



Agencija za energijo

## Motivated decision of the Energy Agency laying down the reference price methodology for the natural gas transmission system

on the basis of the fourth paragraph of Article 27  
of Commission Regulation (EU) 2017/460 of 16  
March 2017 establishing a network code on  
harmonised tariff structures for gas

Maribor, March 2019  
[www.agen-rs.si](http://www.agen-rs.si)



## **1 INTRODUCTION**

Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised tariff structures for gas (OJ L 72, of 17 March 2017, p. 29, hereinafter referred to as EU Regulation 2017/460) requires from national regulatory authorities that within five months following the end of the final consultation on the reference price methodology acting in accordance with Article 41(6)(a) of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L, 211 of 14 August 2009, p. 94) shall take and publish a motivated decision on all items set out in Article 26(1) contained in the document referred to in the consultation procedure.

EU Regulation 2017/460 provides for a network code laying down rules on harmonised gas tariff structures, including rules on the application of a reference price methodology, the associated consultation and publication requirements as well as the calculation of reserve prices for standard capacity products.

Pursuant to Article 26 of Regulation 2017/460 and on the basis of the Energy Agency's Decision No 212-14/2017-01/222 of 7 November 2017, the gas transmission system operator, the gas TSO, the company PLINOVODI, Cesta Ljubljanske Brigade 11B, 1000 Ljubljana (hereinafter referred to as gas TSO), carried out a public consultation, which ended on 31 October 2018. All documents, published during the consultation, are published on the gas TSO's website - in Slovene and English. If the Energy Agency in this document refers to an individual document from the TSO's consultation, it will be mentioned in the text below.

After the consultation process, the Agency for the Cooperation of Energy Regulators (hereinafter referred to as "ACER") on 13 December 2018 in accordance with Article 27(3) of EU Regulation 2017/460 published and forwarded its findings (ACER Report – Analysis of the Consultation Document on the Gas Transmission Tariff Structure for Slovenia of 13 December 2018, hereinafter referred to as ACER Analysis). In accordance with Article 27(4) of EU Regulation 2017/460, the Energy Agency in this document sets out the reasons for its decision, concerning indications from Article 26(1) of EU Regulation 2017/460 contained in the document in the consultation process.

This document provides reasoned decisions on all the indications referred to in Article 26(1) of EU Regulation 2017/460. In its decisions, the Energy Agency took into account the document of the TSO published in the public consultation and the ACER Analysis, and, therefore, the Energy Agency's decision is in some parts different or modified according to the document of the TSO that was published in the public consultation.

In accordance with the Energy Act (Official Gazette of the Republic of Slovenia, Nos 17/14 and 81/15; hereinafter referred to as EA-1), the Energy Agency shall determine the methodology for calculating the network charge with which sets the tariffs and tariff items, the services to be charged by the operator and the method of calculating network charges. On the basis of the ACER Analysis and this motivated decision, the Energy Agency adopted a new Act on the methodology for determining network charges for the natural gas transmission system, which was endorsed by the Energy Agency's Council at its regular meeting of 26 March 2019 and it is published in the Official Gazette of the Republic of Slovenia.

## 2 REFERENCE PRICE METHODOLOGY

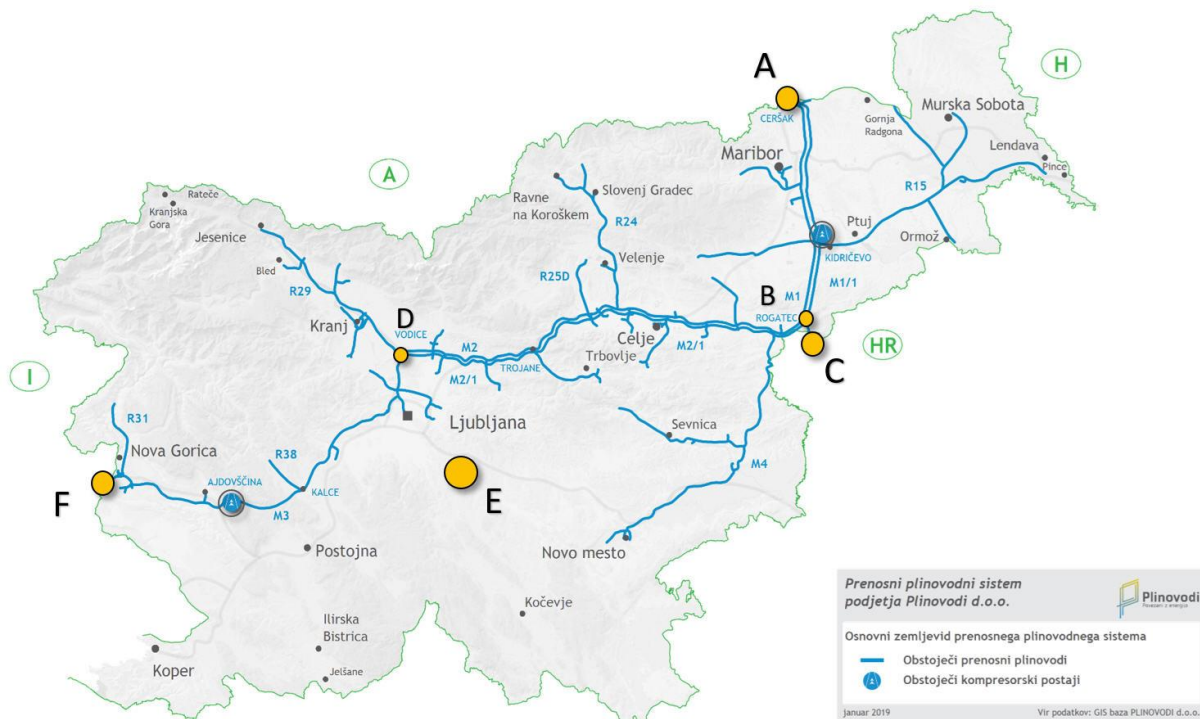
In the context of the TSO consultation process, a matrix methodology was used. The Energy Agency will explain and justify that the choice of the matrix methodology is appropriate.

