

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, 20 September 2022

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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. Reserve prices for standard capacity products for firm capacity for 2022/2023, at GCV

Interconnection Entry/Exit	Capacity Product	The period from	The period to	Price kn/kWh/d GCV	Price EUR/kWh/d GCV
Entry	Yearly	1.1.2022	1.1.2023	2,2871	0,3036
Entry	Yearly	1.1.2023	1.1.2024	2,3592	0,3131
Entry	Quarterly	1.10.2022	1.1.2023	0,8935	0,1186
Entry	Quarterly	1.1.2023	1.4.2023	0,9598	0,1274
Entry	Quarterly	1.4.2023	1.7.2023	0,4618	0,0613
Entry	Quarterly	1.7.2023	1.10.2023	0,4192	0,0556
Entry	Monthly	1.10.2022	1.11.2022	0,2922	0,0388
Entry	Monthly	1.11.2022	1.12.2022	0,3439	0,0456
Entry	Monthly	1.12.2022	1.1.2023	0,4350	0,0577
Entry	Monthly	1.1.2023	1.2.2023	0,4536	0,0602
Entry	Monthly	1.2.2023	1.3.2023	0,3291	0,0437
Entry	Monthly	1.3.2023	1.4.2023	0,3039	0,0403
Entry	Monthly	1.4.2023	1.5.2023	0,2017	0,0268
Entry	Monthly	1.5.2023	1.6.2023	0,1620	0,0215
Entry	Monthly	1.6.2023	1.7.2023	0,1263	0,0168
Entry	Monthly	1.7.2023	1.8.2023	0,1338	0,0178
Entry	Monthly	1.8.2023	1.9.2023	0,1525	0,0202
Entry	Monthly	1.9.2023	1.10.2023	0,1652	0,0219
Entry	Daily	1.10.2022	1.11.2022	0,0181	0,0024
Entry	Daily	1.11.2022	1.12.2022	0,0221	0,0029
Entry	Daily	1.12.2022	1.1.2023	0,0269	0,0036
Entry	Daily	1.1.2023	1.2.2023	0,0281	0,0037
Entry	Daily	1.2.2023	1.3.2023	0,0226	0,0030
Entry	Daily	1.3.2023	1.4.2023	0,0188	0,0025
Entry	Daily	1.4.2023	1.5.2023	0,0130	0,0017
Entry	Daily	1.5.2023	1.6.2023	0,0101	0,0013
Entry	Daily	1.6.2023	1.7.2023	0,0081	0,0011
Entry	Daily	1.7.2023	1.8.2023	0,0083	0,0011
Entry	Daily	1.8.2023	1.9.2023	0,0095	0,0013
Entry	Daily	1.9.2023	1.10.2023	0,0106	0,0014
Entry	Within-day	1.10.2022	1.11.2022	0,0181	0,0024
Entry	Within-day	1.11.2022	1.12.2022	0,0221	0,0029
Entry	Within-day	1.12.2022	1.1.2023	0,0269	0,0036
Entry	Within-day	1.1.2023	1.2.2023	0,0281	0,0037
Entry	Within-day	1.2.2023	1.3.2023	0,0226	0,0030
Entry	Within-day	1.3.2023	1.4.2023	0,0188	0,0025
Entry	Within-day	1.4.2023	1.5.2023	0,0130	0,0017
Entry	Within-day	1.5.2023	1.6.2023	0,0101	0,0013
Entry	Within-day	1.6.2023	1.7.2023	0,0081	0,0011
Entry	Within-day	1.7.2023	1.8.2023	0,0083	0,0011
Entry	Within-day	1.8.2023	1.9.2023	0,0095	0,0013
Entry	Within-day	1.9.2023	1.10.2023	0,0106	0,0014

Source: Calculation of prices according to the amount of tariff items in the Decision on the amount of tariff items for gas transport from 19 September 2022 (OG 108/2022) and application of Articles 31 and 32 of the Methodology for determining the amount of tariff items for gas transport (OG 79/2020 and 36/2021)

