Consultation

Implementation of the network code on harmonised transmission tariff structures for gas

Vienna, 2 May 2024

Table of contents

1 Description of the proposed reference price methodology (Article 26(1)(a) TAR NC)

1.1 Description of the proposed reference price methodology

The reference price methodology (RPM) applied to calculate the tariffs for the Austrian entry-exit system is the capacity weighted distance (CWD) RPM described by the Agency for the Cooperation of Energy Regulators (ACER) in its documents "Revised chapter on Cost Allocation and determination of the reference price of the draft Framework Guidelines on rules regarding harmonised transmission tariff structures"[1] and "Tariff Methodologies: Examples. Illustrating the document: Public Consultation on Draft Framework Guidelines on rules regarding harmonised transmission tariff structures for gas".[2]

In accordance with Article 6(3) TAR NC, the RPM is applied jointly by all transmission system operators within the Austrian entry-exit system to all entry and exit points. The resulting reference prices will be applied during the upcoming tariff period, i.e. from 1 January 2025. Tariffs will be updated each year during the regulatory period.

The transmission service revenues to be recovered through capacity-based transmission tariffs are determined by applying an RPM based on the CWD model as described in Article 8 TAR NC. Recovery of allowed revenues is ensured by an inter-TSO compensation (ITC) mechanism as described in section 1.5.

The CWD RPM is configured with:

- an entry/exit-split of 25% / 75%;
- equalisation adjustments of tariffs for homogeneous groups of entry points;
- equalisation adjustments of tariffs for homogeneous groups of exit points, such that all points within these groups have equal tariffs;
- a cap on tariff increases at exit points into the distribution area to avoid cross-subsidisation between intra-system network use and cross-system network use;
- discounts of 100% for entries from storage and 50% for exits into storage;
- discounts of 10% for conditional products (dynamically allocable capacity, DZK) compared to the corresponding firm products (freely allocable capacity, FZK) at all entry and exit points.

Additionally, the RPM for capacity-based transmission tariffs is accompanied by

- a flow-based charge, levied for the purpose of covering the costs mainly driven by the quantity of gas flow ("commodity charge").

[1] https://www.acer.europa.eu/Official_documents/Public_consultations/Documents/Revised%20chapter.pdf#page=11
[2] https://www.acer.europa.eu/Official_documents/Public_consultations/Documents/TARIFF_METHODOLOGIES_EXAMPLES.pdf#page=24

Following ACER's general recommendation of shorter tariff periods, tariffs are calculated on a yearly basis during the fifth regulatory period. This allows for reflecting changes in gas flow patterns and demand for transmission capacity more accurately by considering under- and over-recovery of allowed revenues in a timely manner.

The following table shows the input parameters that are needed for the RPM.

Table 1: Input parameters for the CWD RPM for tariff period 2025

Input parameter	Symbol	Value
Total allowed transmission service revenue to be recovered through capacity-based transmission tariffs by both TSOs	R_{total}	→ Table 8 and Table 9 (Sum of the allowed revenues to be recovered through capacity-based tariffs by both TSOs)
Entry share of the entry/exit-split (before adjustments according to Article 6(4) TAR NC), i.e. the share of revenues to be recovered at entry points	w_E	25%
Forecasted contracted capacities for each direction (entry E and exit X), point and capacity type (FZK/DZK/UK)	C	→ Table 2 and Table 3
Shortest pipeline distances between all entry and exit points that can be combined in a relevant flow scenario	D	→ Table 4
Homogeneous groups of points to be used for equalisation		→ Table 5 and Table 6
Discount factor at storage entry points	d_E^{UGS}	100%
Discount factor at storage exit points	d_X^{UGS}	50%
Discount factor for dynamically allocable capacity (DZK)	d^{DZK}	10%

The reference price methodology used to calculate the tariffs is the capacity weighted distance methodology, as described in Article 8 TAR NC. It consists of the following steps:

1. Calculation of the share of capacity-based transmission service revenues to be recovered at entry points, R_E, and at exit points R_X:

$$R_E = R_{total} \cdot w_E$$

$$R_X = R_{total} \cdot (1 - w_E)$$

2. Calculation of the capacity-weighted average distance for each entry point, CWD_{E_i}, and for each exit point, CWD_{X_i}:

$$CWD_{E_i} = \frac{\sum_j C_{X_j} \cdot D(E_i, X_j)}{\sum_j C_{X_j}}$$

$$CWD_{X_i} = \frac{\sum_j C_{E_j} \cdot D(E_j, X_i)}{\sum_j C_{E_j}}$$

3. Calculation of the weight of capacity-based revenues at each entry point, $W_{E_i}^c$, and at each exit point, $W_{X_i}^c$:

