

COMMISSION REGULATION (EU) 2017/460

Commitments pursuant to Article 29

Information to be published before the annual yearly capacity auction

Commitments pursuant to Article 30

Information to be published before the tariff period

Zagreb, 31 May 2019

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Article 29 Information to be published before annual yearly capacity auction

29. (a)(i.) The reserve prices applicable until at least the end of the gas year beginning after the annual capacity auction

Table 1. The reserve prices for tariff period 2017 – 2021, at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	$T_{U,IN}$	Tariff item for the entry at an interconnection	2,7432	2,6860	2,0635	2,0548	2,0499	HRK/kWh/day
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	$T_{I,IN}$	Tariff item for the exit at an interconnection	6,9710	6,8546	5,0941	5,1107	5,1270	HRK/kWh/day
Tariff item for the gas quantity at transmission system exits	T_K	Tariff item for gas quantity	0,0018	0,0018	0,0015	0,0015	0,0014	HRK/kWh

Source: Decision by HERA dtd 17 March 2017, Table 16., Decisions by HERA dtd 15 December 2017, Table 10, Decisions by HERA dtd 7 December 2018, Table 10, Decision by HERA dtd 17 December 2019, Table 5.

Table 1.a The reserve prices for tariff period 2017 – 2021, at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tarifne stavke bez PDV-a					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	$T_{U,IN}$	Tariff item for the entry at an interconnection	2,4716	2,4201	1,8592	1,8514	1,8470	HRK/kWh/day
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	$T_{I,IN}$	Tariff item for the exit at an interconnection	6,2809	6,1760	4,5898	4,6047	4,6194	HRK/kWh/day
Tariff item for the gas quantity at transmission system exits	T_K	Tariff item for gas quantity	0,0016	0,0016	0,0014	0,0014	0,0013	HRK/kWh

Source: Decision by HERA dtd 17 March 2017, Table 16., Decisions by HERA dtd 15 December 2017, Table 10, Decisions by HERA dtd 7 December 2018, Table 10, Decision by HERA dtd 17 December 2019, Table 5.

29. (a)(ii.) the multipliers and seasonal factors applied to reserve prices for non-yearly standard capacity products

Multipliers and seasonal factors are not determined by the Methodology for determining the amount of tariff items for gas transmission, rather, the reserve prices for non-yearly standard capacity products are calculated by multiplying the reserve price for yearly standard capacity products and coefficients for the usage of firm capacity on a quarterly, monthly, daily and within-day basis.

Table 2. The coefficients for the usage of firm capacity on a quarterly, monthly, daily and within-day basis.

Month/capacity product	Quarterly	Monthly	Daily	WD
January	0,145	0,175	0,0115	0,0115
February	0,145	0,175	0,0115	0,0115
March	0,145	0,175	0,0115	0,0115
April	0,090	0,105	0,0068	0,0068
May	0,090	0,105	0,0068	0,0068
June	0,090	0,070	0,0046	0,0046
July	0,080	0,070	0,0046	0,0046
August	0,080	0,070	0,0046	0,0046
September	0,080	0,105	0,0068	0,0068
October	0,135	0,105	0,0068	0,0068
November	0,135	0,175	0,0115	0,0115
December	0,135	0,175	0,0115	0,0115

Source: Methodology for determining the amount of tariff items for gas transmission (OG 48/18, 58/18), Articles 32, 33. and 34.

29. (a)(iii.) the justification of the national regulatory authority for the level of multipliers

The Methodology regulates the coefficients for the usage of the transmission system capacity on a quarterly, monthly, daily and within-day basis, which are used to calculate the fee for the usage of the transmission system contracted for a period under one gas year. In order to achieve a more flexible usage of the transmission system, as well as better utilization of the transmission system capacity, i.e. the optimization of the transmission system capacity bookings and a more economic management of the transmission system users, the coefficients for the usage of the transmission system capacity at interconnections on a quarterly, monthly, daily and within-day basis, are determined.

In the next tariff period starting on 1 January 2021, the coefficients shall be replaced with multipliers and seasonal factors in accordance with Regulation 2017/460, thus enabling the transmission system users in Croatia a more favourable booking of short-term capacity, whilst stimulating efficient usage of the transmission system capacity. This pertains to different transmission system user profiles, from those with uniform consumption throughout the year, to those with fluctuating consumption during the summer and winter months. Therefore, the proposed seasonal factors with the corresponding levels of multipliers, under the precondition that the capacity bookings are optimized in accordance with the individual buyer's portfolio, enable for a lesser financial burden on the transmission system users that will book capacities on a quarterly, monthly, daily and within-day basis.

29. (a)(iv.) where seasonal factors are applied, the justification for their application

The Methodology regulates the coefficients for the usage of the transmission system capacity on a quarterly, monthly, daily and within-day basis, which are used to calculate the fee for the usage of the transmission system contracted for a period under one gas year. In order to achieve a more flexible usage of the transmission system, as well as better utilization of the transmission system capacity, i.e. the optimization of the transmission system capacity bookings and a more economic management of the transmission system users, the coefficients for the usage of the transmission system capacity at interconnections on a quarterly, monthly, daily and within-day basis, are determined.

In the next tariff period starting on 1 January 2021, the coefficients shall be replaced with multipliers and seasonal factors in accordance with Regulation 2017/460, thus enabling the transmission system users in Croatia a more favourable booking of short-term capacity, whilst stimulating efficient usage of the transmission system capacity. This pertains to different transmission system user profiles, from those with uniform consumption throughout the year, to those with fluctuating consumption during the summer and winter months. Therefore, the proposed seasonal factors with the corresponding levels of multipliers, under the precondition that the capacity bookings are optimized in accordance with the individual buyer's portfolio, enable for a lesser financial burden on the transmission system users that will book capacities on a quarterly, monthly, daily and within-day basis.

29. (b)(i.) the reserve prices applicable until at least the end of the gas year beginning after the annual yearly capacity auction, for standard capacity products for interruptible

Reserve prices for the standard capacity products for interruptible capacity are calculated by multiplying the reserve price for standard capacity products for firm capacity and coefficients for the usage of interruptible capacity (K_{pr} i $K_{pr,d}$).

Coefficients for the usage of interruptible transmission system capacity on a yearly, quarterly and monthly basis are linked to the determined duration of interruptions of booked capacity in a month.

Table 3. Coefficients for the usage of interruptible capacity on a yearly, quarterly and monthly basis (K_{pr})

Durration of interruption (days per month)	Coefficient for interruptable capacity
≤ 3	0,80
$>3 \text{ i } \leq 10$	0,40
$>10 \text{ i } \leq 25$	0,10
>25	0

Coefficient for interruptible capacity on a daily and within-day basis ($K_{pr,d}$)

0,80 for a gas day for which there were no interruptions of booked daily or within-day interruptible capacity, determined

0,10 for a gas day for which interruptions of booked daily or within day interruptible capacity, were determined

Source: Methodology for determining the amount of tariff items for gas transmission (OG 48/18, 58/18), Article 35.

