SABIEDRISKO
PAKALPOJUMU
REGULĒŠANAS
KOMISIJA

CONSULTATION DOCUMENT

on the application of the methodology for the calculation of the tariffs on the natural gas transmission system service

pursuant to Article 28 and 26 of European Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas

8 August 2019

Riga

Unijas Street 45
Riga, LV-1039
Latvia

T:+ 371 67097200
F:+ 371 67097277
E:sprk@sprk.gov.lv

www.sprk.gov.lv

Table of contents

Summary and legal basis of the consultation document

The consultation document on the application of the methodology for the calculation of the tariffs on the natural gas transmission system service (hereinafter - the consultation document) is based on Article 28 and 26 of European Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (hereinafter - TAR NC).The consultation document seeks on the views of stakeholders on the application of the methodology for the calculation of the tariffs on the natural gas transmission system service and the tariffs for the natural gas transmission system service in Latvia.

In accordance with Section 15(1^1) of the Energy Law, the transmission system operator shall provide the transmission service for tariffs, which have been specified by the relevant service provider in accordance with the tariff calculation method stipulated by the regulator if a permit has been obtained from the regulator. Section 9(1) and (2) of the Law on Regulators of Public Utilities provides that the Regulator shall determine the methodology for calculating tariffs, and Section 25(1) stipulates the providers of public utilities obligation to provide the regulator free access to all information regarding the public utilities and the necessary information regarding other types of commercial activities.

The consultation document describes in detail the Decision of the Board of the Public Utilities Commission (hereinafter - the Regulator) of 3 July 2019 No.1/10 "Methodology for the Calculation of the Tariffs on the Natural Gas Transmission System Service", adopted and applied in the light of the requirements of the TAR NC. The gas transmission system service tariffs shall be calculated using a postage stamp reference price methodology whereby the same tariffs are applied at all entry points of the natural gas transmission system and at all exit points irrespective of their location in the natural gas transmission system. The postage stamp methodology is chosen because it is simple, as well as promotes economic efficiency and competition in the natural gas market.

Prior to the adoption of the Decision referred to in the previous paragraph, the Regulator organised a public consultation of a draft methodology for the calculation of the tariffs on the natural gas transmission system service. Public consultation ran from 31 May to 13 June 2019. Information on the opinions submitted by stakeholders is available on the Regulator's website[1].

Pursuant to Article 28 and 26 of TAR NC, without the proposed reference price methodology (methodology for the calculation of the tariffs on the natural gas transmission system service) the consultation document shall provide information on indicative natural gas transmission system service tariffs, multipliers and seasonal factors affecting the tariff size of short-term capacity products and the allowed revenue for the natural gas transmission system operator to be recovered from those tariffs, for the period from 1 January 2020 to 30 September 2022.

Note that the tariffs for the services of the natural gas transmission system to be consulted are indicative and not binding on the natural gas transmission system operator and the natural gas transmission system users in Latvia.

All stakeholders in the natural gas market are invited to comment on the consultation document.

The stakeholders are asked to submit to Regulator proposals and comments on the consultation document in writing or by electronic mail to sprk@sprk.gov.lv by 9 October 2019.

[1] https://www.sprk.gov.lv/index.php/content/publiskas-konsultacijas

I Technical characteristics of the natural gas transmission system

1) Natural gas transmission system in Latvia

The Latvian natural gas transmission system consists of gas pipelines with an operating pressure above 16 bar, auxiliary objects, items and other assets necessary for the transmission of natural gas. The Latvian gas transmission pipelines are part of the Baltic natural gas transmission system.

The Latvian natural gas transmission system has three cross-border interconnections. The commercial metering of natural gas on the Latvian-Lithuanian border are carried out at Kiemenai (Lithuania) gas metering station (hereinafter - GMS), on the Latvian-Estonian border at Karksi GMS (Estonia).The metering of natural gas received from Russia and supplied to Russia is held in Corneti GMS. The amount of natural gas supplied depends on the capacity of the GMS located at the interconnection (entry/exit) points (see: Table 1).

Table 1

Technical capacity of the natural gas transmission system interconnection points in 2018 (GWh/day)

Entry/exit point	Entry capacity	Exit capacity
Kiemenai (Latvia/Lithuania)	67.6	65.1
Karksi (Latvia/Estonia)[2]	0	73.08
Korneti (Latvia/Estonia)	188.5	105
Inčukalns underground gas storage facility	316	178

The entry flows into the natural gas transmission system are also provided from the Inčukalns underground gas storage facility (hereinafter – UGS) during the withdrawal season and with virtual counter flow during the injection season.

Inčukalns UGS started operation in 1968. The storage is formed in a layer of porous sandstone at a depth of about 700 m, coated with hermetic layers of rock. The area of the natural gas deposit is 25 km². The working gas is 24 219 000 MWh.

The ability of the Inčukalns UGS to provide the necessary flows in the natural gas transmission system depends directly on the natural gas inventory. The withdrawal of natural gas from a storage facility takes place due to the pressure difference in the layer and in the main pipeline, and the daily withdrawal capacity depends on the inventory level in the storage facility. For Inčukalns UGS, the maximum withdrawal capacity of 316 GWh/day may be available for a working gas of more than 18 TWh. If the inventory level in the storage facility is lower, the withdrawal capacity will be reduced in accordance with curve of gas extraction. For example, in 2018 the technical capacity of Inčukalns UGS at the inventory level of 13,5 TWh (56 % of maximum filling) was 246 GWh/day.

The supply of natural gas from the direction from Pskov to Riga is provided on two parallel gas pipelines with a diameter of 700 mm between which the connecting lines are situated. The transmission system is radiate as it is shown on the map of the Latvian natural gas transmission system (see: Fig. 1).

[2]Following the reconstruction of Karki GMS in 2020, its planned entry/exit capacity is 105 GWh/day

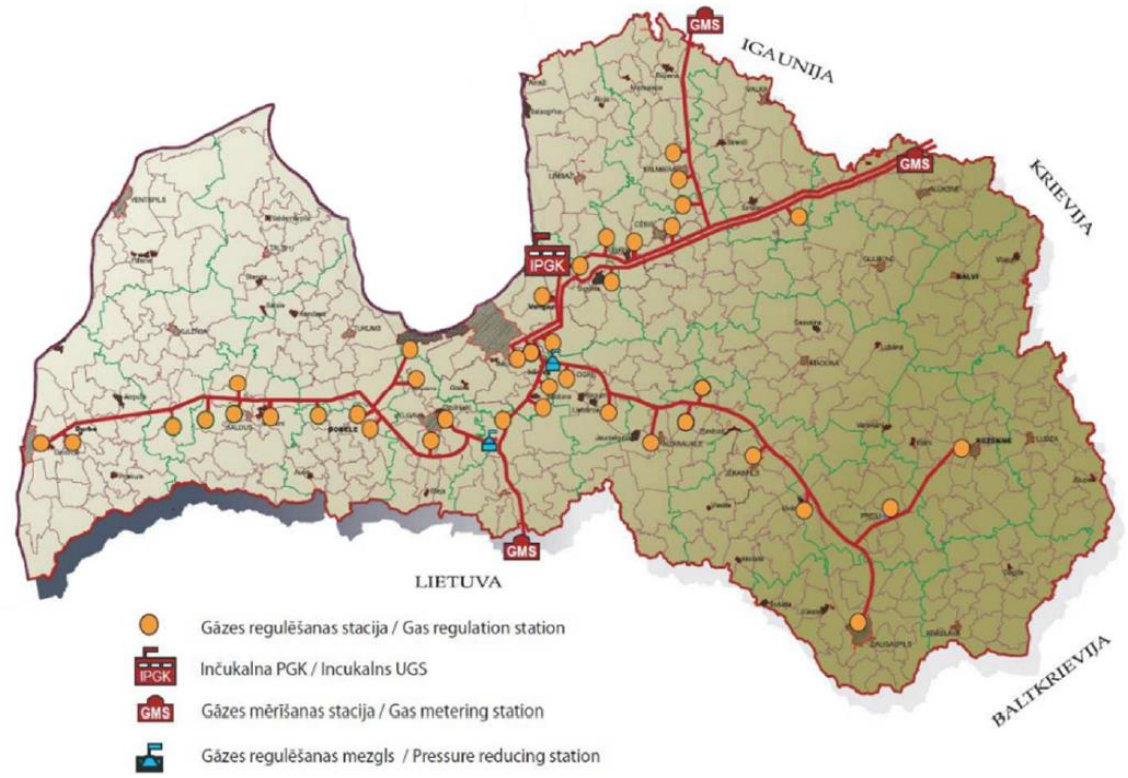


Fig. 1. Natural gas transmission system in Latvia

One main pipeline runs in the direction of Liepāja and the other - in the direction of Daugavpils. Branch pipeline to Rēzekne has been built out in 2005. The total length of the natural gas transmission system is 1 188 km (see: Table 2).

Table 2

Characteristics of the Latvian natural gas transmission system

Pipeline	Year of commissioning	Length, km	Diameter, mm	Maximum pressure, bar
Riga-Panevežys	1983	84,03	700	40
Iecava-Liepaja	1966	209,64	500/350	25
Pskov-Riga	1972	160,63	700	47
Izborsk-Inčukalns UGS	1984	162,51	700	47
Riga-Inčukalns UGSI	1967	41,75	700	40
Riga-Inčukalns UGSII	1978	41,74	700	40
Riga-Daugavpils	1988	203,00	500	25
Vireši-Tallinn	1994	88,00	700	45
Upmala-Preiļi-Rēzekne	2001/2005	66,71	400/350	54
Branch lines		130,06		
Total:		**1188,07**		

The working pressure of the gas pipelines making up the transmission system is between 28 and 45 bar. 40 gas regulatory stations are used to transport natural gas to the natural gas distribution system in Latvia. To improve operational safety gas reduction nodes for automated pressure reduction have been built in the transmission pipeline Riga-Daugavpils and Iecava-Liepaja.

2) Regional natural gas transmission system development

Natural gas supply systems in the Baltic States and Finland are not connected to the common European Union natural gas transmission system. In order to establish a connection to the natural gas transmission system of the European Union, improve security of supply of natural gas and diversify sources of natural gas supply, a number of European projects of common interest are being implemented in the Baltic region (see: Fig. 2).

Fig. 2. Projects of common European interest in the Baltic region

The Estonia-Finland interconnector ("Balticconnector") will connect the Finnish natural gas transmission system with the natural gas transmission systems of the Baltic States, creating the necessary preconditions for the formation of a common Baltic natural gas market. The "Balticconnector" is scheduled to be completed in 2019 with a planned entry and exit capacity of 79 GWh/day.

Enhancement of Estonia — Latvia interconnection (Karksi) will allow natural gas supplies to be organised from Estonia to Latvia and increase natural gas flows from Latvia to Estonia, which will be important to ensure natural gas flows in the common Baltic gas market and to allow the Estonian and Finnish market participants to store natural gas in the Inčukalns UGS. The planned entry and exit capacity of the interconnector is 105 GWh/day. The enhancement of the interconnection is planned to be completed in 2019.

The aim of the construction of the gas interconnection Poland-Lithuania (hereinafter - GIPL) is to connect Polish and Lithuanian natural gas transmission systems, thereby ensuring the integration of natural gas transmission systems in the Baltic States and Finland into the European Union natural gas transmission system and increasing the security of natural gas supply in the region. The construction of the GIPL is scheduled to be completed in 2021. Planned capacity is 73,9 GWh/day towards Lithuania and 51,1 GWh/day in the direction of Poland.

The enhancement of Latvia — Lithuania interconnection will not only allow for an increased exchange of natural gas between Latvia and Lithuania, but will also provide sufficient capacity in the Latvian transmission system for natural gas flows following the establishment of a regional natural gas market. According to a survey carried out in 2018 the maximum capacity of the Latvia — Lithuania interconnection should be 125 GWh/day. This capacity increase will be achieved by increasing the maximum working pressure in the natural gas transmission system in Latvia to 50 bar, as well as by increasing the capacity at Kiemenai GMS and reorganising the Panevežys compressor station in Lithuania. The project is scheduled to be completed in 2023.

In the context of the enhancement of Inčukalns UGS, the dependency between the withdrawal capacity and the inventory level in the storage facility will be significantly reduced, which will significantly improve the security of natural gas supply, as well as the operational efficiency of the storage facility, which will be of particular importance in the context of the common Baltic natural gas market.