For the purposes of establishing tariffs items, already since 2013 the matrix methodology has been applied for entry and exit points of the natural gas transmission system in Slovenia.

The reference prices, determined by the matrix methodology, reflect the eligible costs of individual parts of the transmission system.

The use of the matrix methodology shall establish the reference prices per entry and exit point of the transmission system. A simplified presentation of the Slovenian transmission system is given in Figure 1:

Figure 1: Slovenian transmission system



Entry-exit points, linking the Slovenian transmission system with foreign transmission systems, are Ceršak, Šempeter pri Gorici and Rogatec. These points represent the points of entry and exit interconnection points. At the Ceršak interconnection point, the reverse flow of gas is not possible, but the flow of gas is possible only in the direction of Austria — Slovenia. The reverse flow is possible at the Šempeter pri Gorici and Rogatec entry and exit points.

Within Slovenia, 154 users are connected to the transmission system, of which 12 distribution system operators and three closed distribution system operators, and 139 final consumers. These exit points within Slovenia represent the domestic exit points and form a homogeneous group of points in accordance with EU Regulation 2017/460. At the time of publishing this document, there are no entry points within Slovenia or domestic entry points in Slovenia as there is currently no production of natural gas in Slovenia that would inject natural gas into the transmission system.

*Table 1: Technical capacity of individual entry or exit points*

Entry and exit point (s)		Technical capacity on 1 January 2019 [MWh/day]
Entry point	Ceršak	139,155
	Šempeter pri Gorici	28,316
	Rogatec	7,731
Exit point	Ceršak	0
	Šempeter pri Gorici	25,742
	Rogatec	68,289
	Slovenia — domestic exit point	73,643

For determining the reference prices, based on the matrix methodology, data on planned booked capacity of the individual points, which are listed in Table 2, are used.

*Table 2: Planned booking of individual entry or exit points*

Entry and exit point		Planned capacity booking [MWh/day]
		2020
Entry point	Ceršak	44,336
	Šempeter pri Gorici	1,798
	Rogatec	1,005
Exit point	Ceršak	0
	Šempeter pri Gorici	692
	Rogatec	13,427
	Slovenia — domestic exit point	53,212

Reference prices based on the matrix methodology are determined by taking into account:

- the replacement value of the transmission system,
- the distribution of that part of the eligible costs relating to capacity-based transmission services; and
- load of individual parts of the transmission system at the occurrence of peak load of the transmission system.

When establishing the reference prices with the matrix methodology, these prices are determined with the use of an optimisation process, which aims at establishing the minimum differences between the tariffs for individual entry or exit points and the costs inherent to a particular part of the system.

The transmission system consists of 1,174 km of gas pipelines, the compressor stations in Kidričevo (10.5 MW) and Ajdovščina (9 MW) and 247 metering/regulating stations or other stations. The floor length of the transmission pipelines is shown in Table 3, according to the diameter of pipes.

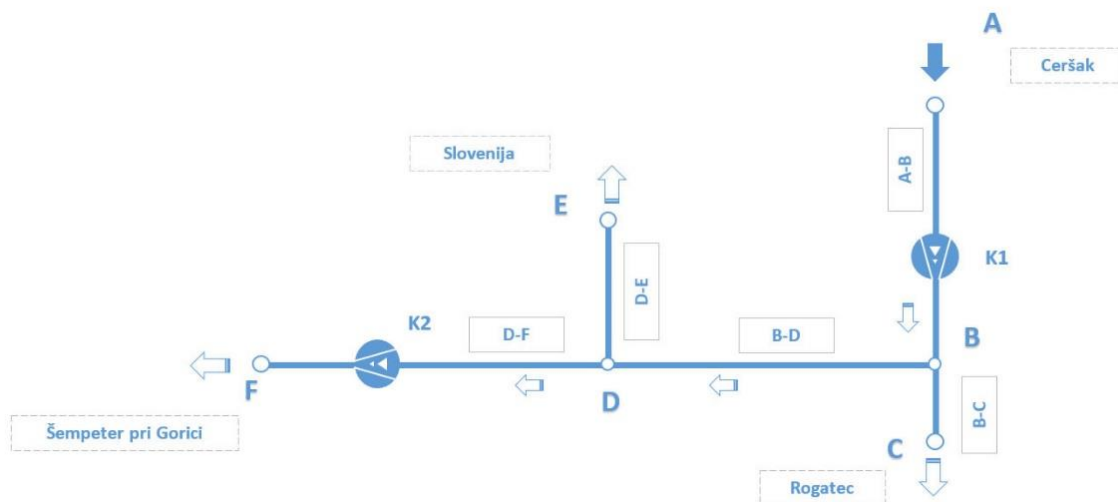
Table 3: Lengths of transmission pipelines by diameter