Table 4. Reserve prices for standard annual capacity products for tariff period 2017 – 2021, at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Duration of interruption (days in a month) ≤3					Duration of interruption (days in a month) >3 i ≤10					Duration of interruption (days in a month) >10 i ≤25					Duration of interruption (days in a month) > 25					Measuring unit
			Tariff items excl. VAT					Tariff items excl. VAT					Tariff items excl. VAT					Tariff items excl. VAT					
			T	T+1	T+2	T+3	T+4	T	T+5	T+6	T+7	T+8	T	T+9	T+10	T+11	T+12	T	T+13	T+14	T+15	T+16	
2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.				
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{u,IN}	Tariff item for the entry at an interconnection point	2,1946	2,1488	1,6508	1,6438	1,6399	1,0973	1,0744	0,8254	0,8219	0,8200	0,2743	0,2686	0,2064	0,2055	0,2050	0,0000	0,0000	0,0000	0,0000	0,0000	kn/kWh/dan
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{i,IN}	Tariff item for the exit at an interconnection point	5,5768	5,4837	4,0753	4,0886	4,1016	2,7884	2,7418	2,0376	2,0443	2,0508	0,6971	0,6855	0,5094	0,5111	0,5127	0,0000	0,0000	0,0000	0,0000	0,0000	kn/kWh/dan
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0018	0,0018	0,0015	0,0015	0,0014	0,0018	0,0018	0,0015	0,0015	0,0014	0,0018	0,0018	0,0015	0,0015	0,0014	0,0018	0,0018	0,0015	0,0015	0,0014	kn/kWh

Table 4a. Reserve prices for standard annual capacity products for tariff period 2017 – 2021, at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Duration of interruption (days in a month) ≤3					Duration of interruption (days in a month) >3 i ≤10					Duration of interruption (days in a month) >10 i ≤25					Duration of interruption (days in a month) > 25					Measuring unit
			Tariff items excl. VAT					Tariff items excl. VAT					Tariff items excl. VAT					Tariff items excl. VAT					
			T	T+1	T+2	T+3	T+4	T	T+5	T+6	T+7	T+8	T	T+9	T+10	T+11	T+12	T	T+13	T+14	T+15	T+16	
2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.	2017.	2018.	2019.	2020.	2021.				
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{u,IN}	Tariff item for the entry at an interconnection point	1,9773	1,9361	1,4874	1,4811	1,4776	0,9886	0,9680	0,7437	0,7405	0,7388	0,2472	0,2420	0,1859	0,1851	0,1847	0,0000	0,0000	0,0000	0,0000	0,0000	kn/kWh/dan
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{i,IN}	Tariff item for the exit at an interconnection point	5,0247	4,9408	3,6718	3,6838	3,6955	2,5123	2,4704	1,8359	1,8419	1,8478	0,6281	0,6176	0,4590	0,4605	0,4619	0,0000	0,0000	0,0000	0,0000	0,0000	kn/kWh/dan
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0016	0,0016	0,0014	0,0014	0,0013	0,0016	0,0016	0,0014	0,0014	0,0013	0,0016	0,0016	0,0014	0,0014	0,0013	0,0016	0,0016	0,0014	0,0014	0,0013	kn/kWh

Tariffs at GCV calculated according to Source: Decision by HERA dtd 17 March 2017, Table 16., Decisions by HERA dtd 15 December 2017, Table 10, Decisions by HERA dtd 7 December 2018, Table 10, Decision by HERA dtd 17 December 2019, Table 5.

29. (b)(ii.) 1. an assessment of the probability of interruption including the list of all types of standard capacity products for interruptible capacity offered including the respective probability of interruption and the level of discount applied

Plinacro offers yearly, quarterly and monthly products for interruptible capacity if the corresponding monthly, quarterly or yearly standard capacity product for firm capacity was sold at an auction premium, was sold out, or was not offered. Plinacro offers daily capacity products for interruptible capacity if the respective standard capacity product for firm capacity was sold out day-ahead or was not offered.

The probability of interruption cannot be determined, given that since 1 October 2014 there were no capacity bookings of standard capacity products for interruptible capacity on IPs where capacity products for firm capacity were offered.

The level of discounts for standard capacity products for interruptible capacity, is calculated by subtracting coefficients for the usage of interruptible capacity from number 1.

Discount = $1 - K_{pr}$, for the usage of interruptible capacity on a yearly, quarterly and monthly basis

Discount = $1 - K_{pr,d}$, for the usage of interruptible capacity on a daily and within-day basis

Coefficients for the usage of interruptible capacity of transmission system on a yearly, quarterly and monthly basis (K_{pr}) are conditioned to duration of interruption of contracted interruptible capacity in a month, and they are shown in the table below:

Duration of interruption (days in month)	Coefficients for interruptible capacity (K_{pr})
≤ 3	0,80
$>3 \text{ i } \leq 10$	0,40
$>10 \text{ i } \leq 25$	0,10
> 25	0

29. (b)(ii.) 2 an assessment of the probability of interruption including the explanation of how the probability of interruption is calculated for each type of product referred to in point 1.

The probability of interruption cannot be determined, given that since 1 October 2014 there were no capacity bookings of standard capacity products for interruptible capacity on IPs where capacity products for firm capacity were offered.

29. (b)(ii.) 3. an assesment of the probability of interruption including the historical or forecasted data, or both, used for the estimation of the probability of interruption referred to in point 2.

The probability of interruption cannot be determined, given that since 1 October 2014 there were no capacity bookings of standard capacity products for interruptible capacity on IPs where capacity products for firm capacity were offered.

Article 30 Information to be published before tariff period

30. 1 (a) INFORMATION ON PARAMETERS USED IN THE APPLIED REFERENCE PRICE METHODOLOGY THAT ARE RELATED TO TECHNICAL CHARACTERISTICS OF THE TRANSMISSION SYSTEM

30. 1 (a)(i) Technical capacity at entry and exit points and associated assumptions

Technical capacity is not relevant for allocation of allowed revenue. Information about technical capacity can be found on this link:

<https://www.sukap.plinacro.hr/>

30. 1 (a)(ii) The planned contracted capacity at entry and exit points

Table 1 Planned contracted firm capacities at an annual level (kWh/day) at NCV

Group of entries/exits	Sign	T 2017	T+1 2018.	T+2 2019.	T+3 2020	T+4 2021
Entry at interconnections	KAP _{U,IN}	50.654.026	59.569.203	66.074.506	68.192.009	73.038.247
Entry from the production	KAP _{U,PR}	32.349.170	24.886.900	22.920.000	23.004.850	19.922.550
Entry from the gas storage system	KAP _{U,SK}	52.902.040	52.902.040	52.902.040	52.902.040	52.902.040
Exit at interconnections	KAP _{I,IN}	2.000.000	2.000.000	3.000.000	3.000.000	3.000.000
Exit in Croatia	KAP _{I,HR}	82.301.020	84.358.546	86.467.509	88.196.859	89.960.797

Source: Decision by HERA dtd 17 March 2017; Table 12, Decision by HERA dtd 17 December 2019; Table 3.

