

Storage Specification Jemgum 17/18

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(hereinafter referred to as "**astora**")

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Article 1 Introduction

1. This **Storage Specification** completes the **Storage Services Agreement** and defines all the details required to enable **astora** to provide **Storage Services** in the Jemgum **Storage Location** based on the **Storage Services Agreement** which will be concluded with regards to the Keyed Procedure held by **astora** on the PRISMA Capacity Platform.
2. For storage of **Gas** the **General Terms and Conditions for Storage Access**, the definitions for the storage of **Gas** contained in the **General Terms and Conditions for Storage Access** and § 6 of the **Storage Services Agreement** shall apply, unless this **Storage Specification** contains different arrangements. The Terms used in the singular also include the plural and vice versa, assuming this has not been expressly agreed otherwise or is obvious from the respective situation.
3. Upon the conclusion of the **Storage Services Agreement** this **Storage Specification** shall be an integral part of the **Storage Services Agreement**. For this products the **General Terms and Conditions for Storage Access** shall apply with the exclusion of Part four, Part five and Part six.

Article 2 Exceeding of Storage Capacities

1. For nominations exceeding the booked **Storage Capacities** the **Fee for Exceeding the Storage Capacities** applies.
2. The **Fee for Exceeding the Storage Capacities** will be calculated daily by using the **Tariff for Exceeding the Storage Capacities** according to the following Article 3 on the basis of the maximum hourly volume which exceeds 100% of the **Storage Capacities** per **Storage Day**.

Article 3 Fee for Exceeding the Storage Capacities

The **Tariff for Exceeding the Storage Capacities** shall be:

Injection rate: 2.2 ct/(kWh/h)/d

Withdrawal rate: 2.8 ct/(kWh/h)/d

Article 4 Technical Limitations

1. All **Storage Capacities** of the **Storage Services** described in the attachments shall be subject to the technical limitations listed in Sections 2 and 3.

2. For the operation of the Jemgum **Storage Facility** the following minimum volume flows for withdrawal and injection are necessary:
Sum over both **Delivery Points** 550,000 kWh/h, but not less than 220,000 kWh/h at each of the **Delivery Points**.
3. In the Jemgum **Storage Location** the time required to process a **Renomination** shall be two (2) hours.

Article 5 Delivery Points

1. The **Points of Withdrawal and Injection** shall correspond to the points at which the Jemgum **Storage Location** is connected to the **Neighbouring Natural Gas Networks**. The **Neighbouring Natural Gas Networks** of the Jemgum **Storage Location** are the natural gas networks operated by GASCADE Gastransport GmbH, Kassel (D) (GASCADE) and Gas Transport Services B. V., Groningen (NL) (GTS).
2. **Delivery Point** to GASCADE is defined as: „Jemgum I“; Netzkpunkt-ID: 1BMA (allocation procedure: declaratory).
3. **Delivery Point** to GTS is defined as: „Oude Statenzijl (astora Jemgum)“; Netzkpunkt-ID: 301391 (allocation procedure: declaratory).
4. In case of using the abovementioned **Delivery Points** the **Storage Customer** have to consider the special provisions of annex 5.

Article 6 Gas Quality Specifications

For the Jemgum **Storage Facility** the quality parameters published by the **Neighbouring Network Operators** shall apply at the **Delivery Points** listed under Article 5 Article 5 Section 2 and 3.

Article 7 Elements of the Agreement

The following documents shall form an integral part of this **Storage Specification**:

- | | |
|---------|---|
| Annex 1 | Storage Product “astora flex” |
| Annex 2 | Storage Product “astora midflex” |
| Annex 3 | Storage Product “astora start” |
| Annex 4 | Provisions to transfer the right of use of transport capacity |
| Annex 5 | Provisions for BEATE |

Name of product:	"astora flex"	
Kind of product:	bundle	
Procedure:	keyed procedure	
Term:	01.04.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)	
Number of bundle:	76	
Scope of (1) bundle:	Working Gas Volume:	10,000,000 kWh (firm)
	Injection Capacity:	6,600 kWh/h (firm)
	Withdrawal Capacity:	10,000 kWh/h (firm)
Restrictions out of Injection and/or withdrawal curves:	no restrictions	
Variable fee:	no	

Name of product: "astora midflex"
 Kind of product: bundle
 Procedure: keyed procedure
 Term: 01.04.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)
 Number of bundle: 5

Scope of (1) bundle:

Working Gas Volume: 67,044,029 kWh (firm)

Injection Capacity: 58,000 kWh/h (firm)

Withdrawal Capacity: 111,800 kWh/h (firm)

The **Withdrawal Capacity** is only available for **Storage Customers** from 15.11.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)

Transport capacities:

Exit (Injection): 58,000 kWh/h (firm)

(GTS → Speicher)

The exit capacity is only available for **Storage Customers** from 01.04.2017 (6:00 a.m.) until 01.11.2017 (6:00 a.m.)