	Length in km
DN 500	270.5
DN 800	166.9
DN < 500	736.8
Total	1,174.3

As an input parameter for determination of reference prices, the replacement value of the transmission system is taken into account. For the transmission system's replacement value the acquisition price of the transmission system is used. For the year 2020, for which the reference prices are determined, the replacement value is EUR 756.3 million and is equal to the acquisition price of the transmission system as on 31 December 2018. According to the replacement value of an individual part of the transmission system, the eligible costs for 2020 are determined. Figure 2 shows the division of the transmission system into individual parts.

For determining the reference price for each entry or exit point, the initial and final point of a part of the transmission system with homogeneous characteristics must be identified. All costs of the transmission system at this part of the system are further on allocated - depending on the peak load of this part of the system- to the individual entry or exit point.

Figure 2: Scheme of the transmission system with parts of the system, whose costs are attributed to an individual point



The part of the transmission system between points A and B is part of the M1 and M1/1 between the border metering-regulation station (BMRS) Ceršak or the national border and the Rogatec BMRS. Point B represents the 'junction', from which natural gas can be passed on through the Slovenian transmission system towards the west or towards the Croatian transmission system. This part of the transmission system also includes the compressor station Kidričevo. The costs of this part of the transmission system are reflected in the price of the Ceršak entry point and at other entry or exit points if this part of the route is used to transfer the gas to a user. Since during the day's maximum load of the system all gas has entered through the point A and transported to system users at exit points, the costs of the system are also reflected in all reference prices for exit points.

The transmission system between points B and C forms a part of the M1 main pipeline, but only from point B, which constitutes the Rogatec BMRS and is the 'junction', from which natural gas can be passed on through the Slovenian transmission system towards west or towards the Croatian transmission system. Point C represents the border point with Croatia. The costs arising from section B–C are attributed to the reference price of the point Rogatec.

Transmission system section marked B–D between points B and D is the main pipeline M2 and M2/1 between the Rogatec BMRS and the Vodice MRS. In Vodice, the gas flow can be diverted in different directions. In section B–D, the highest consumption of Slovenian consumers is detected and, therefore, the costs related to section B–D are reflected in the reference price for the exit point located within Slovenia and at the reference price of the exit point Šempeter pri Gorici.

In the reference price of the exit point within Slovenia are also included all transmission system costs presented in the scheme as a section between points D and E and include all parts of the transmission system used only by final customers and distribution system operators connected to the exit points within Slovenia, irrespective of their actual location. This part of the transmission system includes, for example, pipelines with a lower diameter or lower pressure, connections (MRP and MP), reducing stations, etc.

The last part of the transmission system represents the M3 pipeline between the MRP Vodice and the Šempeter BMRS or the national border, whereas the point Vodice is marked with the letter D, and Šempeter pri Gorici with the letter F. The costs associated with section D–F are reflected in the reference price of the exit point Šempeter pri Gorici.

The data, which relate to individual transmission system section and are necessary to establish the reference prices, are given in the Table 4:

*Table 4: Data of individual transmission system sections*

Segment	Length * [km]	Direction of the gas stream	Peak load * * * [kWh/d]	Replacement value of assets [EUR]	Eligible costs [EUR]
A-B	116.3	A- > B	106,429,174	156,815,489	8,708,730
B-C	3.7	B- > C	26,836,766	10,695,973	594,000
B-D	217.2	B- > D	79,592,408	194,677,272	10,811,379
D-E	736.8 * *	D- > E	53,705,604	221,154,691	12,281,800
D-F	100.3	D- > F	25,886,804	172,966,232	9,605,659
Total	1,174.3			756,309,567	42,001,568

\* ground length

\* \* the distance between D and E represents the length of all gas pipelines, which are intended only for gas transmission to domestic exit points.

\* \* \* on 26 February 2018

When setting the reference prices with matrix methodology, costs are allocated to individual points depending on the load on these parts of the transmission system at the occurrence of the peak load.

The eligible costs to be covered by the revenue from the tariffs for 2020 are not yet determined, as in 2018 the Energy Agency issued its agreement to the regulatory framework and the network tariff rates for 2019. For 2019, the eligible costs covered by the capacity-based transmission tariffs shall be EUR 42,001,568. As the eligible costs will not change significantly in 2020 compared to 2019, that figure shall be used for the establishment of the reference prices for 2020. In view of the actual distribution of the replacement value of assets to the transmission system segments, the eligible costs shall also be distributed in equal proportions from capacity-based transmission services. These costs shall constitute allowable revenue, which shall be covered by capacity-based entry and exit tariffs.

