Network Operator shall then submit two CLEARING ALOCAT messages to the Market Area Manager under the NO Clearing Number, both of which shall contain the cleared data series for the relevant RLM offtakes, once as determined based on the applicable Balancing CV and once as determined based on the applicable Billing CV. The Market Area Manager shall only process these ALOCAT messages if both ALOCAT messages have been received. If the Market Area Manager has only received one of the two messages (Balancing CV and Billing CV), the relevant RLM allocations shall not be cleared. For energy balancing purposes the Market Area

Manager shall only use the CLEARING ALOCAT message received under the relevant NO Clearing Number which contains the quantities that have been determined based on the applicable Billing CV. The relevant Network Operator's Network Balancing Account shall be adjusted to take account of the cleared RLM data series.

4. Where a clearing process has been run under a NO Clearing Number only, the Market Area Manager shall use the quantity based on the applicable Balancing CV it received previously (D+1 or M+12 Business Days) and the quantity based on the applicable Billing CV as contained in the message last submitted.

   Where a clearing process has been run under at least one BGM Clearing Number as well as under at least one NO Clearing Number, the Market Area Manager shall use the quantity based on the applicable Balancing CV as contained in the last message submitted under a BGM Clearing Number, irrespective of whether it is the last message received by the Market Area Manager in the course of the relevant clearing process, and the quantity based on the applicable Billing CV as contained in the message last submitted.

   Where a clearing process has been run multiple times under BGM Clearing Numbers only, the Market Area Manager shall use the message last submitted.

5. Both the Balancing Group Manager/Shipper and the Network Operator involved shall verify and ensure that all requirements for running an allocation clearing process, the thresholds in particular, are met and complied with. The Market Area Manager shall not have an obligation to run any further checks based on any Clearing Number.

6. Where a Network Operator has submitted incorrect allocations in respect of any RLM Exit Point, these allocations may be corrected on an ex-post basis even after M+2 months - 10 Business Days, provided the Network Operator notifies the Market Area Manager without undue delay after becoming aware that any relevant technical metering equipment produces systematic errors, with all such ex-post corrections only being taken into account for the purpose of invoicing RLM Quantity Differences, Balancing Neutrality Charges and Conversion Fees. Any and all other items invoiced as part of the Balancing Group invoicing process shall remain unaffected. The Market Area Manager shall notify the relevant Balancing Group Manager of this without undue delay.

7. Any ex-post correction pursuant to paragraph (6) above shall be conditional on the Network Operator submitting to the Market Area Manager clear and transparent documentation in compliance with the applicable provisions set out in DVGW Technical Rule G 685-B2 (A). All relevant meter readings registered by the meter's index and recording device shall be documented in a report when examining the relevant meter point. Any documentation within the meaning of this paragraph should include a test report confirming that the meter has been repaired by the relevant equipment manufacturer but must include a meter accuracy test report issued by the local measurement office (*Eichamt*) or any other accredited gas meter examiner (*staatlich anerkannte Prüfstelle für Messgeräte für Gas*) verifying that the meter has been recalibrated. The Market Area Manager shall forward this documentation to the Balancing Group Manager. Within 10 Business Days from the date of receipt of documentation within the meaning of this paragraph the Market Area Manager shall in this matter issue a NO Clearing Number to the relevant Network Operator. The Network Operator shall then submit the required

CLEARING ALOCAT messages to the Market Area Manager, stating the NO Clearing Number, within 5 Business Days. If the Market Area Manager has only received one of the two messages (Balancing CV and Billing CV), the relevant RLM allocations shall not be cleared. For energy balancing purposes the Market Area Manager shall only use the CLEARING ALOCAT message received under the relevant NO Clearing Number which contains the quantities that have been determined based on the applicable Billing CV. The relevant Network Operator's Network Balancing Account shall be adjusted to take account of the cleared RLM data series. The Network Operator shall adjust its allocations accordingly.

8. Where a Balancing Group Manager only submits its request for initiation of a clearing process to a Network Operator on the last day of a clearing period, the Network Operator shall be entitled to refuse to process the relevant clearing case if the Network Operator can no longer be reasonably expected to process and submit the required CLEARING ALOCAT message to the Market Area Manager by the deadline M+2 months - 10 Business Days. The Market Area Manager shall report to the Federal Network Agency on a regular basis to inform the regulator in consolidated form about all clearing measures carried out in respect of SLP allocations.

9. The clearing period for data series relating to inter-system gas flows or inputs of liquefied petroleum gas shall open at M+2 months - 8 Business Days and close at M+2 months + 10 Business Days. No Clearing Number shall be required to process these clearing cases. Where inter-system flow data series are to be cleared, the Network Operators involved shall consult with each other to establish the final aggregate inter-system flow data. During each clearing period, both Network Operators shall have the right to submit revised inter-system flow data series to the Market Area Manager but also an obligation to make these data series available to their respective adjacent Network Operator as well. The Market Area Manager shall record all data series relating to aggregate inter-system flows which are submitted during a clearing period separately in the Network Balancing Account affected. If both adjacent Network Operators have submitted revised aggregate inter-system flow data series, the allocations submitted by the Flow Reporting Network Operator designated pursuant to section **Fehler! Verweisquelle konnte nicht gefunden werden.** 30(1) above shall prevail and be used to determine the final balance of the respective Network Balancing Accounts. Where LPG data series are to be cleared, the relevant Network Operator must submit the revised LPG allocations to the Market Area Manager by the applicable deadline, i.e. no later than by M+2 months + 10 Business Days.

48 Formats and Data Exchange

1. The Network Operators shall within the framework of the edi@energy expert group and under the project leadership of BDEW agree an appropriate process for the further development of all relevant data formats as well as reasonable transition periods for the introduction of new data formats and changes to existing data formats.

2. The specifications developed by the edi@energy expert group under the project leadership of BDEW, in particular in the documents "Transmission Route Regulations" *("Regelungen zum Übertragungsweg")* and "General Specifications*" ("Allgemeine*

Festlegungen"), which have been drawn up on jointly by the associations, also apply to the data exchange between the Market Area Manager and the Network Operators. The Market Area Manager and the Network Operators may submit amendments to the above-mentioned documents, in particular specification requirements, to edi@energy. If the edi@energy expert group makes changes, in particular to the documents mentioned in sentence 1, these changes become binding for the Market Area Manager and the Network Operators upon publication on the edi@energy platform at the time specified in the document.

