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Subject: **State aid SA.51983 (2019/N) - KrK LNG Terminal – Croatia**

Madam,

1. PROCEDURE

- (1) Following pre-notification contacts, pursuant to Article 108(3) of the TFEU, on 9 July 2019, Croatia notified to the Commission its intention to provide support to the construction of the LNG terminal located on Krk island, Croatia. On the same date, the Croatian authorities provided a language waiver and agreed that the decision will be adopted in English as authentic language.

2. DESCRIPTION OF THE MEASURE

2.1. Objective and project description

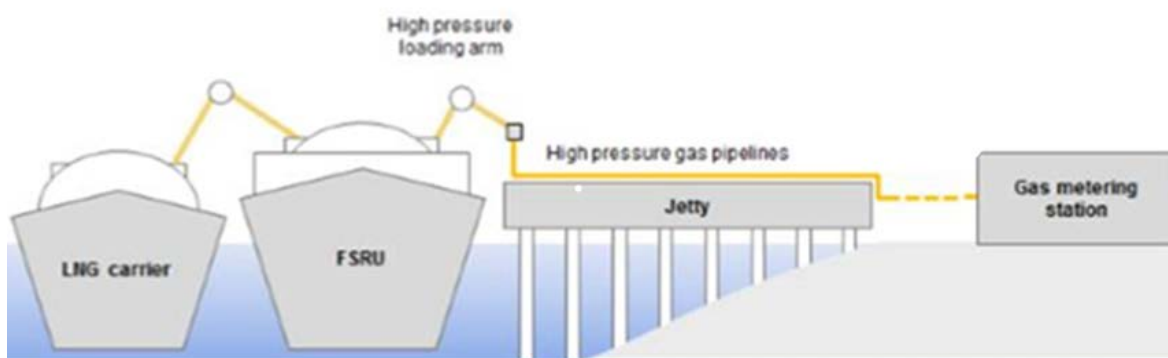
- (2) The project involves the construction and operation of a floating LNG terminal, to be located on the Krk Island, Croatia and fully operational in 2021. This terminal has been included in the lists of European Projects of Common Interest (PCIs)¹, given its strategic importance for the diversification of natural gas supplies into Central and South-East Europe, notably the 1st List (2013), 2nd List (2015) and for the 3rd List – under number 6.5.1- the 2017 list (code LNG-N-82), adopted at the

¹ Annex VII to Regulation (EU) 347/2013, of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009, published in *OJ L 115, 25.4.2013, p. 39–75* as amended by Commission Delegated Regulation (EU) 2018/540 of 23.11.2017, amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest

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end of 2017². The inclusion in the latest PCI list (2017) is linked to the Priority Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe ('NSI East Gas')³.

- (3) The project was awarded EU funds under the Connecting Europe Facility (CEF)-Energy in 2017. In addition, the LNG terminal in Krk has been selected as a key security of supply infrastructure project to ensure security of gas supply for EU consumers as well as part of the Central and South-Eastern European Gas Connectivity – CESEC priority project list (see EU Energy Security Strategy⁴).
- (4) The LNG terminal's promoter is LNG Croatia d.o.o./LLC (LNGH), owned by state controlled companies Hrvatska Elektroprivreda (HEP) d.d. (state owned Croatian utility company active in the gas and electricity markets) and Plinacro d.o.o. (Croatian gas transmission system operator) in the ratio of 85/15 percent each.
- (5) The scope of the LNG terminal project includes a floating storage and regasification unit (FSRU), the land part of the jetty with gas pipeline pigging station for inspection and cleaning of the pipeline, the gas connection pipeline to the Omišalj gas nod as well as the connection point to the gas transmission system, the control building and auxiliary facilities. The connecting high pressure gas pipeline will connect the FSRU and the jetty with the gas transmission system. Specifically it will connect it with evacuation pipeline Omišalj - Zlobin which is as well on the PCI list under code TRA-N-90⁵. The connection gas pipeline passes from the jetty head/high pressure loading arms trough the accessing bridge to the land part of the Terminal and further, to be connected with the gas transmission system in the connection point Omišalj gas nod. The total length of the connection gas pipeline amounts approximately 4.20 km.



² The PCI status was approved in accordance with the TEN-T Regulation (EU) No 1315/2013 on guidelines for the development of the trans-European transport network with the aim of more efficient integration of European energy networks.

³ Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, C/2017/7834.

⁴ <http://ec.europa.eu/energy/en/topics/energy-strategy/energy-security-strategy>.

⁵ Another project which is as well under 6.5.1 of the PCI list is LNG evacuation pipeline Omišalj - Zlobin (Croatia) (Code TRA-N-90) is the pipeline which is part of the transmission system and which is developed by transmission system operator (Plinacro). This pipeline is not part of the measure (state aid) which concerns the project of construction of the LNG terminal and it is partly financed by CEF and partly by Plinacro (transmission system operator).