Table 1a Planned contracted firm capacities at an annual level (kWh/day) at GCV

Group of entries/exits	Sign	T 2017	T+1 2018.	T+2 2019.	T+3 2020	T+4 2021
Entry at interconnections	KAP _{U,IN}	56.219.785	66.114.543	73.334.635	75.684.805	81.063.537
Entry from the production	KAP _{U,PR}	35.903.629	27.621.421	25.438.402	25.532.575	22.111.598
Entry from the gas storage system	KAP _{U,SK}	58.714.806	58.714.806	58.714.806	58.714.806	58.714.806
Exit at interconnections	KAP _{I,IN}	2.219.756	2.219.756	3.329.634	3.329.634	3.329.634
Exit in Croatia	KAP _{I,HR}	91.344.084	93.627.687	95.968.378	97.887.746	99.845.502

Source: Decision by HERA dtd 17 March 2017; Table 12, Decision by HERA dtd 17 December 2019; Table 3.

Table 2 Planned gas quantity at transmission system exits (kWh) at NCV

The year of the regulatory period	T 2017.	T+1 2018.	T+2 2019.	T+3 2020.	T+4 2021
Total planned gas quantity at transmission system exits (kWh)	25.000.000.000	25.500.000.000	26.000.000.000	27.010.000.000	27.950.000.000

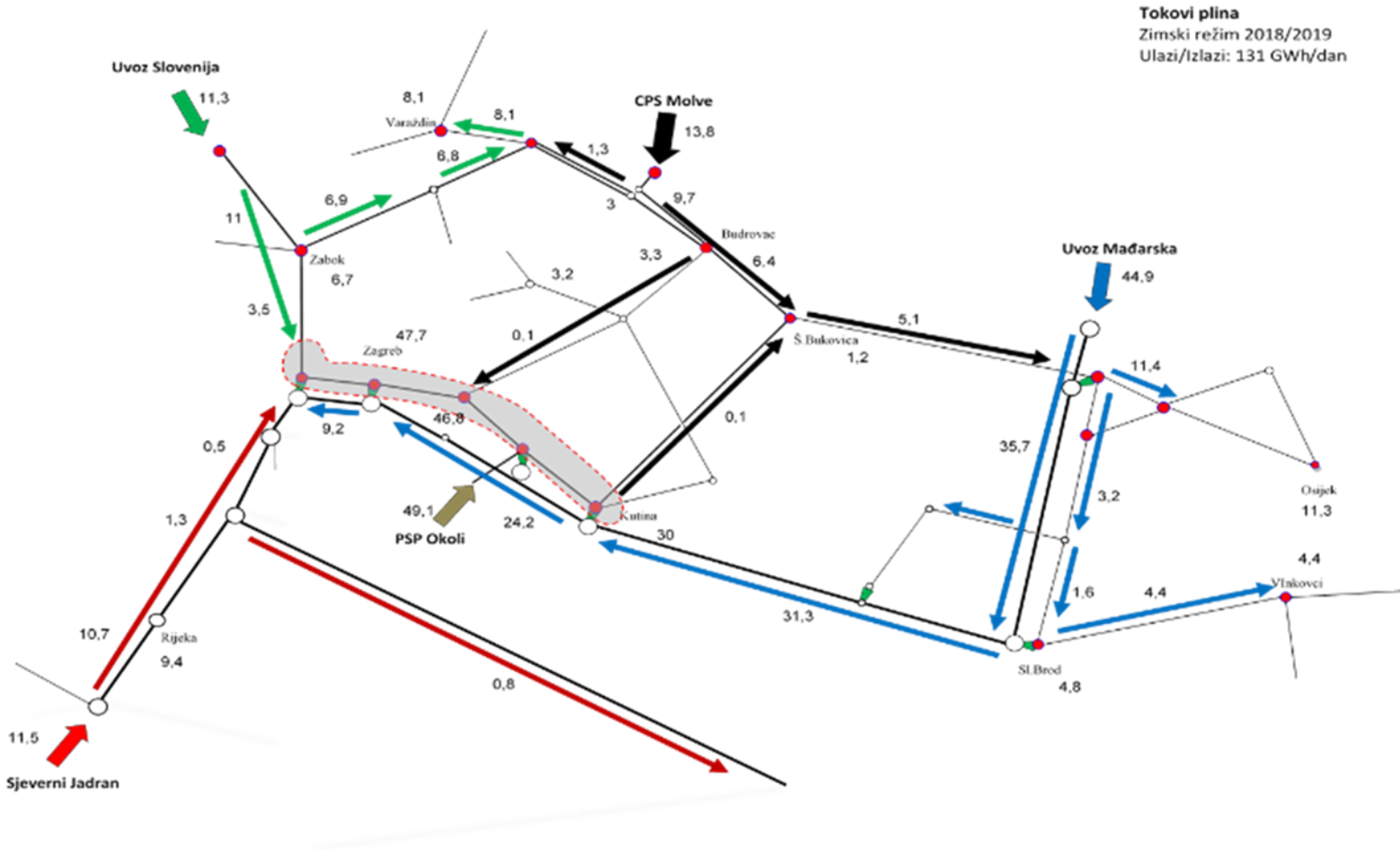
Source: Decision by HERA dtd 17 March 2017; Table 13

Table 2a Planned gas quantity at transmission system exits (kWh) at GCV

The year of the regulatory period	T 2017.	T+1 2018.	T+2 2019.	T+3 2020.	T+4 2.021
Total planned gas quantity at transmission system exits (kWh)	27.746.947.836	28.301.886.792	28.856.825.749	29.977.802.442	31.021.087.680

30. 1 (a)(ii) The quantity and the direction of the gas flow for entry and exit points and associated assumptions, such as demand and supply scenarios for the gas flow under peak conditions

Quantity and the direction of the gas flow on a peak demand day in 2018/2019 winter season, GWh at NCV



30. 1 (a)(iv) The structural representation of the transmission network with an appropriate level of detail

The structural representation of transmission network can be found on this link:

<http://www.plinacro.hr/default.aspx?id=578>

30. 1 (a)(v) The planned contracted capacity at entry and exit points

Description of transmission system can be found on this link:

<http://www.plinacro.hr/default.aspx?id=578>

30. 1. (b) INFORMATION ABOUT TSO'S REVENUE

30. 1 (b)(i) Allowed and/or target revenue of the transmission system operator

Table 3 Allowed revenue for the transmission system operator in the regulatory period 2017 – 2021

<i>The year of the regulatory period</i>	<i>T 2017.</i>	<i>T+1 2018.</i>	<i>T+2 2019.</i>	<i>T+3 2020.</i>	<i>T+4 2021.</i>
DP ^P _t planned allowed revenue in a regulatory year t (HRK)	451.673.194	453.687.009	386.293.614	393.846.620	401.547.305