Based on the data in Table 2 and Table 4, with the matrix methodology the following reference prices with mark I are calculated:

*Table 5: Reference price I (allowed revenue EUR 42 million) from the matrix model*

		Tariff [EUR/kWh/day]
Entry point	Ceršak	0.14020
Exit point	Šempeter pri Gorici	0.86854
	Rogatec	0.03792
	Slovenia — domestic exit point	0.62458

The matrix methodology does not set a rate for a point in the direction where there is no flow, so from this model do not arise tariffs for entry points Rogatec, Šempeter pri Gorici and Slovenia (domestic entry point) and the tariff for the Ceršak exit point. The tariffs for these interconnection points shall be set at a rate of 90% of the tariff in the direction of the low, and the tariff for the entry point of Slovenia (domestic entry point) is the arithmetic average of the tariffs at all border entry points.

*Table 6: Reference prices I (allowed revenue EUR 42 million) for all entry and exit points*

		Tariff [EUR/kWh/day]
Entry point	Ceršak	0.14020
	Šempeter pri Gorici	0.78168
	Rogatec	0.03413
	Slovenia — domestic entry point	0.31867
Exit point	Ceršak	0.12618
	Šempeter pri Gorici	0.86854
	Rogatec	0.03792
	Slovenia — domestic exit point	0.62458

Since the 2017/2018 gas year, a significant decrease in booking of transmission capacity for transmission of gas to other transmission systems or for the cross-system system use has been detected, while the capacity booking by domestic users or the intra-system network use has decreased to a lesser extent.

Table 7: Data on booked capacities

Entry and exit point		Booked capacity on 1 January [MWh/day]				
		2015	2016	2017	2018	2019
Entry point	Ceršak	94,271	92,778	87,749	58,701	54,987
	Šempeter pri Gorici	6,388	4,342	4,350	1,707	1,707
	Rogatec	0	0	0	0	1,005
Exit point	Ceršak	0	0	0	0	0
	Šempeter pri Gorici	0	0	0	0	0
	Rogatec	50,733	43,793	51,381	19,309	10,577
	Slovenia — domestic exit point	61,585	62,392	61,899	56,398	56,887

The decrease in booking is reflected in the revenues of the gas TSO and represents a significant risk for booking also for the coming years. In order to prevent tariff peaks in the coming years and to avoid cross-subsidising between cross-system and intra-system network use, the Energy Agency on the basis of Article 6(4)(c) of EU Regulation 2017/460 assumed that the reference prices for 2020 will be adjusted by multiplying the reference prices at all entry and exit points with the constant. This act will ensure that revenue from capacity-based transmission tariffs for 2020 will be achieved at the level established in agreement with the regulatory framework for 2020.

For the presentation of calculations in this document, the revenue from capacity-based transmission tariffs amount to EUR 34,720,823, which is the amount specified in the regulatory framework for 2019, the constant in this case being 0.83.

The reference prices established on this basis are presented in Table 8.

Table 8: Reference price II (allowed revenue EUR 34.7 million) for all entry and exit points after the adjustment

		Tariff [EUR/kWh/day]
Entry point	Ceršak	0.11590
	Šempeter pri Gorici	0.64618
	Rogatec	0.02822
	Slovenia — domestic entry point	0.26343
Exit point	Ceršak	0.10431
	Šempeter pri Gorici	0.71798
	Rogatec	0.03135
	Slovenia — domestic exit point	0.51631

Reference price II for the exit point Šempeter pri Gorici is, considering other points, non-competing, and implementing such tariff would result in even less booking of capacity. The exit point Šempeter pri Gorici is located on the transmission route Austria-Slovenia-Italy; the competitive direction is Austria-Italy.



The cost of booking of the transfer route Austria-Slovenia-Italy in case of an annual capacity booking on 1 January 2019 amounted to 0.4526 EUR/kWh/day<sup>1</sup>, and the booking of Austria-Italy transfer route 0.3324 EUR/kWh/day<sup>2</sup>. If we enforce reference prices II, the costs of booking the transfer route Austria-Slovenia would be 1.0795 EUR/kWh/day indicating that this route is highly non-competitive.

Based on the results of the analysis presented above in accordance with Article 6(4)(a) of EU Regulation 2017/460 the Energy Agency decided that the reference price should be approximated to the present value, and, therefore a reference price for the exit point Šempeter pri Gorici is set at 0.09220 EUR /kWh/day. This ensures the competitiveness of the transfer route Austria-Slovenia-Italy. Since the tariff for the entry point Šempeter pri Gorici is set at 90% of the tariff for the exit points, this one accounts for 0.08298 per EUR/kWh/day.

The change in the reference price for the point Šempeter pri Gorici with the use of benchmarking in case of other unchanged conditions results in lower revenue from capacity-based transmission services, therefore, once again the calculation of reference prices was carried out, which ensures allowed revenue of EUR 34.7 million. In the adjustment, the reference prices I are multiplied by a constant 0.86. Final reference prices with mark III are presented in Table 9.