49 Quantity Reconciliation for SLP Exit Points

1. The quantities allocated in respect of SLP Exit Points and the quantities actually offtaken shall be reconciled between the relevant Network Operator and the relevant Shipper separately for each individual SLP Exit Point.

2. Each Exit Network Operator shall inform the Market Area Manager of the meter reading arrangements it applies by ticking the relevant box in its master data sheet.

3. Irrespective of the meter reading arrangements in place, each Exit Network Operator shall report the relevant quantities ("Reconciliation Quantity") it has determined in respect of each month and Network Balancing Account by submitting corresponding notifications ("Reconciliation Notice") to the Market Area Manager.

   Each Reconciliation Notice shall specify the aggregate Reconciliation Quantity invoiced in respect of those SLP customers for whom the relevant calculation period ("Reconciliation Period") ends in the same month ("Reconciliation Month"), and shall be submitted after the end of the second month following the end of the month in which a Reconciliation Period ends (M+2 months) but no later than by the end of the third month following the end of the month in which that Reconciliation Period ended (M+3 months).

   If in any month no quantity reconciliation has taken place between a Network Operator and its Shippers in their capacity as Suppliers, the Exit Network Operator shall submit a Reconciliation Notice specifying a quantity of zero.

4. Each Exit Network Operator shall financially settle its Reconciliation Quantities with the Market Area Manager on the basis of the Reconciliation Notices submitted.

5. Each Reconciliation Notice shall be settled separately. Where the relevant Reconciliation Quantity is a positive quantity (a "Positive Reconciliation Quantity"), the Exit Network Operator shall issue an invoice (a "Reconciliation Invoice") to the Market Area Manager for payment by the Market Area Manager to the Exit Network Operator. Where the relevant Reconciliation Quantity is a negative quantity (a "Negative Reconciliation Quantity"), the Exit Network Operator shall provide to the Market Area Manager a self-billed Reconciliation Invoice for payment by the Exit Network Operator to the Market Area Manager.

   Each such Reconciliation Invoice shall be submitted to the Market Area Manager by the Network Operator no later than on the 10th Business Day following submission of the corresponding Reconciliation Notice. All Reconciliation Invoices shall be submitted by way of an electronic EDIFACT message in INVOIC format. All payments to be made by the

Network Operator or Market Area Manager (as the case may be) shall be effected within 10 Business Days from the date on which the relevant invoice was received.

The Network Operator shall also submit an EDIFACT invoice in INVOIC format where the quantity specified in a Reconciliation Notice equals zero.

6. The prices to be applied in the quantity reconciliation process shall in each case be established on the basis of the daily weighted average prices of gas as determined for the relevant gas days based on all transactions for the delivery of gas at the relevant Virtual Trading Point effected on the Relevant Trading Platform on a day-ahead and within-day basis ("Daily Price for RLM Quantity Differences") as published for the preceding month M on M+10 Business Days. Any changes in the Daily Prices for RLM Quantity Differences occurring after this date shall not be taken into account for the purpose of determining Reconciliation Prices and the published Reconciliation Price shall no longer be subject to changes from this point in time.

   In order to establish the Reconciliation Price to be published by the Market Area Manager for each Reconciliation Month, the Market Area Manager shall first calculate a monthly average gas price as the arithmetic mean of the Daily Prices for RLM Quantity Differences in the market area ("Monthly Average Price"). Following this, the price to be applied in respect of the relevant Reconciliation Month ("Reconciliation Price") shall be calculated as the arithmetic mean of the National Monthly Average Prices as determined for the preceding 12 months, starting with the last full month before the month in which the calculations are made.

   The Market Area Manager shall publish this Reconciliation Price, which shall be applied uniformly, no later than by the 15th Business Day of the month preceding each Reconciliation Month (M+15 Business Days).

   The Reconciliation Price shall be a symmetrical price and as such shall be applied equally to Positive and Negative Reconciliation Quantities.

7. The financial settlement of all Reconciliation Quantities between the Market Area Manager and Exit Network Operator involved shall take place regardless of whether and when the Exit Network Operator receives payment on the corresponding Reconciliation Invoices from the Shippers affected.

8. Where an Exit Network Operator has to correct a Reconciliation Quantity invoiced to a Shipper and where as a result of this correction the Reconciliation Quantities reported to the Market Area Manager need to be revised, the Network Operator shall submit a revised Reconciliation Notice to the Market Area Manager (with separate revised Reconciliation Notices to be submitted in respect of each Reconciliation Month affected). Any such revised Reconciliation Notice(s) shall replace the prevailing Reconciliation Notice(s) previously submitted in respect of the relevant month(s). Any Reconciliation Invoice(s) already issued which is (are) affected by the changes shall be cancelled, re-issued and settled on the basis of the revised Reconciliation Quantity.

9. For performance periods until 30 September 2020 the following shall apply: If a Network Operator fails to submit to the Market Area Manager any Reconciliation Notice (SSQNOT message) which is due to be submitted and still has not done so by M+5 months + 1 Business Day, the Market Area Manager shall charge a penalty which shall be payable

by the Network Operator irrespective of whether the relevant Reconciliation Quantity is a Positive or a Negative Reconciliation Quantity. SSQNOT messages shall be submitted no later than 3 months after the month in which the relevant meter readings were taken in respect of the SLP customer group affected. If after another 6 months from M+5 months + 1 Business Day (i.e. at M+11 months + 1 Business Day) the Market Area Manager has still not received any such overdue SSQNOT message, the Market Area Manager shall charge a second, higher penalty. This procedure shall be repeated in 6-month intervals until the relevant SSQNOT message is received by the Market Area Manager.

From the second penalty onwards, the amount of the penalty payable by the Network Operator shall not be increased. Each penalty payable after the second penalty shall be an amount equal to the second penalty payment. The amount of the penalty to be charged in each case shall vary according to the size of the Network Operator affected (as measured in terms of its SLP offtake allocations) and the length of time that has passed since the Network Operator first failed to make its data submission by the applicable deadline. In order to be able to take account of a Network Operator's size each Network Operator will be assigned to a size class on the basis of the offtakes it has allocated to SLP Exit Points in respect of the previous year, with the size classes being as follows:

- small: allocated offtakes < 200 million kWh/calendar year
- medium: allocated offtakes ≥ 200 million < 5,000 million kWh/calendar year
- large: allocated offtakes >= 5,000 million kWh/calendar year

Where no offtake data is available for the previous year (e.g. in the case of a new network company), the Market Area Manager shall estimate or extrapolate the yearly allocated offtakes on the basis of the data available.