Source: Decision by HERA dtd 17 March 2017; Table 10, Decision by HERA dtd 15 December 2017; Table 9, Decision by HERA dtd 7 December 2018; Table 9

30. 1 (b)(ii) Information related to changes in the allowed and/or target revenue for the transmission system operator from one year to the next year

Table 4 Allowed revenue and the associated elements for the years of the regulatory period

<i>The year of the regulatory period</i>	<i>T 2017.</i>	<i>T+1 2018.</i>	<i>T+2 2019.</i>	<i>T+3 2020.</i>	<i>T+4 2021.</i>
DP _{α^P_t} - adjusted allowed revenue in a regulatory year t (HRK)	451.673.194	453.687.009	386.293.614	393.846.620	401.547.305
DP _{KAP} - total allowed revenue based on a tariff item for the capacity (HRK)	406.505.875	408.318.308	347.664.253	354.461.958	361.392.575
DP _u - allowed revenue at transmission system entries in a regulatory year t (HRK)	284.554.112	285.822.815	243.364.977	248.123.370	252.974.802
DP ₁ - allowed revenue at transmission system exits in a regulatory year t (HRK)	121.951.762	122.495.492	104.299.276	106.338.587	108.417.772
DP _{KOL} - total allowed revenue based on a tariff item for the gas quantity (HRK)	45.167.319	45.368.701	38.629.361	39.384.662	40.154.731

Source: Decision by HERA dtd 17 March 2017; Table 11, Decision by HERA dtd 15 December 2017; Table 9, Decision by HERA dtd 7 December 2018; Table 9.

30. 1 (b)(iii) 1 Types of assets included in the regulated asset base and their aggregated value

Source: Methodology for the determination of the tariff items for gas transmission (“Official Gazette“ nos. 48/18 and 58/18), Article 13

Regulated assets include investments under the approved ten-year plan of development of the transmission system, whereby planned investments in the construction and reconstruction of the transmission system should be technically justified and cost-effective and ensure an adequate level of security of gas supply.

The value of regulated assets at the end of regulatory year T-2 is taken from operator’s balance sheet and includes the following:

- Reasonable value of fixed tangible assets in use for the purpose of gas transmission,
- Reasonable value of fixed intangible assets in use for the purpose of gas transmission,
- Deduction of grants received to finance the transmission system development.

Reasonable value of fixed tangible assets is calculated by adding up reasonable net accounting values of the following items:

- Land,
- Buildings, pipelines and office buildings,
- Plants and equipment,
- Tools, plant inventory and transportation means, and
- Other assets.

Reasonable value of fixed intangible assets is calculated by adding up reasonable net accounting values of concessions, patents, licences, software and other similar rights.

Table 5 Regulated assets at the end of the regulatory year - (HRK)

Regulated assets at the end of the regulatory year (HRK)	T	T+1	T+2	T+3	T+4
	2017.	2018.	2019.	2020.	2021.
	3.118.675.672	2.957.884.811	2.327.471.236	2.215.784.547	2.113.468.854

Source: Plinacro Ltd., Request for determining the amounts of tariff items for gas transmission for the regulatory period 2017 – 2021, February 2017; Decision by HERA dtd 7 December 2018, Table 6.

Table 6 New investments in the transmission system that have been put into use in the regulatory year - (HRK)

New investments in the transmission system that have been put in use in the regulatory year (HRK)	T 2017.	T+1 2018.	T+2 2019.	T+3 2020.	T+4 2021.
	75.821.954	128.089.120	409.050.000	31.650.000	39.550.000

Source: Plinacro Ltd., Request for determining the amounts of tariff items for gas transmission for the regulatory period 2017 – 2021, February 2017, Decision by HERA dtd 7 December 2018; model for calculating tariff items for gas transmission

30. 1 (b)(iii) 2 Cost of capital and its calculation methodology

(Source: Methodology for the determination of the tariff items for gas transmission ("Official Gazette" nos. 48/18 and 58/18), Article 14.

(1) WACC amount for the regulatory period is calculated according to the following formula:

$$WACC = \frac{r_e \times \frac{E}{E+D} + r_d \times \frac{D}{E+D}}{1-P}$$

where:

WACC – WACC amount for the regulatory period (%),

r_e - rate of return on equity (%),

$E/(E+D)$ - share of equity in total capital structure (%),

r_d - rate of return on debt (%),

$D/(E+D)$ - share of debt in total capital structure (%),

P - income tax rate (%).

(2) As a target share in the capital structure for the calculation of WACC for the regulatory period referred to in paragraph 1 of this Article, the share of equity in the amount of 50% and the share of debt in the amount of 50% are prescribed.

(3) The rate of return on equity is established by applying the model relying on the capital asset pricing model (CAPM model) according to the following formula:

$$r_e = r_f + \beta \times (r_m - r_f)$$

where:

r_e - rate of return on equity (%),

r_f - risk-free rate of return (%),

r_m - rate of return on diversified market portfolio (%),

$r_m - r_f$ - market risk premium (%),

β - variability coefficient of yield on operator's shares in relation to average variability of yield on market portfolio.

(4) The risk-free rate of return (r_f) is determined on the basis of the average nominal interest rate of the last three emissions of bonds with maturity of ten years or more issued by the Republic of Croatia.

(5) The variability coefficient of yield on operator's shares in relation to average variability of yield on market portfolio (β) reflects the investment risk level in the

energy activity of gas transmission in relation to the investment risk on the market, and can be established on the basis of the comparative analysis of the variability coefficients of yield on gas system operator's shares applied in the regulatory mechanisms of European countries.

(6) The market risk premium ($r_m - r_f$) reflects an additional yield of investor above the risk-free rate of return for taking over the investment risk on the capital market, and it is determined by a comparative analysis of market risk premium, based on publicly available data from the relevant international studies and databases.

(7) The rate of return on debt (r_d) equals to the weighted average interest rate on investment loans used by the operator to finance regulated assets, whereby the interest rate on investment loans is taken into account up to the level of rationally and prudentially borrowed funds, that is, up to the amount of the reference interest rate.

Table 7 Elements for determining WACC for the regulatory period

WACC ELEMENTS	
Rate of return on equity - r_e (%)	5,34%
Risk-free rate of return - r_f (‰)	2,75%
Variability coefficient of yield on operator's shares in relation to	0,54
Market risk premium - $r_m - r_f$ (%)	4,80%
Rate of return on diversified market portfolio - r_m (‰)	7,55%
Share of equity in total capital structure (%) - $E/(E+D)$ (%)	50,00%
Share of debt in total capital structure	3,92%
Share of debt in total capital structure (%) - $D/(E+D)$ (%)	50,00%
Income tax rate - P (%)	18,00%
Planned amount of WACC for the regulatory period - WACCP (%)	5,22%

Source: Decision by HERA dtd 17 March 2017; Table 7.