- (6) The maximum annual delivery of natural gas is expected to be 2.6 billion cubic meters (bcma) in the first stage of the project, whereas further increases of the maximum annual delivery of natural gas would depend on the future pipeline development in Croatia.
- (7) The operation of the Terminal will be fully in line with EU internal market rules, including the “regulated regime”, in which capacity allocation rules, usage tariffs and access to the terminal are approved by the National regulatory Agency. No exemption from the EU internal market rules will be requested by LNGH.
- (8) As mentioned, in 2017 the project was awarded Connecting Europe Facility/CEF funds- for preparatory works and FSRU procurement and other works- with the final contract award signed on 18 December 2017⁶. Based on the EU CEF grant conditions, the Final Investment Decision (FID) was to be taken latest on 31st January 2019. In order to obtain a positive FID, the Open Season procedure (invitation to book the capacity of the LNG Terminal on a long-term period), launched by LNGH on 2018, was supposed to yield capacity bookings of at least 1.5 billion cubic meters per year (bcma) from potential terminal users. In the end, the Open Season procedure was concluded on 20th December 2018 with a booking of only 0.52 bcma.
- (9) This circumstance urged the Croatian Authorities- upon request by LNGH- to introduce an additional support measure, in the form of a direct grant of EUR 100 million on 30 January 2019 to enable the LNG promoter to take a positive FID. The granting decision contains a clause according to which the Ministry of Environment and Energy is obliged to obtain the necessary approval by the European Commission within a set deadline of six months prior to securing investment aid from the state budget⁷.
- (10) As to the implementation timeline, the tenders for the FSRU procurement have been timely launched and concluded in November 2018, with the selection of the FSRU unit provider, subject to the condition of a positive FID. The FID was taken on 31 January 2019 under the express condition of receiving the state support. The construction activities (works on the jetty, as well as pipelines connection to the gas transmission system), planned to start in April 2019, are envisaged by Croatia to be performed within 18 months and project operation is expected to roll out by 1st January 2021 when the LNG terminal should be fully operational. The Croatian Authorities confirmed that works- in terms of construction works on the jetty, the pipelines to connect the FSRU to the gas network- did not start prior to the aid application.
- (11) The Croatian Authorities expect the LNG terminal to ensure the diversification of natural gas supply as well as the enhancement of security of natural gas supply for Central and South-Eastern Europe, in line with its qualification as PCI project (section 6.5.1 in the latest 2017 list) and in line with Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning

⁶ INEA Grant (INEA/CEF/ENER/M2016/1291902, activity: 6.5.1-0018-HR-WM-16), following the CEF-Energy call 2016-2.

⁷ See Government Decision on financing the first phase of the floating terminal for liquefied natural gas on the island of KrK of 30 January 2019 (Official Gazette NN.12/2019).

measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010⁸.

- (12) The project will be an important factor in the diversification of natural gas supply and in enhancing security of supply not only for Croatia, but also for the neighbouring countries. Croatia's domestic gas consumption corresponds to approximately 2.6 bcm which corresponds to the regasification capacity of the terminal. Out of such amount, approximately 60% of the natural gas is imported, while the remaining 40% comes from domestic production.
- (13) In addition, the Croatian Authorities indicated that the LNG terminal on the Island of Krk will provide the possibility of implementing LNG as an environmentally friendly fuel for heavy truck traffic and maritime traffic, in line with the MARPOL Convention and the expected application of the Emission Control Area (ECA) area the Adriatic after 2020, the Directive 2014/94/EU on the establishment of infrastructure for alternative fuels, as well as the National Policy Framework for the Establishment of an Alternative Fuel Infrastructure. Therefore, when considering the various applications of LNG fuel and the future development of the LNG market, the Croatian Authorities expect that alongside with the LNG's main use in terms of regasification, LNG will be used as a fuel source in road, railroad and mainly shipping traffic i.e. bunkering, which is considered to be a potentially wide future market for the terminal on the Island of Krk from 2020 according to the national plan for alternative fuel use in shipping traffic.

2.2. Project investment costs, revenues and financing structure preceding the State measures

2.2.1. Project investment costs

- (14) Based on the received binding bids for the procurement of the FSRU vessel, Engineering Procurement and Construction (EPC) works and estimated costs for land expropriation, the total investment for the construction of the floating LNG terminal has been projected at EUR 233.6 million, out of which EUR 114.5 million (49%) to be invested in 2019 and EUR 119.1 million (51%) in 2020.
- (15) The overall investment costs consist of the following:
- Procurement of the FSRU vessel in the amount of EUR 159.6 million, of which EUR 80 million is projected to be spent in 2019 and EUR 79.6 million in 2020.
 - Procurement of onshore EPC works in total amount of EUR 60 million, of which EUR 58.5 million relates to the procurement of EPC works and EUR 1.5 million to construction works supervision. Investment for EPC works in 2019 is projected at EUR 20.7 million (34.6%) and in 2020 at EUR 39.3 million (65.4%).
 - Land expropriation costs are estimated at EUR 14 million and are projected to incur in the full amount in 2019.

⁸ OJ L 280, 28.10.2017, p. 1–56.

Table 1. Investment structure for the construction of the floating LNG terminal (Croatian authorities)

Investment overview			
in '000 EUR	2019	2020	Total
Land	14.000,0	-	14.000,0
FSRU Vessel	80.000,0	79.600,0	159.600,0
EPC contract			
Onshore construction	20.065,5	38.434,5	58.500,0
Project coordination & management	514,5	985,5	1.500,0
Total EPC contract	20.580,0	39.420,0	60.000,0
Total planned investment	114.580,0	119.020,0	233.600,0

2.2.2. Project financing excluding state aid measures

(16) The project financing structure, preceding the Croatian State's direct involvement, consists of an EU grant and an increase in the promoter's company (LNGH) equity by existing owners, as follows:

- EU Grant in the amount of EUR 101.4 million for the works necessary for the construction of the floating LNG terminal solution. According to the EU grant, the following project activities are eligible for financing under CEF: purchase of FSRU vessel, construction of jetty and auxiliary facilities, construction of gas pipeline and project co-ordination. All other costs related to the project (e.g. purchase of land) should be financed from other sources.
- Increase in LNGH equity in the amount of EUR 32.2 million. Increase in LNGH's equity in the total amount of EUR 32.2 million will be provided by its owners, HEP and Plinacro.

2.2.3. Revenues from regulated tariffs

(17) The Croatian Authorities have provided a projection of the revenue over the expected LNG terminal life-cycle of 20 years (2021-2040). These projections are based on a series of assumptions related to terminal capacity booking and annual send out⁹.