Where a Network Operator fails to submit its Reconciliation Notice by the date specified in sentence 1 of subparagraph 1 above, the Market Area Manager shall invoice the following penalty amounts: €100 (small Network Operator), €1,000 (medium-sized Network Operator), €2,000 (large Network Operator). Where the Network Operator also fails to meet the deadline specified in sentence 3 of subparagraph 1 above, the Market Area Manager shall apply the following penalty amounts: €600 (small Network Operator), €6,000 (medium-sized Network Operator), €12,000 (large Network Operator). The Market Area Manager shall submit the invoice for the penalty for contract periods within the meaning of this section as an electronic document in accordance with section 14(1) sentence 8 of the German VAT Act (UstG). Section 50(12) shall apply accordingly.

The Market Area Manager shall record the corresponding revenue items in the SLP Balancing Neutrality Account and report the Network Operators concerned to the Federal Network Agency.

10. For performance periods from 1 October 2020 the following shall apply: If a Network Operator fails to submit to the Market Area Manager any Reconciliation Invoice (INVOIC message) which is due and still has not done so by M+5 months + 1 Business Day, the Market Area Manager shall charge a penalty which shall be payable by the Network Operator irrespective of whether the relevant Reconciliation Quantity is a Positive or a Negative Reconciliation Quantity. The INVOIC message shall be submitted no later than 3 months after the month in which the relevant meter readings in respect of the SLP

customer group affected were taken. If after another 6 months from M+5 months + 1 Business Day (i.e. at M+11 months + 1 Business Day) the Market Area Manager has still not received any such overdue INVOIC message, the Market Area Manager shall charge a second, higher penalty. This procedure shall be repeated in 6-month intervals until the Market Area Manager has received the relevant INVOIC message.

From the second penalty onwards, the amount of the penalty payable by the Network Operator shall not be increased. Each penalty payable after the second penalty shall be an amount equal to the second penalty payment. The amount of the penalty to be charged in each case shall vary according to the size of the Network Operator affected (as measured in terms of its SLP offtake allocations) and the length of time that has passed since the Network Operator first failed to submit its data by the applicable deadline. In order to be able to take account of a Network Operator's size, each Network Operator will be assigned to a size class on the basis of the offtakes it has allocated to SLP Exit Points in respect of the previous year, with the size classes being as follows:

- small: allocated offtakes < 200 million kWh/calendar year
- medium: allocated offtakes > 200 million < 5,000 million kWh/calendar year
- large: allocated offtakes >= 5,000 million kWh/calendar year

Where no offtake data is available for the previous year (e.g. in the case of a new network company), the Market Area Manager shall estimate or extrapolate the yearly allocated offtakes on the basis of the data available.

Where a Network Operator fails to submit its Reconciliation Notice pursuant to sentence 1 of subparagraph 1 above by the date specified in sentence 1 of subparagraph 1 above, the Market Area Manager shall invoice the following penalty amounts: €100 (small Network Operator), €1,000 (medium-sized Network Operator), €2,000 (large Network Operator). Where the Network Operator also fails to meet the deadline specified in sentence 3 of subparagraph 1 above, the Market Area Manager shall apply the following penalty amounts: €600 (small Network Operator), €6,000 (medium-sized Network Operator), €12,000 (large Network Operator). The Market Area Manager shall submit the invoice for the penalty for contract periods within the meaning of this section as an electronic document in accordance with section 14(1) sentence 8 of the German VAT Act (UstG). Section 50(11) shall apply accordingly.

The Market Area Manager shall record the corresponding revenue items in the SLP balancing contribution account and report the Network Operators concerned to the Federal Network Agency.

50 Network Balancing Account System and Incentive Mechanism

1. The Market Area Manager shall set up individual Network Balancing Accounts for each Network Operator, separately for each gas quality where required. The Market Area Manager shall record all measured inputs delivered to a network and compare them against all allocated offtakes to end users and measured offtakes to downstream networks and storage facilities delivered from that network on a daily basis.

Reverse gas flows from a downstream network to an upstream network shall be treated as an offtake from the network of the downstream Network Operator and an input to the network of the upstream Network Operator.

Where in the course of any given month the Market Area Manager terminates a Balancing Group with immediate effect and the Network Operator is not provided with an alternative Balancing Group to which it can allocate the relevant quantities, the Network Operator shall have the right to eliminate these quantities from its Network Balancing Account by making the corresponding additions/deductions, subject to documentation of this being submitted to the Market Area Manager.

Each Network Operator may apply to the Market Area Manager to request that a separate NBA Balancing Object be created and assigned to its Network Balancing Account where needed to take account of linepack changes and/or operational balancing accounts (OBA) when determining the quantities to be recorded in the Network Operator's Network Balancing Account.

Where a Network Operator wishes to do so, it shall submit its application for the creation of a separate NBA Balancing Object to the Market Area Manager no later than one month prior to the date on which allocations are to be made for the first time. The Market Area Manager shall provide an application form on its website or on the relevant portal for this purpose.

2. Network Balancing Accounts are used for the purpose of monitoring the accuracy of the allocations made by Network Operators. For this purpose, the Market Area Manager shall

   a) perform a financial settlement in respect of certain imbalances arising in the Network Balancing Accounts,

   b) publish certain information, and

   c) submit the allocations and flow data submitted by all Network Operators for each day to the Federal Network Agency in aggregated form for each data series type and Network Balancing Account.

3. On the basis of the allocations and Inter-System Flow Notifications submitted pursuant to sections 46 and 47 above, the Market Area Manager shall determine the daily balance between the inputs and offtakes recorded for each Delivery Day and report this balance to the relevant Network Operator by way of an electronic message in the applicable format as modified from time to time.