30. 1 (b)(iii) 3 Capital expenditures

Source: Methodology for the determination of the tariff items for gas transmission, ("Official Gazette" nos. 48/18 and 58/18), Article 11

- a) Methodologies to determine the initial value of the assets
It is recorded per acquisition cost in accordance with the International accounting standard 16 and the International accounting standard 38.

- b) Methodologies to re-evaluate the assets
Measurement after recognition is carried out in accordance with the cost model in compliance with art. 30 of the International accounting standard 16 and article 74 of the International accounting standard 38.

- c) Explanations of the evolution of the value of the assets
Changes in the asset value are recorded on the occasion of new purchases, state aid receiving, expenses and when calculating depreciation.

- d) Depreciation period and the amounts per asset type.

The depreciation of regulated assets is calculated using the linear method by applying annual depreciation rates established according to the expected asset life, in line with the principles of accounting standards.

The expected long-term tangible asset life in the category of gas pipelines, measuring-regulation stations and office buildings is at least 35 years.

The basis for depreciation calculation is the purchase accounting value of fixed assets whose net accounting value on the last day of regulatory year t-1 is in accordance with international accounting standards.

Pursuant to art. 13 para 6 the methodology stipulates that the reasonable value of long-term tangible and intangible assets in the function of gas transmission, reduced by grants for financing the development of the transmission system, may be determined by HERA based on analysis of economic efficiency of the existing assets of the operator, as well as of a comparative analysis of costs and efficiency of business operations of transmission system operators in the neighbouring countries. Accordingly, HERA has conducted the analysis economic efficiency of the existing long-term tangible and intangible assets, i.e. regulated assets in compliance with the valid Decision, where the utilisation of transmission system capacity was used as a key parameter. The utilisation of transmission system capacity represents a relevant indicator of economic reasonability of funds invested in long-term assets, based on which depreciation is calculated and yield from regulated assets, which are the elements for the calculation of the allowed revenue.

Reasonable value of regulated assets is calculated as a share in the total value of regulated assets by applying a linear function according to which reasonable value of regulated assets changed depending on the utilisation of the transmission system capacity.

Applied annual depreciation rate and amount of annual depreciation for years of regulatory period have been shown in Table 8.

Table 8 Depreciation of regulated assets for years of the regulatory period

Regulatory year 2017 (T)			
No.	Structure of regulated assets	Applied annual depreciation rate (%)	Amount of annual depreciation (HRK)
1.	Tangible assets		131.616.340,98
1.1.	Buildings		105.039.042,51
	<i>Gas pipelines, MRSs, office buildings</i>	2,85%	104.968.596,84
	Other buildings. Barracks and garages.	10%	70.445,67
1.2.	Facilities and equipment		26.577.298,47
2.	Intangible assets	20; 25%	10.579.906,14
TOTAL (1.+2.)		-	142.196.247,12

Regulatory year 2018 (T+1)			
No.	Structure of regulated assets	Applied annual depreciation rate (%)	Amount of annual depreciation (HRK)
1.	Tangible assets		95.896.416,04
1.1.	Buildings		109.577.492,17
	<i>Gas pipelines, MRSs, office buildings</i>	2,85%	109.507.046,50
	Other buildings. Barracks and garages.	10%	70.445,67
1.2.	Facilities and equipment		21.071.324,74
2.	Intangible assets	20; 25%	5.324.805,11
TOTAL (1.+2.)		-	135.973.622,03

Regulatory year 2019 (T+2)			
No.	Structure of regulated assets	Applied annual depreciation rate (%)	Amount of annual depreciation (HRK)
1.	Tangible assets		106.913.442,62
1.1.	Buildings		75.836.234,55
	<i>Gas pipelines, MRSs, office buildings</i>	2,85%	75.805.832,16
	Other buildings. Barracks and garages.	10%	30.402,38
1.2.	Facilities and equipment		31.077.208,07
2.	Intangible assets	20; 25%	5.342.388,34
TOTAL (1.+2.)		-	112.255.830,95

Regulatory year 2020 (T+3)			
No.	Structure of regulated assets	Applied annual depreciation rate (%)	Amount of annual depreciation (HRK)
1.	Tangible assets		117.826.062,21
1.1.	Buildings		80.725.304,20
	<i>Gas pipelines, MRSs, office buildings</i>	2,85%	80.724.514,20
	Other buildings. Barracks and garages.	10%	790,00
1.2.	Facilities and equipment		37.100.758,01
2.	Intangible assets	20; 25%	7.610.626,01
TOTAL (1.+2.)		-	125.436.688,22

Regulatory year 2021 (T+4)			
No.	Structure of regulated assets	Applied annual depreciation rate (%)	Amount of annual depreciation (HRK)
1.	Tangible assets		117.007.017,42
1.1.	Buildings		80.725.304,20
	<i>Gas pipelines, MRSs, office buildings</i>	2,85%	80.724.514,20
	Other buildings. Barracks and garages.	10%	790,00
1.2.	Facilities and equipment		36.281.713,22
2.	Intangible assets	20; 25%	6.058.676,37
TOTAL (1.+2.)		-	123.065.693,79

Source: Decision by HERA dtd 7 March 2017; Decision by HERA dtd 15 December 2017; Decision by HERA dtd 7 December 2018;

30. 1 (b)(iii) 4 Operational expenditures

Source: Methodology for the determination of the tariff items for gas transmission (“Official Gazette“ nos. 48/18 and 58/18), Article 10

(1) Operating expenses (hereinafter: OPEX) constitute all reasonable operating expenses related to the gas transmission energy activity and do not cover depreciation costs.

(2) OPEX consists of the reasonable amount of material expenses, service expenses, personnel expenses, other operating expenses and other business expenditures.

(3) OPEX also includes gas procurement costs necessary for maintaining linepack, operating consumption, and for covering allowed operating losses and differences in measuring.

(4) The allowed operating losses and differences in measuring amount to maximum 0,3% of the total gas quantity at the transmission system entry points determined based on the measured data on the transmission system capacity use.

(5) OPEX does not include operating expenses that the Agency considers non-eligible for performing the energy activity of gas transmission.

(6) Non-eligible expenses referred to in paragraph 5 of this Article are as follows:

- Cost of gas procurement to cover the allowed operating losses and differences in measuring, in the amount exceeding the product of allowed gas losses and differences in measuring referred to in paragraph 4 hereof and the reasonable average procurement price of gas, value adjustment, in the amount exceeding 1% of total operating revenue of the operator,
- advertising services, sponsorships and costs of fairs, in the total amount,
- costs of internal representation and advertising, in the total amount,
- annual awards to the board members, in the total amount,
- life insurance premium costs, in the total amount,
- provisions, in the total amount,
- donations, in the total amount,
- penalties, compensations and costs from the contract, in the total amount, and
- expenditures – write-off of tangible and intangible assets, if the same assets are replaced by new assets that are entered into regulated assets.

Anticipated OPEX amounts for the years of the regulatory period have been shown in Table 9.