II Description of the proposed reference price methodology

1) FinEstLat single natural gas transmission entry-exit system

Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 775/2005 (hereinafter – Regulation 715/2009) introduced the concept of the entry-exit system into the European regulatory framework whereby transmission costs were no longer directly associated to one specific route and specifies that transmission system operators should have a de-coupled entry-exit system in place. An entry-exit system is a gas network access model which allows network users to book capacity independently at entry and exit points, thereby creating gas transport through zones instead of along contractual paths (Recital 19 of Regulation 715/2009). Entry-exit systems aim for independent and seamless use of flexible entry and exit capacity regardless of underlying system characteristics, and at times across different networks operated by different transmission system operators

European energy policy has a long-standing objective of sustainable, secure and affordable energy future. A fully integrated European energy market with active cross-border trading, and participation in markets not defined by national borders, but rather by natural trading hubs and satellite markets is central to realise this objective.

Quo vadis EU gas market regulatory framework – Study on a Gas Market Design for Europe[3] (hereinafter – Study) identifies that the currently applied entry-exit transmission tariff system leads to a tariff 'pancaking' effect (accumulation of tariffs to be paid by traders when shipping

[3] *European Commision, Directorate-General for Energy, Internal Energy Market. Quo vadis EU gas market regulatory framework – Study on a Gas Market Design for Europe*. 2018, 214-215 p. https://ec.europa.eu/energy/sites/ener/files/documents/quo_vadis_report_16feb18.pdf

gas through several zone borders), therefore, the transmission tariff structure can be considered as one of the key barriers to an European Union (hereinafter - EU) wide integrated natural gas market.

It was concluded in the Study that the setting of the intra-EU cross-border tariffs to zero is leading to increased liquidity between the zones and, therefore, to higher price convergence across EU. The revenue decrease for transmission system operators should be compensated by increasing either EU entry border tariffs or domestic exit tariffs (or a combination of both) and redistributing the revenues through an inter-TSO compensation (hereinafter – ITC) mechanism.

Thus, it can be concluded that a single entry-exit system of more than one EU Member States is likely to provide more socio-economic benefits than separate Member States' entry-exit systems.

FinEstLat single natural gas transmission entry-exit system is a natural gas network access model involving three countries – Finland, Estonia and Latvia. The objective of the establishment of the FinEstLat single natural gas transmission entry-exit system is to take advantage of the of above mentioned regarding the Study as well as of economies of scale by:

- promoting the free movement of natural gas in the region and preventing discrimination of supply routes;
- lowering barriers to new market entrants into the FinEstLat natural gas market and thereby fostering competition in the market;
- ensuring greater market liquidity;
- improving the use of existing infrastructure and avoiding excessive investment therein;
- improving security of supply through market-based measures;
- reducing the complexity of the tariff system and ensuring transparency and predictability of tariffs;
- ensuring a higher level of convergence across Baltic and in Finland;
- reducing the market power of major suppliers of natural gas and increasing the independence of the natural gas market in the Baltic States and Finland.

Consultancy company Baringa Partners LLP (hereinafter - Baringa) conducted a study on Tariff model for the natural gas entry-exit system for the common Baltic-Finnish market [4], so that the regulatory authorities of FinEstLat and Lithuania can make an informed decision on the most appropriate model for the natural gas transmission entry-exit system. According to the findings of the Baringa study, the creating FinEstLat single natural gas transmission entry-exit system requires the following key features should be provided:

- no internal interconnection points within FinEstLat single natural gas transmission entry-exit system, including entry point from Inčukalns UGS and exit point to Inčukalns UGS;
- the postage stamp reference price methodology is applied separately in each country of the single natural gas transmission entry-exit system;
- flat tariffs are determined at entry points of single natural gas transmission entry-exit system using benchmarking and rescaling;
- the revenue of the natural gas transmission system service recovered from the tariffs of the entry points are distributed through the ITC mechanism in proportion to the

[4] https://www.sprk.gov.lv/sites/default/files/editor/Kosn_dokumenti/Tariff%20model_Baringa%20Phase%202%20Report_Final_V3_0.pdf

quantity of natural gas consumed in each country of the single natural gas transmission entry-exit system;
- the exit tariffs are set to ensure that each transmission system operator recovers transmission system service revenue which has not been recovered from entry tariffs;
- non-transmission services revenue is individually decided by each single natural gas transmission entry-exit system country.

A legally binding set of technical and commercial rules governing access to and use of trans-European energy networks has been created in order to ensure the smooth functioning of the EU single internal energy market. The legal framework for the natural gas market consists of the following EU directives and regulations:

- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC;
- Regulation 715/2009;
- European Commission Regulation (EU) Nr.312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks;
- European Commission Regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules;
- European Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms for gas transmission systems and repealing Regulation (EU) Nr.984/2013;
- TAR NC.

The requirements of this regulatory framework must be respected and followed in each EU internal energy market segment, including FinEstLat single natural gas transmission entry-exit system.

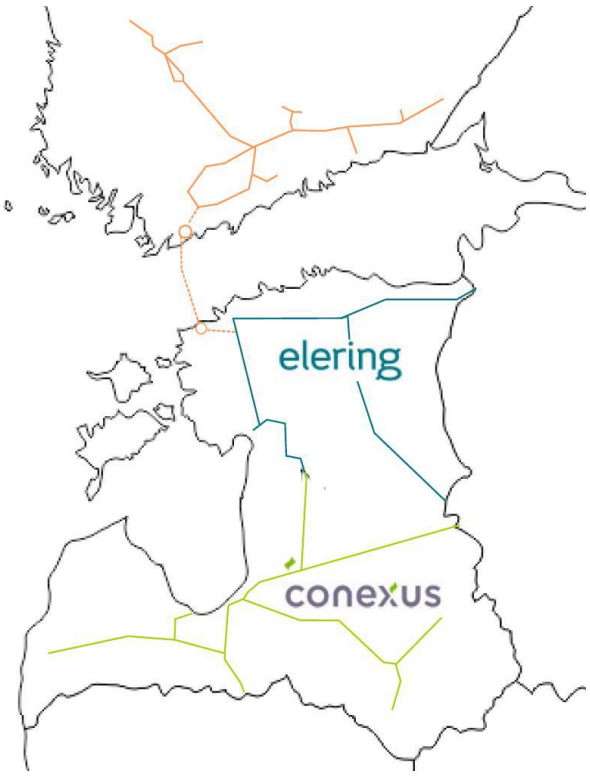
The single natural gas transmission entry-exit system is characterised by the application of the common rules. **Consequently, common rules on third-party access, capacity allocation and congestion management as well as on balancing should be applied in the single natural gas transmission entry-exit system.**

Developing the rules for the use of the natural gas transmission system in the FinEstLat single natural gas transmission entry-exit system the different levels of natural gas market maturity in the countries participating in the single system shall be taken into account. While the natural gas markets in Estonia and Latvia are already open, the opening of the natural gas market in Finland is only foreseen in 2020. Accordingly, a step-by-step approach has been agreed for the establishment of a single balancing zone of three countries.

The difference in the maturity natural gas market determines the extent to which countries can implement common rules for the use of the natural gas transmission system. Thus, in order to benefit from a common natural gas market and to promote convergence of national natural gas markets, a transitional period is provided from 2020 until 2022 during which slight deviations for the Finnish market are allowed. This approach is supported by the European Commission in respect of Estonia, stressing that that in view of the broader Baltic regional gas market integration and its target deadline for Baltic regional gas market integration process group - 2020 as presented also to the BEMIP high-level group, further flexibility as regards the timing of the implementation of the network codes could be justified in order to cater for such implementation taking place on a regional level.[5].

[5]European Commission letter No ENER/DR/KCoR/s/s (2017) 2311911 of 22 May 2017

During the transition period, two balancing areas will be set up in the FinEstLat single natural gas transmission entry-exit system – the common Estonian-Latvian balancing zone and the Finnish balancing zone. The public consultation of the rules for use and balancing of the natural gas transmission system in Latvia and Estonia were carried out by the Latvian natural gas transmission system operator JSC "Conecxus Baltic Grid" (hereinafter - Conexus Baltic Grid) and Estonian natural gas transmission system operator Elering AS. Public consultation run until 5 April 2019. The public consultation materials are available on the Conexus Baltic Grid website[6] and on the Elering AS website[7]. The draft rules have been submitted to the Regulator and the Estonian regulator for harmonised approval and should enter into force on 1 November 2019. In 2022, after the end of the transitional period, the merge of both balancing zones with the creation of a common FinEstLat balancing zone is envisaged.



In 2020, when the FinEstLat single natural gas transmission entry-exit system starts operation , network users will be free to book natural gas transmission system capacity at any entry and exit point in Finland, Estonia or Latvia and to transport natural gas across these three national borders without additional charges due to the absence of commercial interconnection points between the single natural gas transmission entry-exit system countries. A network user will be able to enter into a transmission service agreement with any of the natural gas transmission system operators operating in the common Estonia-Latvia balancing zone for the transportation of natural gas within the single balancing zone. For the transportation of natural gas within the Finnish balancing zone, transmission service agreement with the natural gas transmission system operator in Finland will have to be closed.

[6] Http://www.conexus.lv/aktualitates/latvijas-un-igaunijas-ieejas-izejas-sistemas-dabasgazes-parvades-sistemas-lietosanas-noteikumu-un-balansesanas-noteikumu-sabiedriska-apspriesana

[7] Https://elering.ee/en/closed-consultations

2) Choice of the reference price methodology

Article 6(1) and (3) of the TAR NC state that reference price methodology shall be set or approved by the national regulatory authority upon adoption and publication of a reasoned decision following the final consultations on the reference price methodology pursuant to Article 26 of the TAR NC.

The TAR NC does not foresee any default rules or specific requirements for entry-exit systems covering more than one Member State where more than one transmission system operator is active. Therefore, in line with the requirements of Article 11 of the TAR NC, the same reference price methodology may be applied jointly or separately or different reference price methodologies may be applied separately where more than one transmission system operator is active in an entry-exit system covering more than one Member State.

As mentioned in the previous section, the Baringa study concluded that in the FinEstLat single natural gas transmission entry-exit system the postage stamp reference price methodology should be applied in each country separately. The conclusion was made in the first phase of the study comparing the postage stamp, capacity weighted distance and the matrix reference price methodologies. The reference price methodologies comparison assessed the impact of each methodology on the functioning of the natural gas market, on the competitiveness of natural gas and the welfare of network users, as well as the simplicity of the methodology and the volume of transfers within the framework of ITC mechanism (which should be as low as possible).

The results of Baringa's analysis and wider assessment suggest that the postage stamp reference price methodology has many attractive features (see: Table 3).

Table 3

Results of the comparison of the reference price methodologies

Criterion	Postage stamp reference price methodology	Capacity weighted distance reference price methodology	Matrix reference price methodology
Economic efficiency			
Facilitation of long-run consumer welfare			
Facilitation of competition			
Simplicity			
Avoidance of significant transfers between national transmission system operators			

For instance, it was concluded that the postage stamp reference price methodology is being associated with simplicity and the most favorable impacts on competition and consumer welfare. A major drawback of the postage stamp methodology was found to be high associated inter-TSO transfers, ensuring the allowed revenue for each natural gas transmission system operator. Consequently, the postage stamp reference price methodology has been subject to the lowest score as regards the fulfilment of the criterion "Avoidance of significant transfers between national transmission system operators".

The capacity weighted distance and matrix reference price methodologies ensure a higher degree of long-run user welfare compared to the postage stamp reference price methodology. However, in the case of the use of the capacity weighted distance reference price methodology, transfers between national transmission system operators will be relatively high. The matrix reference price methodology allows for the smallest transfers within the ITC mechanism.

Taking into account the advantages and disadvantages of all reference price methodologies, Baringa concludes that for the determination of natural gas transmission system service tariffs in the FinEstLat single natural gas transmission entry-exit system, taking into account in particular the assessment criteria such as economic efficiency and competition in the supply of natural gas, the postage stamp reference price methodology most appropriate one.

On the basis of the agreement of the national regulatory authorities of the FinEstLat single natural gas transmission entry-exit system reference price to apply the postage stamp reference price methodology in each country separately, the Regulator approved on 3 July 2019 Decision Nr.1/10 "The methodology for the calculation of the tariffs on the natural gas transmission system service" [8] (hereinafter - the Tariff Calculation Methodology).

3) General conditions of the tariff calculation methodology

The current duration of the regulatory and the tariff period was one year. The tariff calculation methodology provides for a period of three years for the regulatory period and for the tariff period if the Regulator has not made a decision of a different length of the regulatory period or the tariff period until the 15 January of the starting year of the regulatory period or the tariff period. The regulatory period and the tariff period shall start on 1 October of the relevant year. This creates a more transparent and predictable operational environment for the natural gas transmission system operator and network users.

Article 12 of the TAR NC, which sets out the general rules for calculating tariffs for standard capacity products, provides for the gradual harmonisation of the tariff period and gas year (starting on 1 October of the current year and ending on 30 September of the following year). In the light of the above, the Tariff Calculation Methodology provides that, as of 2022, the regulatory period and the tariff period should begin on 1 October of the relevant year.