4. By M+2 months - 5 Business Days the Market Area Manager shall for each Network Balancing Account produce a statement detailing the data as recorded in the respective Network Balancing Account based on the data submitted by the relevant Network Operator to the Market Area Manager before M+2 months - 8 Business Days (“NBA Statement”). Once a Network Operator receives an NBA Statement from the Market Area Manager, it shall have 10 Business Days to validate the data provided. The Network Operator shall check each NBA Statement and report any errors/discrepancies to the Market Area Manager no later than by the 10th Business Day following receipt of the information. If the Network Operator discovers any discrepancies, it shall specify the dates

on which the data recorded in the Network Balancing Account differ from the data submitted by the Network Operator or on which the balance determined by the Market Area Manager has been found to be incorrect. Where the Network Operator raises objections, the relevant data shall be clarified with the Market Area Manager without undue delay. If no notice pursuant to sentence 4 is received within 10 Business Days from the date of receipt of the NBA Statement, the Network Operator shall be deemed to have accepted the NBA Statement. All NBA Statements shall be provided in a common format and shall be made available by the Market Area Manager to the relevant Network Operator as a download or via a subscription service. Each NBA Statement shall consist of a data part and an analytical part. On expiry of the relevant clearing period at M+2 months + 10 Business Days, the Market Area Manager shall update the NBA Statements to take account of the revised data series (where applicable) and shall provide these updated NBA Statements to the Network Operators by M+2 months + 15 Business Days. Whenever an NBA Statement is made available, the Market Area Manager shall give notice thereof to the relevant Network Operator in Text Form (on M+2 months - 5 Business Days and on M+2 months + 15 Business Days).
For validation purposes, the Market Area Manager shall make the relevant allocation data reports available to the Network Operator without undue delay. This data shall either be made available on the portal provided by the Market Area Manager or submitted in Text Form where the Network Operator has subscribed to a subscription service.

5. A financial settlement mechanism for daily NBA Imbalances shall operate as an additional incentive mechanism outside of the SLP quantity reconciliation process as required under section 8(a) of the operative part of the GaBi Gas 2.0 ruling. Financial settlement shall take place on the basis of the ratio (expressed in percentage terms) of the daily NBA Balance 1 (calculated as the NBA Balance 0 as determined pursuant to paragraph (3) above plus/less the corresponding daily RLM Quantity Differences) to the sum of the daily quantities allocated in respect of SLP Exit Points as recorded in the relevant Network Balancing Account (the “Daily NBA Imbalance Ratio”) with due regard to the provisions of paragraph (4) above and in accordance with the following principles:

   a) Where the Daily NBA Imbalance Ratio is between 0% and 35% (under-allocations), no charges shall be applied by the Market Area Manager.

   b) Other than provided for at a) above, where the Daily NBA Imbalance Ratio exceeds the 35% threshold (under-allocations) on more than 6 days in a month, the Market Area Manager shall charge the corresponding daily NBA Balance 1 quantities to the relevant Network Operator for all days in that month (M) on which the Daily NBA Imbalance Ratio exceeded the 35% threshold.

   c) For days on which the Daily NBA Imbalance Ratio is less than 0% but not less than -3% (over-allocations), the Market Area Manager shall make a payment to the relevant Network Operator. Where the Daily NBA Imbalance Ratio is less than -3%, no payment shall be made. Each Network Operator may waive its right to receive payment in respect of its over-allocations for the duration of an entire Gas Year by giving written notice to this effect to the Market Area Manager by 1 October of the relevant year. For this purpose, the Market Area Manager shall provide a common standard form on its website or provide a technical option for submitting such notices

via the relevant portal. In the latter case the Market Area Manager shall inform the Network Operators thereof at least two months in advance.

Each month between M+2 months + 15 Business Days and M+2 months + 25 Business Days the Market Area Manager shall raise all relevant invoices (self-billed invoices where applicable; each such invoice an "NBA Invoice") plus VAT. In the course of this process all NBA Balance 1 quantities to be charged or paid to the relevant Network Operator pursuant to b) and c) above shall be multiplied by the national Reconciliation Price as published for the corresponding Reconciliation Month pursuant to section 49(6) above. Save where otherwise agreed between a Market Area Manager and a Network Operator, the total amount including VAT payable by the Network Operator as stated in an NBA Invoice shall be offset against the total amount including VAT payable by the Market Area Manager as stated in a self-billed NBA Invoice (if any).

6. The financial settlement of a Network Balancing Account pursuant to paragraph (5) above (if any) shall later be reversed in conjunction with the SLP quantity reconciliation process, with the process varying according to the meter reading arrangements the Network Operator has chosen to apply in respect of its SLP Exit Points. However, payments due on NBA Invoices, on the one hand, and on SLP Reconciliation Invoices, on the other hand, will not necessarily be offset against each other.

   a. Reversal where all meter readings are taken around a fixed reference date:

      - All amounts payable by a Network Operator in respect of the month of the meter reading reference date and the 11 preceding months pursuant to paragraph (5)(lit. b) above as stated in each case in the corresponding NBA Invoice shall be refunded to the Network Operator by the Market Area Manager by the end of the third month (M+3 months) following the month of the meter reading reference date, provided the quantity reconciliation process for the corresponding SLP reconciliation quantities in this period has been completed between the Market Area Manager and the Network Operator.
      - All amounts payable by a Market Area Manager pursuant to paragraph (5)(lit. c) above as stated in each case in the corresponding NBA Invoice shall be refunded to the Market Area Manager by the relevant Network Operator by the end of the third month (M+3 months) following the month of the meter reading reference date, even if the SLP reconciliation quantities for the month of the meter reading reference date and the 11 preceding months have not yet been (fully) submitted or invoiced.

   b. Reversal where individual meter readings are taken on a rolling basis:

      - All amounts payable by a Network Operator in respect of a month M pursuant to paragraph (5)(lit. b) above as stated in each case in the corresponding NBA Invoice shall be refunded to the Network Operator by the Market Area Manager by the end of the eighth month following that month (M+8 months), provided the SLP quantity reconciliation process between the Market Area

Manager and the Network Operator required for the month M and the following five months (M+5 months) has been completed.

- All amounts payable by a Market Area Manager in respect of a month M pursuant to paragraph (5)(lit. c) above as stated in each case in the corresponding NBA Invoice shall be refunded to the Market Area Manager by the relevant Network Operator by the end of the eighth month following that month (M+8 months), even if the SLP reconciliation quantities for the month M and the following five months (M+5 months) have not yet been (fully) submitted or invoiced.