$$W_{E_i}^c = \frac{C_{E_i} \cdot CWD_{E_i}}{\sum_j C_{E_j} \cdot CWD_{E_j}}$$

$$W_{X_i}^c = \frac{C_{X_i} \cdot CWD_{X_i}}{\sum_j C_{X_j} \cdot CWD_{X_j}}$$

4. Calculation of the share of the capacity-based transmission service revenues to be recovered at each entry and by each exit point:

$$R_{E_i} = W_{E_i}^c \cdot R_E$$

$$R_{X_i} = W_{X_i}^c \cdot R_X$$

5. Calculation of the initial FZK capacity tariffs for each entry point, $T_{E_i}^{FZK\ ini}$, and for each exit point, $T_{X_i}^{FZK\ ini}$:

$$T_{E_i}^{FZK\ ini} = \frac{R_{E_i}}{C_{E_i}^{FZK} + C_{E_i}^{DZK} \cdot (1 - d^{DZK})}$$

$$T_{X_i}^{FZK\ ini} = \frac{R_{X_i}}{C_{X_i}^{FZK} + C_{X_i}^{DZK} \cdot (1 - d^{DZK})}$$

6. Calculation of the initial DZK tariffs for each entry point, $T_{E_i}^{DZK\ ini.}$, and for each exit point, $T_{X_i}^{DZK\ ini.}$ by applying the discount factor d^{DZK}:

$$T_{E_i}^{DZK\ ini} = T_{E_i}^{FZK\ ini} \cdot (1 - d^{DZK})$$

$$T_{X_i}^{DZK\ ini} = T_{X_i}^{FZK\ ini} \cdot (1 - d^{DZK})$$

7. Adjustments according to Article 6(4) TAR NC and Article 9(1) TAR NC:

7.1 Equalisation: For each homogeneous group E_i, the equalised group tariff X_i (to be applied at all entry $T_{G_j}^{FZK\ eq}$ and exit G_j points within the group) is determined by dividing the planned revenues resulting from the initial tariffs by the total forecasted contracted capacities (adjusted for the DZK discount factor, where applicable). The equalised DZK tariff is calculated by applying the DZK discount factor.

7.2 Storage discounts: The discounted storage tariff at each storage entry point E_i and at each storage exit point X_i is calculated by applying the respective storage discount factor:

$$T_{E_i}^{FZK\ disc} = T_{E_i}^{FZK\ eq} \cdot (1 - d_E^{UGS})$$

$$T_{X_i}^{FZK\ disc} = T_{X_i}^{FZK\ eq} \cdot (1 - d_X^{UGS})$$

Please note that at the moment, DZK capacities are not marketed at storage points.

7.3 Benchmarking: A benchmarking was not exercised for the 2025 tariff period.

7.4 Adjustment:

7.4.1 Calculation of the theoretically recovered revenue through tariffs calculated up to this point by multiplying tariffs with forecasted contracted capacities and summing them up, $R_{pre-rescaling}$. Due to the storage discounts granted, this value is lower than the allowed revenue R_{total}.

7.4.2 Calculation of the global rescaling factor f^{re} to ensure full recovery of the total allowed revenues:

$$f^{re} = \frac{R_{total}}{R_{pre-rescaling}}$$

7.4.3 Calculation of the final RPM tariffs by applying the global rescaling factor f^{re}, distinguishing three different cases:

7.4.3.1 Case a): Tariff is neither adjusted by equalisation nor by a storage discount:

$$T_{E_i}^{FZK} = T_{E_i}^{FZK\ ini} \cdot f^{re}, \qquad T_{E_i}^{DZK} = T_{E_i}^{DZK\ ini} \cdot f^{re},$$
$$T_{X_i}^{FZK} = T_{X_i}^{FZK\ ini} \cdot f^{re}, \qquad T_{X_i}^{DZK} = T_{X_i}^{DZK\ ini} \cdot f^{re}$$

7.4.3.2 Case b): Tariff is adjusted by equalisation:

$$T_{E_i}^{FZK} = T_{E_i}^{FZK\ eq} \cdot f^{re}, \qquad T_{E_i}^{DZK} = T_{E_i}^{DZK\ eq} \cdot f^{re},$$
$$T_{X_i}^{FZK} = T_{X_i}^{FZK\ eq} \cdot f^{re}, \qquad T_{X_i}^{DZK} = T_{X_i}^{DZK\ eq} \cdot f^{re}$$

7.4.3.3 Case c): Tariff is adjusted by a storage discount:

$$T_{E_i}^{FZK} = T_{E_i}^{FZK\ disc} \cdot f^{re}$$
$$T_{X_i}^{FZK} = T_{X_i}^{FZK\ disc} \cdot f^{re}$$

Additional tariff calculation principles for points without technical/forecasted contracted capacity:

- Tariffs for firm capacity products at points with technical capacity but without forecasted contracted capacity are derived from the closest point tariff by applying the ratio between the CWD of these points:
  - The FZK tariff at exit point Petrzalka is derived from the FZK tariff at exit point Mosonmagyaróvár by applying the ratio between the CWD of these points.
- Tariffs for interruptible capacity products for virtual reverse flow (i.e. at points with technical capacity only in the forward flow direction - these are the entry points Mosonmagyaróvár, Petrzalka and Murfeld) are derived from the uniform FZK tariff for the homogeneous group of entry points.