With respect to the recommendations of the Organisation for Economic Cooperation and Development and the State Audit Office of the Republic of Latvia, the Regulator has incorporated the components of the incentive regulation into the Tariff Calculation Methodology to facilitate a more efficient operation of the natural gas transmission system operator.

The natural gas transmission system operator shall create a regulatory account, where the difference between planned revenue and revenue obtained are attributed after the end of each gas year distinguishing between revenue attributed to the cross-border transmission system and the national transmission system. Planned revenues for the gas year are determined considering forecasted weighed average entry and exit capacity of the transmission system and

[8]Decision No Nr.1/10 of the Council of the Public Utilities Commission of 3 July 2019 on the methodology for the calculation of the tariffs on the natural gas transmission system service— https://likumi.lv/ta/id/307981-dabasgazes-parvades-sistemas-pakalpojuma-tarifu-aprekinasanas-metodika

the corresponding approved entry or exit point tariffs on capacity products. The balance of the regulatory account balance is taken into account in the determination of the revenue adjustments resulting in changes to the costs of capacity booking service for the next regulatory period.

The Tariff Calculation Methodology introduces for the concept of the natural gas transmission entry-exit system, including single natural gas transmission entry-exit system, and foresees that revenues and costs regarding to the inter-transmission system operator compensations of transmission system operators of the single natural gas transmission entry-exit system in accordance with the inter- transmission systems operator compensation terms and conditions should be taken into account for the purposes of calculating tariffs on the natural gas transmission system service for single natural gas transmission entry-exit system.

For the purpose of determining transmission system total entry capacity, the capacity at entry points from other transmission systems within the single natural gas transmission entry-exit system shall not be taken into account. For the purpose of determining transmission system total exit capacity, the capacity at exit points from other transmission systems within the single natural gas transmission entry-exit system shall not be taken into account.

4) Costs drivers of reference price methodology

According to Article 3(18) of the TAR NC, cost driver means a key determinant of the transmission system operator's activity which is correlated to the costs of that transmission system operator, such as distance or technical capacity.

The Tariff Calculation Methodology has been developed on the basis of the agreement by the national regulatory authorities of the FinEstLat single natural gas transmission entry-exit system to apply the postage stamp reference price methodology in each country separately. The Tariff Calculation Methodology requires the same tariffs on the natural gas transmission system service (reference price) at all entry points and exit points, irrespective of the transportation distance of the natural gas. Using the distance as a cost driver would not be in the spirit of the postage stamp reference price methodology. According to the Tariff Calculation Methodology, the tariffs on the natural gas transmission system service shall depend on the specified allowed revenue, the entry-exit split, as well as on capacity booking assumptions.

The FinEstLat single natural gas transmission entry-exit system, including the natural gas transmission system of Latvia, is designed to transport larger quantities of natural gas compared to the expected consumption of natural gas. Due to the low utilisation level of the natural gas transmission system, the forecasted booked capacity not the technical capacity of the natural gas transmission system is considered to be the most appropriate cost driver.

5) Entry-exit split

In calculating the planned revenue for tariff period to be recovered from the revenue of capacity booking of the entry points from other transmission entry-exit systems and the exit points to other transmission entry-exit systems, the natural gas transmission system operator shall apply the total revenue allocation coefficient 0.50 to the revenue for booking the entry point capacity and the total revenue allocation coefficient 0.50 for booking the exit point capacity. Concurrently with the draft tariff, the natural gas transmission system operator shall submit a justification if the revenue allocation coefficients are adjusted.

6) Capacity-commodity split

The Tariff Calculation Methodology specifies that the allowed revenues for the natural gas transmission system operator shall cover the total costs of capacity booking service within the regulatory period. The planned revenue for a tariff period covers the costs of capacity booking to be included in tariff calculation.

According to the natural gas market model introduced in Latvia with the opening the natural gas market in 2017, a balancing regime covering both the natural gas transmission and distribution systems has been established under the current regulatory framework. For capacity booking at the virtual exit point for the supplying gas users in Latvia "booked as measured" principle is introduced with capacity pre-booking requirement replaced by the obligation to submit non-binding nominations for the natural gas transmission system technical steering purposes, and "allocated as measured" for allocation taking into account that:

- more than 80 % of the services provided to the natural gas transmission system users serve for the needs of Latvian retail market;
- the consumption of natural gas by household users and other users of non-daily metered sites is about 10 % of Latvia's total natural gas consumption and they are characterised by its own intrinsic unpredictability;
- the natural gas distribution system operator is not currently in a position to provide accurate allocation data during gas day; and
- the natural gas transmission system is technically capable to quench 100% of the winter peak demand.

Such a principle does not impede the cross-border natural gas flows, ensures the correct allocation of costs between the wholesale of natural gas wholesale and retail markets and is compatible with the principle used in Estonia which also does not foresee booking of capacity for the exit to local consumption, effectively aligning conditions of the use of the network in both natural gas transmission systems forming a common Estonia-Latvia balancing zone.

Given that there is no booking at the exit point for the supplying gas users in Latvia, a capacity-based tariff for the use of the exit point for the supplying gas users in Latvia is converted into the energy charge. Pending the start of the next regulatory and tariff period, that is to say, by 1 October 2022, taking into account the results of the operation of the FinEstLat single natural gas transmission entry-exit system, the need to convert the tariff for the use of the exit point for the supplying gas users in Latvia into the energy charge.

The recovery of the transmission services revenue from commodity-based transmission tariffs is not envisaged.

7) Choice of inter-transmission system operator compensation mechanism

In accordance with Article 10(3) of the TAR NC, in order to allow for the proper application of the same reference price methodology jointly, an effective inter- transmission system operator compensation mechanism shall be established to prevent detrimental effects on the transmission services revenue of the transmission system operators involved and to avoid cross-subsidisation between intra-system and cross-system network use.

The absence of internal commercial interconnection points and the possibility of applying the flat tariff at all FinEstLat single natural gas transmission entry-exit system entry points from other transmission entry-exit systems are one of the most significant principles of the FinEstLat single natural gas transmission entry-exit system. In order to cover the reasonable costs incurred by the natural gas transmission system operators resulting from the provision of the natural gas transmission service in the FinEstLat single natural gas transmission entry-exit system without any detrimental impact on the transmission service revenues of the transmission system operators involves, the transmission system operators of the FinEstLat single natural gas transmission entry-exit system entered into agreement on ITC terms and conditions in Finland, Estonia and Latvia according to which the Latvian natural gas transmission system operator and the other natural gas transmission system operators in the FinEstLat single natural gas transmission entry-exit system will receive from or make payments to the other transmission system operators of the FinEstLat single natural gas transmission entry-exit system.

In particular, the basic principles of the ITC system of the FinEstLat single natural gas transmission entry-exit system are:

- the revenue recovered from the tariffs of all entry points of the FinEstLat single natural gas transmission entry-exit system is considered a single pool;
- the pooled revenue is shared between transmission system operators based on the share of natural gas delivered through the transmission system for domestic consumption in a particular country, including consumption for the natural gas transmission loss and technological purposed in the total quantity of natural gas delivered through the natural gas transmission system for consumption in the FinEstLat single natural gas transmission entry-exit system. The distribution of pooled revenue is carried out monthly, using previous year's corresponding national consumption shares in the total consumption of the FinEstLat single natural gas transmission entry-exit system;
- the variable costs incurred by the transmission system operators borne due to the ensuring of the flows not dedicated for delivery to the specific market directly is based on a regional flow scenario agreed between natural gas transmission system operators and estimates of compressor fuel costs incurred to facilitate the regional flow;
- for the purpose of compensation of eligible variable costs, the eligible variable costs shall be subtracted from the invoiced entry revenue of the natural gas transmission system operator who incurred the eligible variable costs. Eligible variable costs to be compensated has to be justified by appropriate invoices or calculations;
- at the end of the year, there shall be a reconciliation of the revenue recovered from the tariffs at the entry points of the FinEstLat single natural gas transmission entry-exit system. The reconciliation process shall result from a recalculation of the ITC entitlement shares attributable to the natural gas transmission system operator on the basis of actual data for the annual domestic natural gas consumption in Finland, Estonia and Latvia, and a reallocation of revenues based on the identified actual ITC entitlement share for each transmission system operator. The estimated actual ITC entitlement share for each transmission system operator shall be used for allocation of the following year’s pooled revenue;
- calculation of ITC entitlement shares and annual entry revenue reconciliation shall be performed by the elected Data Administrator, which shall be one of the TSOs and shall rotate annually;
- The role of the data administrator, unless agreed otherwise, shall be performed in the following order: Elering AS (Data Administrator’s obligations in 2020), Conexus Baltic Grid, the Finnish natural gas transmission system operator.

There are the following exit points to other natural gas transmission entry-exit systems in the FinEstLat single natural gas transmission entry-exit system:

- Narva exit point (Estonia — Russia);
- Varska exit point (Estonia — Russia);
- Izbors exit point (Estonia — Russia);
- Kiemenai exit point (Latvia — Lithuania).

According to the consultation document on Methodology on Tariffs of AB Amber Grid for 2020-2023,[9] in 2019, in Lithuania the largest natural gas entry flows were estimated via the Kotlovka entry point and an entry point from the LNG terminal. Only 2 % of the total entry natural gas

[9] *Lithuanian National Regulatory Authority:National Commission for Energy Control and Prices.Consultation on Methodology on Tarifa of AB Amber Grid for 2020-2023.Consultation Document based on Articles 26 & 28 of Commission Regulation (EU) 2017/460 of 16 March 2017 upgraded a network code on harmonised transmission tariff quotas for gas (TAR NC).2019*Internet — https://www.regula.lt/en/Pages/Updates/Public-Consultation-on-tariff-methodology-and-indicative-2020-2023-tariffs-of-Lithuanian-TSO-implementation-of-the-Networ.aspx

flows of 24TWh are expected to be received from Latvia via the Kiemenai entry point. No capacity reserved for Kiemenai at the entrance to 2020 to 2023 is foreseen.

Forecasting of the entry capacity for the Latvian natural gas supply system was carried out accordance with Sub-paragraph 2.7. of the Tariff Calculation Methodology, which set that estimated average daily capacity at the entry point is equal to the average daily capacity used (kWh/d) at the entry point within the three previous calendar years. The forecasted capacity at Kiemenai exit point is 4 874 MWh/day/year, i.e. 6 % of the exit capacity of the transmission system in Latvia, and less than 1 % of the exit capacity of the FinEstLat single natural gas transmission entry-exit system.

Based on the Tariff Calculation Method, the forecasted booked capacity at the Korneti exit point in case the FinEstLat single natural gas transmission entry-exit system is not established is 1465 MWh/ day/ year, which is 2% of the Latvian transmission system exit capacity.

In case FinEstLat single natural gas transmission entry-exit system is created, the forecasted booked capacity at the Korneti exit point would be attributed to Izborsk exit point and would be less than 1 % of the exit capacity of the FinEstLat single natural gas transmission entry-exit system. Having assessed the natural gas flows from 2017 to 2019, it is established that natural gas flows to Russia can only be observed during repair work in the Russian north-west natural gas transmission system. The negligible amount of forecasted booked capacity towards Russia is explained by the fact that the repair work in 2020-2022 is not intended and consequently the natural gas flows to Russia will be minimal.

In light of the above, it can be concluded that in the FinEstLat single natural gas transmission entry-exit system will in principle be no natural gas transit during the period 2020 to 2022 and that the whole system will operate in order to meet domestic demand for natural gas. The ITC regime should therefore be based on the allocation of revenue among natural gas transmission system operators based on domestic natural gas consumption of the country concerned and it is considered shall not allow for cross-subsidisation between intra-system and cross-system network use.

The choice of the basic principle of the ITC regime is also linked to the envisaged activities of the transmission system operators of the FinEstLat single natural gas transmission entry-exit system for the management of natural gas flows - transmission system operators will not use physical (point-to-point) delivery but will use flow netting.

One of the features of the FinEstLat single natural gas transmission entry-exit system is the flat tariffs at all single natural gas transmission entry-exit system entry points, preventing discrimination of routes of supply and reducing the barriers for new market entrants. Due to the above, the change in the natural gas suppliers booking practice regarding the usage of the FinEstLat single natural gas transmission entry-exit system entry points are unpredictable. Taking into account the topology of the natural gas transmission systems within the FinEstLat single natural gas transmission entry-exit system, which effectively prevents the circular natural gas transportation as a result of the change of the natural gas entry flows within the FinEstLat single natural gas transmission entry-exit system a part of the currently less used transmission system will be loaded with a view to relieving currently more used part of the transmission system.

It is expected that the launch of the FinEstLat single natural gas transmission entry-exit system will increase the number of natural gas trading transactions at the virtual trading point without any significant change in natural gas flows during the initial period.

Furthermore, it should be noted that the cooperation agreement between the natural gas transmission system operators necessary for the entry into operation of the single Estonia-Latvia balancing zone is based on the assumption that both natural gas transmission system operators

operate as a single system operator providing network users service and the technical cooperation.