Interconnection Entry/Exit	Capacity Product	The period from	The period to	Price kn/kWh/d GCV	Price EUR/kWh/d GCV
Exit	Yearly	1.1.2022	1.1.2023	1,3312	0,1767
Exit	Yearly	1.1.2023	1.1.2024	1,3408	0,1780
Exit	Quarterly	1.10.2022	1.1.2023	0,5201	0,0690
Exit	Quarterly	1.1.2023	1.4.2023	0,9598	0,1274
Exit	Quarterly	1.4.2023	1.7.2023	0,4618	0,0613
Exit	Quarterly	1.7.2023	1.10.2023	0,4192	0,0556
Exit	Monthly	1.10.2022	1.11.2022	0,1701	0,0226
Exit	Monthly	1.11.2022	1.12.2022	0,2002	0,0266
Exit	Monthly	1.12.2022	1.1.2023	0,2532	0,0336
Exit	Monthly	1.1.2023	1.2.2023	0,2578	0,0342
Exit	Monthly	1.2.2023	1.3.2023	0,1870	0,0248
Exit	Monthly	1.3.2023	1.4.2023	0,1727	0,0229
Exit	Monthly	1.4.2023	1.5.2023	0,1147	0,0152
Exit	Monthly	1.5.2023	1.6.2023	0,0921	0,0122
Exit	Monthly	1.6.2023	1.7.2023	0,0718	0,0095
Exit	Monthly	1.7.2023	1.8.2023	0,0760	0,0101
Exit	Monthly	1.8.2023	1.9.2023	0,0867	0,0115
Exit	Monthly	1.9.2023	1.10.2023	0,0939	0,0125
Exit	Daily	1.10.2022	1.11.2022	0,0105	0,0014
Exit	Daily	1.11.2022	1.12.2022	0,0128	0,0017
Exit	Daily	1.12.2022	1.1.2023	0,0157	0,0021
Exit	Daily	1.1.2023	1.2.2023	0,0159	0,0021
Exit	Daily	1.2.2023	1.3.2023	0,0129	0,0017
Exit	Daily	1.3.2023	1.4.2023	0,0107	0,0014
Exit	Daily	1.4.2023	1.5.2023	0,0074	0,0010
Exit	Daily	1.5.2023	1.6.2023	0,0057	0,0008
Exit	Daily	1.6.2023	1.7.2023	0,0046	0,0006
Exit	Daily	1.7.2023	1.8.2023	0,0047	0,0006
Exit	Daily	1.8.2023	1.9.2023	0,0054	0,0007
Exit	Daily	1.9.2023	1.10.2023	0,0060	0,0008
Exit	Within-day	1.10.2022	1.11.2022	0,0105	0,0014
Exit	Within-day	1.11.2022	1.12.2022	0,0128	0,0017
Exit	Within-day	1.12.2022	1.1.2023	0,0157	0,0021
Exit	Within-day	1.1.2023	1.2.2023	0,0159	0,0021
Exit	Within-day	1.2.2023	1.3.2023	0,0129	0,0017
Exit	Within-day	1.3.2023	1.4.2023	0,0107	0,0014
Exit	Within-day	1.4.2023	1.5.2023	0,0074	0,0010
Exit	Within-day	1.5.2023	1.6.2023	0,0057	0,0008
Exit	Within-day	1.6.2023	1.7.2023	0,0046	0,0006
Exit	Within-day	1.7.2023	1.8.2023	0,0047	0,0006
Exit	Within-day	1.8.2023	1.9.2023	0,0054	0,0007
Exit	Within-day	1.9.2023	1.10.2023	0,0060	0,0008

Source: Calculation of prices according to the amount of tariff items in the Decision on the amount of tariff items for gas transport from 19 September 2022 (OG 108/2022) and application of Articles 31 and 32 of the Methodology for determining the amount of tariff items for gas transport (OG 79/2020 and 36/2021)

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

Reserve prices for firm non-annual standard capacity products are calculated using appropriate multipliers and seasonal factors, the same for all homogeneous groups of points.