1.2 Parameters used in the applied reference price methodology that are related to the technical characteristics of the transmission system (Article 26(1)(a)(i) TAR NC)

The parameters used as inputs in the RPM are chosen according to the prerequisites of the TAR NC. The forecasted contracted capacities as well as the quantities of gas flows are based on actual annual bookings with forecasts for bookings of capacity products with shorter durations. The forecasts refer to each entry and exit point individually.

1.2.1 Structural representation of the transmission network (Article 30(1)(a)(iv) TAR NC)

The Austrian gas network is subdivided into three market areas, but only the market area east contains gas transmission pipelines and thus is subject to the TAR NC. The market area east is not connected to the other two market areas, Tyrol and Vorarlberg, inside Austria.

For an overview of the transmission system please refer to the TSO websites:

i. Gas Connect Austria GmbH (GCA): https://www.gasconnect.at/
ii. Trans Austria Gasleitung GmbH (TAG): https://www.taggmbh.at/

Technical capacities at the entry and exit points of the transmission system are provided in Table 2 and Table 3 below.

1.2.2 Technical capacity and forecasted contracted capacity at entry and exit points (Article 30(1)(a)(i) and Article 30(1)(a)(ii) TAR NC)

The technical capacities were calculated according to the methodology pursuant to section 34 Gas Act 2011 (approved by E-Control), inter alia by conducting state-of-the-art load flow simulations.

Regarding the forecasted contracted capacity, additional booking on top of the existing long-term bookings were forecasted based on expected capacity demand for 2025 (indicative forecast from March 2024). The forecasted contracted capacity already includes the forecasted short-term bookings (quarter, month, day-ahead and within-day capacity products) on an annualised basis (weighted with the respective multipliers), as well as forecasted interruptible capacity bookings (weighted reflecting the applicable discounts, respective points are marked with an asterisk in the tables below). Please note that this can lead to instances where the forecasted contracted capacity appears larger than the technical capacity.

Table 2: Capacities at entry points (kWh/h)

Entry point	Technical capacity	Forecasted contracted capacity 2025	
		FZK / UK	DZK
Baumgarten	96 080 396	25 785 676	
Arnoldstein	17 377 622	9 181 043	521 331
Oberkappel*	10 349 306	10 987 013	
Überackern*	4 750 155	2 230 891	3 357 000
Mosonmagyaróvár	0	0	
Murfeld	0	0	
Petrzalka	0	0	
Storage MAB*	7 273 500	8 672 911	
Storage Penta West	2 950 825	0	
Distribution area	10 848 000	4 028 400	

Table 3: Capacities at exit points (kWh/h)

Exit point	Technical capacity	Forecasted contracted capacity 2025	
		FZK / UK	DZK
Baumgarten	10 272 000	4 599 481	
Arnoldstein	50 014 969	6 683 747	
Oberkappel	15 660 325	13 795 957	
Überackern*	7 273 500	324 117	6 431 372
Mosonmagyaróvár*	6 378 300	6 142 392	
Murfeld	4 688 610	638 699	
Petrzalka	1 119 000	0	
Storage MAB*	7 273 500	7 574 727	
Storage Penta West	2 950 825	0	
Auersthal	4 635 629	0	4 635 629
Kirchberg	0	0	
Gr. Göttfritz	0	0	
Rainbach	0	0	
Bad Leonfelden	2 378 658	0	2 378 663
Arnreith	0	0	
Baumgarten-PVS2	21 422 795	21 422 795	
Eggendorf	1 111 503	1 111 503	
Grafendorf	166 731	166 731	
St. Margarethen	221 439	221 439	

Exit point	Technical capacity	Forecasted contracted capacity 2025	
		FZK / UK	DZK
Weitendorf	1 952 543	1 952 543	
Sulmeck-Greith	110 456	110 456	
Ettendorf	55 223	55 223	
Waisenberg	22 022	22 022	
Ebenthal	110 087	110 087	
Finkenstein	284 539	284 539	

1.2.3 Additional technical information about the transmission network (Article 30(1)(a)(iv) TAR NC)

Table 4 displays the distances that are used by the applied RPM as parameters to calculate CWD tariffs.