Entry (withdrawal): 111,800 kWh/h (firm)

(Speicher → GTS)

The entry capacity is only available for **Storage Customers** from 15.11.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)

Transport fee: without payment (see annex 4)

Restrictions out of injection and/or withdrawal curves: no restrictions

Variable fee: no

Name of product: “astora start”
Kind of product: bundle
Procedure: keyed procedure
Term: 01.04.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)
Number of bundle: 25
Scope of (1) bundle:

Working Gas Volume: 65,880,000 kWh (firm)

Injection on firm and flat basis: 15,000 kWh/h
01.04.2017 (6:00 a.m.) until
01.10.2017 (6:00 a.m.)

Delivery point: VP GASPOOL

Injection Capacity: 64,000 kWh/h (firm)

The **Injection Capacity** is only available for **Storage Customers** from 15.12.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)

Withdrawal Capacity: 92,000 kWh/h (firm)

The **Withdrawal Capacity** is only available for **Storage Customers** from 15.12.2017 (6:00 a.m.) until 01.04.2018 (6:00 a.m.)

First fill of the Working Gas Volume

The **Storage Customer** is obliged to first fill the total **Working Gas Volume** by delivering **Astora** with the abovementioned rate (injection on firm and flat basis) within the abovementioned period in each hour at the **Delivery Point** VP GASPOOL.

astora takes over the gas for injection from the **Storage Customer** and transfers it at the same time to his discounted GASPOOL account as defined in annex 5 § 1 section 1a at **Storage Location** Jemgum.

At no time **astora** will gain the ownership of the gas which is delivered by the **Storage Customer** at the VP GASPOOL. **astora** will solely ensure that the delivered volumes from the **Storage Customer** will be credited to the discounted GASPOOL account of the **Storage Customer** simultaneously.

astora points out that the **Working Gas Volume** which is injected until 01.10.2017 is available from 15.12.2017 at the earliest by using the abovementioned **Injection- and Withdrawal Capacities**.

Specific rules for nomination procedure

In addition to Article 4 of the **Operating Agreement Nominations** from **Storage Customer** to **astora** are not necessary for the period of injection on firm and flat basis. **astora** will use the abovementioned hourly value as **Nomination** for the matching process with GASPOOL.

Shortfall of injection on firm and flat basis

In case that the **Storage Customer** could not fulfil his obligations to deliver the hourly volume, he is obliged to reimburse **astora** for its charges. The calculation of charges is based on the invoices for balancing charges of the operator of the market area GASPOOL "GASPOOL Balancing Service GmbH" to **astora** plus 20 %. These volumes will be covered as injected.

The provisions for the first fill in of the **Working Gas Volume** and the specific rules for nomination procedure will be the basis for the accounting of the shortfall of injection on firm and flat basis.

Transport capacities:

Entry (withdrawal): 30,400 kWh/h (interruptible + discounted)
(Speicher → GASCADE) The entry capacity is only available for
Storage Customers from 15.12.2017
(6:00 a.m.) until 01.04.2018 (6:00 a.m.)

Transport fee: without payment (see annex 4)

Restrictions out of injection and/or withdrawal curves: no restrictions

Variable fee: no

Provisions to transfer the right of use of transport capacity

1. **astora** will transfer the rights of use to the **Storage Customer** as described in annex 2 and 3.
2. The transfer of use will be executed over the PRISMA European Capacity Platform.
3. Each party represents and warrants that it has entered into the required agreements with PRISMA European capacity platform GmbH (PRISMA) according to PRISMA's General Terms and conditions (PRISMA GTCs) and is not in default with such terms. The transfer of use request shall be submitted by means of Over the Counter procedure, according to the PRISMA GTCs. After the conclusion of the **Storage Agreement astora** and **Storage Customer** coordinate in due time when **astora** will upload the transfer proposal on PRISMA.
4. Moreover each party represents and warrants that it has entered into the required agreements with the relevant transmission system operator according to the transmission system operator's General Terms and conditions (TSO GTCs) and is not in default with such terms.
5. For the whole duration **astora** remains the contractual party of the capacity rights towards the relevant transmission system operator and the resulting regulated payment obligations as well as a depositing of securities towards the relevant transmission system operator. The **Storage Customer** receives only the right to use the capacity.
6. **astora** may pass on any restrictions that the capacity right under this agreement may suffer according to the PRISMA GTCs and TSO GTCs to the **Storage Customer** and the **Storage Customer** accepts to bear all such restrictions. The **Storage Customer** in no case can hold **astora** liable for such restrictions.
7. All risks associated with, and the responsibility for all costs (including but not limited to penalties for capacity exceeding) and charges other than the regulated tariffs imposed on or associated with the acceptance and use (or its non-use, as the case may be) of the capacity under a transfer of use transaction according to this agreement shall be transferred to the **storage customer**.