Reference prices III, determined by the adjustment and benchmarking, cause the gas TSO a predetermined deficit of EUR 7,280,744 for 2020. The deficit from network charges shall be settled to the gas TSO in the subsequent year or, in order to prevent any rapid tariff rate changes, in following years as the payment for service of general economic interest of the gas TSO for the year in which the deficit was established. In the line with the fifth paragraph of Article 255 of the EA-1, the gas TSO shall take the deficit from network charges into account when setting out the network charges for the subsequent regulatory period or subsequent regulatory periods.

*Table 9: Reference prices III (allowed revenue EUR 34.7 million) for all entry and exit points after the adjustment and benchmarking*

		Tariff [EUR/kWh/day]
Entry point	Ceršak	0.12097
	Šempeter pri Gorici	0.08298
	Rogatec	0.02945
	Slovenia – domestic entry point	0.07780
Exit point	Ceršak	0.10887
	Šempeter pri Gorici	0.09220
	Rogatec	0.03272
	Slovenia – domestic exit point	0.53889

The document ACER Analysis on the consultation on the tariff structure for gas transmission in Slovenia imposes an obligation on the Energy Agency to publish a simplified tariff model with all the necessary information to enable users to calculate the tariffs for a valid tariff

<sup>1</sup> Data summarized from the national regulator's or gas TSO website

<sup>2</sup> Data summarized from the national regulator's or gas TSO website

period and possible variations during the period after that tariff period, therefore, in line with this recommendation, the Energy Agency prepared a model of setting reference prices based on the matrix methodology (Annex 1 of this document). On the basis of the presented input data, the model calculates the reference prices I, which represent basic prices without further adjustments. The user can also calculate the reference price II by changing the allowable income.

EU Regulation 2017/460 in Article 9 allows adjustment of tariffs at entry points from and exit points to storage facilities and at entry points from LNG facilities and infrastructure ending isolation. Since the Slovenian transmission system currently does not have such points, the adjustment was not carried out.

### 3 COST ALLOCATION ASSESSMENTS

A cost allocation assessment relating to the transmission services revenue to be covered by capacity-based transmission tariffs in accordance with Article 5 of EU Regulation 2017/460 is based on the cost drivers of:

- technical capacity; or
- forecasted contracted capacity; or
- technical capacity and distance; or
- forecasted contracted capacity and distance.

Based on the results of the cost allocation assessment, the degree of cross-subsidisation between intra-system and cross-system network use is assessed.

The Energy Agency decided that for the cost allocation assessment as the cost driver are used a forecasted contracted capacity and distance. Table 10 presents the calculation of the capacity cost allocation comparison index between the intra-system and cross-system network use.

*Table 10: Capacity cost allocation comparison index between the intra-system and cross-system network use*

	Reference price I	Reference price III
Assessment of revenues for intra-system network use	38,597,797	32,557,714
Assessment of revenues for cross-system network use	3,403,359	2,163,184
Assessment of the weight of cost for intra-system network use	14,058,153,736	14,058,153,736
Weight of cost assessment for cross-system network use	2,226,275,379	2,226,275,379
Ratio for intra-system network use	0.00275	0.00232
Ratio for cross-system network use	0.00153	0.00097
Capacity cost allocation comparison index	56.94%	81.78%

The capacity cost allocation comparison index between intra-system and cross-system network use (the CAA comparison index) shall be 56.94% for the reference prices. The high value of the comparison index is the result of the determination of the virtual location of the domestic exit point and the distance of this point from other entry and exit points. In Slovenia 139 final consumers and 15 operators of distribution system and closed distribution systems are connected to the gas transmission system at 297 exit points in total. These exit points are located throughout Slovenia with the exception of the Primorska region. For the calculating of the capacity cost allocation comparison index the location of the domestic exit point is located in Vodice with the distance of 167 km from the Ceršak entry point.

The Energy Agency considers that despite the high value of the capacity cost allocation comparison index the choice of a reference price methodology is appropriate, since tariffs are set to reflect actual cost of the transmission system incurred in a given part of the transmission system. The fact that the transmission system was constructed primarily for the purpose of supplying domestic users is reflected in the higher replacement value of the transmission system, which is intended to supply only Slovenian users of the system, in the value of EUR 221 million, and eligible costs EUR 12.3 million.

The reference price III for an exit point in Slovenia is EUR 0.53889 EUR/kWh/day and is higher than the other reference prices. Setting a reference price on the basis of another method would not reflect the actual costs of the transmission system and would allow cross-subsidising between cross-system and intra-system network use.

## **4 THE INDICATIVE INFORMATION ON THE TRANSMISSION SERVICES REVENUES**

The gas TSO's eligible costs for 2020 have not yet been determined; therefore data for 2019 will be used for the purposes of this decision. Act on the methodology for determining the regulatory framework of the natural gas system operator (Official Gazette of the Republic of Slovenia, No 21/18) specifies the type, criteria, and the method for calculating the elements of the regulatory framework, on the basis of which the gas TSO determines eligible costs and the related required revenues, which are submitted to the Energy Agency for approval. Concurrently, the gas TSO determines individual tariff items in such a way that with the planned use of the transmission system revenues from the network charges reach the maximum amount of the network charges of the regulatory period.