Table 4: Pipeline distances between entry points and exit points (in km)

Exit \ Entry	Baumgarten	Oberkappel	Überackern	Mosonmagyaróvár	Petrzalka	Murfeld	Arnoldstein	Storage Penta West	Storage MAB	Domestic[3]
Baumgarten	-	245	340	49	39	241	385	337	5	27
Oberkappel	245	-	95	288	278	480	624	92	244	218
Überackern	340	95	-	383	373	575	719	3	339	313
Mosonmagyaróvár	49	288	383	-	10	284	428	380	48	70
Petrzalka	39	278	373	10	-	274	418	370	38	60
Murfeld	241	480	575	284	274	-	144	572	240	262
Arnoldstein	385	624	719	428	418	144	-	716	384	406
Storage Penta West	337	92	3	380	370	572	716	-	336	310
Storage MAB	5	244	339	48	38	240	384	336	-	26
Auersthal	27	218	313	70	60	262	406	310	26	-
Kirchberg	81	164	259	124	114	316	460	412	80	54
Gr. Göttfritz	136	109	204	179	169	371	515	467	135	109
Rainbach	188	57	152	231	221	423	567	519	187	161
Bad Leonfelden	205	40	135	248	238	440	584	536	204	178
Arnreith	225	20	115	268	258	460	604	556	224	198
Baumgarten-PVS2	3	242	337	46	36	238	382	334	2	24
Eggendorf	75	314	409	118	108	166	310	406	74	96
Grafendorf	140	379	474	183	173	101	244	471	139	161
St. Margarethen	183	422	517	226	216	58	201	514	182	204
Weitendorf	214	453	548	257	247	27	171	545	213	235
Sulmeck-Greith	234	473	568	277	267	48	150	565	233	255
Ettendorf	272	511	606	315	305	85	113	603	271	293
Waisenberg	303	542	637	346	336	117	81	634	302	324
Ebenthal	324	563	658	367	357	137	61	655	323	345
Finkenstein	364	603	698	407	397	178	20	695	363	385

[3] The assumption is that domestic entries (from storage) enter the transmission system via the Auersthal point.

Regarding DZK (dynamically allocable capacities) restrictions on possible flow scenarios are applied in accordance with the conditions defined for enabling firm usage of DZK:

i. Entry Überackern (to exit Oberkappel)
ii. Entry Arnoldstein (to exit distribution area Carinthia; see definition below)
iii. Exit Überackern (from entry Oberkappel)
iv. Exit distribution area (from entry Baumgarten); see definition below
v. Exit distribution area (from entry Oberkappel); see definition below

1.2.4 Homogeneous groups of points

For the purpose of equalisation the following homogeneous groups of points are defined:

Table 5: Homogeneous groups exits

Homogeneous group	Points
Exit SK	Exit Baumgarten
	Exit storage MAB
Exit DE	Exit Oberkappel
	Exit Überackern
	Exit storage Penta West
Exit distribution area	Auersthal
	Kirchberg
	Gr. Göttfritz
	Rainbach
	Bad Leonfelden
	Arnreith
	Baumgarten-PVS2
	Eggendorf
	Grafendorf
	St. Margarethen
	Weitendorf
	Sulmeck-Greith
Exit distribution area Carinthia	Ettendorf
	Waisenberg
	Ebenthal
	Finkenstein

Table 6: Homogeneous groups entry

Homogeneous group	Points
Entry	FZK entry Baumgarten
	Entry Oberkappel
	Entry Überackern
	FZK entry Arnoldstein

For more details on the transmission system (e.g. pipeline lengths, diameters and compressor stations), please refer to the TSO websites:

- https://www.gasconnect.at/
- https://www.taggmbh.at/

1.2.5 Quantity and direction of the gas flows (Article 30(1)(a)(iii) TAR NC)

For the quantity and direction of the gas flows at entry and exit points and associated assumptions, such as demand and supply scenarios for the gas flow under peak conditions, please refer to the coordinated network development plan (KNEP), section 5.2.2. (booked capacities and capacity demand at each entry and exit point between 2022 and 2031 are shown on pp 72 et sqq). This document is jointly drawn up by GCA, TAG and the market and distribution area manager AGGM and is approved by E-Control. The KNEP 2023-2032 was approved on 31. May 2023.

- https://www.e-control.at/bereich-recht/entscheidungen-vorstand-gas/knep-g#/

1.3 Storage discounts (Article 26(1)(a)(ii) TAR NC)

The following discounts are applied to capacity-based transmission tariffs at entry points from and exit points into storage.

Table 7: Storage discounts

Discount at entry points from gas storage facilities	100%
Discount at exit points into gas storage facilities	50%

There are several storage facilities which are connected to more than one transmission or distribution network and that are used to compete with the interconnection points (IPs) in Austria:

- Storages 7Fields and Haidach (cross-border usage between Austria and Germany): The entry/exit point “Storage Penta West” competes with the interconnection points “Überackern-ABG” and “Überackern-SUDAL”.
- Storage Lab (cross-border usage between Slovakia and Austria): the entry/exit point “Storage MAB” competes with interconnection point Baumgarten.