Table 2a. Multipliers for firm non-annual standard capacity products

Multipliers	Quarterly	Monthly	Daily and within-day
	1,2	1,3	2,5

Source: Methodology for determining the amount of tariff items for gas transmission (OG 79/2020, Article 31)

Table 2b. Seasonal factor for firm non-annual standard capacity products

Month	Quarterly	Monthly	Daily and within-day
January	1,375	1,7413	1,7413
February	1,375	1,3991	1,3991
March	1,375	1,1666	1,1666
April	0,6542	0,8004	0,8004
May	0,6542	0,6219	0,6219
June	0,6542	0,5011	0,5011
July	0,5875	0,5137	0,5137
August	0,5875	0,5856	0,5856
September	0,5875	0,6553	0,6553
October	1,2917	1,1572	1,1572
November	1,2917	1,4074	1,4074
December	1,2917	1,7226	1,7226

Source: Methodology for determining the amount of tariff items for gas transmission (OG 79/2020, Article 31)

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

Source: Decision on discount, multipliers, and seasonal factors in accordance with the Commission Regulation (EU) 2017/460 of 16 March 2017 establishing network rules on harmonised structures of transmission system tariffs for gas (Class: 310-03/18-02/3, Ur. number: 371-04-19-8); [HERA, May 23, 2019](#)

According to the provisions of Article 13(1) of the Regulation, Regulations 2017/460, for the calculation of the reserve price for non-annual standard capacity products, determined multiplier levels, for quarterly capacity products in the amount of 1.2; monthly capacity products in the amount of 1.3; while a multiplier of 2.5 has been designated for daily and within-daily capacity products.

With a view to comparing multipliers of the multiplier level and seasonal factors determined by the Decision, the coefficients for determining the price of non-annual standard capacity products in the previous Methodology are reduced from monthly to annual level. From the ratio of average product levels of multipliers and seasonal factors and coefficients from the Methodology reduced to an annual level, there is a decrease in the price for non-annual standard capacity products, i.e. a decrease in the cost of leasing short-term capacities compared to the current Methodology, and on average by 13.2%.

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

Source: Decision on discounts, multipliers and seasonal factors pursuant to Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (class: 310-03/18-02/3, File no.: 371-04-19-8); [HERA, 23 May 2019](#)

The calculation of seasonal factors was carried out in compliance with article 15, para. 2 to 6 of the Regulation 2017/460, and it is based on the share of the particular month in the total average realised gas flow quantity for the previous period 2015 – 2017, which is then multiplied by the planned gas flow quantities for the period 2021 – 2026. Average monthly gas flow quantity for the period 2021 -2026, calculated in this way is divided by the total average annual gas quantity of the same period. The resulting share of the monthly gas flow is then multiplied by 12 and the resulting coefficient is potentiated by a *power* factor of 1.3 which, pursuant to article 15, para. 3 clause (e) of the Regulation 2017/460, may be within the range from 0 to 2, and the result of which is a seasonal factor on a monthly level.

Following the performed consultations, HERA accepted the remark by adjusting the projections of gas flow quantities for February so that leap years were taken into account, the result of which was that the seasonal factors for February and November were balanced, thus achieving optimal seasonality of winter months.

Furthermore, a power factor of 1.3 was applied to calculate the seasonal factors determined by this Decision, thus achieving optimal seasonality in the price of short-term products, as opposed to the *power* factor of 1.5, which was applied to calculate seasonal factors in consulting. By reducing this factor, an additional reduction in the cost of leasing monthly and daily capacities in January and December was achieved, while maintaining a sufficient level of seasonality, that is, the difference in the price of monthly and daily lease of capacity in winter months compared to summer months.

The methodology for determining the amount of tariff items for gas transmission prescribes multipliers and seasonal factors in the manner envisaged by Regulation 2017/460. They provide a more favorable lease of short-term capacities for the users of the Croatian transmission system, which at the same time facilitates the efficient use of the gas transmission network capacities.

This applies to different user profiles, from those who has a balanced consumption throughout the year to those that have fluctuations in consumption between the summer and winter months. Therefore, the proposed seasonal factors with the corresponding levels of multipliers, with the precondition of optimizing the booking of the required capacities in accordance with the individual customer portfolio, enable lower financial burden for transmission system users who will book capacities on 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

The reserve price for a standard capacity product for interruptible capacity is equal to the applicable reference or reserve price for the same standard capacity product for the firm capacity, with the application of an ex-post discount for each day when the contracted interruptible capacity is interrupted. The reserve prices are listed previously in Table 1a and Table 1b.