If, in spite of the above, there will be significant internal (technical) cross-border flows of natural gas in the FinEstLat single natural gas transmission entry-exit system, their provision will only result in additional variable costs for the natural gas transmission system operators, which can be clearly identified. Accordingly, the agreement on ITC terms and conditions in Finland, Estonia and Latvia sets out the specific variable costs to be considered eligible, as well as the principles for their allocation and compensation. Such a variable cost reimbursement arrangement ensures that the transmission services revenue of the transmission system operators involved are not detrimentally affected.

In order to monitor the relevance of the ITC regime of the FinEstLat single natural gas transmission entry-exit system, the transmission system operators shall be required to assess, by 1 March of each year, the results of the implementation of the ITC mechanism of the previous year and to inform the national regulatory authorities. If necessary, the relevant changes will be made to the FinEstLat ITC regime.

The Tariff Calculation Methodology provides that the revenues and costs incurred by the natural gas transmission system operator pursuant to the ITC regime of the single natural gas transmission entry-exit system shall be taken into account for the calculation of the tariffs of the single natural gas transmission entry-exit system. The methodology provides that the planned revenue for a tariff period shall be calculated according to the following formula:

$$Ie_{PSO} = I_{PSO} - I_{PSO\,ef} - ITC,$$

where:

Ie_{PSO} - planned revenue of a tariff period (EUR);
I_{PSO} – total costs of capacity booking service (EUR);
$I_{PSO\,ef}$ – the amount of the capacity booking service costs to be reduced by the system operator by improving the efficiency of the use of assets and other resource as well as operational efficiency (EUR);
ITC – balance of revenues and costs regarding to the inter-transmission system operator compensations of transmission system operators of the single natural gas transmission entry-exit system that in accordance with the inter- transmission systems operator compensation terms and conditions is attributed to the system operator (hereinafter – inter-transmission system operator compensation) (EUR).

Considering that the planned revenue of the natural gas transmission system operator for the tariff period shall be allocated between cross-border transmission systems, the ITC shall attribute to the costs of the cross-border transmission system and of the national transmission system in accordance with the cost allocation methodology. This ensures that the planned revenue structure of the natural gas transmission system operator does not change, irrespective of whether the ITC is being or is not applicable.

8) Costs of securing natural gas supply

Amendments of 8 May 2018 to Cabinet Regulation No 312 of 19 April 2011 on Procedures for the Supply of Energy Users and Sale of Heating Fuel During Declared Energy Crisis and in Case of Endangerment to the State (hereinafter — Regulation No 312) lay down the responsibility of the joint natural gas transmission and storage system operator to ensure that, between the end of the natural gas injection season and 1 March of the following year, the Inčukalns UGS facility maintains a quantity of working gas of not less than 3160 thousand MWh (300 million m^3) to provide the daily capacity necessary for withdrawal of the natural gas from Inčukalns UGS during the energy crisis which to ensure a supply of natural gas to Latvia. The necessary technological and economically justified costs relating to the fulfilment of that obligation shall be those

included in the eligible costs of the natural gas transmission system service, and the joint natural gas transmission and storage system operator shall coordinate the model for providing that volume on an annual basis with the Ministry of Economics and Regulators.

In accordance with Article 3(11) of the TAR NC, allowed revenue means the sum of transmission services revenue and non-transmission services revenue for the provision of services by the transmission system operator for a specific time period within a given regulatory period.

When assessing the costs of securing natural gas supply related to the obligation of the natural gas transmission system operator in Regulation No 312 to secure the necessary natural gas withdrawal capacity from the Inčukalns UGS at the time of the energy crisis, the following arguments were put forward:

- European Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms for gas transmission systems and repealing Regulation (EU) Nr.984/2013 establishes the obligation of the natural gas transmission system operator to make available to the network users the maximum technical capacity, taking into account system integrity, security and efficient network operation;
- in accordance with Section 15(6) and Section 112(1) of the Energy Law, the natural gas transmission system operator is liable for the efficient operation, service and safety, the management and development of the system within the licence area, the connection to other systems and the long-term ability of the system to ensure the transmission of energy in accordance with demand;
- natural gas is to be compressed to a particular level for the transportation through the natural gas transmission system. When pressure falls to a certain value, the highest hydrocarbons present in natural gas become liquid and hinder the transport of natural gas with the result that natural gas users do not receive natural gas in an appropriate quantity and quality. Compressor stations are being used to ensure the pressure required for natural gas transmission systems. The specific feature of the natural gas transmission system in Latvia: the pressure required to transport natural gas is ensured by Inčukalns UGS;
- the risk assessment of the gas system in Estonia, Finland, Latvia and Lithuania drawn up by the Joint Research Centre of the European Commission in 2016 concluded that the flexibility of the Inčukalns UGS as an active pressure control facility depends on its inventory level, which turns out to be a key component of the regional security of gas supply.[10];
- natural gas transmission system operator, storing in Inčukalns UGS active natural gas the amount of which is not less than 3160 thousand MWh, from the end of the injection season until 1 March of the following year, complies with the obligation laid down in Regulation No 312 and at the same time ensures the required level of the natural gas inventory so the active pressure control facility - Inčukalns UGS, to be able to maintain the required level of pressure in the natural gas transmission system by providing uninterrupted provision of the transmission service to network users as well as the integrity of the system.

In the light of the above, it is considered that Costs of securing natural gas supply related to the obligation of system operator stipulated in the Regulation No 312 to ensure necessary natural gas withdrawal capacity from Inčukalns UGS facility during the energy crisis, are linked to the provision of the capacity booking service and to be included in the costs of the transmission service, as also specified in Regulation No 312.

[10] *Joint Research Centre of European Commission. Joint Risk Assessment of the system of Estonia, Finland, Latvia and Lithuania*, 2016.

The joint natural gas transmission and storage system operator Conecxus Baltic Grid, in agreement with the Ministry of the Economy and Regulator, has determined an auction for storing and accessing the quantity of active natural gas in Inčukalns UGS as the most appropriate model for fulfilling the obligation laid down in Regulation No 312. The joint natural gas transmission and storage system operator Conexus Baltic Grid has been conducting auctions annually during or prior to the injection season.

Costs of securing natural gas supply related to the obligation of system operator stipulated in the Regulation No 312 to ensure necessary natural gas withdrawal capacity from Inčukalns UGS facility during the energy crisis are one of the major cost elements of natural gas transmission system operator. The value of these costs is influenced by the price of natural gas, the price of future transactions, as well as the types of loss hedging available to natural gas suppliers at the time of the auction. Consequently, there are significant fluctuations in the cost of securing natural gas supply over the years (see: Table 4).

Table 4

Eligible costs of securing natural gas supply for the period 2017-2019, million EUR

Indicator	Year 2017	Year 2018	Year 2019
Costs of securing natural gas supply	5.3	9.2	5.2

In order to avoid a possible rapid fluctuation in the natural gas transmission service tariffs, the Tariff Calculation Methodology provides that of securing natural gas supply shall be included in the draft tariff in accordance with the actual, justified amount. These costs are to be recovered in two gas years starting from the moment the costs are incurred.

For the regulatory period from 1 January 2020 to 30 September 2022, the transmission system operator shall indicate the charge for the use of the exit point for supplying gas users in Latvia in the form of a table at the various costs of securing natural gas supply with 100’000 EUR increments. This is due to the fact that the costs of securing natural gas supply are not identifiable for the entire regulatory period and may change significantly during the regulatory period and, therefore, it is necessary to provide the natural gas transmission system operator with the possibility to cover all costs of the capacity booking service with the allowed revenue.

According to the Tariff Calculation Methodology, the costs of securing natural gas supply are included in the operating costs of the national transmission system and are only taken into account when determining the charge for the use of the exit point for the supplying gas users in Latvia. Such a cost allocation principle was established in the assessment of the results of the costs of securing natural gas supply: the supply of natural gas during the energy crisis of Latvia is ensured and the required level of pressure is ensured in the natural gas transmission system. Given that the necessary pressure level in the natural gas transmission system is provided not only by the amount of natural gas stored in the Inčukalns UGS according to the Regulation No 312, but also by the amount of natural gas stored by the natural gas suppliers at the Inčukalns UGS, it can be concluded that the allocation of the costs should be based on the objective of the cost of securing natural gas supply — to provide a supply of natural gas to Latvia gas during the energy crisis.

Considering that the Baltic States have not yet reached agreement, as provided for in Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply, and repealing Regulation (EU) No 994/2010, on the necessary measures, including no technical, legal and financial arrangements to ensure that natural gas is supplied in solidarity preventing unjustified socialisation of the of costs for the supply of natural gas, there is no reason to take into account the costs of securing natural gas supply determining the tariffs at the entry or exit points to other natural gas transmission entry-exit systems.

Note that, pursuant to Regulation No 312, the obligation for the joint natural gas transmission and storage system operator to ensure that the Inčukalns UGS facility maintains a quantity of working gas of not less than 3160 thousand MWh to ensure a supply of natural gas to Latvia during energy crisis must be fulfilled until 1 March 2022.

III Discounts, multipliers and seasonal factors

Pursuant to Article 28(1) of the TAR NC, at the same time as the final consultation carried out in accordance with Article 26(1) of TAR NC, the national regulatory authority shall conduct a consultation on the level of multipliers; the level of seasonal factors and the levels of discounts applied at entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems as well as to the interruptible capacity product tariffs.

The Latvian natural gas supply system does not include LNG facilities and infrastructure to end the isolation.

1) Discount applied to transmission tariffs at entry points from and exit points to storage facility

Pursuant to Article 9(1) of the TAR NC, a discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point.

The Tariff Calculation Methodology determines that the system operator shall specify the discount applicable to the tariffs for the entry point from the natural gas storage facility and the exit point to the natural gas storage facility (Dkr). Concurrently with the draft tariff, the system operator shall submit the justification for the amount of the discount.

A discount of 100 % is foreseen to applied to the tariffs at the entry point from the natural gas storage facility and exit point to the natural gas storage facility. The same discount is also applied to the tariffs in force.

The amount of the discount to the tariffs at entry point from the natural gas storage facility and exit point to the natural gas storage facility is determined based on the conclusion of the Baringa study that one of the main principles to be observed in the creation of the FinEstLat single natural gas transmission entry-exit system is non-existence of an internal interconnection points, including the Inčukalns UGS entry and exit point. This will prevent the pancaking of tariffs on the natural gas transmission system service, facilitate the free movement of natural gas in the region and improve the use of existing infrastructure. The following factors were taken into account in the determination of the discount:

- the specific role played by Inčukalns UGS in the region, ensuring the security of natural gas supply, the continuity of natural gas flows and the integrity of the system;
- promoting the natural gas trade in the region, while balancing the interests of natural gas producers, traders and end-users, via enabling the optimisation of the natural gas acquisition programs by the first and saving from unjustified price spikes the others;
- an increase in the competition and independence of the natural gas reserves accumulated in the region, as natural gas in storage has already passed the external border of the FinEstLat single natural gas transmission entry-exit system, thereby reducing the market power of the natural gas suppliers relying on direct deliveries at the time of peak demand;
- the natural gas transmission system operator shall not incur any specific costs related to the organisation of the natural gas flows and the transportation of natural gas by means of its injection or withdrawal from the storage facility;

- a discount application will enable network users to make more efficient use of the Inčukalns UGS in daily balancing.

Therefore, it is reasonable to assume that the use of the particular natural gas transmission system point without charge for the natural gas transmission system (100% discount applied to the tariff qualifying the connection point as only technical and invisible for the market commercially), is comparable to the abolishment of commercial interconnection points between countries that form a single natural gas transmission entry-exit system strengthening the sustainability of the integrated Baltic gas market, increasing the bargaining power of market players active in the integrated market thus enhancing the positive impact of the regional natural gas market integration process.

In accordance with the Tariff Calculation Methodology, revenue foregone resulting from the application of the 100 % discount to the tariffs at the entry point from the natural gas storage facility and exit point to the natural gas storage facility shall be attributed to the charge for the use of the exit point for the supplying gas users in Latvia.

Chapter 7 of Section II of the consultation document explains that during the period from 2020 to 2022 in the FinEstLat single natural gas transmission entry-exit system actually would not be natural gas transit and that the whole system will operate in order to meet domestic demand for natural gas. Consequently, it would not be justified to determine that part of revenue foregone resulting from the application of the 100 % discount to the tariffs at the entry point from the natural gas storage facility and exit point to the natural gas storage facility should be recovered by the natural gas transmission system operator from the capacity products tariffs at entry or exit points to the other transmission entry-exit system.