In order to avoid distortions, a fee for cross-border storage usage (based on Article 9(1) TAR NC) was introduced some time ago. This fee, calculated and charged ex-post based on the actual daily cross-border usage, will be continued:

- Base quantity: peak hourly usage per gas day
- Base tariff: applicable interconnection point tariff (FZK), including the daily multiplier

1.4 Allowed revenue (Article 30(1)(b)(i) TAR NC)

The allowed revenue of GCA and TAG result from the allowed cost for each year of the regulatory period, set according to the methodology pursuant to section 82 Gas Act 2011. In more concrete terms, E-Control issued the official decisions V MET G 01/20 and V MET G 02/20 to set the TSOs' allowed cost.

Table 8: Allowed transmission revenues GCA for the 2025 (RP5) and 2024 (RP4) tariff periods

	RP5	RP4
GCA allowed revenues	116 220 077 EUR	126 092 600 EUR
GCA share to be recovered by capacity-based transmission tariffs	99 061 030 EUR	126 092 600 EUR
GCA share to be recovered by commodity-based transmission tariffs	17 159 047 EUR	0 EUR
GCA share to be recovered by non-transmission tariffs	0 EUR	0 EUR

Table 9: Allowed transmission revenues TAG for the 2025 (RP5) and 2024 (RP4) tariff periods

	RP5	RP4
TAG allowed revenues	183 532 570 EUR	278 833 200 EUR
TAG share to be recovered by capacity-based transmission tariffs	167 539 570 EUR	278 833 200 EUR
TAG share to be recovered by commodity-based transmission tariffs	15 992 900 EUR	0 EUR
TAG share to be recovered by non-transmission tariffs	0 EUR	0 EUR

These are the allowed revenues before the inter-TSO compensation mechanism as defined in the section 1.5 is applied.

The change of allowed revenues from 2024 to 2025 is largely due to the following factors:

i. The 4-year duration of the regulatory period, with the allowed cost for 2021-2024 having been determined in 2020.

ii. The shift from reference volumes with risk remuneration to forecasted contracted capacity without risk remuneration. Risk remuneration granted in the past has now been accounted for in the allowed revenues.

iii. The impact of Russia's war against Ukraine on the gas flow situation (→ change in expected compressor energy demand) and on energy prices (→ change in expected compressor energy costs).

Please note that the information pursuant to Article 30(1)(b)(iii) TAR NC will published before the annual auction starts in July 2024.

1.5 Inter-TSO compensation (Article 10(3) TAR NC)

GCA and TAG jointly operate the common entry-exit system in the market area east and apply an overall market area tariff calculation approach. Market area wide CWD tariffs do not ensure direct cost recovery for each TSO. Thus, an inter-TSO compensation mechanism is required to fulfil the legal requirement of systematic cost recovery. This gives rise to:

i. inter-TSO compensation from capacity-based transmission tariffs

ii. inter-TSO compensation from commodity-based transmission tariffs (Article 4(3) TAR NC)

The application of the RPM for 2025 tariffs results in planned ITC payments from GCA to TAG. Since tariffs are calculated based on forecasted contracted capacity, revenues based on actual contracted capacity will deviate from the planned revenues. The ITC payments are then performed on a "pay-as-earned" principle, meaning the share of the planned ITC payments in GCA's planned transmission tariff revenues will be used to determine the inter-TSO payment from GCA's actual transmission tariff revenues. This principle is applied to each tariff category that is subject to an overall market area tariff calculation approach (i.e. capacity-based tariffs and flow-based charge).

i. The planned ITC payment is calculated as the difference between GCA's planned revenues and GCA's allowed revenues: $ITC_{plan} = R^{GCA}_{plan} - R^{GCA}_{allowed}$

ii. The pay-as-earned tariff component is calculated as the share of the planned ITC in the planned revenues of the ITC providing TSO (GCA): $\alpha_{ITC} = \frac{ITC_{plan}}{R^{GCA}_{plan}}$

iii. The ITC to be paid by GCA to TAG is determined by applying this share to the actual revenues: $ITC_{actual} = \alpha_{ITC} \cdot R^{GCA}_{actual}$

iv. Total ITC payments are capped by the sum of the planned ITC payments.

v. This has to be performed separately for each of the tariff categories, i.e. capacity-based tariffs and commodity-based tariffs.

The following table contains the ITC tariff components for the tariff period 2025:

Table 10: ITC tariff components α_{ITC} for tariff period 2025

GCA's revenue share from capacity-based tariffs for ITC payments to TAG	48%
GCA's revenue share from the commodity-based charge for ITC payments to TAG	30%

2 Transmission tariff level and comparison

2.1 Value of reference price (Article 26(1)(a)(iii) TAR NC) and difference in the level of transmission tariffs for the same type of transmission service (Article 30(2)(a)(i) and Article 30(2)(a)(ii) TAR NC)

The following capacity-based transmission tariffs, expressed in EUR/kWh/h/a, result from applying the RPM with the input parameters described in section 1. The tables below compare them to the tariffs of the current tariff and regulatory period (RP4 tariffs).