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 annual, quarterly and monthly standard capacity products for interruptible capacity if the corresponding monthly, quarterly or annual standard capacity product for firm capacity is sold with an auction premium, if it is sold out or if it was not offered at all. Plinacro offers a daily capacity product for interruptible capacity if the corresponding standard capacity product for firm capacity is sold out for the next day or if it was not offered at all.

At the moment, and in the last gas year, there was no congestion on the transmission system so there was no contracted interruptible capacity at the relevant points (as of 1 October 2014). The sufficient quantity of firm standard capacity products is available to the users of the transmission system; therefore, the estimate of the probability of interruption is 0. If it is necessary to interrupt the contracted interruptible capacity, the interruption is performed in compliance with the Network Code of the transmission system (link), and the amount of the determined interruption of capacity depends on the condition and availability of transmission capacities of the neighboring transmission systems.

Ex-post discount for the interrupted service of transmission to users who have contracted interruptible capacity is granted for each day in which the interruption occurred, and it is calculated pursuant to the following formula:

$$P_{pr,ex-post} = 3 \times M_d \times SF_d \times \left(\frac{T_{\Omega,i}}{365} \right) \times kap_{pr}$$

- $P_{pr,ex-post}$ – ex-post discount for the interruptible capacity (HRK),
- M_d – multiplier for a standard daily capacity product,
- SF_d – seasonal factor for a standard daily capacity product,
- $T_{\Omega,i}$ – reference price for the relevant entry into or exit from the transmission system (HRK/kWh/day),
- kap_{pr} – the amount of the determined interruption in capacity which presents partial or total amount of the contracted interruptible capacity at an individual entry into or exit from the transmission system for an individual user in an individual gas day (kWh/day).

Source: Methodology for determining the amount of tariff items for gas transmission (OG 79/2020, article 33)

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

Information about technical capacity can be found on this link:

<https://172.18.105.158/wps/portal/Home/SukapPublishing>

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

Table 3a Planned contracted firm capacities at an annual level (kWh/day) at NCV

Group of entries/exits	Sign	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
Entry at interconnections	KAP _{U,IN}	12.606.792	0	0	7.000.000	8.000.000
Entry from the production	KAP _{U,PR}	16.997.230	15.817.400	15.153.000	13.354.800	10.237.700
Entry from the gas storage system	KAP _{U,SK}	33.302.245	49.532.231	49.532.231	49.532.231	49.532.231
Entry from the LNG terminal	KAP _{U,UPP}	53.733.169	66.814.184	63.283.694	52.673.965	53.644.938
Exit at interconnections	KAP _{I,IN}	11.157.123	9.363.568	7.575.039	419.430	0
Exit in Croatia	KAP _{I,HR}	76.278.680	79.198.061	79.108.270	81.425.299	80.777.157

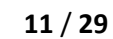
Source: Decision by HERA dtd 28 December 2020, Table 18

Table 3b Planned contracted firm capacities at an annual level (kWh/day) at GCV

Group of entries/exits	Sign	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
Entry at interconnections	KAP _{U,IN}	13.992.000	0	0	7.769.145	8.879.023
Entry from the production	KAP _{U,PR}	18.864.850	17.555.383	16.817.980	14.822.198	11.362.597
Entry from the gas storage system	KAP _{U,SK}	36.961.426	54.974.729	54.974.729	54.974.729	54.974.729
Entry from the LNG terminal	KAP _{U,UPP}	59.637.257	74.155.587	70.237.174	58.461.670	59.539.332
Exit at interconnections	KAP _{I,IN}	12.383.044	10.392.417	8.407.368	465.516	0
Exit in Croatia	KAP _{I,HR}	84.660.022	87.900.179	87.800.522	90.372.141	89.652.782

Calculated at GCV based on the previous Table 3a

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:

<https://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 4 Allowed revenue of transmission system operator in the regulatory period 2021-2025

<i>The year of the regulatory period</i>	<i>T 2021</i>	<i>T+1 2022</i>	<i>T+2 2023</i>	<i>T+3 2024</i>	<i>T+4 2025</i>
DP _t ^P - planned allowed revenue in a regulatory year t (HRK)	439.334.768	424.975.918	423.848.089	419.523.379	415.378.813

Source: Decision by HERA dtd 28 December 2020, Table 15

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 5 Allowed revenue and the associated elements for the years of the regulatory period