(18) Revenues are primarily based on the regulated tariffs for the regasification services. LNGH, as the operator of the LNG terminal, is obliged to apply the Methodology for the Determination of the Tariff Items for the Unloading and Send Out of Liquefied Natural Gas (hereinafter "the Methodology") set out by the Croatian Energy Regulatory Agency (hereinafter "HERA") on May 2018 (*Official Gazette of the Republic of Croatia No. 48/18*)¹⁰.

⁹ Applicable tariff, FSRU operation and maintenance cost, CO2 emission costs, consumption of raw materials and flat remaining OPEX, as well as possible Security of Supply charge.

¹⁰ The Methodology determines the following: • the model of regulation of the energy activity regarding the management of a terminal for liquefied natural gas; • the formula and elements for calculating the allowed revenue of the LNG terminal operator, • the procedure for the audit of the allowed revenue, • the tariff items and the manner, elements and criteria for calculating the amount of the tariff items, • the coefficients for calculating the fee for the use of the LNG terminal, • the calculation of the fee for the use of the LNG terminal for the clients of the LNG terminal, • the characteristics and prerequisites for the establishment of a regulatory account and the method, elements and criteria for the calculation and audit of the amount of tariff items in the regulatory account model, • the process of submitting a request for the determination, i.e. change in the amount of tariff items, • information, documentation and other

- (19) According to the Methodology, the projected revenues shall cover the reasonable operating expenses realised when performing the energy activity of managing the LNG terminal and ensure a return on regulated assets.
- (20) Projected allowed revenues are calculated according to the following formula:

$$DP = OPEX + A + PRO - PRI$$

whereas:

- DP – projected allowed revenue in the regulatory year,
 - OPEX – projected operating costs in the regulatory year,
 - A – projected depreciation of regulated assets in the regulatory year,
 - PRO – projected return on regulated assets in the regulatory year and
 - PRI – projected other operating revenues not related to the core business of the LNG terminal operator in the regulatory year.
- (21) Based on the Methodology, with the application of the Regulatory Account and a WACC (Weighted Average Cost of Capital) at 6.51%, the tariff has been projected at 1.39 EUR / MWh for net calorific value (NCV), in line with the current scenario “S1”, based on the 1.5 bcma booked capacity, linked to the outcome of 2018 Open Season (excluding potential increase in booked capacity throughout the duration of the project). The WACC of 6.51% has been defined by HERA. LNGH is not allowed to change or apply a different WACC.
- (22) The indicative tariffs were calculated for the Open Season purposes and were projected to vary downwards based on the different expected capacity booking scenarios¹¹.
- (23) The Croatian Authorities indicated that, based on publicly available official LNG terminals’ websites, terminal tariffs in Europe varied considerably from 0.7 to 2.29 (Polskie LNG) and 3.62 (LNG Toscana), thus the envisaged tariff of 1.39 EUR/MWh for NCV- set by the KrK LNG Terminal- would be in the mid/high end of the observed tariff range.

materials used to calculate and audit the allowed revenue, as well as for the calculation of the amount of tariff items.

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<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05

2.2.4. Funding gap under the main capacity booking assumptions

- (24) Croatia has provided the calculation of the funding gap related to the project, *i.e.* the net present value of the negative cash flows triggered by the project, deprived of state support. This calculation relies on financial projections and a sensitivity analysis based on the different capacity bookings scenarios.
- (25) As explained in recital (8), it was estimated that commitments in terms of mandatory capacity booking should have reached 1.5 bcma. Nevertheless, the December 2018 Open Season procedure had as outcome only 0.52 bcma booked capacity. Given the base case scenario of 0.52 bcma booked capacity, the Croatian Authorities estimated the funding gap as presented in the table below.

Table 2: Sources of funding of the LNG terminal (Croatian Authorities)

Project profitability, NPV, IRR	
WACC during regulatory period	6,51%
NPV	
EU Grant	101.400,0 kEUR
Government Grant	- kEUR
Initial investment	(233.600,0) kEUR
Project free cashflows	(159.757,5) kEUR
Assets residual value at project end	- kEUR
Total Free Cash Flows (not discounted)	(291.957,5) kEUR
Project NPV	(193.916,5) kEUR
IRR	
Project IRR	N/A

- (26) Based on the projection of the capacity booking, resulting from the binding “Open Season” phase of December 2018, Croatia claims the funding gap would amount to a loss of 193 million EUR, with a negative IRR. The calculation of the funding gap was based on the following assumptions.
- (27) Revenues of the floating LNG terminal were projected based on the assumed capacity booking of 0.5 bcma throughout the entire duration of the project (2021-2040). The terminal’s capacity is 2.6 bcma, which means that the submitted investment plan projects 20% of capacity utilization. Based on the capacity booking projections and tariffs calculated according to the Methodology, revenues from regasification services (regasification tariff) are estimated at EUR 6.94 million annually in the first year of business operation (2021), until year 2040.
- (28) The total annual LNG terminal operating costs are estimated at EUR 13 million annually, and are projected as flat, increasing only with the forecast inflation¹².
- (29) As regards the terminal value, Croatia assumed an absence of such terminal value at the end of the project, as the terminal has a definite end of life and should not generate indefinite cash-flows beyond 2040.¹³

¹² FSRU operation and maintenance and insurance costs are the main OPEX categories and are estimated at 10.6 mEUR p.a., excluding inflation, 81% of total OPEX. The remaining costs are estimated to some 2.4 mEUR p.a., excluding inflation.