Provisions for BEATE

Preamble

astora operates the gas **storage facility** Jemgum, which is connected to the network of GASCADE Gastransport GmbH (market area GASPOOL) and also provides the Storage Customer with access to the market area of the Netherlands (TTF).

Pursuant to the Federal Network Agency's BEATE administrative act, network operators must, as a matter of principle, offer transmission customers a discounted fee with regard to entry and exit points at gas storage facilities. At storage facilities, which are connected to two German market areas or to one German market area and one neighboring country, network operators must offer a discounted fee only if the respective storage operator demonstrates compliance with the terms set out under point IX. 8 (specification 2) of the BEATE administrative act vis-à-vis the network operator in question.

A precondition for compliance with the rules to be agreed with the network operator in accordance with BEATE is that **astora** concludes corresponding agreements with its **Storage customers**. In view thereof, the Contracting Parties agree as follows:

Article 1 Creation of Discounted and Non-Discounted Accounts

1. **astora** undertakes, for the gas storage facility Jemgum, for the **Storage Customer**, with regard to the connected market area (GASPOOL) and the connected market of the neighboring country (TTF) to set up an account in each case, in which the contractual quantities of the **Storage Customer** are booked, which,
 - a. using the exit and entry capacity of the network operator at the storage connection point, which is priced with a discounted fee in accordance with the specifications of point 2 d) of the tenor of BEATE (hereinafter "Discounted Capacity"), are injected and withdrawn at the gas storage facility (hereinafter "Discounted Account") and
 - b. using the exit and entry capacity of the network operator at the storage connection point, which is not priced with a discounted fee in accordance with the specifications of point 2 d) of the tenor of BEATE (hereinafter "Undiscounted Capacity"), are injected and withdrawn at the gas storage facility (hereinafter "Non-Discounted Account").
2. **astora** shall ensure that it is impossible for transfers to be made between a Discounted Account and a Non-Discounted Account in any direction.

Article 2 Allocation of the Gas Quantities to Discounted/Non-Discounted Accounts

1. **astora** shall ensure that working gas quantities nominated by the **Storage Customer** are allocated to one or more Discounted/Non-Discounted Accounts set up in accordance with Article 1 point 1.

The **Storage Customer** must undertake all nominations vis-à-vis **astora** only from/in the balancing accounts/sub-balancing accounts set up for that purpose to the appropriate Discounted or Non-Discounted Accounts in each case. If a **Storage Customer** des use more than one balancing accounts/sub-balancing accounts in the market area of GASPOOL, the account classification should be announced to **astora** latest one week week, before the **Storage** contract is starting and/or with a lead time of one **working days** during business times from Mondays till Fridays respectively.

If a **Storage Customer** is using the market area TTF to inject and withdrawal Gas from and the Storage, he only can the Discounted Account or the Non-Discounted Account. The balancing account (Shippercode) used by the **Storage Customer** can be switched between the Discounted and Non-Discounted Account with a lead time of one working day during business time from Mondays till Friday by phone respectively to the **Notice of Responsibility** or by E-Mail to: operations@astora.de

2. Transfers within the Discounted Accounts and within the Non-Discounted Accounts of one **Storage Customer** or more Storage Customers, can be made by the **Storage Customer** within a lead time of 2 hours. The transfer can be made by the **Storage Customer** according to Paragraph 21 Article 3 of the General terms and Conditions of **astora** and/or by using a message format, which can be asked for by **astora**. Should the **Storage Customer** allocate quantities contrary to point 1, the nominations concerned shall be reduced to zero by **astora** and communicated to the Storage Customer.
3. The **Storage Customer** shall be entitled to carry out transfers between its Discounted Accounts set up in accordance with Article 1 point 1 and between its Non-Discounted Accounts set up in accordance with Article 1 point 1.
4. Transfers between the **Storage Customer's** Discounted and Non-Discounted Accounts shall not be permitted. The same shall apply to transfers between Discounted and Non-Discounted Accounts of different **Storage Customers**.
5. **astora** is obliged to observe the **Storage Customer's** transfer wishes permitted in accordance with point 3.
6. **astora** shall immediately confirm transfers in accordance with points 3 and 5 with the **Storage Customer**.

Article 3 Determination of Quantities

1. For every **Storage Customer** and every performance month (timeframe from the first gas day of a month, 06:00, until the first Storage day of the following month, 06:00) **astora** shall determine, on an hourly basis and separately for each entry booking and exit booking, the working gas quantities which are booked in the Discounted Account or the Non-Discounted Account in each case.
2. **astora** shall provide the **Storage Customer** with the data determined in accordance with point 1 by the 10th working day of the following month.