7. Network Balancing Accounts where the downstream Network Operator must apportion the gas flow at a system interconnection point between several upstream Network Operators shall always be considered in aggregated form for the purpose of the financial settlement of the Network Balancing Accounts affected. Where in the case of under-allocations pursuant to paragraph (5)(b) above the positive threshold of 35% is exceeded on more than 6 days in a month even if the relevant data is considered in aggregate, the Market Area Manager shall apply charges in respect of the daily NBA Balance 1 quantities recorded on the days in question. In relation to over-allocations pursuant to paragraph (6)(c) above, the aggregate view means that payments will only be received in respect of days on which the aggregate daily NBA Imbalance is between 0% and -3%. For each of these days the Network Operator shall then receive a payment which shall be limited in each case to the relevant aggregate quantity.

8. In the case of a Gas Quality Switchover from low CV to high CV gas quality, the Switchover Balancing Effective Date may differ from the date on which the gas quality changes at the relevant system interconnection point. Throughout the period between these dates all NBA Imbalances arising in the respective Network Balancing Accounts for high CV and low CV gas shall be considered in aggregate. In this case the rules for the financial settlement of the Network Balancing Accounts of Network Operators as set out in paragraph (6) above shall apply.

9. Network Operators who incur NBA Imbalances in excess of +/-50% on 10 or more error days in any month shall be published in the public area of the Market Area Manager's website. The relevant NBA Imbalances shall be calculated in accordance with the rules set out in paragraph (5) above. For the purpose of publication of a Network Operator on the website of a Market Area Manager, the NBA Imbalances in the Network Balancing Accounts of Network Operators where the downstream Network Operator must apportion the gas flow at a system interconnection point between several upstream Network Operators shall always be considered in aggregate. The lists published by the Market Area Manager shall be updated on a rolling basis, with the historical lists published in the 12 preceding months to be provided in each case.

10. Network operators with network balancing accounts containing SLP allocation quantities are obliged to examine measures to improve the application of standard load profiles if the cumulated absolute network balancing account imbalance over a 12-month period in relation to the calendar year is outside the 90% quantile of the following size groups. For this purpose, the network balancing accounts are divided into the following size groups on the basis of the SLP offtake allocation per calendar year in the period under review:

- small: allocated SLP offtake < 100 million kWh/calendar year
- medium: allocated SLP offtake >= 100 million to < 250 million kWh/calendar year
- large: allocated SLP offtake >= 250 million kWh/calendar year

Network balancing accounts of Network Operators in the market area converted to another gas quality are considered as one with regard to the determination of the cumulative absolute NBA imbalance and allocated to the relevant size group.

The obligation to review measures always refers to the synthetic or analytical load profile method applied by the Network Operator.

After the relevant clearing periods, the Market Area Manager determines the network balancing accounts for each size group which are subject to the review obligation pursuant to sentence 1 and calls upon the Network Operators concerned to comply with the review obligation by 1 April of the year using the review routine laid down in the BDEW/VKU/GEODE Guidelines for the Use of Standard Load Profiles for Gas Demand Estimation Purposes (German only; "*Leitfaden Abwicklung von Standardlastprofilen Gas*"). The Network Operators concerned shall inform the Market Area Manager of the results of the reviews by 1 July of the same year. The Market Area Manager shall use the data received from the Network Operators in the context of the procedure described above exclusively for the purpose of carrying out this procedure.

If the review reveals a significant and sustainable potential for improvement (as defined in the BDEW/VKU/GEODE Guideline on Market Processes for Gas Balancing Group Management *(Leitfaden Marktprozesse Bilanzkreismanagement Gas)*, the Network Operator shall implement the corresponding improvement measures by 1 July of the following year. In justified individual cases, a longer implementation period may be agreed in consultation with the Market Area Manager.

If the Market Area Manager has any doubts about the contents and/or results of the review and these doubts cannot be dispelled, the Network Operator and the Market Area Manager shall commission an independent expert who shall clarify the matter. Where the expert confirms the correctness of the results of the audit, the costs for the commissioning of the independent expert shall be borne by the Market Area Manager; if this is not the case, the costs shall be borne by the Network Operator . In the event that the expert does not confirm the correctness of the results of the review, the Network Operator shall carry out a new review without delay.

If the Network Operator has sufficiently demonstrated that an improvement is structurally impossible and this has been accepted by the Market Area Manager, this result shall apply for the following two calendar years, provided that these structural conditions remain unchanged.

If the Network Operator fails to comply with the obligation to review and submit the results or fails to do so adequately, or if measures pursuant to paragraph 5 are not implemented within the planned or agreed implementation period, the Market Area Manager shall levy a penalty to be paid by the Network Operator concerned within 10 Business Days of receipt of the Market Area Manager's invoice. The amount of the penalty payment will be based on the SLP offtake allocation per calendar year of the Network Operator concerned in the year under review:

From >100 million kWh up to and including 175 million kWh:	EUR 5,000
From >175 million kWh up to and including 250 million kWh:	EUR 7,500
From >250 million kWh up to and including 1,000 million kWh:	EUR 10,000
From >1,000 million kWh up to and including 5,000 million kWh:	EUR 15,000
From >5,000 million kWh:	EUR 20,000

The Market Area Manager shall record the corresponding revenue items in the SLP balancing neutrality account, report the Network Operators concerned to the Federal Network Agency and publish the names of the Network Operators subject to penalties for the period under review on its website, stating the reason for the penalties. In addition, the Market Area Manager shall prepare and publish a brief report on the events described in this section on its website once a year.

11. For the electronic transmission of the invoices in accordance with this section, the Network Operator shall provide the Market Area Manager with an e-mail address to which the Market Area Manager either sends the invoice or informs the Network Operator that the invoice is available for download on the Market Area Manager's portal. Sentence 1 does not apply to invoices submitted via EDIFACT.

12. Section 50(2), (4) and (6) to (12) shall not apply to TSOs.

Chapter 3 (deleted)

51 (deleted)

Part 5 Final Provisions

52 Information relating to Gas Composition and Calorific Value to be Published by Network Operators

1. By the 10th Business Day of each month, each relevant Network Operator shall publish for all Entry and Exit Points on a distribution network the Billing CV applicable at those points in the preceding month in accordance with section 40(1), sentence 1, No. 7 of the Access Regulations.