¹³ In this respect Croatia considered that the typical floating LNG terminal operating life-cycle is 20 years and that significant docking and heavy maintenance would be required after 10-15 years of operation to extend the terminal life-cycle for additional 10-15 years. As Croatia does not plan significant docking and

- (30) In order to calculate the net present value of the funding gap, Croatia used the WACC as the discount rate of 6.51% as defined by the regulator [see above recital (21)]. The assumptions taken for the calculation of the WACC are as follows:

Table 3: WACC components, as elaborated by HERA (Croatian Authorities)

WACC assumptions		
Risk-free rate of return (r_f)	%	3,00%
Variability coefficient (β (levered))	-	1
Market risk premium ($r_m - r_f$)	%	4,80%
Premium on additional risk of investment (r_{UPP})	%	0,00%
Share of equity in total capital ($SE = E/(E+D)$)	%	50,00%
Rate of return on debt (r_d)	%	3,50%
Share of debt in total capital ($SD = D/(E+D)$)	%	50,00%
Corporate profit tax (P)	%	18,00%

- (31) Also based on the other capacity booking scenarios- which assume the same initial capacity booking of 0.5 bcma but which differ for the foreseen increases at different points in time [see also recital (39)] Croatian Authorities estimated that the Terminal would yield a negative project NPV, and negative IRR, as shown in the below Table 4.

Table 4, based on data provided by Croatian Authorities

Scenarios/Capacity booking	Project NPV
1/ 0.5 bcma	-193m EUR
2/ 1.2 bcma	-159 m. EUR
3/ 1.5 bcma	-124m EUR
4/ 2.6 bcma	-119.1m EUR

2.3. The measures: the different forms of support, beneficiary, granting authorities and duration

- (32) In order to bridge the funding gap, notably after the 2018 Open Season procedure, the Croatian State decided to provide a direct financial contribution from the Croatian State Budget of EUR 100 million (740 million Croatian Kuna) to cover a portion of the investment costs.
- (33) Additionally, the Croatian State will ensure a tariff compensation called ‘security of supply fee’, which is financed by levies charged by the gas TSO to gas transmission system users (suppliers or end consumers connected directed to the transmission system). These charged levies will be transferred to LNGH as of 2021, in order to enable to cover parts of the operating expenditures in case of insufficient bookings.

additional heavy maintenance in the operating 20-year period which would extend the terminal life-cycle, Croatia took the assumption is that the terminal value of the terminal in 2040 is zero.

- (34) The notified measure consists of the following support elements benefitting LNGH, the LNG promoter/operator:
- (i) A direct contribution from the Croatian State budget of EUR 100 million in two instalments, one up to EUR 50 million - subject to conditions as above mentioned [recital (9)] no later than 31 January 2020- and another instalment- up to overall 100 million euro, no later than 31 December 2020;
 - (ii) A compensation to LNGH in the form of a security of supply fee, variable in time – also based on the relevant Open Season bookings and realized revenues – as mentioned in recital (22) above.

2.3.1. The direct grant from the Croatian Government

- (35) Croatia submits that, based on initial estimates, the mandatory capacity booking should have amounted to around 1.5 bcma. This would have allowed financial viability to the project. However, the planned mandatory booking capacity was not reached and the bookings amounted only to 0.52 bcma in the 2018 Open Season procedure.
- (36) Under such constraints, LNGH would not have been able to take a positive FID. Therefore, following the Croatian Government Decision on financing the floating LNG terminal construction project on the Island of Krk (dated 30 January 2019, Official Gazette, n.12/2019), a government grant in the total amount of EUR 100 million will be provided in two equal instalments of EUR 50 million in 2019 and in 2020 to co-finance the project.

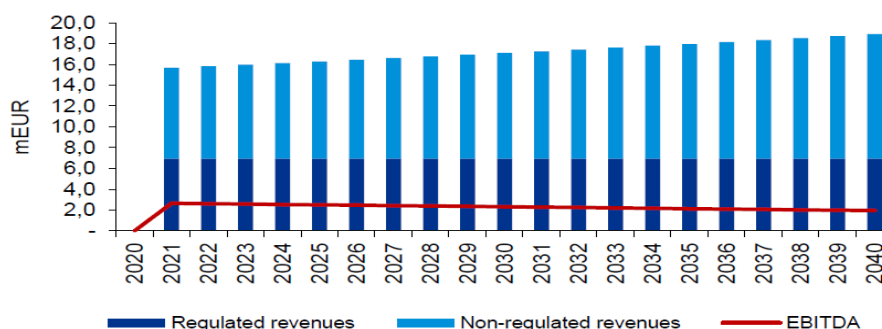
2.3.2. The compensation via the security of supply levy

- (37) Croatia passed an LNG Act in 2018 (nn.57/2018) of 27 June 2018, as part of its security of supply for gas policy, in line with Regulation (EU) No 994/2010¹⁴. It introduces the power for the National Regulatory Authority to determine – by decision until the 15th December for the following year – the amount and manner of collection of the security of supply (SoS) fee which, upon the proposal of LNGH, shall be charged by TSO as part of its transmission tariff. Based on the LNG Act, the TSO will have the obligation to collect the SoS and thereafter grant such amounts to LNGH. The objective of the compensation via the security of supply fee is to cover the difference between “allowed” and “actual regulated” revenues (the ones deriving from regasification services) in case of lower capacity booking and lower revenues, ultimately to top up LNGH’s remuneration and enable it to reach break-even.
- (38) As mentioned above in recital (27), based on the current capacity booking projections and tariffs calculated according to the Methodology, the component related to revenues from regasification tariffs only- defined also “regulated revenue”- is projected at EUR 6.9 million per year and is unchanged throughout the duration of the project. Therefore, in order to enable LNGH to obtain the total “allowed revenue” (the revenues needed to cover investments and operating costs

¹⁴ Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC (OJ L 295, 12.11.2010, p. 1–22)

and a reasonable rate of return), LNGH would need to benefit from the security of supply component, also defined as “unregulated revenue”. Its amount- based on scenario “1” (see Table 5 below) was projected in the range of EUR 8.7 million in year 2021 to EUR 12.0 million in year 2022. Croatia explained that the increase in unregulated revenue is the result of projected inflation (1.4% yearly) on LNGH business.