Table 11: Capacity-based tariffs of GCA for the 2025 tariff period

Direction	Type	Point	Capacity-based tariff	RP4 tariffs	Relative difference
			EUR/kWh/h/a	EUR/kWh/h/a	%
Entry	FZK	Baumgarten	1.30	0.85	+53%
Entry	FZK	Oberkappel	1.30	0.97	+34%
Entry	FZK	Überackern	1.30	0.97	+34%
Entry	FZK	Distribution area	0.00	0.00	
Exit	FZK	Baumgarten	2.14	1.23	+74%
Exit	FZK	Oberkappel	4.25	3.26	+30%
Exit	FZK	Überackern	4.25	3.26	+30%
Exit	FZK	Mosonmagyaróvár	2.15	1.23	+75%
Exit	FZK	Petrzalka	2.15	1.23	+75%
Exit	FZK	Murfeld	3.73	1.90	+97%
Exit	FZK	Distribution area	1.26	0.42	+200%
Entry	DZK	Überackern	1.17	0.88	+33%
Exit	DZK	Überackern	3.82	2.93	+31%
Exit	DZK	VG Auersthal (distribution area)	1.13	0.38	+198%
Exit	DZK	VG Bad Leonfelden (distribution area)	1.13	0.38	+198%
Entry	FZK	Storage Penta West	0.00	0.00	
Entry	FZK	Storage MAB	0.00	0.00	
Exit	FZK	Storage Penta West	2.12	0.44	+383%
Exit	FZK	Storage MAB	1.07	0.44	+144%

Table 12: Capacity-based tariffs of TAG for the 2025 tariff period

Direction	Type	Point	Capacity-based tariff	RP4 tariffs	Relative difference
			EUR/kWh/h/a	EUR/kWh/h/a	%
Entry	FZK	Baumgarten	1.30	0.85	+53%
Entry	FZK	Arnoldstein	1.30	0.97	+33%
Exit	FZK	Arnoldstein	5.96	4.35	+37%
Exit	FZK	Distribution area	1.26	0.42	+200%
Exit	FZK	Distribution area Carinthia	4.62	3.85	+20%
Entry	DZK	Arnoldstein	1.17	0.68	+72%

The following tables show the estimated tariffs resulting from applying the reference price methodology to forecasted contracted capacities and flow volumes for the remainder of the tariff period. Please note that forecasts and calculations will be done on a yearly basis for the following year and therefore can result in different tariffs than preliminarily indicated below.

Table 13: Estimated GCA capacity tariffs for the full regulatory period

Direction	Type	Point	2025	2026 (preliminary)	2027 (preliminary)
			EUR/kWh/h/a	EUR/kWh/h/a	EUR/kWh/h/a
Entry	FZK	Baumgarten	1.30	1.37	1.48
Entry	FZK	Oberkappel	1.30	1.37	1.48
Entry	FZK	Überackern	1.30	1.37	1.48
Entry	FZK	Distribution area	0.00	0.00	0.00
Exit	FZK	Baumgarten	2.14	2.38	2.67
Exit	FZK	Oberkappel	4.25	4.59	4.98
Exit	FZK	Überackern	4.25	4.59	4.98
Exit	FZK	Mosonmagyaróvár	2.15	2.49	2.80
Exit	FZK	Petrzalka	2.15	2.49	2.80
Exit	FZK	Murfeld	3.73	4.19	4.71
Exit	FZK	Distribution area	1.26	1.45	1.67
Entry	DZK	Überackern	1.17	1.23	1.33
Exit	DZK	Überackern	3.82	4.13	4.48
Exit	DZK	VG Auersthal (distribution area)	1.13	1.30	1.50
Exit	DZK	VG Bad Leonfelden (distribution area)	1.13	1.30	1.50

Direction	Type	Point	2025	2026 (preliminary)	2027 (preliminary)
			EUR/kWh/h/a	EUR/kWh/h/a	EUR/kWh/h/a
Entry	FZK	Storage Penta West	0.00	0.00	0.00
Entry	FZK	Storage MAB	0.00	0.00	0.00
Exit	FZK	Storage Penta West	2.12	2.29	2.49
Exit	FZK	Storage MAB	1.07	1.19	1.34

Table 14: Estimated TAG capacity tariffs for the full regulatory period

Direction	Type	Point	2025	2026 (preliminary)	2027 (preliminary)
			EUR/kWh/h/a	EUR/kWh/h/a	EUR/kWh/h/a
Entry	FZK	Baumgarten	1.30	1.37	1.48
Entry	FZK	Arnoldstein	1.30	1.37	1.48
Exit	FZK	Arnoldstein	5.96	6.62	7.39
Exit	FZK	Distribution area	1.26	1.45	1.67
Exit	FZK	Distribution area Carinthia	4.62	5.14	5.78
Entry	DZK	Arnoldstein	1.17	1.23	1.33

2.1.1 Reference prices for interruptible capacity products

The tariffs for interruptible capacity are calculated as described in section 1.1 (virtual reverse flows) for ex-ante discounts. For points with ex-post discounts, the interruptible capacity product tariff is equal to the FZK tariff and not provided separately in this document.