Table 9 The amount of OPEX for years of a regulatory period

<i>The year of the regulatory period</i>	T 2017.	T+1 2018.	T+2 2019.	T+3 2020.	T+4 2021.
<i>OPEX (HRK)</i>	156.119.865	156.588.536	158.058.302	159.686.535	160.317.281

Source: Decision by HERA dtd 17 March 2017; Table 4, Decision by HERA dtd 15 December 2017, Table 3

30. 1 (b)(iii) 5 Incentive mechanisms and efficiency targets

1. Achieved savings

Source: Methodology for the determination of the tariff items for gas transmission, ("Official Gazette" nos. 48/18 and 58/18), Article 7

Achieved savings represent the difference between the allowed amount of operating expenses and the incurred amount of operating expenses in a year on the basis of which the base amount of reasonable operating expenses of business activities is determined. The achieved savings are shared in a way that the operator keeps 50% of the achieved savings.

2. Efficiency coefficient X

Source: Methodology for the determination of the tariff items for gas transmission, ("Official Gazette" nos. 48/18 and 58/18), Article 10, para. 7

(7) The planned OPEX amount for the first year of a regulatory period is established as follows:

$$OPEX^P_T = OPEX^{DOZ}_{T-2} \times (1 + CPI^P_{T-1} - X_{T-1}) \times (1 + CPI^P_T - X)$$

where:

- OPEX_T^P - planned OPEX for regulatory year T (HRK),
- OPEX_{T-2}^{DOZ} - allowed base amount of OPEX for the year preceding year T-1 (hereinafter: year T-2) (HRK),
- CPI_{T-1}^P - planned consumer price index for year T-1,
- X_{T-1} - efficiency coefficient for year T-1,
- CPI_T^P - planned consumer price index for regulatory year T,
- X - efficiency coefficient for a regulatory period.

X = 0,01

For the calculation of the planned OPEX for the years of the regulation period 2017-2021 HERA applied efficiency coefficient (X) which equals 0,01.

Source: Decision by HERA of 17 March 2017, page 7

30. 1 (b)(iii) 6 Inflation indices

Table 10 Index growth projections of consumer prices of the Republic of Croatia

Index growth projections of consumer prices (%)	T 2017.	T+1 2018.	T+2 2019.	T+3 2020.	T+4 2021.
	1,20%	1,10%	1,30%	1,40%	1,40%

Source: Decision by HERA dtd 17 March 2017; Pages 6,7; Decision by HERA dtd 7 December 2018; model for calculating tariff items for gas transmission

30. 1 (b)(iv) Revenue from the transmission services

Table 11 Revenue from the transmission services

<i>The year of the regulatory period</i>	<i>T 2017.</i>	<i>T+1 2018.</i>	<i>T+2 2019.</i>	<i>T+3 2020.</i>	<i>T+4 2021.</i>
DP _α ^P _t - adjusted allowed revenue in a regulatory year t (HRK)	451.673.194	453.687.009	386.293.614	393.846.620	401.547.305
DP _{KAP} - total allowed revenue based on a tariff item for the capacity (HRK)	406.505.875	408.318.308	347.664.253	354.461.958	361.392.575
DP _u - allowed revenue at transmission system entries in a regulatory year t (HRK)	284.554.112	285.822.815	243.364.977	248.123.370	252.974.802
DP ₁ - allowed revenue at transmission system exits in a regulatory year t (HRK)	121.951.762	122.495.492	104.299.276	106.338.587	108.417.772
DP _{KOL} - total allowed revenue based on a tariff item for the gas quantity (HRK)	45.167.319	45.368.701	38.629.361	39.384.662	40.154.731

Source: Decision by HERA dtd 17 March 2017; Table 11, Decision by HERA dtd 15 December 2017; Table 9, Decision by HERA dtd 7 December 2018; Table 9.

30. 1 (b)(v) 1 Capacity-commodity split, meaning the breakdown between the revenue from capacity-based transmission tariffs and the revenue from commodity-based transmission tariffs

Source: Methodology for determining the amount of tariff items for gas transmission ("Official Gazette" nos. 48/18 and 58/18), article 25

The allowed revenue is divided to the part achieved from the tariff item for capacity and to the part achieved from the tariff item for gas quantity according to the following formulas:

$$DP_{KAP} = 0,9 \times DP_{\alpha t}^P \quad i \quad DP_{KOL} = 0,1 \times DP_{\alpha t}^P$$

DPKAP - total allowed revenue based on a tariff item for the capacity in a regulatory year t (HRK),

DP α Pt - adjusted allowed revenue in a regulatory year t (HRK),

DPKOL - total allowed revenue based on a tariff item for the gas quantity in a regulatory year t (HRK).

30. 1 (b)(v) 2 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

Source: Methodology for determining the amount of tariff items for gas transmission ("Official Gazette" nos. 48/18 and 58/18), article 27.

Total allowed revenue on the basis of the tariff item for the capacity in the regulatory year t (DP_{KAP}) is divided to the part achieved at the transmission system entries and the part achieved at transmission system exits according to the following formula:

$$DP_U = 0,7 \times DP_{KAP} \quad i \quad DP_I = 0,3 \times DP_{KAP}$$

DP_U - allowed revenue at transmission system entries in the regulatory year t (HRK),

DP_{KAP} - allowed revenue based on the tariff item for the capacity in the regulatory year t (HRK),

DP_I - allowed revenue at transmission system exits in the regulatory year t (HRK).

30. 1 (b)(v) 3 Intra-system/cross-system split, meaning the breakdown between the revenue from intra-system network use at both entry points and exit points and the revenue from cross-system network use at both entry points and exit points calculated as set out in Article 5

The revenue from the intra-system network use – 100 %

The revenue from cross-system network use – 0 %

Source: Plinacro d.o.o

30. 1 (b)(vi) 1 The actually obtained revenue, the under- or over-recovery of the allowed revenue and the part thereof attributed to the regulatory account and, if applicable, sub-accounts within such regulatory account

HERA has reviewed and analysed the documents and data submitted by the energy entity Plinacro in its Request and the supplement to the Request, and within regular annual reporting to HERA in the previous years, and HERA carried out a regular revision of allowed revenue stipulated by article 6 of the Methodology.