Article 4 Determination of the Transfer Fee

1. If the **Storage Customer** nominates quantities for withdrawal into the Dutch network of Gasunie Transport Services BV (GTS), which it allocated as part of the allocation in accordance with Article 1 point 1 to a Discounted Account, it must pay **astora** a transfer fee for such so-called transfer quantities. The amount of the respective transfer fee shall be calculated in accordance with the following system:
 - a. The pricing shall be based on the maximum hourly working gas quantity determined in kWh/h for transfers between accounts on every Storage day in accordance with Article 3 point 1.
 - b. For exit bookings, working gas quantities must be booked out from the respective Discounted Account and at the same time booked via the entry booking to the same extent to a Discounted Account relating to another market area.
 - c. The transfer fee shall include
 - i. an exit booking component ("AK") consisting of the difference between the highest annual exit fee of the transmission products generally available identified by the relevant network operator at the storage facility and the lowest annual exit fee of the transmission products generally available identified by the relevant network operator at that storage facility, and
 - ii. an entry booking component ("EK"), consisting of the difference between the highest annual entry fee of the transmission products generally available identified by the relevant network operator at the storage facility and the lowest annual entry fee of the transmission products generally available identified by the relevant network operator at that storage facility.
 - d. The AK must be divided by the number of days in the year and multiplied by the maximum hourly working gas quantity of the transfers between accounts in kWh/h on one Storage day in accordance with

Article 4 point 1 and by a factor of 1.4. That then produces the supplementary payment amount Exit fee, in accordance with the following formula: $NZB_{exit} = \frac{AK}{d_j} * \sum_{i=1}^{d_m} \max_{1 \leq j \leq 24} x_{ij} * 1,4$

- e. The EK must be divided by the number of days in the year and multiplied by the maximum hourly working gas quantity of the transfers between accounts in kWh/h on one gas day in accordance with Article 4 point 1 and by a factor of 1.4. That then produces the supplementary payment amount Entry fee, in accordance with the following formula:

$$NZB_{entry} = \frac{EK}{d_j} * \sum_{i=1}^{d_m} \max_{1 \leq j \leq 24} y_{ij} * 1,4$$

NZB_{exit} = supplementary payment amount Exit fee

NZB_{entry} = supplementary payment amount Entry fee

AK = exit booking component [EUR/(kWh/h)/a]

EK = entry booking component [EUR/(kWh/h)/a]

d_m = number of days of the month

d_j = number of days of the year

x_{ij} = hourly booked out working gas quantity on the day i at the hour j [kWh/h]

y_{ij} = hourly booked in working gas quantity on the day i at the hour j [kWh/h]

2. For accounting, **astora** may also consult the fees published by GASCADE in accordance with the fee information sheet, accessible at <https://www.gascade.de/download/>.
3. The **Storage Customer** must pay **astora** the supplementary payment amount Exit fee in accordance with point 1 d from the market area GASPOOL, from which the gas was withdrawn.
4. The **Storage Customer** must pay **astora** the supplementary payment amount Entry fee in accordance with point 1 e from the market area GASPOOL into which the gas was injected.
5. If the level of the transfer fees and/or supplementary payment amounts changes due to legal provisions and/or official rulings and/or court decisions, the fees amended according to the legal provisions and/or court decisions shall apply at the time of entry into force of the legal provisions and/or effectiveness of the decision; in the case of changes due to official rulings, the amended fees shall apply as from the point in time of enforceability.

Article 5 Special Provisions for Settlement and Maturity of the Transfer Fee

1. Notwithstanding section 33 Storage Facility Access Conditions, the transfer fee shall be settled as follows:

astora shall invoice the **Storage Customer** for the supplementary payment amounts to be paid in accordance with Article 5 plus, where applicable, any sales tax due by the 15th working day of the first month following the month to be settled (M + 1 months + 15 working days). The invoice shall contain an aggregated list per Storage day of the transfer fees invoiced to the **Storage Customer**. In the event that sales tax is due, the invoice must be drawn up in such a way that it provides authorization for the deduction of tax. The amount displayed in the respective invoice must be paid to **astora** with fixed value date no later than the 10th working day following receipt of the invoice by the **Storage Customer**.

2. If errors are identified in the calculation of invoice amounts or data on which the invoice is based, the overpayment shall be reimbursed by **astora** or the shortfall subsequently paid by the **Storage Customer**. Corrections to invoices shall be permitted up to a maximum of 3 years following receipt of the outgoing invoice.
3. Claims shall not be offset against claims of **astora** unless such claims are not disputed by **astora** or an enforceable judgment has been rendered in respect of such claims.

Article 6 Relationship to the Provisions in the Storage Contract

The provisions of the storage contract along with its essential elements shall otherwise remain unaffected and shall also apply for this provisions, provided that this provisions does not expressly stipulate otherwise.