<i>The year of the regulatory period</i>	<i>T 2021</i>	<i>T+1 2022</i>	<i>T+2 2023</i>	<i>T+3 2024</i>	<i>T+4 2025</i>
DP _a ^P _t - adjusted allowed revenue in a regulatory year t (kn)	439.334.768	431.761.487	424.318.754	417.004.320	409.815.972
DPu - allowed revenue at transmission system entries in a regulatory year t (kn)	263.600.861	259.056.892	254.591.252	250.202.592	245.889.583
DP ₁ - allowed revenue at transmission system exits in a regulatory year t (kn)	175.733.907	172.704.595	169.727.502	166.801.728	163.926.389

Source: Decision by HERA dtd 28 December 2020, Table 17

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" no. 79/20), Article 14

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 6 Planned average amount of regulated funds for the years of the regulation period 2021-2025

RO prospective (kn) - average amount of regulated funds	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
	2.638.429.670	2.520.912.201	2.415.819.611	2.304.879.002	2.192.711.475

Source: Decision by HERA dtd 28 December 2020; Table 12

Table 7 New investments in the transmission system that are put into use in the years of the regulation period 2021-2025

New investments in the transport system that are planned to be put into service in the regulatory year - Ipt (kn)	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
	64.518.884	56.213.506	48.819.829	48.200.431	47.334.962

Source: Decision by HERA dtd 28 December 2020; Table 6

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

Source: Methodology for the determination of the tariff items for gas transmission (OG no. 79/20, Article 16)

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

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

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 8 WACC identification elements for the regulatory period

Rate of return on equity -- r_e (%)	4,96%
Risk-free rate of return -- r_f (%)	1,25%
Variability coefficient of yield on operator's shares in relation to average variability of yield on market portfolio -- β	0,72
Market risk premium -- $r_m - r_f$ (%)	5,15%
Rate of return on diversified market portfolio -- r_m (%)	6,40%
Share of equity in total capital structure -- $E/(E+D)$ (%)	50,00%
Rate of return on total capital structure -- r_d (%)	2,35%
Share of debt in total capital structure -- $D/(E+D)$ (%)	50,00%
Income tax rate - P^P (%)	18,00%
Planned amount of WACC for the regulatory period $WACC^P$ (%)	4,20%

Source: Decision by HERA dtd 28 December 2020, Table 14

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

- 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.

Methodology for the determination of the tariff items for gas transmission, (OG no. 79/20) in Article 12 subscribes:

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. 14 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.

HERA calculated the average planned utilisation of output capacity from the transmission system ($ISK_{KAP, IZL}^P$) for years of regulation period representing the ratio of the planned maximum used capacity of output from the transmission system and the total technical capacity of output from the transmission system as follows: 42% in 2021, 42.4% in 2022,

41.7% in 2023, 40.1% in 2024 and 39.8% in 2025, bringing the average utilisation for the third regulatory period years to 41.19%. HERA has established a justified share of the value of regulated funds (RABPOPR) for the years of the 2021-2025 regulation period using the linear function: $RAB_{OPR}^P = 0,4119 + 0,3=0,7119$ or 71,19%.

The applied annual depreciation rate and the amount of annual depreciation through the years of the regulatory period are shown in Table 9.

Table 9 Amortization amounts for the years of the regulation period 2021-2025 .

Amortization (kn)	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
	134.367.182	137.951.363	140.767.152	140.634.328	140.736.119

Source: Decision by HERA dtd 28 December 2020; Table 11

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

Source: Methodology for the determination of the tariff items for gas transmission (OG 79/20, Article 11)

(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.

The planned OPEX amounts for the years of the regulatory period are shown in Table 10.

Table 10 Amount of OPEX for the years of the regulation period 2021-2025

OPEX (kn)	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
	185.957.618	186.325.533	186.878.510	187.433.146	187.989.445

Source: Decision by HERA dtd 28 December 2020; Table 5

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, (OG no. 79/20, Article 8)

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, (OG no. 79/20, Article 11)

(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 is:

- $OPEX^P_T$ - planned OPEX for regulatory year T (HRK),
- $OPEX^{DOZ}_{T-2}$ - allowed base amount of OPEX for the year preceding year T-1 (HRK)
- CPI^P_{T-1} - planned consumer price index for year T-1,
- X_{T-1} - efficiency coefficient for year T-1,
- CPI^P_T - planned consumer price index for regulatory year T,
- X - efficiency coefficient for a regulatory period.