Table 12 Part of difference between revised allowed revenue and achieved revenue in the previous regulatory period that has been transferred to a current regulatory period

	year of regulatory period	2014	2015	2016
a	OPEX (kn)	170.517.444	157.856.284	156.119.865
b	Depreciation (kn)	182.227.224	154.689.657	136.606.725
c	Return on regulatory assets (kn)	192.821.210	187.179.830	181.792.114
d	Revenue from fees for connecting to the transmission system and for the increase of connection capacity (kn)	52.341	9.208	4.870.304
e	Revenue from non-standard services (kn)	3.364.176	1.158.527	312.558
f	Other business revenues (kn)	10.336.978	10.076.543	7.289.263
1	REVISED ALLOWED REVENUE (kn) (a+b+c-(d+e+f))	531.812.383	488.481.493	462.046.579
1a	Nett present value of REVISED ALLOWED REVENUES for 2014., 2015. and 2016., according to the value from the beginning of 2014. (kn)	1.327.493.974		
2	OBTAINED REVENUE (kn)	504.813.942	439.186.692	506.403.910
2a	Nett present value of OBTAINED REVENUES for 2014., 2015. and 2016., according to the value from the beginning of 2014. (kn)	1.295.393.110		
3	DIFFERENCE (kn) 1a-2a	32.100.864		
2. regulatory period	Part of difference (3), added in the calculation of allowed revenue for regulatory year 2017.	0		
	Part of difference (3), added in the calculation of allowed revenue for regulatory year 2018.	10.674.297		
	Part of difference (3), added in the calculation of allowed revenue for regulatory year 2019.	11.300.972		
	Part of difference (3), added in the calculation of allowed revenue for regulatory year 2020.	11.964.438		
	Part of difference (3), added in the calculation of allowed revenue for regulatory year 2021.	12.666.856		

Source: Decision by HERA dtd 15 December 2017, Table 2

30. 1 (b)(vi) 2 The reconciliation period and the incentive mechanisms implemented

The reconciliation period – 5 years

Source: Methodology for determining the amount of tariff items for gas transmission (“Official Gazette” nos. 48/18 and 58/18), article 16 para. 1

In the year following the last year of the regulatory period a regular audit of the allowed revenue is carried out to determine the differences between the achieved revenue and the revised allowed revenue for the same regulatory period.

30. 1 (b) (vii) The intended use of the auction premium

Source: Methodology for determining the amount of tariff items for gas transmission (“Official Gazette” nos. 48/18 and 58/18), article 22 item 2

The revenues from auction premiums have been included in the total achieved revenue and they are subject to the audit of the allowed revenue.

30. 1. (c) INFORMATION ON TRANSMISSION AND NON-TRANSMISSION TARIFFS

30. 1 (c) (i) Commodity-based transmission tariffs

Table 13 Commodity-based transmission tariffs at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff item for the gas quantity at transmission system exits	TK	Tariff item for gas quantity	0,0018	0,0018	0,0015	0,0015	0,0014	HRK/kWh

Source: Decision by HERA dtd 17 March 2017; Table 16; Decision by HERA dtd 15 December 2017; Table 10, Decision by HERA dtd 7 December 2018; Table 10.

Table 13a Commodity-based transmission tariffs at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff item for the gas quantity at transmission system exits	TK	Tariff item for gas quantity	0,0016	0,0016	0,0014	0,0014	0,0013	HRK/kWh

30. 1 (c)(ii) Non-transmission tariffs for the non-standard services as per article 4 item 4

A Price list for the non-standard services of the transmission system operator for the second regulatory period has been drawn up in compliance with the Methodology for determining the price of the non-standard services for gas transmission, gas distribution, gas storage and a public service of gas supply ("Official Gazette" 158/13, 91/16, 116/16, 48/18) and the Decision by HERA on the average prices of a working hour for the providers of non-standard services in gas sector for the second regulatory period 2017-2021 of 29 November 2017.

Table 13 A Price list for the non-standard services of the transmission system operator for the regulatory period 2017-2021

PRICE LIST FOR NON-STANDARD SERVICES of the transmission system operator for the regulatory period 2017 - 2021				
Non-standard service			Price of a non- standard service excl. VAT (HRK)	Price of a non- standard service incl. VAT in the amount of 25% (HRK)
1.	Issuance of Energy approval for the facility or a part of the facility with one billing metering point and the connection capacity of:			
a.	up to 40,000 kWh/h	-	440,94	551,18
b.	from 40,000 to 200,000 kWh/h	-	881,88	1.102,35
c.	over 200,000 kWh/h	-	3.086,58	3.858,23
2.	Drawing up study of extraordinary creation of technical conditions in the transmission system	[1]	PI	PI
3.	Approval for the execution of works in the transmission system protective zone	-	440,94	551,18
4.	Supervision for the execution of works in the transmission system protective zone	[1]	PI	PI
5.	Drawing the positions of the transmission system elements into the maps of the following formats:			
a.	up to B3	-	220,47	275,59
b.	B2 and larger	-	661,41	826,76
6.	Installation and deinstallation of a gas meter and other measuring equipment:			
a.	turbine gas meter and a rotary piston gas meter up to G-65	[2]	440,94	551,18
b.	turbine gas meter and a rotary piston gas meter from G-100 to G-250	[2]	881,88	1.102,35
c.	turbine gas meter and a rotary piston gas meter from G-400 to G-650	[2]	1.322,82	1.653,53
d.	turbine gas meter and a rotary piston gas meter from G-1000 to G-2500	[2]	2.645,64	3.307,05
e.	turbine gas meter and a rotary piston gas meter G-4000 and larger	[2]	3.527,52	4.409,40
f.	mechanical corrector	[2]	1.322,82	1.653,53
g.	electronic corrector	[2]	1.322,82	1.653,53
7.	Installation or deinstallation of the regulation, safety and other equipment:			
a.	regulation equipment up to DN50	[2]	110,24	137,80
b.	regulation equipment from DN65 to DN80	[2]	220,47	275,59
c.	regulation equipment DN100 and larger	[2]	220,47	275,59
d.	other equipment of nominal diameter DN 25 and larger	[3]	PI	PI
8.	Installation or deinstallation of gas meter and other metering equipment with increased number of functions, including the modul for the remote reading	[3]	PI	PI
9.	Dislocation of the billing metering point in case of unauthorised gas consumption	[3]	PI	PI
10.	Dislocation of the gas transmission system elements	[3]	PI	PI
11.	Repair of transmission system elements due to damage or misappropriation which could have been prevented by the user	[3]	PI	PI

12.	Putting gas connection out of function	[3]	PI	PI
13.	Suspension of gas delivery	-	220,47	275,59
14.	Continuation of gas delivery upon elimination of the cause of the restriction or suspension of delivery for which the user is responsible	[4]	220,47	275,59
15.	Testing of gas quality on the request of a system user	[5]	220,47	275,59
16.	Reading of a gas meter status on a special request of a gas supplier:			
a.	without using a remote reading modul	-	22,05	27,56
b.	by using a remote reading modul with the GPRS system	-	17,64	22,05
17.	Control testing of the proper operation of a gas meter and other measuring equipment on the request of the user in the authorised service with the expertise of the State Office for Metrology (DZM) or at an legal person authorised for gas meter attestation	[1]	PI	PI
18.	Temporary change of the exit pressure on the request of the distribution system operator or the end user connected to the transmission system	-	440,94	551,18
19.	Elimination of liquid technological impurities from a device for the extraction of liquid technological impurities	-	440,94	551,18
20.	Supervision of the elimination of liquid technological impurities from a device for the extraction of liquid technological impurities	[1]	PI	PI
21.	Issuance of the authorisation to a legal or natural person for the performance of connection to the transmission system for the period of two years	-	1.102,35	1.377,94
22.	Preparation-completion time	-	110,24	137,80
23.	Registration of trade for a seller on the secondary market	-	440,94	551,18
24.	Registration of trade for a customer on a secondary market	-	661,41	826,76
25.	Fee for the access to the application for a buyer at the secondary market who is not the transmission system user	-	881,88	1.102,35
26.	Monthly fee for the access to the application for a buyer at the secondary market who is not the transmission system user	-	881,88	1.102,35
27.	Fee for the use of interruptible capacity with reduced interruptibility at Croatia-Hungary interconnection	[6]	PI	PI

Source: Decision by HERA on the average prices of a working hour for the providers of non-standard services in the gas sector for the second regulatory period as of 29 November 2016.