Table 5, LNG terminal revenue projections for period 2021-2040 (S1 0.52bcma) (source Croatian Authorities)



(39) Different scenarios were developed by Croatian Authorities in order to address potential increase of capacity booking according to the market analysis and forecast as follows:

- S2: Send out 1.22 bcma, based on current binding Open Season, with subsequent increases assumed to take place in 2028 and 2032;
- S3: send-out at 1.52 bcma, based on current Open Season, with assumed increases as of 2022, 2028 and 2032;
- S4: send-out at 2.6 bcma, which differs from S3 as it includes prospects of further booking increases as of 2036.

(40) Based on the different scenarios, the required levels of security of supply charges will vary depending on the difference between the actual “regulated revenues” and the “allowed revenues”. The following three tables describe the varying levels of unregulated revenues as compared to the regulated revenues, based on the different scenarios (S2, S3, and S4). As it can be seen below (Tables 7 and 8) under Scenarios 3 and 4, the SoS levy compensation would disappear as from 2032 onwards, as the actual regulated revenues would fully match the total “allowed revenue”.

Table 6, LNG terminal revenue projections for period 2021-2040 (S2 1.22 bcma) (source Croatian Authorities)

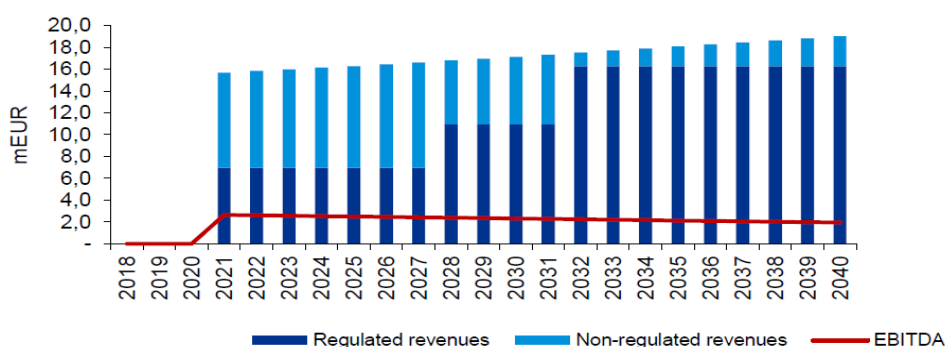


Table 7, LNG terminal revenue projections for period 2021-2040 (S3 1.52 bcma) (source Croatian Authorities)

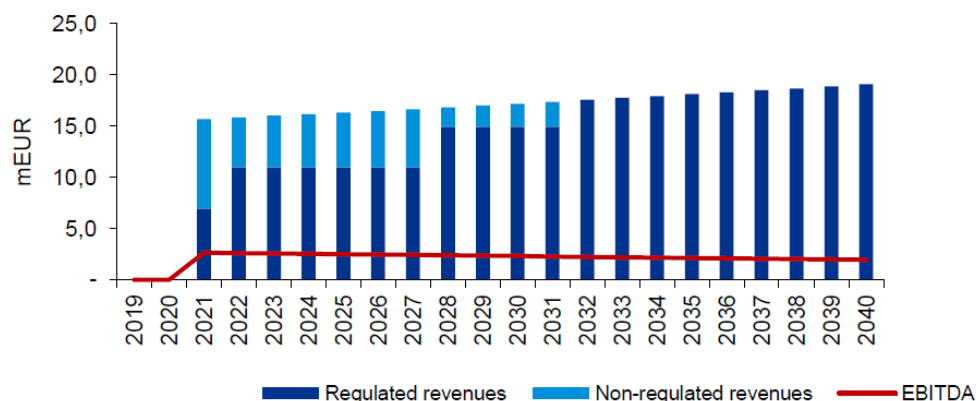
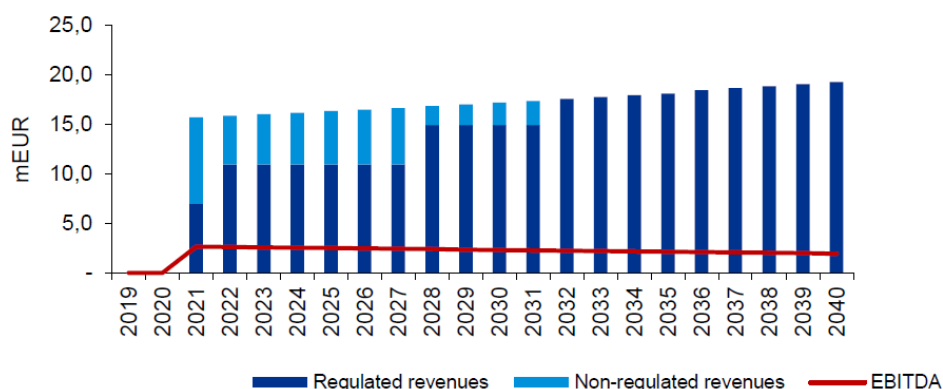


Table 8, LNG terminal revenue projections for period 2021-2040 (S4 2.6 bcma) (source Croatian Authorities)



(41) As to the timeline and duration of this measure, the amounts of the security of supply fee are set by HERA on a yearly basis at the request of the gas transmission system operator (TSO) and based on LNGH’s proposal, as defined in Article 12 of the LNG Act. The Croatian Authorities confirmed that Article 12 – paragraph 5 – which sets out this measure, will come into force on 1st November 2019, while the full implementation of the measure will be done on a yearly basis thereafter, starting as of 1st January 2021, until the end of the project (throughout twenty years).

2.4. Funding gap analysis including the state measures. Commitment by Croatian Authorities.

(42) The main assumptions used by Croatia as regards the cash flow generation and the financial projections – in the absence of state support – are explained above in recitals (27) to (29). In order to calculate the amount of SoS fee necessary to match the “allowed remuneration”, Croatia provided four different scenarios of booking/consumption. Since the aim of the Security of Supply charge is to ensure a constant level of “allowed revenues”, regardless of the level of booking of the LNG

terminal, the profitability of the project, measured by the project Internal Rate of Return (project IRR), will always be 2.03%.