   The Network Entry CV applicable at the system interconnection point to the downstream Network Operator shall be provided by the upstream Network Operator. In order to enable compliance with this short-term publication requirement, the date by which the Network Entry CV shall be provided shall be agreed between the upstream and downstream Network Operators involved.

2. Each month by M+10 Business Days, Network Operators shall provide Shippers with information on the carbon dioxide mole fraction, standard density, calorific value and, where available, hydrogen mole fraction and oxygen of the gas delivered at relevant Exit Points. The relevant Exit Points shall be agreed between the Shippers and the Network Operator involved.

TSOs shall provide the data pursuant to sentence 1 as determined in respect of the relevant system interconnection points to their downstream Network Operators and, for metering systems with operating pressures greater than 26 bar, with the molar fractions of the natural gas components covered by the scope of the AGA8-92DC procedure in accordance with the DVGW codes on a monthly basis each month by M+5 Business Days. Each further downstream Network Operator shall in turn provide the data pursuant to sentence 1 to its own lower-level downstream Network Operator(s) within a period of no more than 2 additional Business Days, with the relevant dates to be set so as to ensure that the data will be made available to the lowest-level Network Operator by M+9 Business Days. Where a series of more than 3 networks are connected in a cascading structure or where a system interconnection point is served by more than one upstream TSO, the Network Operators on all affected levels shall between them agree to adjust the deadlines set out in sentences 1 and 2 above so as to ensure that the deadline of M+9 Business Days can be met in respect of the lowest-level network.

The upstream and downstream Network Operators shall agree the system interconnection points in respect of which the relevant data is to be provided.

53 Taxes

1. Where a Party supplies gas quantities to another Party who is not a supplier within the meaning of section 38(3) of the German Energy Tax Act (*EnergieStG*), the other Party shall pay the applicable fees and/or charges plus energy tax at the applicable rate.

   Most notably, without limitation, such a supply shall be deemed to take place between the Parties for settlement purposes in the course of the quantity reconciliation process.

   Where gas quantities are supplied to a Party who is a registered supplier within the meaning of section 38(3) of the Energy Tax Act, the receiving Party shall provide evidence to the delivering Party that it meets the requirements of section 38(3) of the Energy Tax Act by submitting a current registration certificate issued pursuant to section 78(4) of the Energy Tax Act Implementation Regulations (*EnergieStV*) by the responsible customs administration office which confirms that the receiving Party is entitled to purchase gas quantities without application of the relevant tax in its capacity as a registered supplier. Relevant documentation confirming that the requirements of section 38(3) of the Energy Tax Act are met shall be submitted to the delivering Party no later than one week before the date of delivery. Where within that period the receiving Party fails to submit adequate documentation confirming that the requirements of section 38(3) of the Energy Tax Act are met, the delivering Party shall have the right to invoice the relevant fees and/or charges payable in respect of the relevant gas quantities to the receiving Party plus energy tax at the applicable rate.

   If the receiving Party is not or no longer a supplier within the meaning of section 38(3) of the Energy Tax Act, it shall promptly notify the delivering Party thereof in writing. If the address, company name or legal form of any Party changes, that Party shall submit an updated registration certificate issued by the relevant customs administration office. Where a receiving Party fails to notify a delivering Party in accordance with this paragraph or where it does not comply with its notice obligation within the applicable time limits, the

receiving Party shall reimburse the relevant delivering Party for any energy tax payable by that Party as a consequence of such failure or delay.

2. Where any tax or other public charge to be levied on any fee or charge payable under this Agreement, including any tax or other public charge to be levied on the services that form the basis for such fee or charge, is introduced, abolished or modified, the relevant Party shall implement the corresponding increase or reduction of the relevant fee or charge payable under this Agreement with effect from the date on which the introduction, abolition or modification of such tax or other public charge comes into force. This shall apply accordingly where any other fee or charge is introduced, abolished or modified by way or as a result of national or European legislation, administrative decisions or any other orders issued by any competent authority.

3. All fees and charges shall be listed before application of taxes. All applicable taxes shall be paid in addition to the relevant fees and/or charges.

4. All fees and charges payable under this Agreement, together with any surcharges levied thereupon, shall represent the relevant value for the purposes of the German Value Added Tax Act (*UStG*; hereinafter "VAT Act") and do not include value added tax (VAT). Save where the reverse charge procedure applies, the relevant Party shall pay value added tax to the other Party at the applicable rate as determined based on the relevant value. Where the recipient of any supply meets the requirements set out in section 3g(1) of the VAT Act, the recipient shall as evidence for the application of the reverse charge procedure submit to the other Party a Certificate for Resellers of Natural Gas (official form "USt 1 TH") issued pursuant to section 13b(2)(5)(b) and section 13b(5) of the VAT Act; said certificate shall be submitted to the other Party no later than 1 week before the date of delivery where submitted for the first time, and shall be re-submitted regularly on expiry of the previous certificate's validity period without any prior request to this effect being required from the other Party. Where invoices are issued under self-billing arrangements within the scope of sentence 2 of section 14(2) of the VAT Act, the relevant invoices must include the mention "self-billing" (section 14(4)(10) of the VAT Act).

54 Force Majeure

1. A Party shall be released from its obligations under this Agreement where and to the extent that it is prevented from performing such obligations due to an Event of Force Majeure as defined in paragraph (2) below. To the extent and for such time as that Party is prevented from performing its obligations due to an Event of Force Majeure, the other Party shall be released from its corresponding obligations.

2. For the purposes of this Agreement, an Event of Force Majeure means any unforeseeable external circumstance which the Party affected could not have been expected to prevent or could not have prevented in good time even by applying reasonable care and taking such measures as would have been technically feasible and commercially reasonable. Such events include, without limitation, natural disasters, terrorist attacks, power failures, telecommunications failures, strikes, lawful lockouts, legal requirements and government, court or official orders (regardless of their legality).

3. The Party affected in each case shall notify the other Party without undue delay, stating the reasons for the occurrence of the Event of Force Majeure and its expected duration. In

any such case, the Party affected shall make an effort to take all technically feasible and commercially reasonable steps to resume the performance of its obligations as soon as possible.