One of the objectives of the FinEstLat single natural gas transmission entry-exit system is to improve the use of the existing infrastructure, including the Inčukalns UGS. However, in the start-up phase of the FinEstLat single natural gas transmission entry-exit system the forecasts for the utilisation of the Inčukalns UGS, determining which network users of the FinEstLat single natural gas transmission entry-exit system and to what extent will use the storage, are highly inaccurate. The accuracy of the forecast is influenced by, for example, the fact that the Finnish-Estonian interconnector Balticconnector will become operational in 2020. Even though the natural gas suppliers in Finland have expressed an interest in using the Inčukalns UGS, forecasts for the utilisation of the transmission capacity related to the storage would be speculative before the conclusion of the storage service agreements and storage capacity booking.

The natural gas transmission system operators of the FinEstLat single natural gas transmission entry-exit system in the agreement on ITC terms and conditions in Finland, Estonia and Latvia do not intend to offset any revenue foregone from the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility. Furthermore, the national regulatory authorities of the FinEstLat single natural gas transmission entry-exit system have not been reached an agreement on the compensation arrangements for these foregone revenues, considering that without a reasoned forecast of the use of the transmission system capacity related to the Inčukalns UGS the compensation arrangements for the foregone revenue may lead to an undue socialisation of costs.

In order to prevent detrimental effects on the transmission system services revenue and to ensure that the costs of the natural gas transmission system operator are covered, and in the light of the above and in view of the fact that Latvia's demand for natural gas is mostly covered by the supplies of natural gas from the Inčukalns UGS, it is justified to recover the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility applying the charge for the use of the exit point for supplying gas users in Latvia.

2) Multipliers

The Tariff Calculation Methodology states that concurrently with the draft tariff, the system operator shall submit the economic justification for the size of multipliers used in the draft tariff by taking into account the system operator's obligation to ensure efficient use of the transmission system for the provision of the capacity booking service and for covering the total costs of the capacity booking service.

The natural gas transmission system is designed with the ability to transport large quantities of natural gas under conditions of maximum demand but is only partially used under average conditions. Therefore, the costs of ensuring short-term transmission capacity are not significantly different from the cost of the annual capacity provision. The application of the multipliers for tariffs for short-term capacity products greater than 1 makes it possible to charge more for those network users that contribute to peak demand for the use of the natural gas transmission system service than the network users with a distributed natural gas transmission system service profile. In this way, the interest of the network users in the long-term capacity products booking is encouraged. Applying lower multipliers, the network users are incentivised to shape capacity booking profile to their needs, and the trading of natural gas is encouraged as appropriate.

According to Article 13 of the TAR NC, the level of multipliers for quarterly standard capacity products and for monthly standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 1,5; for daily standard capacity products and for within-day standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 3. In duly justified cases, the level of the respective multipliers may be less than 1, but higher than 0, or higher than 3. According to Article 28(3) of the TAR NC, the following aspects should be taken into account in determining the level of multipliers:

- the balance between facilitating short-term gas trade and providing long-term signals for efficient investment in the transmission system;
- the impact on the transmission services revenue and its recovery;
- the need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices;
- situations of physical and contractual congestion;
- the impact on cross-border flows.

One of the objectives of the creation of the FinEstLat single natural gas transmission entry-exit system is to avoid non-justified competition between the entry points of the FinEstLat single natural gas transmission entry-exit system, improving the natural gas trading in the FinEstLat natural gas market and optimising natural gas flows between Finland, Estonia and Latvia. Following that objective, the same multipliers will be applied when setting the tariffs for short-term capacity products at the entry points of the FinEstLat single natural gas transmission entry-exit system. The multipliers fall within the ranges set out in Article 13 of the TAR NC and are close to the EU average level of the multipliers (see: Table 5).

Table 5

Applicable multipliers for the standard capacity products tariffs

Type of standard capacity product	Existing multipliers in Latvia	A multiplier applicable the FinEstLat single natural gas transmission entry-exit system	EU average multipliers[11]
Annual	1	1	1
Quarterly	1	1.1	1.18
Monthly	1	1.25	1.27
Daily	1.05	1.5	1.43
Within day	1.05	1.7	1.39

Defining the level of multipliers applicable to the FinEstLat single natural gas transmission entry-exit system, account was taken of the transmission system capacity booking practice in Latvia (currently in Finland and Estonia the transmission system capacity is not booked by network users), which shows that network users are mainly using daily and within day standard capacity products, with no use at all of the annual standard capacity product. Since no long-term capacity products booking is being made, the natural gas transmission system operator is not receiving an effective investment signal.

In order to create the most justified and balanced distribution of costs between network users with a distributed natural gas transmission system service use profile as well as network users with an unpredictable natural gas transmission system service use profile, such as gas-fired combined heat and power plants, and to promote the interest of the network users in the long-term capacity products booking, it is envisaged to use increased multipliers in the FinEstLat single natural gas transmission entry-exit system compared to the multipliers in force in Latvia.

In order to avoid any excessive or insufficient recovery of allowed revenue, the natural gas transmission system operator anticipates the distribution of revenue for the standard capacity products for the tariff period. No discount of less than 1 is expected to be used for the determination of the standard capacity product tariffs, i.e. none of the capacity products benefit from a discount, the tariffs ensure coverage of the costs of total capacity booking service included in their calculation, and therefore there is no risk of cross-subsidisation of the system users using the capacity products at a discount.

The level of multipliers has an impact on the operational planning for the FinEstLat single natural gas transmission entry-exit system natural gas transmission system operators. By applying such multipliers, a predictable operational environment for the FinEstLat single natural gas transmission entry-exit system transmission system operators are created, which is of particular importance in view of the increased interoperability necessary to support market integration. In addition, the application of such multipliers will promote the interest of the network users (suppliers) in more accurate planning of supply, thereby ensuring a more appropriate information base for natural gas transmission system operators to optimise the operation of the

[11]Implementation Monitoring and Baseline for Effect Monitoring of the Tarif Network Code. First ENTSOG report. March 2018. Internet — https://www.entsog.eu/public/uploads/files/publications/Tariffs/2018/TAR0878_171108_TAR%20NC%20Implementation%20and%20Effect%20Monitoring%20Report%202017_High-Res.pdf

natural gas transmission system, which in turn would improve the overall stability of the natural gas transmission system and the implementation of security of supply measures.

All network users are charged the same tariffs for standard capacity products. The multipliers are not differentiated according to the natural gas consumption profile of the network user, the consumption volume or other factors characterising the network users, so that cross-subsidisation between system users is avoided.

Given the decreasing trend of gross domestic natural gas consumption in the EU Member States in recent years, as well as EU decisions to promote the use of renewable energy resources and energy efficiency, it would not be appropriate to predict the growth in the natural gas consumption in Latvia and the rest the FinEstLat single natural gas transmission entry-exit system countries. Consequently, given that the natural gas transmission system is designed to transport larger quantities of natural gas compared to the forecasted consumption of natural gas, it can be concluded that there is a situation of very low probability of physical congestion and contractual congestion within the FinEstLat single natural gas transmission entry-exit system.

3) Seasonal factor

The seasonal factor is applied by setting the tariffs of short-term capacity products to take into account the seasonality of natural gas flows during the year. The purpose of the seasonal factor is to incentivise network users to use the natural gas transmission system for the low load season (summer) by shifting the demand from winter peak, thus ensuring efficient use of the natural gas transmission system.

According to the TAR NC, starting July 2018 seasonal factors are applied to determine the tariffs at the Latvian natural gas transmission system entry points. The objective of the seasonal factor application is to encourage the network users to plan deliveries in a manner that reduces the risks of the natural gas transmission system congestion under conditions of high natural gas demand which will avoid the imposition of unjustified investment in increasing the interconnection capacity of the transmission system. For quarterly capacity products, the seasonal factor is applied for the first and fourth quarters of the year, but the seasonal factor for monthly, daily and within day capacity products is applied in November, December, January, February, March and April.

For the calculation of quarterly and monthly standard capacity products, the seasonal factor 1,5 is applied. Daily and within day standard capacity products are subject to a seasonal factor of 3.

Taking into account the different levels of the natural gas market maturity in the FinEstLat single natural gas transmission entry-exit system, the seasonal factor for the pricing of short-term standard capacity products is introduced in order to familiarise market participants with the concept, but the seasonal factor is 1,0, which does not lead to a seasonal differentiation of tariffs.

IV Indicative natural gas transmission service tariffs

The indicative natural gas transmission service tariffs for the tariff period from 1 January 2020 to 30 September 2022 are determined in accordance with the Tariff Calculation Methodology using the forecasted entry and exit point capacity referred to in Chapter 4, entry-exit split described in Chapter 5, the capacity-commodity split described in Section 6 of Title II of the Consultation Document, the natural gas storage tariff discount set out in Chapter 1, the multipliers set out in Chapter 2 and the seasonal factor set out in Chapter 3 of the Title III.

1) Forecasted entry and exit capacity and volume of natural gas transmitted

According to subparagraph 2.7. of the Tariff Calculation Methodology, estimated average daily capacity at the entry or exit point is equal to the average daily capacity used within the three previous calendar years.

The forecasted total entry and exit capacity of the transmission system over the tariff period from 1 January 2020 to 30 September 2022 is 86 828 798 MWh (see: Table 6).The capacity based on three years' actual use is forecasted at all entry and exit points of the Latvian natural gas transmission system.

Up to now, the capacity and flows of the Karksi entry point have not been forecasted when setting natural gas transmission system service tariffs because only the physical natural gas exit flows and a virtual entry flows were possible at this interconnection point. Taking into account the completion of the European project of common interest at the end of 2019 — the Enhancement of Estonia — Latvia interconnection, the Karksi entry capacity is forecasted to be 2 % of the total entry point capacity of the transmission system in 2020, 3 % in 2021 and 4 % in 2022.

Table 6

Total booked entry and exit capacity of the transmission system for the period 2017 to 2019 and the tariff period 1 January 2020 to 30 September 2022, MWh/year

Entry/exit points	Fact			Forecast			
	Year 2017	**Year 2018**	**Year 2019**[12]	**01.01.2020—30.09.2020**	**01.10.2020—30.09.2021**	**01.10.2021—30.09.2022**	**Tariff Period from 01.01.2020 to 30.09.2022**
Total entry capacity of the transmission system, including:	**26 346 611**	**30 195 069**	**34 664 421**	**22 801 525**	**31 753 841**	**32 273 432**	**86 828 798**
Korneti entry point capacity	13 782 684	15 317 981	19 852 713	11 782 314	16 210 214	16 486 841	44 479 368
Kiemenai entry point capacity	2 536 069	2 204 574	2 552 661	1 823 326	2 396 112	2 459 958	6 679 396
Karksi entry point capacity	0	0	0	456 031	952 615	1 290 937	2 699 583
entry pint from storage capacity	10 027 858	12 672 514	12 259 048	8 739 855	12 194 900	12 035 696	32 970 451
Total exit power of the transmission system, of which:	**26 346 611**	**30 195 069**	**34 664 421**	**22 801 525**	**31 753 841**	**32 273 432**	**86 828 798**
Korneti exit point capacity	52 667	586 488	687 595	331 688	572 111	567 319	1 471 118
Kiemenai exit point capacity	209 751	2 423 916	1 923 432	1 139 275	1 955 460	1 799 309	4 894 044
Karksi exit point capacity	1 567 435	1 123 660	1 792 747	1 120 961	1 470 340	1 585 901	4 177 201
exit point to storage capacity	11 360 422	10 962 743	16 362 674	9 671 460	13 406 899	14 221 617	37 299 976
exit point for supplying gas users in Latvia capacity	13 156 336	15 098 262	13 897 973	10 538 143	14 349 030	14 099 287	38 986 460

[12] Capacity at the entry or exit points for 2019 is calculated on the basis of data available on AS Conecxus Baltic Grid website for July-January 2019 and average capacity of the three previous calendar years for July — December

1) Calculation of indicative yearly capacity products tariffs

According to Article 3(1) of the TAR NC, reference price means the price for a capacity product for firm capacity with a duration of one year, which is applicable at entry and exit points and which is used to set capacity-based transmission tariffs.

The TAR NC does not foresee any special rules or specific requirements for entry-exit systems covering more than one Member State where more than one transmission system operator is active. Therefore, as set out in Article 11 of the TAR NC transmission system operators operating in such natural gas transmission entry-exit system may apply the same reference price methodology jointly or separately or may apply different reference price methodologies separately.

Article 6(4)(a) of the TAR NC provides that adjustments to the application of the reference price methodology to all entry and exit points may only be made by benchmarking, whereby reference prices at a given entry or exit point are adjusted so **that the resulting values meet the competitive level of reference prices.**

The FinEstLat single natural gas transmission entry-exit system entry points in Finland, Estonia and Latvia are similar and competing against each other in a situation, where there are no interconnection points between the three countries. No or little congestion is expected between these different entry points; and majority of the gas is originating from the same supply source. Therefore, all entry points to the region are effectively competing against each other for satisfying regional gas demand. Any difference in entry tariff level would pick a winner to allocate all flow to the entry point with lowest entry tariff, thus putting the entire system under extreme strain. Taking it into account, it is vital to make the entry tariffs to the FinEstLat single natural gas transmission entry-exit system equal.