Table 15: Interruptible capacity-based tariffs of GCA for the 2025 tariff period without ex-post discounts

Type	Direction	Point	Capacity-based tariff	RP4 tariffs	Relative difference
			EUR/kWh/h/a	EUR/kWh/h/a	%
Interruptible	Entry	Oberkappel	1.14	0.85	+34%
Interruptible	Entry	Überackern	1.14	0.85	+34%
Interruptible (VRF)	Entry	Mosonmagyaróvár	1.30	0.85	+53%
Interruptible (VRF)	Entry	Petrzalka	1.30	0.85	+53%
Interruptible (VRF)	Entry	Murfeld	1.30	0.97	+34%

For short-haul transmission services involving the transfer of gas between ABG and SUDAL pipelines (both part of the German gas transmission system) in GCA's Überackern station, the currently applicable discounted tariff is continued:

Table 16: Tariffs for interruptible short-haul capacity of GCA for the 2025 tariff period

Type	Direction	Capacity-based tariff	RP4 tariffs	Relative difference
		EUR/kWh/h/a	EUR/kWh/h/a	%
Short-haul from Überackern-SUDAL to Überackern-ABG	Entry	0.14	0.14	0%
	Exit	0.14	0.14	0%
Short-haul from Überackern-ABG to Überackern-SUDAL	Entry	0.14	0.14	0%
	Exit	0.14	0.14	0%

Revenues from this short-haul tariff are to be treated under GCA's capacity-based transmission revenues, but no contracted capacity is forecasted for short-haul transmission services.

2.2 Commodity-based transmission tariff (Article 26(c)(i) TAR NC)

2.2.1 Commodity charge (Article 4(3)(a) TAR NC)

The commodity charge is calculated on the basis of allowed costs to be recovered by a flow-based charge and forecasted flow volumes. It is set in such a way that it is the same at all entry points and the same at all exit points. Allowed costs are forecasted based on electricity and gas usage and the associated costs thereof. The parameters have been chosen to cover the costs, mainly driven by the quantity of gas flow (as required by Article 4(3)(a)(iii) TAR NC).

The entry/exit-split for commodity is set to 25% / 75% as indicated in Table 19.

The charge is in EUR/MWh. The table below shows the relevant values used to determine the commodity charge (the respective allowed revenues are provided in section 1.4).

Table 17: Forecasted flows for calculating the flow-based charge

Points	Forecasted flow for 2025
	MWh
Entry points GCA	141 843 857
Entry points TAG	66 969 421
Exit points GCA	143 526 582
Exit points TAG	45 057 615

Table 18: Flow-based charge acc. to Article 4(3)(a) TAR NC for the 2025 tariff period

Direction	Flow-based charge 2025	RP4 tariff[4]
	EUR/MWh	EUR/MWh
Entry	0.03969	0
Exit	0.13184	0

The commodity charges are adjusted annually during the regulatory period.

2.3 Explanation of the differences between tariff in the current and next tariff period (Article 26(d)(i) TAR NC)

The differences in the tariff levels of the 4th and 5th regulatory period lie mainly in the change of the reference price methodology from the virtual point-based (VPB) methodology to the default capacity-weighted distance methodology. The change itself is a necessary consequence of the changed circumstances that the Austrian transmission system faces in the upcoming years.

The VPB approach with Baumgarten as a dominant node of the system fit the reality of the years before Russia's invasion of Ukraine in February 2022 very well. The majority of entry capacities were booked at the Baumgarten IP and exited the system at the Arnoldstein IP, the distribution area exit points or the western exit points (Oberkappel and Überackern). With the discontinuation of Russian transit flows to Italy and the fact that Germany also has further diversified its sources of gas supply, Baumgarten ceases to qualify as a real dominant node.

Because of the same reason, we now use forecasted contracted capacities instead of reference volumes. Based on actual annual bookings and additional predictions for shorter-term products, reliable TSO forecasts can only comprise one year.

The differences between the 2025 tariffs and the indicative tariffs for the remainder of the regulatory period (2026, 2027, 2028) result from the differences in the forecasted

[4] In the fourth regulatory period, a flow-based charge applied between 1 June 2022 and 31 December 2023. From 4 November 2022 until 31 December 2023, the charges were 0.20772 EUR/MWh for entries and 0.69818 EUR/MWh for exits. The initial charges, applicable from 1 June 2022 to 4 November 2022, were 0.08552 EUR/MWh (entry) and 0.31829 EUR/MWh (exit).

contracted capacities for these years at the time of publication of this document and the forecasted allowed revenue.

2.4 Simplified tariff model (Article 30(2)(b) TAR NC)

See attached excel model

3 Transmission services revenue (Article 30(1)(b)(iv) TAR NC)

The following table contains the ratios for the transmission service revenues referred to in Article 30(1)(b)(v) TAR NC.