4. Where a Party makes use of services by a third party to perform its obligations under this Agreement, an event that would constitute an Event of Force Majeure for that third party as defined in paragraph (2) above shall also constitute an Event of Force Majeure for that Party.

55 Liability

1. If any counterparty to any of the standard terms and conditions to be applied pursuant to section 2(2) above – a Shipper, Balancing Group Manager, Biogas Connection Customer or Biogas Connection User – (hereinafter referred to as an "Affected Third Party") suffers any loss or damage (whether financial or to persons or property) due to the wilful or negligent conduct of any Party, or any legal representative or vicarious agent acting on behalf of that Party, that Party shall hold the other Party harmless against any and all claims asserted against that other Party by the Affected Third Party to the extent that the other Party has a statutory or contractual liability to that Affected Third Party. Where and to the extent that the Parties are jointly and severally liable for any loss or damage suffered by any other third party, the proportions in which they incur liability and are entitled to compensation as between them shall be determined on the basis of the extent to which each Party was responsible for causing the loss or damage in question.

   If a Party did not apply the liability clause provided as part of the relevant standard terms and conditions pursuant to section 2(2) above in relation to any Affected Third Party, liability and claims for compensation between the Parties shall be limited to such liability and compensation as would arise under the liability clause provided as part of the relevant standard terms and conditions pursuant to section 2(2) above.

2. Where an Affected Third Party or any other third party asserts a claim for damages against any Party, the Parties involved shall cooperate in relation thereto. They shall keep each other informed about all facts pertaining to the cause of the loss or damage in question and the responsibility of either or both Parties in relation thereto. Once an Affected Third Party or any other third party asserts a claim against either Party, that Party shall notify the other Party thereof without undue delay and give the other Party opportunity to comment.

   In the event that either Party fails to comply with this notice obligation, liability and claims for compensation between the Parties shall be limited to such liability and compensation as would arise under the liability clause provided as part of the relevant standard terms and conditions pursuant to section 2(2) above.

3. If any Party suffers any loss or damage (whether financial or to persons or property) due to the wilful or negligent conduct of any other Party, or any legal representative or vicarious agent acting on behalf of that Party, as the case may be, liability shall be governed by the following provisions:

   a) The Parties shall be mutually liable for loss of life, personal injury or damage to health, except where the relevant Party, or the legal representative or vicarious agent acting on its behalf, as the case may be, acted neither wilfully nor negligently.

b) The Parties shall be mutually liable for any financial loss or damage to property suffered as a result of a breach of a material contractual obligation, except where the breaching Party, or the legal representative or vicarious agent acting on its behalf, as the case may be, acted neither wilfully nor with gross negligence; where any such financial loss or damage to property was caused due to minor negligence, the liability of the Parties shall be limited to such foreseeable loss or damage as is typical for the relevant type of contract.

   aa) For the purposes of this Agreement, a material contractual obligation means any obligation the performance of which is absolutely essential to the proper execution of this Agreement and compliance with which the Parties generally do and may reasonably rely on.

   bb) For the purposes of this Agreement, a foreseeable loss or damage that is typical for the relevant type of contract means any loss or damage the relevant Party foresaw as a possible consequence of any breach of contract or that it should have foreseen in light of the circumstances known to that Party, or in light of any circumstance it should have had knowledge of had it exercised due care.

   cc) In relation to the type of transactions in question a typical damage to property can be expected to amount to EUR 2.5 million, a typical financial loss to EUR 1.0 million.

c) The Parties shall be mutually liable for any financial loss or damage to property suffered as a result of a breach of a non-material contractual obligation, except where the breaching Party, or the legal representative or vicarious agent acting on its behalf, as the case may be, acted neither wilfully nor with gross negligence.

   aa) The liability of the Parties for any financial loss or damage to property caused due to gross negligence on the part of the breaching Party, or on the part of the legal representative or any senior vicarious agent acting on its behalf, as the case may be, shall be limited to such foreseeable loss or damage as is typical for the relevant type of contract.

   bb) The liability of the Parties for any loss or damage caused due to gross negligence on the part of any so-called ordinary vicarious agent acting on behalf of the breaching Party shall be limited to EUR 1.5 million in the case of damage to property and to EUR 0.5 million in the case of financial loss.

d) Sections 16 and 16a of the Energy Industry Act shall remain unaffected. Measures within the meaning of section 16(2) of the Energy Industry Act may also include any action taken to secure the gas supply of residential customers in accordance with section 53a of the Energy Industry Act.

e) The provisions set out in paragraph (3)(a) to (d) above shall also apply to the benefit of the legal representatives, employees and vicarious agents acting on behalf of a Party insofar as they apply to that Party.

f) Any liability a Party may incur under the mandatory provisions of the German Liability Act (*Haftpflichtgesetz*) or any other legal provision shall remain unaffected.

56 Transfer of Rights and Obligations

No Party may assign or otherwise transfer its rights and obligations under this Agreement to any other entity without the prior consent of the other Parties hereto unless that entity performs the role of a Network Operator within the scope of section 3, No. 5 or 7 of the Energy Industry Act, or the role of a Market Area Manager within the scope of section 2, No. 11 of the Access Regulations. The companies will inform VKU and BDEW about the transfer of rights and obligations under this Agreement; the amended information will be published on the VKU and BDEW websites.

57 Arbitration Clause

1. The Parties shall make every effort to resolve amicably any dispute that may arise between the Parties out of or in connection with this Agreement by way of negotiations between the Parties.

2. Where in the view of any of the Parties involved any dispute or other matter arising out of or in connection with this Agreement cannot be resolved by mutual agreement pursuant to paragraph (1) above, it shall be referred to and finally resolved by an arbitral tribunal to the exclusion of the ordinary courts of law. The arbitral tribunal shall consist of 3 arbitrators, one of whom shall act as the chairperson. The arbitrator acting as the chairperson of the arbitral tribunal shall be fully qualified to be appointed as a judge.