After a careful assessment, the regulatory authorities of Finland, Estonia and Latvia have concluded jointly that the competitive reference price for the entry points is the average yearly entry capacity product tariff of all EU countries (except the Baltic States and Finland) for which an uncertainty adjustment was applied (standard error). The following factors justify the conclusion:

- the reference price at the entry points shall be calculated in such a way that the wider objective of the FinEstLat single natural gas transmission entry-exit system joining the EU common market is taken into account;
- reference price at the entry point thus calculated gives a motivating price signal to the natural gas suppliers to ensure compatibility with the changes in the competitive environment after ending the state of isolated market;
- reference price at the entry point thus calculated facilitates trade links with the EU's continental market through *forward* swap transactions;
- reference price for the entry point thus calculated motivates third parties to launch their activities in the FinEstLat single natural gas transmission entry-exit system.

EU Member States the average yearly entry capacity product tariff is EUR 128.44 MWh/day/year and standard error — 14.33 (calculations in Annex 11). Consequently, the indicative reference price at all FinEstLat single natural gas transmission entry-exit system entry points is EUR 142.77 MWh/day/year.

The benchmarking exercise leading to an adjustment of the reference prices at FinEstLat single natural gas transmission entry-exit system entry points, obtaining a competitive reference price level, changes the entry-exit split used for fixing the tariffs for the Latvian natural gas

transmission entry-exit system only. On the basis of the established flat reference price at all FinEstLat single natural gas transmission entry-exit system entry points and according to the agreement of the regulatory authorities of the FinEstLat single natural gas transmission entry-exit system respectively is adjusted indicative charge for the use of the exit point for supplying gas users in Latvia laid down for Latvia, provided that the FinEstLat single natural gas transmission entry-exit system was established (see Table 7).

When calculating the tariffs in force for the applicable yearly standard capacity products, the revenue allocation coefficient for the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for supplying gas users in Latvia K_{reg} was calculate as the proportion of the natural gas transmission capacity for supplying gas users in Latvia in the total exit capacity of the transmission system, excluding storage capacity.

When calculating the tariffs for the regulatory period and for the tariff period from 1 January 2020 to 30 September 2022, the procedure for calculating this coefficient has been changed by providing for coefficient to be set as the proportion of the capacity of the natural gas transmission system necessary to meet the demand for natural gas in Latvia (capacity-related cost driver for intra-system network use) in the total entry and exit capacity of the natural gas transmission system.

The change in determination of the revenue allocation coefficient for the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for supplying gas users in Latvia K_{reg}, avoid cross-subsidisation between intra-system and cross-system network use, changed the relationship between costs (and revenues respectively) that are attributable to the cross-border and national transmission system. With the increase in eligible costs for cross-border transmission systems, the indicative entry capacity product tariffs for the regulatory and tariff period from 1 January 2020 to 30 September 2022, compared to the existing tariffs, increase by 357 %, and indicative exit capacity product tariffs by 102 %. At the same time, the charge for the use of the exit point for supplying gas users in Latvia is reduced by 22 % (see: Table 8). The increase reduction in capacity product tariffs is not proportional as the forecasted average daily capacity of the transmission system has changed.

For the regulatory and tariff period from 1 January 2020 to 30 September 2022 in calculating the planned revenue for tariff period to be recovered from the revenue of capacity booking of the entry points from other transmission entry-exit systems and the exit points to other transmission entry-exit systems, the total revenue allocation coefficient 0.50 to the revenue for booking the entry point capacity and the total revenue allocation coefficient 0.50 for booking the exit point capacity is applied.

In accordance with the Tariff Calculation Methodology for the regulatory period from 1 January 2020 to 30 September 2022, the charge for the use of the exit point for supplying gas users in Latvia shall be indicated in the form of a table at the various costs of securing natural gas supply with 100’000 EUR increments. (see: Annex 1).

Table 7

Indicative yearly standard capacity products tariffs and the elements used for their calculation

Indicator	Designation	Unit	Tariffs in force	Indicative tariffs if no FinEstLat system was created	Indicative tariffs, if the FinEstLat system is in place	Indicative tariffs if there are flat entry tariffs in the FinEstLat system
Total costs of capacity booking service, including:	I_{TSO}	EUR	38 407 036	33 831 000	33 831 000	33 831 000
Costs of securing natural gas supply		*EUR*	11 814 120	2 618 500	2 618 500	2 618 500
Adjustment to the costs of securing natural gas supply		*EUR*		2 282 386	2 282 386	2 282 386
Inter-transmission system operator compensation	ITC	EUR			5 545 302	5 545 302
Allowed revenue	**$IE\ The_{TSO}$**	**EUR**	**38 407 036**	**33 831 000**	**28 285 698**	**28 285 698**
Costs of the cross-border transmission system	CSO_{ST}	EUR	4 969 676	15 940 383	8 294 388	8 294 388
Costs of the national transmission system	$I_{PSO\ Regs}$	EUR	33 437 360	17 890 617	19 991 310	19 991 310
Entry capacity of the transmission system	P_e	kWh/d	85 698 701	86 482 867	39 491 879	39 491 879
Exit capacity of the transmission system	P_{iz}	kWh/d	85 698 701	86 482 867	80 857 052	80 857 052
Forecasted daily average capacity at the entry point from the natural gas storage facility	P_{kr}	kWh/d	26 910 880	32 839 095	32 839 095	32 839 095
Forecasted daily average capacity at the exit point from the natural gas storage facility	$Mr_{iz\ Kr}$	kWh/d	38 386 812	37 151 370	37 151 371	37 151 371
Forecasted maximum daily capacity at exit point for supplying gas users in Latvia	$P_{iz\ v}$	kWh/d	39 271 414	38 831 135	38 831 135	38 831 135
Forecast of natural gas delivered to gasified objects connected to the natural gas transmission and distribution system during the year	Q pour	kWh	14 334 066 000	14 176 894 545	14 176 894 545	14 176 894 545
Revenue allocation coefficient for the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for supplying gas users in Latvia	K_{reg}		83 %	45 %	65 %	65 %
Discount applied to transmission tariffs at entry points from and exit points to storage facility	Kr		100 %	100 %	100 %	100 %
Yearly standard capacity product tariff for entry points from another transmission entry-exit system	**$T\ e_e$**	**EUR/kWh/d/y**	**0.0312507**	**0.1232448**	**0.2888725**	**0.1427700**
Yearly standard capacity product tariff for entry point from natural gas storage facility	**$T_{e\ kr}$**	**EUR/kWh/d/y**	**0.0000000**	**0.0000000**	**0.0000000**	**0.0000000**
Yearly standard capacity product tariff for exit points to other transmission entry-exit system	**T_z**	**EUR/kWh/d/y**	**0.0329931**	**0.1304010**	**0.0667545**	**0.0667545**
Yearly standard capacity product tariff for the exit point to the natural gas storage facility	**T_{iz}**	**EUR/kWh/d/y**	**0.0000000**	**0.0000000**	**0.0000000**	**0.0000000**
Charge for the use of the exit point for supplying gas users in Latvia	**$K\ over_v$**	**(EUR/kWh)**	**0.0025327**	**0.0018234**	**0.0018367**	**0.0019722**

Table 8

Comparison of existing and indicative annual capacity products tariffs

Type of tariff	The tariffs in force, EUR/kWh/day/year	Indicative tariffs if no FinEstLat system was created, EUR/kWh/day/year	Indicative tariffs if there are flat entry tariffs in the FinEstLat system, EUR/kWh/day/year	Comparison of the indicative tariffs if no FinEstLat system was created, with tariffs in force		Comparison of the indicative tariffs if FinEstLat system was created, with tariffs in force	
				Abs.	%	Abs.	%
Yearly standard capacity products tariffs							
Tariff for entry points from another transmission entry-exit system	0.0312507	0.1232448	0.1427700	0.0919941	294 %	0.1115193	357 %
Tariffs for exit points to another transmission entry-exit system	0.0329931	0.1304010	0.0667545	0.0974079	295 %	0.0337614	102 %
Interruptible capacity products tariffs							
Tariff for entry points from another transmission entry-exit system	0.0296882	0.1170825	0.1356315	0.0873943	294 %	0.1059433	357 %
Tariffs for exit points to another transmission entry-exit system	0.0313434	0.1238809	0.0634168	0.0925375	295 %	0.0320734	102 %
Charge for the use of the exit point for supplying gas users in Latvia	**0.0025327**	**0.0018234**	**0.0019722**	**0.0007093**	**-28 %**	**00005605**	**- 22 %**

2) Calculation of indicative tariffs for short-term capacity products

The tariffs for short-term power products can be found in Annex 2-10.

3) Cost allocation assessment

Article 5 of the TAR NC provides that a cost allocation assessment be made to ensure that there is no cross subsidisation between intra-system and cross-system network use. The cost allocation assessment is made determining the cost allocation comparison index. The size of the cost allocation comparison index depends on the intra-system capacity ratio and the cross-system capacity ratio. If the of the cost allocation comparison index exceeds 10 %, the justification for that result must be provided.

The intra-system capacity ratio is calculated as the revenue, which is obtained from capacity tariffs and charged for intra-system network use at both all entry points and all exit points divided by the value of capacity-related cost driver for intra-system network use.

The cross-system capacity ratio is calculated as the revenues which is obtained from capacity tariffs and charged for cross-system network use at both all entry points and all exit points divided by the value of capacity-related cost driver for cross-system network use.

Pursuant to Article 3(8) and (9) of the TAR NC network, intra-system network use means transporting gas within an entry-exit system to customers connected to that same entry-exit system and cross-system network use means transporting gas within an entry-exit system to customers connected to another entry-exit system.

Natural gas which at the cross-border entry point is injected into the relevant natural gas transmission entry-exit system (cross-system network use), as can be withdrawn from the system at national exit point, at exit point to storage facility (intra-system network use) or at cross-border exit point (cross-system network use). Therefore, the cross-system network use is determined on the basis of Article 5(5) of the TAR NC - the amount of allocated capacity attributed to the provision of transmission services for cross-system network use at all entry points shall be deemed equal to the amount of capacity attributed to the provision of transmission services for cross-system network use at all exit points. Other transmission services revenue is the revenue to be obtained from intra-system network use at entry points.

The cost allocation assessment has been made on the basis of the cost diver used in the reference price methodology - the forecasted booked entry and exit capacity of the natural gas transmission system (see: Table 6), indicative tariffs (see: Table 7) and corresponding revenue for the booked capacity of the natural gas transmission system for the regulatory and tariff period from 1 January 2020 to 30 September 2022.

To determine the degree of cross-subsidisation between intra-system and cross-system network use on the basis of the proposed reference price methodology, the intra-system and cross-system capacity ratio as well as the capacity cost allocation comparison index have been be calculated (see: Table 9).

Table 9

Cost allocation assessment

Indicator		No FinEstLat system was created (by postage stamp methodology) *		No FinEstLat system was created (by postage stamp methodology) **		No FinEstLat system was created (by capacity weighted distance methodology) *		No FinEstLat system was created (by capacity weighted distance methodology) **		FinEstLat system created	
		Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue	Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue	Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue	Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue	Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue
Entry	Intra-system network use	38 831 135	4 785 735	38 831 135	7 581 392	38 831 135	11 727 663	38 831 135	12 864 386	38 831 135	5 545 302
	Cross-system network use	47 651 731	1 825 580	47 651 731	9 303 525	14 812 636	2 198 460	14 812 636	2 411 550	6 652 785	1 921 807
Exit	Intra-system network use	38 831 135	25 850 428	38 831 135	7 611 975	38 831 135	15 653 200	38 831 135	13 891 286	38 831 135	26 038 493
	Cross-system network use	47 651 731	1 369 257	47 651 731	9 303 525	10 500 362	4 251 677	10 500 362	4 663 778	42 025 916	325 398
Intra-system capacity ratio		0.394479357		0.19563382		0.352563248		0.344513128		0.406681327	
Cross-system capacity ratio		0.033522784		0,195240022		0,254815236		0,279513639		0.046164022	
Cost allocation comparison index		168.67		0.20		32.19		20.83		159.22	

* Costs of securing natural gas supply, the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility according to the Tariff Calculation Methodology are attributed to the charge for the use of the exit point for supplying gas users in Latvia.
* * Costs of securing natural gas supply, the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility are attributed to all entry/exit points.

Considering that the costs of securing natural gas supply as well as the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility according to the Tariff Calculation Methodology are attributed to the charge for the use of the exit point for supplying gas users in Latvia, significantly increasing in the level of cross-subsidisation, an assessment of the cost allocation has been made in case the costs of securing natural gas supply as well as the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility are attributed to all entry and exit points of the natural gas transmission system.