In the continuation, the indicative information referred to in of Article 30(1)(b) of EU Regulation (EC) 2017/460 are presented together with an explanation.

All information refer to 2020 in a way that the information provided for the regulatory framework for 2019 are taken into account. The Energy Agency considers that data for 2019 provide a sufficiently good basis for providing indicative information for the tariff period 2020.

1. The eligible costs that are covered by transmission and non-transmission services amount to EUR 46.1 million. As a result of the estimated lower capacity booking at the entry and exit points, which may have a significant impact on the increase in network charge tariff rates, the Energy Agency for the 2019 regulatory framework decided that the gas TSO can achieve the revenue from transmission and non-transmission services in the amount of EUR 38.8 million. The difference between eligible costs and allowed revenue in the amount of EUR 7.3 million represents a predetermined deficit, which shall be settled in the next regulatory periods.
2. Indicative revenue from the transmission services amounts to EUR 36.4 million.
3. Capacity-commodity split, meaning the breakdown between the revenue from capacity-based transmission tariffs and the revenue from commodity-based transmission tariffs, is 95/5.
4. Entry-exit split, meaning the breakdown between the revenue from capacity-based transmission tariffs at all entry points and the revenue from capacity-based transmission tariffs at all exit points, is 16/84.
5. The ratio between indicative revenues from intra-system network use at entry and exit points and between indicative revenues from cross-system network use at entry and exit points is 94/6.

## **5 COMPARISON OF REFERENCE PRICE METHODOLOGY BASED ON A MATRIX METHODOLOGY WITH CWD METHODOLOGY**

As the Energy Agency decided to use a matrix methodology to set reference prices, it is in accordance with Article 26(vi)(a) of EU Regulation 2017/460 necessary to compare these reference prices with the indicative prices determined by the distance-based methodology.

The reference prices based on matrix methodology, shown in Table 11, are equal to reference prices presented in Chapter 2. Reference prices determined by the capacity weighted distance reference price methodology (from now on marked as "CWD") are determined with the same input data. In doing so, the reference prices CWD-I are determined in such a way that with envisaged bookings the allowed revenue of EUR 42 million is reached, while the reference prices CWD-III are determined so that the adjustment and benchmarking are carried out and allowed revenue of EUR 34.7 million is covered.

The Energy Agency is establishing that with the presentation of calculated reference prices before adjustment, and after adjustment and benchmarking is enabled the transparent and non-discriminatory comparison of reference prices, determined with different methods of reference prices.

When setting the reference prices on the basis of a matrix methodology, no input data on the ratio between the revenues at entry and exit points is required, since the reference prices are determined on the basis of the actual cost of each part of the transmission system. However, for establishing reference prices based on the CWD methodology the ratio between the revenues at entry and exit points 50/50 is used.

The Energy Agency notes that the matrix methodology for determining prices is more appropriate, since the reference price per entry or exit point reflects the actual costs of the transmission system and loading of the system.

The price determination based on CWD methodology is not appropriate for the Slovenian transmission system, because the predetermined ratio between revenues at entry and exit points in the proportion of 50/50 does not reflect the actual costs associated with the transport of gas through the Slovenian transmission system. In case of the use of the CWD methodology, more than 50% of the revenues should be transferred to exit points, as the costs related to transferring to exit points are also higher than costs related to transferring from entry points.

**Table 11:** Comparison of reference prices based on the matrix methodology with the methodology based on distance

		Matrix methodology		CWD methodology	
		Reference prices I	Reference prices III	Reference prices CWD-I	Reference prices CWD-III
Entry point	Čeršak	0.14020	0.12097	0.44597	0.37775
	Šempeter pri Gorici	0.78168	0.08298	0.44404	0.08298
	Rogatec	0.03413	0.02945	0.42763	0.36222
	Slovenia – domestic entry point	0.31867	0.07780	0.43921	0.27432
Exit point	Čeršak	0.12618	0.10887	0.40137	0.33998
	Šempeter pri Gorici	0.86854	0.09220	0.79826	0.09220
	Rogatec	0.03792	0.03272	0.20334	0.17224
	Slovenia – domestic exit point	0.62458	0.53889	0.33296	0.28203

A comparison of the results of the cost allocation assessment related to the transmission services revenues, covered by capacity-based transmission tariffs, shown in Table 12, demonstrates the appropriateness of the chosen method. The CAA capacity cost allocation comparison index is in the case of the determination of reference prices without adjustment and benchmarking higher on the basis of the CWD methodology. In both cases, forecasted contracted capacity and distance are as a cost driver used to assess the cost allocation.