$X = 0,01$

HERA applied an efficiency coefficient (X) of 0.01 for the calculation of the planned OPEX for the years of the regulation period 2021-2025.

Source: HERA decision of 28 December 2020 (class: 310-45/20-02/68, file no.: 371-04-20-10)

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

Table 11 Projections of growth of the Consumer Price Index of the Republic of Croatia

Growth of the Consumer Price Index (%)	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
	0,80%	1,20%	1,30%	1,30%	1,30%

Source: Decision by HERA dtd 28 December 2020; Table 5

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

Table 12 Revenue from the transmission services

The year of the regulatory period	T 2021	T+1 2022	T+2 2023	T+3 2024	T+4 2025
DP_{α}^P - adjusted allowed revenue in a regulatory year t (kn)	439.334.768	431.761.487	424.318.754	417.004.320	409.815.972
DPu - allowed revenue at transmission system entries in a regulatory year t (kn)	263.600.861	259.056.892	254.591.252	250.202.592	245.889.583
DP_1 - allowed revenue at transmission system exits in a regulatory year t (kn)	175.733.907	172.704.595	169.727.502	166.801.728	163.926.389

Source: Decision by HERA dtd 28 December 2020, Table 17

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 (OG no. 79/20, Article 27)

The allowed revenue in the regulatory year t (DP) is divided into the part that is generated at the entrances to the transmission system and the part that is generated at the exits of the transmission system, according to the formulas:

$$DP_U = 0,6 \times DP \quad \text{and} \quad DP_I = 0,4 \times DP$$

DP_U – allowed revenue generated at the entrances to the transmission system in the regulatory year t (HRK),

DP – allowed revenue in the regulatory year t (HRK),

DP_I – allowed revenue generated at the exits to the transmission system 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 %

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 13 - Determining the difference added to the calculation for the years of the third regulatory period 2021-2025

	Year of the regulatory period	2017	2018	2019	2020
a	Operating expenses - OPEX (kn) - revised	156.275.984,50	157.057.364,43	156.743.249,70	156.489.303,70
b	Amortization of regulated funds - A (kn) - revised	127.300.773,18	129.205.005,44	107.373.654,27	121.421.841,69
c	Income from regulated funds - PRO (kn)- revised	157.814.442,58	153.315.236,58	119.519.415,69	132.330.749,29
d	Part of the difference between the revised permitted revenues and revenues generated from the first regulatory period 2014-2016 - PVδ (kn)	0,00	10.674.297,10	11.300.971,96	11.964.438,14
e	Revenues from the connection fee and increase of connecting capacity - PPRIK (kn) - revised	14.917,00	0,00	15.352.960,62	4.605.616,26
f	Revenues from non-standard services - PNU (kn) - revised	689.391,00	67.560,00	124.712,80	2.917.900,00
g	Other operating income - POST(kn) - revised	8.019.281,00	13.414.612,87	12.087.103,84	3.456.190,65
1	REVISED PERMITTED REVENUE (kn) (a+b+c-(d+e+f))	432.667.611,26	436.769.730,68	367.372.514,36	411.226.625,91
1a	Net present value of REVISED PERMITTED REVENUES for 2017-2020 reduced to the value of the beginning of 2017 (kn)	1.456.660.166,94			
2	REVENUES GENERATED (kn) from gas transport generated by the application of tariff items	546.482.601,00	441.497.163,00	331.032.944,56	318.941.784,45
2a	Net present value of revenues for 2017-2020 reduced to the value of the beginning of 2017 (kn)	1.462.606.702,14			
3	DIFFERENCE (kn) 1a-2a	-5.946.535,20			
3. regulacijsko razdoblje	Part of the difference (3), which is added to the calculation of the permitted revenue for the 2021 regulatory year, increased by the approved amount of the difference from the first regulatory period	11.133.192 (-1.533.664+12.666.856)			
	Part of the difference (3), which is added to the calculation of the allowed revenue for the 2022 regulatory year.	-1.613.679,68			
	Part of the difference (3), which is added to the calculation of the allowed revenue for the 2023 regulatory year.	-1.697.870,47			
	Part of the difference (3), which is added to the calculation of the allowed revenue for the 2024 regulatory year.	-1.786.453,75			
	Part of the difference (3), which is added to the calculation of the allowed revenue for the 2025 regulatory year.	-1.879.658,71			