When the costs of securing natural gas supply as well as the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility according to the Tariff Calculation Methodology are attributed to the charge for the use of the exit point for supplying gas users a cost allocation comparison index is 168.67. When the costs of securing natural gas supply as well as the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility are attributed to all entry and exit points of the natural gas transmission system, the cost allocation comparison index is 0.2, indicating that there is no cross subsidisation between intra-system and cross-system network use.

Reasons why the Tariff Calculation Methodology foresees the attribution of the costs of securing natural gas supply as well as the revenues foregone from the application of the 100 % discount to the tariffs at entry point to the natural gas storage facility and exit point from the natural gas storage facility to the charge for the use of the exit point for supplying gas users in Latvia, are explained in Chapter 8 of Title II and Chapter 1 of Title III of the consultation document.

The cost allocation assessment sets out the cost allocation comparison indexes for both the tariffs of the natural gas transmission system service resulting from the use of the postage stamp reference price methodology and the capacity weighted distance reference price methodology (the CWD methodology). It is already mentioned that the Tariff Calculation Methodology is based on the principles of a postage stamp reference price methodology.

The results from the cost allocation assessment show that the application of the CWD methodology results in a higher cost allocation comparison index. In case the costs of securing natural gas supply and the costs associated with the natural gas storage are applied to all entry and exit points of the natural gas transmission entry-exit system using the postage stamp reference price methodology the capacity cost comparison index is 0.2 and 2.83 using the CWD methodology.

In conclusion, using the CWD method the degree of cross-subsidisation between intra-system and cross-system network use is higher than the post mark reference price methodology.

V Assessment of the proposed reference price methodology

According to Article 7 of the TAR NC, the reference price methodology shall comply with Article 13 of Regulation 715/2009 and with the following requirements:

- enabling network users to reproduce the calculation of reference prices and their accurate forecast;
- taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network;

- ensuring non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5 of the TAR NC;
- ensuring that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system;
- ensuring that the resulting reference prices do not distort cross-border trade.

The Tariff Calculation Methodology — the postage stamp reference price methodology — is transparent, takes fully into account the need for system integrity and reflects the actual costs incurred, insofar as such costs correspond to those of an efficient and structurally comparable network operator and are transparent, whilst including appropriate return on investments, and, where appropriate, taking account of the benchmarking of tariffs by the regulatory authorities.

The Tariff Calculation Methodology — the postage stamp reference price methodology — ensures that costs are reasonably reflected and are predictable, as all revenue from capacity booking service is allocated to all entry and exit points of the natural gas transmission entry-exit system based the total revenue allocation coefficient, reflecting the degree of utilization of entry and exit points. As the utilization of entry and exit points are characterised by the average daily capacity used at the entry or exit point within the three previous calendar years, the allocation of the allowed revenue is easy to forecast. Information on the natural gas transmission system capacity used is publicly available on both the natural gas transmission system operator's website and on the Transparency platform of the European Network of Transmission System Operators for Gas.

The Tariff Calculation Methodology specifies that the total entry and exit capacity of the transmission system and, accordingly, the fixing of tariffs, the capacity at entry points from other transmission systems within the single natural gas transmission entry-exit system and the capacity at exit points from other transmission systems within the single natural gas transmission entry-exit system shall not be taken into account, thereby avoiding undue cross-subsidisation.

The Tariff Calculation Methodology [13] enables network users to reproduce the calculation of the reference prices and their accurate forecast using the formulas therein for calculation of the tariffs on the yearly standard capacity products (paragraphs 49 to 53 of the Tariff Calculation Methodology), for calculation of the tariffs on short-term standard capacity products (paragraphs 56 to 60 of the Tariff Calculation Methodology), for calculation of the tariffs on interruptible capacity products (paragraphs 61 to 64 of the Tariff Calculation Methodology) and for calculation of the tariff on the products of the virtual counter flow capacity to be interrupted (paragraphs 65 to 56 of the Tariff Calculation Methodology).

Network users for the reproduction of reference prices may use a simplified tariff model published on the Regulator's website as one of the Annexes to this consultation document.

Chapter 7 of Title II of the consultation document explaining the selection of the ITC mechanism concludes that the FinEstLat single natural gas transmission entry-exit system for the period 2020-2022 will operate in order to meet domestic demand for natural gas, as there will be no actual natural gas transit. Notwithstanding this, eliminating the possibility of significant volume risk to be assigned to final customers, the Tariff Calculation Methodology foresees that changing utilisation of capacity at entry points from other natural gas transmission entry-exit systems and exit points to other natural gas transmission systems changes to other natural gas transmission

[13]Decision No Nr.1/10 of the Council of the Public Utilities Commission of 3 July 2019 on the methodology for calculation of the tariffs on the natural gas transmission system service — https://likumi.lv/ta/id/307981-dabasgazes-parvades-sistemas-pakalpojuma-tarifu-aprekinasanas-metodika

systems will change the capacity products tariffs for entry and exit points not the charge for the use of the exit point for supplying gas users in Latvia.

The application of the flat reference price (tariff) of EUR 142,77/MWh/day/year for the FinEstLat single natural gas transmission entry-exit system entry points, and corresponding national exit prices, ensures equal treatment of network system users in the country. The reference price for entry points as calculated and applied in the way indicated in Chapter 2 of Title IV of the Consultation Document, serves as motivatingl price signal to the natural gas suppliers as it ensures that their current functioning and competition environment is compatible with the competitive environment that will develop after the ending of the isolated gas market in the Baltic States and Finland.

VI Comparison of the proposed reference price methodology and capacity weighted distance reference price methodology

Recital 3 of the TAR NC determines, where the proposed reference price methodology is other than the CWD methodology, the latter should serve as a counterfactual for comparison with the proposed reference price methodology.

The postage stamp methodology means that, regardless of the distance to which natural gas is to be transferred, the same tariff is charged to the natural gas transmission system entry points or exit points. Consequently, the forecasted booked capacity is the only cost factor to be used.

A comparison of the tariffs for the natural gas transmission system entry and exit points derived using the postage stamp reference price methodology and CWD methodology is carried out if no the FinEstLat single natural gas transmission entry-exit system was created, if the FinEstLat single natural gas transmission entry-exit system is in place and if flat entry tariffs are applied in the FinEstLat single natural gas transmission entry-exit system (see: Table 10).

Table 10

Comparison of the tariffs of entry and exit points of the natural gas transmission system based on postage and the CWT

Entry/exit point	Indicative tariffs if no FinEstLat system was created			Indicative tariffs, if the FinEstLat system is in place			Indicative tariffs if there are flat entry tariffs in the FinEstLat system		
	Postage stamp methodology	CWD methodology	Comparison (postage stamp - CWD)	Postage stamp methodology	CWD methodology	Comparison (postage stamp - CWD)	Postage stamp methodology	CWD methodology	Comparison (postage stamp - CWD)
Korneti entry point	0.1232	0.3020	0.1788	—	—	—	—	—	—
Kiemenai entry point	0.1232	0.0626	0.0606	0.2889	0.3980	0.1091	0.1428	0.3980	0.2552
Karksi entry point	0.1232	0.0482	0.0751	—	—	—	—	—	—
Entry point from storage	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Korneti exit point	0.1304	0.0921	0.0383	—	—	—	—	—	—
Kiemenai exit point	0.1304	0.5126	0.3822	0.0668	0.8810	0.8142	0.0668	0.8810	0.8142
Karksi exit point	0.1304	0.3326	0.2022	—	—	—	—	—	—
Exit point for supplying gas users in Latvia	0.0018	0.4031	0.4013	0.0018	0.8090	0.8072	0.0020	0.8090	0.8070
Exit point to storage	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Under the CWD methodology, the revenues to be recovered by the natural gas transmission system operator is proportionate to its contribution to the transmission system's capacity and the length (distance) of the pipeline weighted by the technical capacity of the pipeline is acting

as a cost driver. The application of the CWD methodology results in different tariffs for each entry and exit point of the natural gas transmission system.

According to the results of the Baringa study, the application of the CWD methodology leads to significantly different tariffs of the FinEstLat single natural gas transmission entry-exit system entry points, the lowest being 0.246 EUR /MWh, and the highest of 0.481 EUR /MWh. Exit tariffs also vary from 0.809 EUR /MWh to 1,238 EUR /MWh.

According to Chapter 4 of Title IV of the Consultation Document regarding the costs allocation assessment, the use of the CWD methodology, as compared to the use of the postage stamp reference price methodology, leads to a higher degree of cross-subsidisation between intra-system and cross-system network use.

VII Allowed revenues of the transmission system operator

The Tariff Calculation Methodology provides for the length of the regulatory period and the tariff period shall be three gas years, if the Regulator has not made a decision of a different length of the regulatory period or the tariff period until the 15 January of the starting year of the regulatory period or the tariff period.

If there are more than one tariff period within a regulatory period, the allowed revenues shall remain unchanged during regulatory period unless there are changes in the costs of securing natural gas supply that are applied to a tariff period.

Where there is more than one tariff period within a regulatory period, the planned revenue within the tariff period are changed in accordance with revenue adjustment set out in Chapter 3.4. and costs of securing natural gas supply that are applied to the tariff period.

The planned revenue for a tariff period covers the costs of capacity booking to be included in tariff calculation.

The estimated revenue over the tariff period is determined by subtracting from the total cost of the capacity booking service the amount of the capacity booking service costs to be reduced by the system operator by improving the efficiency of the use of assets and other resource as well as operational efficiency and the ITC.

1) Cost of capacity booking service

In the calculation of tariffs for the natural gas transmission system operator, only the costs associated with the provision of the capacity reservation service should be included in the calculation and explicitly mentioned.

The system operator shall accurately and unambiguously specify and include in tariff calculation only such costs that are applied to provision of capacity booking service.

The costs of capacity booking service to be included in tariff calculation shall be formed of the capital costs of the cross-border transmission system and the national transmission system, operating costs and taxes, applied to the cross-border transmission system and the national transmission system, and the costs shall be shall be calculated according to the following formulas:

$$I_{PSO} = I_{PSO\ st} + I_{PSO\ nac},$$

where:

I_{PSO} – total costs of capacity booking service (EUR);

$I_{PSO\ st}$ - the costs of the cross-border transmission system (EUR);

$I_{PSO\ nac}$ - the costs of the national transmission system (EUR).

$$I_{PSO\ st} = I_{kap\ st} + I_{ekspl\ st} + I_{nod\ st} + Ie_{kor\ st},$$

where

$I_{kap\ st}$ - the capital costs of the cross-border transmission system (EUR);

$I_{ekspl\ st}$ - the operating costs of the cross-border transmission system (EUR);

$I_{nod\ st}$ - taxes applicable to the cross-border transmission system (EUR);

$Ie_{kor\ st}$ – revenue adjustment attributed to the cross-border transmission system (EUR).

$$I_{PSO\ nac} = I_{kap\ nac} + I_{ekspl\ nac} + I_{nod\ nac} + Ie_{kor\ nac},$$

where:

$I_{kap\ nac}$ - the capital costs of the national transmission system (EUR);

$I_{ekspl\ nac}$ - the operating costs of the national transmission system (EUR);

$I_{nod\ nac}$ - taxes attributable to the national transmission system (EUR);

$Ie_{kor\ nac}$ – revenue adjustment attributed to the national transmission system (EUR).

2) Capital cost

Capital costs consist of the return on capital for cross-border and national transmission system and the depreciation of fixed assets and value of written-off intangible investments for cross-border and national transmission system. The regulated asset base (RAB) and the return rate on capital shall be used for determining the capital costs.

3) Regulated asset base (RAB) of the transmission system

The calculations of the RAB value of the transmission system shall include the residual and the balance sheet value of the fixed assets, the intangible investments and inventories owned and leased by the system operator from the financial statement of the previous year at the 1st of January of the starting year of regulatory period, as well as the payments listed in the assets for participation in international transmission infrastructure projects and commitments arising from decisions on the allocation of investment costs, which have been taken in accordance with Regulation No. 347/2013 of the European Parliament and of the Council 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 by excluding financial investments, amounts receivable, securities, participating interest in capital, monetary instruments, the accumulated supplies of gas for sale as well as the value of a part of the fixed assets financed under the financial assistance or financial support of the local government, a foreign state, the European Union, another international organisation and institution. The RAB shall correspond to the value of the capital assigned for the provision of long-term services (equity capital, long-term credits and the relevant part of the leased assets capital).

Fixed assets acquired from the assets of users (connection fee) shall not be included in the RAB value; the depreciation of the fixed assets shall not be covered by the tariffs and no return on capital shall be planned for these assets.