**Table 12:** Comparison of the results of the cost allocation assessment relating to the transmission services revenue to be covered by capacity-based transmission tariffs

The compared component	Matrix methodology		CWD methodology	
	Reference prices I	Reference prices III	Reference prices CWD-I	Reference prices CWD-III
Assessment of revenues for intra-system network use	38,597,797	32,557,714	32,427,897	27,098,441
Assessment of revenues for cross-system network use	3,403,359	2,163,184	9,573,104	7,546,746
Assessment of the weight of cost for intra-system network use	14,058,153,736			
Assessment of the cost factor for cross-system network use	2,226,275,379			
Ratio for intra-system network use	0.00275	0.00232	0.00231	0.00193
Ratio for cross-system network use	0.00153	0.00097	0.00430	0.00339
Capacity cost allocation comparison index	56.94%	81.78%	60.34%	55.00%

In line with the recommendation of the document ACER Analysis, the Energy Agency in Annex 2 of this document publishes the calculation of the capacity cost allocation comparison index based on the matrix methodology and CWD methodology.

## 6 COMMODITY-BASED TRANSMISSION TARIFFS AND NON-TRANSMISSION SERVICES

### Commodity-based transmission tariffs

The commodity-based transmission tariff is a tariff intended to cover the natural gas consumption for the gas TSO own use for the conditioning of natural gas in metering regulating stations and other stations and heating of these facilities, and for compressors in the compressor stations of Kidričevo and Ajdovščina. The tariff for own use shall be determined in such a way that it covers the part of the eligible costs relating to the abovementioned natural gas quantities.

The allowed revenue to be covered by the own-use tariff amounts to EUR 1.7 million and represents 4.4% of the allowed revenue. The own-use tariff for 2019 is 0.03254 EUR/kWh and it is expected not to change significantly in 2020.

A tariff item for own use is the same for all users of the transmission system and reflects costs related to own use. The calculated amount of network charge for own use depends on the own-use tariff item and 0.4% of the transferred quantity of natural gas at an individual exit point ( $Q_m$ ). The value of constant 0.4 is determined on the basis of the technical characteristics of compressors units. The transferred quantity of natural gas at each exit point shall be determined based on the measured quantities at an exit point.

### Non-transmission services:

A basic non-transmission service, charged to transmission system users that book exit capacity, is a metering service.

The transmission system user, who books the exit capacity, shall be charged for network charges for metering in the form a metering tariff item ( $C_M$ ) and by taking into account the size of metering device and the number of reduction steps.

The tariff item for metering shall be determined in such a way that the network charge for metering covers the part of the eligible costs that arise in relation to the extent of the measurements and they relate to metering services, the processing of measured data, maintenance, calibration, and periodic replacement of measuring devices under the law.

The allowed revenue to be covered by tariff for metering amounts to EUR 358,713 and represents 0.9% of the allowed revenue. Tariff for metering in 2019 amounts to 20.14334 EUR /month and it is expected not to change significantly in 2020.

The gas TSO in the context of the provision of service of general economic interest may also charge transmission system users other services, which represent non-transmission services. Tariffs for non-transmission services shall be determined by taking into account the actual costs of these services. In the process of determining the regulatory framework, the gas TSO shall also set out the individual tariff items for other services to which the



Energy Agency gives its approval. For 2019, expected revenue from the remaining services is EUR 2,051,866, which represents 5.3 % of the allowed revenue.

Other services and tariff items are shown in Annex 3.

## 7 THE INDICATIVE INFORMATION ON TRANSMISSION TARIFFS

By setting the network charge tariff for entry and exit points in the new regulatory period, 2020-2021 the tariff items will change with respect to 2019.

Table 13: *Estimated differences of tariff items for entry and exit points in 2020 compared to 2019*

		Tariff item for the point [EUR/kWh/day]		Difference 2020/2019 [EUR/kWh/day]	Difference 2020/2019 [%]
		2019	2020 *		
Entry point	Ceršak	0.11484	0.12097	0.00613	5.34%
	Šempeter pri Gorici	0.08352	0.08298	- 0.00054	- 0.65%
	Rogatec	0.08644	0.02945	- 0.05699	-65.93%
	Slovenia – domestic entry point	0.08513	0.07780	- 0.00733	-8.61%
Exit point	Ceršak	0.10335	0.10887	0.00552	5.34%
	Šempeter pri Gorici	0.09216	0.09220	0.00004	0.04%
	Rogatec	0.06403	0.03272	- 0.03131	-48.90%
	Slovenia – domestic exit point	0.43289	0.53889	0.10600	24.49%

\* designated as reference price III in Chapter 2 of this document

The reference prices for 2020 differ significantly from the applicable entry and exit tariff items for 2019. At the time of preparing the motivated decision, the 2020 network charge tariffs have not yet been determined, since in 2018 the approval was issued to the regulatory framework and the network charge tariffs only for 2019. The regulatory framework and network charge tariffs for 2020 and 2021 will be defined and approved by 31 May 2019 at the latest; therefore, the disclosed reference prices for 2020 are indicative prices. Network charge tariffs approved by the Energy Agency for 2020 may differ slightly from the reference prices presented in this document. Network charge tariffs for 2021 may be changed by no more than 3% compared to 2020 in accordance with Article 12 of the Act on the methodology for determining network charges for the natural gas transmission system, which has been approved by the Energy Agency's Council at its 59th regular meeting on 26 March 2019.