3. To constitute the arbitral tribunal, the Party (or Parties) who has (have) raised the request for arbitration (the “Claimant(s)”) shall appoint an arbitrator, whereupon it (they) shall call upon the other Party (or Parties; the “Respondent(s)”) to appoint a second arbitrator, with both appointed arbitrators then selecting the chairperson of the arbitral tribunal. If the Respondent(s) fail(s) to appoint an arbitrator within a period of 4 weeks, the Claimant(s) shall have the right to ask the President of Düsseldorf Higher Regional Court (*Oberlandesgericht Düsseldorf*), or the President of any other Higher Regional Court of competent jurisdiction responsible for the place of the Claimant's registered office, to propose an arbitrator, which proposal shall be binding on the Parties involved. If the arbitrators fail to appoint a chairperson within a period of 4 weeks, each of the Parties involved shall have the right to ask the President of Düsseldorf Higher Regional Court or the President of any other Higher Regional Court of competent jurisdiction responsible for the place of the Claimant's registered office to propose that chairperson, which proposal shall be binding on the Parties involved.

4. Except where and to the extent otherwise agreed between the Parties involved, lawyers’ fees shall only be reimbursed up to an amount equal to twice the fees payable in accordance with the German Act on the Remuneration of Attorneys (*Rechtsanwaltsvergütungsgesetz*; as set out for civil proceedings at first instance in Annex 1, Part 3, Chapter 1 as applicable from time to time). To the extent that the Parties’ costs exceed this amount, each Party shall bear its own costs.

5. Except as otherwise provided herein, the statutory provisions governing arbitration shall apply.

6. Section 31 of the Energy Industry Act shall remain unaffected.

58 Severability

1. If any provision set out in this Agreement or any Appendix hereto is, becomes or is held to be invalid or unenforceable, it shall not serve to invalidate the remaining provisions set out in this Agreement or any Appendix hereto, which shall remain in full force and effect as if such provision had not originally been contained in this Agreement or the relevant Appendix.
2. The Parties hereby undertake to cooperate to replace any such invalid or unenforceable provision by a valid and enforceable provision having as far as reasonably possible the commercial effect of the invalid or unenforceable provision it is to replace and to select an appropriate procedure to do so. This shall apply accordingly where any provision is found to be incomplete.

59 Confidentiality

1. Save as otherwise provided in paragraph (2) below and section 25 above, the Parties shall treat as confidential any and all information they obtain under or in connection with this Agreement and/or any other contract entered into pursuant hereto (hereinafter referred to as “Confidential Information”) and shall not disclose or make available any such Confidential Information to any third party without the affected Party's prior written consent. Each Party hereby undertakes to use any Confidential Information solely for the purpose of performing this Agreement.
2. Each Party shall be entitled to disclose any Confidential Information it has obtained from any other Party without the written consent of that Party
   a) to an affiliated entity, provided that such entity is subject to an equivalent confidentiality requirement,
   b) to its representatives, consultants, banks and insurers where and to the extent that disclosure is required to ensure the proper performance of the relevant contractual obligations, and provided that such persons or entities have undertaken to keep such Confidential Information confidential prior to their receipt thereof or are subject to a statutory professional confidentiality requirement in respect of such Confidential Information; or
   c) to the extent that such Confidential Information
      - was legitimately known to the receiving Party prior to receiving such Confidential Information from the other Party,
      - was already in the public domain or becomes publicly available other than through an act or omission of the receiving Party; or
      - where the disclosing Party is required to disclose such Confidential Information under any statutory provision or a court or official order or a request received from a regulatory authority.
3. The obligation to uphold confidentiality in accordance with this section shall end 2 years after the date on which the relevant contract comes to an end.
4. Section 6a of the Energy Industry Act shall remain unaffected.

60 Entry into Force of Cooperation Agreement

1. This Agreement shall take effect once it has been executed by at least two operators of gas supply networks located in Germany and notice of such execution has been given to VKU or BDEW in writing. Other Network Operators and Market Area Managers shall be entitled to accede to this Agreement by giving notice to that effect to VKU or BDEW in writing. Any such notice of accession shall become binding on being received by VKU or BDEW. In relation to all acceding Parties this Agreement shall take effect from the date of accession.

2. Where in any individual case a certain Network Operator has not yet acceded to this Agreement but accession of that Network Operator is required for the purpose of performing an entry or exit agreement, the obligations of the Parties affected under this Agreement shall in this individual case be suspended until the relevant Network Operator has acceded to this Agreement.

3. All Parties to this Agreement shall be listed with their names and addresses on the websites of BDEW and VKU from the date of their accession. The Parties shall inform VKU and BDEW of any changes to the published information.

61 Amendment of Cooperation Agreement

1. The Parties shall amend this Cooperation Agreement especially where necessary to comply with applicable laws or regulations and/or legally binding orders made by national or international courts or authorities, including but not limited to administrative rulings and related notifications issued by the Federal Network Agency, and/or to comply with generally accepted technical standards.

2. BDEW, VKU and GEODE shall in each case review and decide in good time whether and to what extent any amendments need to be made pursuant to paragraph (1) above. They shall submit all such amendments to the Parties in accordance with paragraph (3) below, generally no later than 3 months before the date on which the notified amendments are to take effect. All amendments to this Cooperation Agreement are to take effect on 1 October in any year. Amendments required to be implemented at short notice due to legal requirements may be introduced outside the periods defined in sentences 2 and 3 above.

3. All amendments made to this Cooperation Agreement shall be notified to the Parties by BDEW, VKU and GEODE in Text Form; for the purpose of such notice, it is sufficient if a link is provided to a website which sets out the exact wording of the amendments made. Each Party shall be deemed to have accepted any such amendment unless it terminates this Cooperation Agreement within 1 month of being notified of that amendment. Section 62 (1) and (4) shall apply accordingly.

62 Termination / Expiry of Cooperation Agreement

1. This Agreement shall run for an indefinite period of time. Either Party may terminate this Agreement unilaterally. Notice of each such termination shall be given to BDEW or VKU by registered letter.

2. Except as otherwise provided in section 61 above, each Party shall have the right to terminate this Agreement for convenience with effect from the end of any given Gas Year by giving at least 6 months' prior notice.

3. The above provisions shall not affect or prejudice any right a Party may have to terminate this Agreement for cause.

4. Once a termination takes effect, all rights and obligations of the terminating Party under this Agreement shall cease. Where exit agreements involving gas transports through the terminating Party's network are in force on the effective date of the terminating Party's termination, the terminating Party's rights and obligations under this Agreement shall remain in effect in relation to those exit agreements until those exit agreements come to an end.

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