30. 1 (c)(iii) The reference prices and other prices applicable at the points other than those referred to in article 29 (points which are not interconnections)

Table 14 The reference prices and other prices applicable at the points other than interconnections at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,PR}	Tariff item for the entry from the production	2,4689	2,4174	1,8572	1,8493	1,8449	HRK/kWh/day
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2743	0,2686	0,2064	0,2055	0,2050	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,HR}	Tariff item for exit in Croatia	1,0457	0,9644	0,7641	0,7666	0,7691	HRK/kWh/day
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for the gas quantity at transmission system exits	0,0018	0,0018	0,0015	0,0015	0,0014	HRK/kWh

Source: Decision by HERA dtd 17 March 2017; Table 16, Decision by HERA dtd 15 December 2017; Table 10, Decision by HERA dtd 7 December 2018; Table 10, Decision by HERA dtd 17 December 2019; Table 5.

Table 14a The reference prices and other prices applicable at the points other than interconnections at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,PR}	Tariff item for the entry from the production	2,2245	2,1781	1,6733	1,6662	1,6623	HRK/kWh/day
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2471	0,2420	0,1860	0,1852	0,1847	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,HR}	Tariff item for exit in Croatia	0,9422	0,8689	0,6885	0,6907	0,6930	HRK/kWh/day
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for the gas quantity at transmission system exits	0,0016	0,0016	0,0014	0,0014	0,0013	HRK/kWh

2 INFORMATION WITH REGARD TO THE TRANSMISSION TARIFFS

30. 2 (a)(i) The difference in the level of transmission tariffs for the same type of transmission service applicable for the prevailing tariff period and for the tariff period for which the information is published

Table 15 The difference in the level of transmission tariffs for the same type of transmission service applicable for the years of the regulatory period at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,IN}	Tariff item for the entry at an interconnection	2,7432	2,6860	2,0635	2,0548	2,0499	HRK/kWh/day
	T _{U,PR}	Tariff item for the entry from the production	2,4689	2,4174	1,8572	1,8493	1,8449	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2743	0,2686	0,2064	0,2055	0,2050	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,IN}	Tariff item for the exit at an interconnection	6,9710	6,8546	5,0941	5,1107	5,1270	HRK/kWh/day
	T _{I,HR}	Tariff item for the exit in Croatia	1,0457	0,9644	0,7641	0,7666	0,7691	
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0018	0,0018	0,0015	0,0015	0,0014	HRK/kWh

Source: Decision by HERA dtd 17 March 2017; Table 16, Decision by HERA dtd 15 December 2017; Table 10, Decision by HERA dtd 7 December 2018; Table 10, Decision by HERA dtd 17 December 2019; Table 5.

Table 15a The difference in the level of transmission tariffs for the same type of transmission service applicable for the years of the regulatory period at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tarifne stavke bez PDV-a					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,IN}	Tariff item for the entry at an interconnection	2,4716	2,4201	1,8592	1,8514	1,8470	HRK/kWh/day
	T _{U,PR}	Tariff item for the entry from the production	2,2245	2,1781	1,6733	1,6662	1,6623	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2471	0,2420	0,1860	0,1852	0,1847	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,IN}	Tariff item for the exit at an interconnection	6,2809	6,1760	4,5898	4,6047	4,6194	HRK/kWh/day
	T _{I,HR}	Tariff item for the exit in Croatia	0,9422	0,8689	0,6885	0,6907	0,6930	
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0016	0,0016	0,0014	0,0014	0,0013	HRK/kWh

30. 2 (a)(ii) The estimated difference in the level of transmission tariffs for the same type of transmission service applicable for the tariff period for which the information is published and for each tariff period within the remainder of the regulatory period

Table16 The estimated difference in the level of transmission tariffs for the same type of transmission service applicable for the years of the regulatory period at NCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,IN}	Tariff item for the entry at an interconnection	2,7432	2,6860	2,0635	2,0548	2,0499	HRK/kWh/day
	T _{U,PR}	Tariff item for the entry from the production	2,4689	2,4174	1,8572	1,8493	1,8449	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2743	0,2686	0,2064	0,2055	0,2050	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,IN}	Tariff item for the exit at an interconnection	6,9710	6,8546	5,0941	5,1107	5,1270	HRK/kWh/day
	T _{I,HR}	Tariff item for the exit in Croatia	1,0457	0,9644	0,7641	0,7666	0,7691	
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0018	0,0018	0,0015	0,0015	0,0014	HRK/kWh

Source: Decision by HERA dtd 17 March 2017; Table 16, Decision by HERA dtd 15 December 2017; Table 10, Decision by HERA dtd 7 December 2018; Table 10, Decision by HERA dtd 17 December 2019; Table 5.

Table16a The estimated difference in the level of transmission tariffs for the same type of transmission service applicable for the years of the regulatory period at GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tarifne stavke bez PDV-a					Measuring unit
			T	T+1	T+2	T+3	T+4	
			2017.	2018.	2019.	2020.	2021.	
Tariff items for the contracted firm capacity at an annual level for the transmission system entries	T _{U,IN}	Tariff item for the entry at an interconnection	2,4716	2,4201	1,8592	1,8514	1,8470	HRK/kWh/day
	T _{U,PR}	Tariff item for the entry from the production	2,2245	2,1781	1,6733	1,6662	1,6623	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2471	0,2420	0,1860	0,1852	0,1847	
Tariff items for the contracted firm capacity at an annual level for the transmission system exits	T _{I,IN}	Tariff item for the exit at an interconnection	6,2809	6,1760	4,5898	4,6047	4,6194	HRK/kWh/day
	T _{I,HR}	Tariff item for the exit in Croatia	0,9422	0,8689	0,6885	0,6907	0,6930	
Tariff item for the gas quantity at transmission system exits	T _K	Tariff item for gas quantity	0,0016	0,0016	0,0014	0,0014	0,0013	HRK/kWh

30. 2 (b) At least a simplified tariff model, updated regularly, accompanied by the explanation of how to use it, enabling network users to calculate the transmission tariffs applicable for the prevailing tariff period and to estimate their possible evolution beyond such tariff period

Simplified tariff model can be downloaded on the following link:

[Simplified tariff model](#)

Change the capacity and commodity data to calculate tariffs (unlocked cells)!