ACER in its analysis of 13 December 2018 establishes that determination of the network charge for the exit point within Slovenia by taking into account the rate of exit item for each customer group is not appropriate and is not provided for in EU Regulation 2017/460. The current methodology of determining the network charge for the exit point within Slovenia determines different customer groups for exit points within Slovenia ( $C_{PK1} - C_{PK8}$ ) in such a way that to users in the lower customer groups a higher amount of the network charge per capacity unit is imposed than to users in customer groups with higher consumption. This mechanism allows that comparable final customers connected to the transmission system have comparable network charges compared to final customers connected to the distribution system. Currently, 139 final customers are connected to the transmission system in Slovenia, out of which more than 85% book less than 250.000 kWh/day capacity per year. These final customers have a significant competitive advantage compared to the final customers connected to the distribution system, since their network charges represent only one third of the network charge of comparable final customers on a distribution network.

The Energy Agency decided to reduce gradually the exit tariff item for an individual customer group and to phase out these rates within five years, and thereby gradually move towards a new methodology of charging transmission tariffs. The above-mentioned decision of the Energy Agency is also implemented by the Act on the methodology for determining network charges for the natural gas transmission system, which has been approved by the Energy Agency's Council at its 59th regular meeting on 26 March 2019. During the adoption of this act (in public hearing), the Energy Agency received comments from interested public objecting to the termination of customer groups and considering that such differences between users of the transmission system and users of the distribution system will increase and that this will introduce further discriminatory conditions in the natural gas market. The Energy Agency agrees in principle with the comments made by the interested public, while at the same time noting that the current arrangements (several customer groups) are not in line with EU Regulation 2017/460, which requires the same reference price at all exit points within Slovenia.

Network charges tariff for 2020 will be published no later than 30 days before the annual yearly capacity auction in accordance with Article 29 and Article 32 of EU Regulation 2017/460.

In accordance with Article 28 of EU Regulation 2017/460 a consultation was also carried out on discounts, multipliers and seasonal factors. The final decision on the level of multipliers and seasonal factors was adopted by the Energy Agency with the Act on the methodology for determining network charges for the natural gas transmission system adopted on 26 March 2019. Multipliers and seasonal factors are presented in Table 14 and Table 15.

*Table 14: Multipliers for individual standard capacity products:*

Standard capacity product	Level of a multiplier
Quarterly ( $M_Q$ )	1.45
Monthly ( $M_M$ )	1.5
Daily ( $M_D$ )	2.75
Intraday ( $M_{ZD}$ )	2.8

*Table 15: Seasonal factor for an individual standard capacity product:*

Gas month ( $m$ )	Seasonal factor for an individual standard capacity product			
	Quarterly $S_{Q(m)}$	Monthly $S_{M(m)}$	Daily $S_{D(m)}$	Within-day $S_{ZD(m)}$
January	1.652	1.679	1.742	1.742
February	1.652	1.666	1.729	1.729
March	1.652	1.612	1.673	1.673
April	0.675	0.807	0.837	0.837
May	0.675	0.640	0.664	0.664
June	0.675	0.579	0.601	0.601
July	0.528	0.504	0.523	0.523
August	0.528	0.495	0.514	0.514
September	0.528	0.584	0.606	0.606
October	1.145	0.750	0.778	0.778
November	1.145	1.130	1.172	1.172
December	1.145	1.554	1.613	1.613

The following Annexes are attached to this Motivated decision on determination of reference price methodology for the natural gas transmission system:

Annex 1: Simplified tariff model

Annex 2: Calculation of the capacity cost allocation comparison index

Annex 3: List of other services presenting non-transmission services

## **8 CONCLUSION**

The Energy Agency with this Motivated decision in accordance with Article 27(4) of Regulation (EC) No 2017/460 sets the reference price methodology and reference prices for 2020. Reference prices are set on the basis of the matrix methodology, since with the motivated decision it is proved that the use of the matrix methodology is more appropriate for the determination of the Slovenian transmission entry and exit tariffs. The reference prices, determined by the matrix methodology, reflect the eligible costs of individual parts of the transmission system. By using the matrix methodology, the reference prices for an individual entry and exit point of the transmission system are determined by taking into account the replacement value and the peak load of individual parts of the transmission system.

At determination of the reference prices, the Energy Agency on the basis of Article 6(4)(c) of EU Regulation 2017/460 revaluated the reference price for 2020 in a way that reference prices I at all entry and exit points is multiplied by the constant 0.86. On the basis of Article 6(4)(a) of EU Regulation 2017/460 the Energy Agency adjusted prices at the point Šempeter pri Gorici in order to make this transmission path competitive.

Network charges tariffs that will be charged by the gas TSO to the transmission system users in 2020 have not yet been determined, since the regulatory framework for 2020 has not yet been established. Therefore, the reference prices in the motivated decisions present the indicative prices. Compared to the network charge tariffs for 2019 the reference prices change the most for the users of the system who book the point Rogatec and the domestic exit point.

Annexes, showing the simplified tariff model, the calculation of the capacity cost allocation comparison index and list of other services presenting non-transmission services, accompany this motivated decision.