Table 19: Transmission service revenue ratios for 2025 according to Article 30(1)(b)(v) TAR NC

Capacity/commodity-split	88.9% / 11.1%
Entry/exit-split (capacity)[5]	25.1% / 74.9%
Entry/exit-split (commodity)	25.0% / 75.0%
Intra-system/cross-system-split	22.8% / 77.2%

4 Assessment of the reference price methodology (Article 26(1)(a) TAR NC)

4.1 Cost allocation assessment (Article 26(1)(a)(iv) TAR NC)

The cost allocation assessment (CAA) according to Article 5 TAR NC is used to indicate the degree of cross-subsidisation between network uses under the proposed RPM tariffs.

4.1.1 CAA capacity

The cost drivers applied for the assessment are the respective distance in combination with the forecasted contracted capacity. This is consistent with the input parameters of the RPM.

The CAA reveals that applying the reference price methodology with a 25% entry split without capping the tariffs at exit points into the distribution area would result in heavy cross-

[5] This value deviates from the 25%/75% split due to the application of the storage discounts and rescaling.

subsidisation to the detriment of intra-system network use. The CAA index for capacity-based tariffs would stand at 61%.

To minimise cross-subsidisation, the tariff increase at exit points into the distribution area is capped at 200%, thus resulting in a quite balanced CAA, close to 0%.

This enables us to stay below the 10% limit enshrined in Article 5(6) TAR NC and to achieve a fair distribution of costs.

Table 20: CAA capacity

Ratio intra	8.2
Ratio cross	8.3
CAA index	0.6%

4.1.2 CAA commodity

The cost driver applied for the assessment is the forecasted flow. This is consistent with the input parameters of the calculation of the flow-based charge and a continuation of the approach when the first commodity-based tariffs were introduced in Austria.

The cost allocation assessment index for commodity amounts to 6.3%. This does not exceed the value of 10% mentioned in Article 5(6) TAR NC.

Table 21: CAA commodity

Ratio intra	80.5
Ratio cross	85.8
CAA index	6.3%

4.2 Assessment of the reference price methodology (Article 26(1)(a)(v) TAR NC)

Given that the nature of the utilisation of the Austrian transmission network has changed dramatically since the beginning of the last regulatory period a different RPM was required. As discussed in further detail in section 2.3, the VPB methodology with Baumgarten as a dominant node does not reflect the reality of the transmission system any longer. The proposed CWD reference price methodology is the benchmark reference price methodology according to Article 8 TAR NC and as such the most straightforward and cost-reflective approach.

4.2.1 Reproducibility

The simplified tariff model (see section 2.4), along with the accompanying input data on forecasted contracted capacities, allowed costs, distances, and discounts, allows all network users to replicate the calculation of reference prices. Another element that makes the

RPM easily reproducible is the fact that the CWD methodology was applied with very limited and transparent adjustments, i.e. only equalisation of homogeneous groups of points (see section 1.2.4), the cap on tariff increases at exit points into the distribution area and obligatory storage discounts.

4.2.2 Actual costs

The actual allowed cost and revenue for the fifth regulatory period (2025-2027) have been calculated by applying the methodology approved in line with section 82 Gas Act 2011. In more concrete terms, E-Control has issued the official decisions V MET G 01/20 and V MET G 02/20 to set the TSOs' allowed cost.

4.2.3 Cost-reflectivity, cross-subsidisation and volume risks

The capacity-weighted distance method according to Article 8 TAR NC is the reference and benchmark price methodology of TAR NC and as such ensures cost-reflectivity. The straightforward CWD methodology together with the annual tariff period ensures that revenues are generated only where flows are actually expected. Unlike in the previously applied reference price methodology, where the volume risk was borne by the TSOs, it will be transferred to network users in the future.

4.2.4 Effects on cross-border trade

The effects on cross-border trade can be clearly attributed to the significant change of gas flows as a consequence of Russia's invasion of Ukraine. This change of gas flows is the decisive reason behind the need to fundamentally change the reference price methodology applied. The requirement not to distort cross-border trade is fulfilled by the cost-reflectivity of the CWD methodology and resulting tariffs. The adjustments mentioned in Article 6(4) TAR NC (i.e. equalisation and rescaling) have no effects on non-adjusted points (see above).

5 Non-transmission tariffs (Article 26(1)(c) TAR NC)

n.a.

6 Annex

Abbreviation	Meaning
DZK	Dynamically allocable capacity
FZK	Freely allocable capacity
GCA	Gas Connect Austria GmbH
KNEP	Coordinated network development plan
RP4	Fourth regulatory period (2021-2024)
RP5	Fifth regulatory period (2025-2027)
RPM	Reference price methodology
TAG	Trans Austria Gasleitung GmbH

Abbreviation	Meaning
UK	Interruptible capacity
VRF	Virtual reverse flow