Source: Decision by HERA dtd 28 December 2020, Table 3

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 (OG no. 79/20 and 36/21, article 16)

In the regulatory year T+4, the Agency conducts a regular audit of the allowed revenues for the year T1 and for the previous years of the regulatory period and determines the difference between the revenues generated and the revised allowed revenues 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 (OG no. 79/20 and 36/21, article 22)

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)(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 regulatory period as of 1 October2022 - 31 December 2025:

https://narodne-novine.nn.hr/clanci/sluzbeni/2022_09_108_1600.html

Source: Decision by HERA on the Price list for the non-standard services of the transmission system operator for the third regulatory period as of 1 October2022 - 31 December 2025

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 GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT				Measuring unit
			T+1	T+2	T+3	T+4	
			1.10.-31.12. 2022.	2023.	2024.	2025.	
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	2,2871 (0,3036)	2,3592 (0,3131)	2,4447 (0,3245)	2,4477 (0,3249)	HRK/kWh/day (EUR/kWh/day)
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2287 (0,0304)	0,2359 (0,0313)	0,2444 (0,0324)	0,2448 (0,0325)	
	T _{U,UPP}	Tariff item for the entry from LNG terminal	1,9440 (0,2580)	2,0053 (0,2661)	2,0780 (0,2758)	2,0806 (0,2761)	
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	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	
	T _{I,HR}	Tariff item for the exit in Croatia	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	

Source: https://narodne-novine.nn.hr/clanci/sluzbeni/2022_09_108_1596.html

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 GCV

Type of tariff items	Sign of tariff items	Name of tariff item	Tariff items excl. VAT				Measuring unit
			T+1	T+2	T+3	T+4	
			1.10.-31.12. 2022.	2023.	2024.	2025.	
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	2,2871 (0,3036)	2,3592 (0,3131)	2,4447 (0,3245)	2,4477 (0,3249)	HRK/kWh/day (EUR/kWh/day)
	T _{U,PR}	Tariff item for the entry from the production	2,2871 (0,3036)	2,3592 (0,3131)	2,4447 (0,3245)	2,4477 (0,3249)	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2287 (0,0304)	0,2359 (0,0313)	0,2444 (0,0324)	0,2448 (0,0325)	
	T _{U,UPP}	Tariff item for the entry from LNG terminal	1,9440 (0,2580)	2,0053 (0,2661)	2,0780 (0,2758)	2,0806 (0,2761)	
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	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	
	T _{I,HR}	Tariff item for the exit in Croatia	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	

Source: https://narodne-novine.nn.hr/clanci/sluzbeni/2022_09_108_1596.html

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

Table 16 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	Tariff items excl. VAT				Measuring unit
			T+1	T+2	T+3	T+4	
			1.10.-31.12. 2022.	2023.	2024.	2025.	
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	2,2871 (0,3036)	2,3592 (0,3131)	2,4447 (0,3245)	2,4477 (0,3249)	HRK/kWh/day (EUR/kWh/day)
	T _{U,PR}	Tariff item for the entry from the production	2,2871 (0,3036)	2,3592 (0,3131)	2,4447 (0,3245)	2,4477 (0,3249)	
	T _{U,SK}	Tariff item for the entry from the gas storage system	0,2287 (0,0304)	0,2359 (0,0313)	0,2444 (0,0324)	0,2448 (0,0325)	
	T _{U,UPP}	Tariff item for the entry from LNG terminal	1,9440 (0,2580)	2,0053 (0,2661)	2,0780 (0,2758)	2,0806 (0,2761)	
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	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	
	T _{I,HR}	Tariff item for the exit in Croatia	1,3312 (0,1767)	1,3408 (0,1780)	1,3956 (0,1852)	1,3896 (0,1844)	

Source: https://narodne-novine.nn.hr/clanci/sluzbeni/2022_09_108_1596.html

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:

[Tariff model](#)

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