- (43) Taking into account the support measures, Croatia provided several funding gap calculations, based on the four different booking/consumption scenarios: 0.52 bcma, 1.2 bcma, 1.5 bcma and 2.6 bcma. The result of this sensitivity analysis is summarised below:

Funding gap

EUR in millions	0.52 bcm	1.22 bcm	1.52 bcm	2.6 bcm
Funding gap	193,916	159,119	124,410	119,148
Investment costs	212,504	212,504	212,504	212,504
Security of supply component	96,456	61,658	32,484	32,484
Grant	90,783	90,783	90,783	90,783
State aid granted	187,238	152,441	123,267	123,267
Funding gap exceeded	No	No	No	Yes
IRR (including State Aid)	2.03%	2.03%	2.03%	2.03%

Source: Croatia

- (44) The result of this sensitivity shows that, in three scenarios out of four, the amount of aid does not exceed the funding gap, and that therefore the measure does not entail overcompensation. The only case in which the amount of support would go beyond the funding gap, relates to the most extreme scenario, of consumption of 2.6 bcma (full booked capacity). However, Croatia explained that this scenario – or any assumption of full booking capacity, even after 2036 – would be very unlikely, because it is theoretical in its nature. Croatia explained that LNG terminals are primarily strategic infrastructures with the aim to diversify gas routes and increase security of supply, therefore Croatia claims that having 100% full utilization scenario is not realistic, since all Europe’s LNG terminals are almost idle, the average usage rate at terminals in the EU being approximately 30%.
- (45) In order to dispel any concerns of overcompensation for scenarios above 1.52 bcma of capacity bookings, the Croatian authorities have devised a reporting and claw-back mechanism, called “Proportionality Concept Control Mechanism”.
- (46) The “Proportionality Concept Control Mechanism” would preliminarily consist of regular updates of the Base case financial model, which has an assumed level of booking of 0.52 bcma (“S1”), and includes the EUR 100 million Government Grant and the implementation of the Security of Supply Charge. Croatia confirmed that, should the execution of the “Base Case Financial Model” update show that the overall state support exceeds the Funding Gap, LNGH will return the amount by which the present value of the state support exceeds the Funding Gap to the Croatian State in the next project period (5-year period) in order to preserve the “Proportionality Concept”, either by returning the funds and/or by lowering the Security of Supply Charge in the next period.
- (47) In detail, the reporting would take place every 5 years or earlier if there is additional capacity booking, increasing from the current 0.52 bcma. The report will

be delivered to the Ministry of Environment and Energy by 1st June of the year following the 5-year reporting period. If there is no additional capacity booking, the deadline for the reporting of the period starting on 1st January 2021 (assumed starting of LNG operations) and ending on 31st December 2025 will be by 1st June 2026.

- (48) If additional capacity booking takes place – as compared to the Base scenario (“S1”) – LNGH will be obliged to execute the proposed “Proportionality Concept Control Mechanism” during the year following the year in which additional capacity booking occurred. This means that LNGH will have an obligation to submit to the Ministry of Environment and Energy report, which includes the “Base Case Financial Model” update together with the validation of the Proportionality Concept by 1st June in the year following the year when additional capacity booking occurred.
- (49) For the final 5-year reporting period (from 2036 to 2040), in order to assure that eventual funding gap breach by the end of operation will be returned, the Croatian Authorities ensure that LNGH will make a reservation of required funds in advance, in a way that, should the present value of the planned State aid exceed the present value of the funding gap, the difference should be fully reserved on a bank account at the end of given period.

2.5. The national legal basis and transparency

- (50) The government grant of EUR 100 million has been approved by the Croatian Government’s *Decision on financing the first phase of the floating terminal for liquified natural gas on the island of Krk*, Article III, adopted by the Government of the Republic of Croatia on 30 January 2019 (Official Gazette n.12/2019), and its implementation is subject to express Commission approval within six months from the Decision. The resources come from the State budget.
- (51) The compensation mechanism via the security of supply fee is regulated in Article 12 of LNG Act 57/2018. Article 16 of the LNG Act sets out that the security of supply fee procedure would come into force on 1st November 2019. Once the terminal will start to be operational on the level of capacity booking of 0.52 bcma, the LNG terminal operator will submit a proposal for a security of supply fee, thus triggering the procedure. The first disbursements of the security of supply fee are planned starting as of 2021.
- (52) Croatia confirms that they will publish via an official website (web page of the Ministry of Finance) the notified measure, the identity of the granting authority, the identity of the individual beneficiary, the aid instruments and amount of aid granted to the beneficiary, the objective of the aid, the date of granting, the type of undertaking, the Commission's aid measure reference number, the region where the beneficiary is located and the principal economic sector of the beneficiary.

2.6. Cumulation

- (53) Croatia has confirmed that the measures will not be cumulated with other aid sharing the same eligible costs.

3. ASSESSMENT

3.1. The existence of State aid according to Article 107(1) TFEU

(54) According to Article 107(1) TFEU, the qualification of a measure as State aid requires the following conditions to be met cumulatively:

- the measure is financed through State resources;
- it grants a selective advantage liable to favour certain undertakings or the production of certain goods;
- the measure distorts or threatens to distort competition;
- it has the potential to affect trade between Member States.

3.1.1. Aid granted by a Member State through State resources

(55) By granting EUR 100 million from the State budget, Croatia made a direct grant to the LNG terminal promoter and operator, LNGH. This amount is therefore considered to be granted from State resources and is imputable to the State within the meaning of Article 107(1) TFEU.

(56) The compensation via the security of supply fee, in the varying amounts linked to the “missing revenues” as described (20) to (24) above, constitutes a fee applied to all gas consumers, along with transmission tariffs, by the TSO. As the funds derive from a levy defined by the State by its LNG Act, applied to users, on a mandatory basis – as part of the gas transmission tariff – the Commission views the security of supply revenues falling within State resources imputable to the State within the meaning of Article 107(1) TFEU.

(57) The other financing measures, CEF funds and the shareholders’ equity participation do not constitute State aid because they are, respectively, centrally managed European funds and private equity participation from the project shareholders.

3.1.2. Favouring certain undertakings or the production of certain goods

(58) The notified measures will provide an economic advantage to LNGH in the following forms:

- a) direct grant for the realization of the project investment for the amount of 100 Mio EUR in two installments;
- b) yearly revenues through the security of supply charge in case of insufficient bookings and revenues.

(59) These possibilities are not available to all undertakings in Croatia, therefore both notified measures are selective.

3.1.3. Distortion of competition and effect on trade between Member State

(60) Both measures as referred to in recital (34) above may establish a strong position of LNGH as a new entrant to the LNG regasification sector, being the sole terminal in Croatia, but potentially competing with other LNG terminals in the Mediterranean and other gas transmission options. Furthermore, the notified measures may strengthen the positions of the shareholders of LNGH, HEP d.d. (Croatian utility company), which is active in the gas and electricity supply and retail sectors with

significant market shares, and Plinacro d.o.o. (Croatian gas transmission system operator). Consequently, the measures threaten to distort competition and are liable to affect trade between Member States as they relate to the construction of an LNG terminal in Croatia through which gas will be traded in Croatia and towards other EU Member States and beyond.

3.1.4. Conclusion with regard to the presence of State aid

- (61) Taking the above in Section 3.1 into consideration, the Commission concludes that both notified measures set out in recital (34) to be granted in order to contribute to the economic viability of the LNGH constitute State aid within the meaning of Article 107(1) TFEU.

3.2. Lawfulness of the aid

- (62) By notifying the aid measures before granting them, the Croatian authorities fulfilled their obligation according to Article 108(3) TFEU. The fact that the Government's grant has already been earmarked does not detract to this conclusion, as, according to the Government decision of 30 January 2019, its effects are suspensively conditioned to the European Commission approval.
- (63) With regard to the security of supply fee, the Croatian Authorities confirmed that – subject to its procedures and underlying conditions for approval – according to the LNG Law, the Security of Supply charge will first of all enter into force only as of November 2019 and will in any case start to be applicable from 1st January 2021, thus in compliance with the standstill principle.

3.3. Compatibility

- (64) The notified measures aim to finance the construction of an LNG terminal regasification station in Croatia. Support for LNG/gas infrastructure fall within the scope of the Commission's Guidelines on State aid for environmental protection and energy 2014-2020¹⁵ (hereinafter "EEAG"), section 3.8 "Aid to energy infrastructure".

3.3.1. Objective of common interest

- (65) In line with point 202 EEAG, the Commission considers that energy infrastructure is a precondition for a functioning energy market. Aid to energy infrastructure therefore strengthens the internal market. It enhances the integration of different energy sources and energy supplies in under-developed networks. The Commission therefore considers that aid to energy infrastructure contributes to an objective of common interest.
- (66) Croatia's LNG terminal constitutes a gas energy infrastructure in line with point 31 (b) of Section 1.3. Definitions of the EEAG. It is an LNG terminal station enabling the fuelling, regasification and transmission of natural gas within Croatia and to be traded beyond its national borders. As explained by Croatia [see recitals (11) and (12) above], the Croatian LNG terminal has several strategic objectives, such as diversification of gas supply by providing alternative sources as well as ensuring the security of gas supply, which were also recognised by the European

¹⁵ OJ C 200, 28 July 2014, p. 1

Union by including the project in the list of European Projects of Common Interest¹⁶.

- (67) Considering the above, the notified aid measures contribute to an objective of common interest in accordance with section 3.8.1 of the EEAG.

3.3.2. Need for State intervention

- (68) As it is explained in point 203 EEAG, energy infrastructure investments are often characterised by market failures. To address the market failures, energy infrastructures are typically subject to tariff and access regulation and to unbundling requirements according to internal energy market legislation (see point 204 EEAG). The Project company has not requested any exemption from the internal energy market rules and thus regulated tariffs and third-party access in line with Internal Market rules are fully applicable.
- (69) Pursuant to point 206 EEAG, the Commission considers that for infrastructure investments, which fall in the approved list of PCIs, the market failures in terms of positive externalities and coordination problems are such that financing by means of tariffs may not be sufficient.
- (70) Since KrK LNG Terminal is on the list of PCIs, the Commission therefore concludes that the notified aid measures are necessary for the construction of the LNG terminal.

3.3.3. Appropriate instrument

- (71) The Commission recalls that point 209 of the EEAG acknowledges that in the case of PCIs (such as the Croatian LNG terminal) State aid may be considered an appropriate instrument to partially or wholly finance that infrastructure if recouping the investment exclusively via tariffs is not feasible.
- (72) As explained in Section 2.2 above the Croatian authorities have initially explored the possibility to finance the LNG terminal exclusively through tariffs. Accordingly, at the level of an initial capacity booking of 1.5. bcma level, the revenues from tariffs could be considered sufficient to cover the project costs. However, the December 2018 Open Season procedure had as outcome only 0.52 bcma booked capacity.
- (73) Consequently, as shown in recital (25), the financing of the project solely by an increase in regasification tariffs could seemingly deter users from using the infrastructure, because it could lead to tariff levels that could be not acceptable or affordable for users. As mentioned in recital (23), the initial tariff – set at regulated level – is already in the mid-range, close to the higher end, if one excludes the two highest LNG terminal tariffs. Finally, as set out in recitals (26) to (31) in the absence of the Government Grant and the other form of support (SoS levy) under all capacity booking scenarios, taking into account the outcome of 2018 December Open Season, the project would have yielded a negative IRR and thus the project promoter would have not had the possibility to start the project.

¹⁶ Commission Delegated Regulation (EU) 2018/540 of 23.11.2017, amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest.

- (74) Given the PCI status of the project [see recital (2)], and considering that the principles for the tariff setting have been approved [see recitals (17) and (18) above] and that the methodology to establish the tariffs is under the control of the national regulator, the Commission considers that the notified measures are appropriate to bring the LNG project forward.

3.3.4. *Incentive effect*

- (75) According to point 210 of the EEAG, the incentive effect of the aid will be assessed on the basis of the conditions set out in Section 3.2.4 (points (49) and following of the EEAG). In line with point 49 EEAG, the incentive effect occurs, if the aid induces the beneficiary to change their behaviour towards reaching the objective of common interest which it would not do without the aid.
- (76) The LNG project requires very significant upfront investment well in advance of the period at which the project can start to generate its sole revenue source, in that the tariffs paid by gas users are not expected to provide enough revenues until the capacity booking reaches 1.52 bcm (based on the project estimates). As portrayed in recitals (30) and (31) above, given the low capacity booking currently reached and expected for the next years (until 2022 based on the least realistic scenario and 2031 based on the other scenarios), without the aid measures, both the EUR 100 million grant and the security of supply charge, the corresponding financial internal rate of return of investment would be negative, meaning that a rational investor would not carry out the investment.
- (77) As for the other conditions of the incentive effect, as set out in point 50 of the EEAG, namely that there would be “*no incentive effect in all cases where work on the project had already started prior to the aid application by the beneficiary to the national authorities*”, as well as on the need to use an application form [as set out in recitals (8) to (10)], Croatia confirmed that works have not started prior to the aid application and the final FID was taken positively only thanks to the Government Grant.
- (78) Under these circumstances, considering that the Government Grant follows an application for aid by LNGH – subsequent to the unsuccessful outcome of the 2018 Open Season –, and that the SoS levy is implemented only based on an application by LNGH [see respectively recitals (36) and (37) until (41)], the incentive effect can be considered as fulfilled in this case.
- (79) Taking into account the above considerations, it can be concluded that the project would not be carried out in the absence of the notified measures and that the notified measures have an incentive effect for the realisation of the project, in accordance with sections 3.8.4 and 3.2.4 of the EEAG.

3.3.5. *Proportionality*

- (80) A state aid measure is proportional if the measure is designed in a way that the aid as such is kept to the minimum necessary to achieve the objective sought. Pursuant to point 211 of the EEAG in conjunction with point 212 of the EEAG, aid measures in support of infrastructure should not exceed an aid intensity of 100% of the eligible costs, defined as a funding gap.
- (81) The Commission considers that Croatia has satisfactorily demonstrated that, in three of the most plausible scenarios of consumption detailed in recital (43), the net present value of the State aid components, namely the Security of Supply charge

and the grant, would not exceed the funding gap, accordingly with point 212 of the EEAG.

- (82) As regards the specific scenario of 2.6 bcma consumption, the Commission notes that it corresponds to a level of booking of the terminal of 100% of its technical capacity. The Commission considers that Croatia has convincingly explained that such a level of booking does not correspond to the actual levels of booking observed in the LNG markets in Europe, as explained in recital (44).
- (83) To take into account booking levels between 1.5 bcma and 2.6 bcma that may result in aid exceeding the funding gap, the Commission also notes that Croatia has committed to implement a proportionality mechanism, detailed in the recitals (45) to (49), in case the net present value of the State aid components would exceed the funding gap. The Commission considers that this mechanism is satisfactorily described, and constitutes an efficient mechanism to prevent any situation in which the net present value of the State aid components would exceed the funding gap.
- (84) The Commission concludes therefore that the combination of the two notified measures does not entail overcompensation, in accordance with points 211 and 212 of the EEAG.
- (85) In addition, the Commission notes that, in all the booking scenarios, the internal rate of return is constant, at 2.03% [due to the constant level of allowed remuneration and the offsetting mechanism explained in recital (18)], which is below the WACC of 6.51%.
- (86) The Commission concludes therefore that under all scenarios, the project will not trigger a profitability which exceeds the return expected by the market, measured by the WACC, and therefore does not entail overcompensation.

3.4. Avoidance of any undue negative effects on competition and trade

- (87) In line with point 214 of the EEAG, in the case of infrastructures fully subject to internal market legislation (“not exempted”), the Commission “*will consider that aid [...] does not have undue distortive effects*”.
- (88) Notwithstanding the significant activity in the gas sector by one of the project operator shareholder (HEP), considering that the infrastructure is fully subject to internal energy market legislation, and that this last set of rules is aimed at strengthening competition, the Commission concludes that the notified aid measures concerning KrK LNG Terminal have no undue negative effect on competition and trade.

3.5. Transparency

- (89) Member States are required under Section 3.2.7 of the EEAG to publish as of 1 July 2016 certain information related to the beneficiaries of aid.
- (90) As seen in recital (52), since the Croatian authorities have committed to publish the relevant information on an indicated website, the EEAG provisions on Transparency can be considered as complied with.

3.6. Conclusion

- (91) In light of the above the Commission considers that the notified measures are compatible with the internal market in accordance with Article 107 (3) (c) TFEU, as they comply with Section 3.8 of the EEAG.
- (92) The Commission reminds the Croatian authorities that in accordance with Article 108 (3) TFEU, any plans to refinance, alter or change this aid have to be notified to the Commission pursuant to the provisions of the Commission Regulation (EC) 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty (now Article 108 TFEU)¹⁷.

Yours faithfully
For the Commission

Margrethe VESTAGER
Member of the Commission

¹⁷ OJ L 140,30.4.2004, p1.