The balance sheet value of the fixed assets or their parts which are not efficiently used in the provision of capacity booking service shall not be included in the RAB, and their depreciation shall not be covered with a tariff. The regulator may require the system operator to submit an evaluation of the technical condition and the operating life of the fixed assets.

4) Return rate on capital

The Regulator sets the weighted average cost of capital in accordance with the Methodology of calculating the return rate on capital [14]. The system operator shall apply a different weighted average cost of capital for those assets included in RAB, which have been revaluated and assets included in RAB that have not been revaluated as determined in the Methodology for calculating weighted average cost of capital.

The Methodology for calculating the return rate on capital states that the Regulator annually by 1 September draws up weighted average cost of capital calculation and determines the return rate on the capital. The system operator shall apply the return rate on capital determined by the Regulator in the calculation of a draft tariff which effective date is planned for the following calendar year following the date of the decision of the Regulator to determine the return rate on capital.

For the development of the natural gas transmission system service tariffs, a 4.22 % weighted average cost of capital has been established[15].

The Regulator, taking into account the different asset value determination approaches applied by system operators, is actively pursuing regulatory changes to return rate on capital in order to ensure that system operators receive and network users cover the capital costs corresponding to the revenue the system operator would obtain from the application of the nominal rate to the non-revalued RAB.

In view of this, during the indicative natural gas transmission system service tariff consultations or approval of tariffs approval process there is the possibility that weighted average cost of capital used to determine indicative natural gas transmission system service tariffs could be changed, which will lead to a corresponding change in the level of the indicative tariffs for natural gas transmission system service.

5) Indicative allowed revenue

Based on the set of allowed revenues described in this section, it is established that the indicative annual revenue for the natural gas transmission system operator for the regulatory and tariff period from 1 January 2020 to 30 September 2022, no the FinEstLat single natural gas transmission entry-exit system was created is EUR 33 831, where the FinEstLat single natural gas transmission entry-exit system is in place — EUR 28 286 (see: Table 11).

[14] Decision No 1/23 of the Council of the Public Utilities Commission of 13 August 2018 on the methodology for calculating the return rate on capital. Internet — https://likumi.lv/ta/id/300987-kapitala-atdeves-likmes-aprekinasanas-metodika

[15] Decision No 97 of the Council of the Public Utilities Commission of 23 August 2018 concerning the return rate on capital for the natural gas transmission system, natural gas distribution system and natural gas storage service draft tariff development. Internet — https://likumi.lv/ta/id/301233-par-kapitala-atdeves-likmi-dabasgazes-parvades-sistemas-dabasgazes-sadales-sistemas-un-dabasgazes-uzglabasanas-pakalpojuma-tari...

Table 11

The indicative annual total cost of the natural gas transmission system and the annual allowed revenue for the natural gas transmission system operator for the regulatory and tariff period from 1 January 2020 to 30 September 2022 and for the tariff period starting 1 July 2019

Costs	Designation	Annual cost, thousands EUR	
		Tariff period 01.01.2020-30.09.2022	Tariff period starting 01.07.2019
Capital costs (WACC = 4,22 %) $I_{kap} = P_{KA} + I_{nol}$	I_{kop}	16 788	16 788
Taxes $I_{nod} = I_{ip.nod} + I_{ien.nod}$	I_{nod}	848	848
Operating costs (excluding the cost of securing natural gas supply) $I_{ekspl} = I_{tehn\ proc} + I_{pers} + I_{rem} + I_{saimn}$	$I_{expressed}$	11 294	11 248
Costs of securing natural gas supply and their adjustment, including	I_{list}	4 901	9 523
Costs of securing natural gas supply		2 618	11 814
Adjustment to the costs of securing natural gas supply		2 282	(2 291)
Total costs of capacity booking service	I_{TSO}	33 831	38 407
Inter-transmission system operator compensation	ITC	5 545	—
Allowed revenue if no the FinEstLat single natural gas transmission entry-exit system was created	**IePSO**	**33 831**	**38 407**
Allowed Revenue, the FinEstLat single natural gas transmission entry-exit system is in place	**IePSO**	**28 286**	**—**

In comparison to the staff costs in the current tariff period the planned wage growth rate based on the forecast of the Bank of Latvia for the annual change in nominal gross wage is 5.9 %[16]. In determining the costs of natural gas transmission losses and of ensuring technological processes of the cross-border transmission system, the weighted average price of natural gas is assumed of 19.1 EUR /MWh.

The volume of ITC is determined on the basis of the basic principles of the ITC system of the FinEstLat single natural gas transmission entry-exit system - the revenue recovered from the tariffs of all entry points of the FinEstLat single natural gas transmission entry-exit system is pooled and shared between transmission system operators in proportion to their domestic annual consumption. The forecasted natural gas consumption in Latvia is 14 176 894 545 kWh. Multiplying the forecasted natural gas consumption with the tariff at the FinEstLat single natural gas transmission entry-exit system entry point set at 0,14277 EUR/kWh/day/year annual ITC volume of EUR 5 545 is determined.

[16] https://www.bank.lv/en/tasks/task-monetary-policy/forecasts

6) Simplified tariff model

A simplified tariff model is published on the Regulator's website: www.sprk.gov.lv.

Chairman R. Irklis

Annexes

Annex 1

The charge for the use of the exit point for supplying gas users in Latvia at the various costs of securing natural gas supply

Volume	Average consumption in Latvia	14 176 894 545
Auction increments, EUR	100 000	

Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh	Costs of securing natural gas supply, EUR	The charge for the use of the exit point for supplying gas users in Latvia, EUR/KWh
0,00	**0,0015541**														
100 000	**0,0015612**	3 100 000	**0,0017728**	6 100 000	**0,0019844**	9 100 000	**0,0021960**	12 100 000	**0,0024076**	15 100 000	**0,0026193**	18 100 000	**0,0028309**	21 100 000	**0,0030425**
200 000	**0,0015683**	3 200 000	**0,0017799**	6 200 000	**0,0019915**	9 200 000	**0,0022031**	12 200 000	**0,0024147**	15 200 000	**0,0026263**	18 200 000	**0,0028379**	21 200 000	**0,0030495**
300 000	**0,0015753**	3 300 000	**0,0017869**	6 300 000	**0,0019985**	9 300 000	**0,0022101**	12 300 000	**0,0024218**	15 300 000	**0,0026334**	18 300 000	**0,0028450**	21 300 000	**0,0030566**
400 000	**0,0015824**	3 400 000	**0,0017940**	6 400 000	**0,0020056**	9 400 000	**0,0022172**	12 400 000	**0,0024288**	15 400 000	**0,0026404**	18 400 000	**0,0028520**	21 400 000	**0,0030636**
500 000	**0,0015894**	3 500 000	**0,0018010**	6 500 000	**0,0020126**	9 500 000	**0,0022242**	12 500 000	**0,0024359**	15 500 000	**0,0026475**	18 500 000	**0,0028591**	21 500 000	**0,0030707**
600 000	**0,0015965**	3 600 000	**0,0018081**	6 600 000	**0,0020197**	9 600 000	**0,0022313**	12 600 000	**0,0024429**	15 600 000	**0,0026545**	18 600 000	**0,0028661**	21 600 000	**0,0030777**
700 000	**0,0016035**	3 700 000	**0,0018151**	6 700 000	**0,0020267**	9 700 000	**0,0022384**	12 700 000	**0,0024500**	15 700 000	**0,0026616**	18 700 000	**0,0028732**	21 700 000	**0,0030848**
800 000	**0,0016106**	3 800 000	**0,0018222**	6 800 000	**0,0020338**	9 800 000	**0,0022454**	12 800 000	**0,0024570**	15 800 000	**0,0026686**	18 800 000	**0,0028802**	21 800 000	**0,0030919**
900 000	**0,0016176**	3 900 000	**0,0018292**	6 900 000	**0,0020409**	9 900 000	**0,0022525**	12 900 000	**0,0024641**	15 900 000	**0,0026757**	18 900 000	**0,0028873**	21 900 000	**0,0030989**
1 000 000	**0,0016247**	4 000 000	**0,0018363**	7 000 000	**0,0020479**	10 000 000	**0,0022595**	13 000 000	**0,0024711**	16 000 000	**0,0026827**	19 000 000	**0,0028944**	22 000 000	**0,0031060**
1 100 000	**0,0016317**	4 100 000	**0,0018433**	7 100 000	**0,0020550**	10 100 000	**0,0022666**	13 100 000	**0,0024782**	16 100 000	**0,0026898**	19 100 000	**0,0029014**	22 100 000	**0,0031130**
1 200 000	**0,0016388**	4 200 000	**0,0018504**	7 200 000	**0,0020620**	10 200 000	**0,0022736**	13 200 000	**0,0024852**	16 200 000	**0,0026968**	19 200 000	**0,0029085**	22 200 000	**0,0031201**
1 300 000	**0,0016458**	4 300 000	**0,0018575**	7 300 000	**0,0020691**	10 300 000	**0,0022807**	13 300 000	**0,0024923**	16 300 000	**0,0027039**	19 300 000	**0,0029155**	22 300 000	**0,0031271**
1 400 000	**0,0016529**	4 400 000	**0,0018645**	7 400 000	**0,0020761**	10 400 000	**0,0022877**	13 400 000	**0,0024993**	16 400 000	**0,0027110**	19 400 000	**0,0029226**	22 400 000	**0,0031342**
1 500 000	**0,0016599**	4 500 000	**0,0018716**	7 500 000	**0,0020832**	10 500 000	**0,0022948**	13 500 000	**0,0025064**	16 500 000	**0,0027180**	19 500 000	**0,0029296**	22 500 000	**0,0031412**
1 600 000	**0,0016670**	4 600 000	**0,0018786**	7 600 000	**0,0020902**	10 600 000	**0,0023018**	13 600 000	**0,0025135**	16 600 000	**0,0027251**	19 600 000	**0,0029367**	22 600 000	**0,0031483**
1 700 000	**0,0016741**	4 700 000	**0,0018857**	7 700 000	**0,0020973**	10 700 000	**0,0023089**	13 700 000	**0,0025205**	16 700 000	**0,0027321**	19 700 000	**0,0029437**	22 700 000	**0,0031553**
1 800 000	**0,0016811**	4 800 000	**0,0018927**	7 800 000	**0,0021043**	10 800 000	**0,0023159**	13 800 000	**0,0025276**	16 800 000	**0,0027392**	19 800 000	**0,0029508**	22 800 000	**0,0031624**
1 900 000	**0,0016882**	4 900 000	**0,0018998**	7 900 000	**0,0021114**	10 900 000	**0,0023230**	13 900 000	**0,0025346**	16 900 000	**0,0027462**	19 900 000	**0,0029578**	22 900 000	**0,0031694**
2 000 000	**0,0016952**	5 000 000	**0,0019068**	8 000 000	**0,0021184**	11 000 000	**0,0023301**	14 000 000	**0,0025417**	17 000 000	**0,0027533**	20 000 000	**0,0029649**	23 000 000	**0,0031765**
2 100 000	**0,0017023**	5 100 000	**0,0019139**	8 100 000	**0,0021255**	11 100 000	**0,0023371**	14 100 000	**0,0025487**	17 100 000	**0,0027603**	20 100 000	**0,0029719**	23 100 000	**0,0031836**
2 200 000	**0,0017093**	5 200 000	**0,0019209**	8 200 000	**0,0021325**	11 200 000	**0,0023442**	14 200 000	**0,0025558**	17 200 000	**0,0027674**	20 200 000	**0,0029790**	23 200 000	**0,0031906**
2 300 000	**0,0017164**	5 300 000	**0,0019280**	8 300 000	**0,0021396**	11 300 000	**0,0023512**	14 300 000	**0,0025628**	17 300 000	**0,0027744**	20 300 000	**0,0029861**	23 300 000	**0,0031977**
2 400 000	**0,0017234**	5 400 000	**0,0019350**	8 400 000	**0,0021467**	11 400 000	**0,0023583**	14 400 000	**0,0025699**	17 400 000	**0,0027815**	20 400 000	**0,0029931**	23 400 000	**0,0032047**
2 500 000	**0,0017305**	5 500 000	**0,0019421**	8 500 000	**0,0021537**	11 500 000	**0,0023653**	14 500 000	**0,0025769**	17 500 000	**0,0027885**	20 500 000	**0,0030002**	23 500 000	**0,0032118**
2 600 000	**0,0017375**	5 600 000	**0,0019492**	8 600 000	**0,0021608**	11 600 000	**0,0023724**	14 600 000	**0,0025840**	17 600 000	**0,0027956**	20 600 000	**0,0030072**	23 600 000	**0,0032188**
2 700 000	**0,0017446**	5 700 000	**0,0019562**	8 700 000	**0,0021678**	11 700 000	**0,0023794**	14 700 000	**0,0025910**	17 700 000	**0,0028027**	20 700 000	**0,0030143**	23 700 000	**0,0032259**
2 800 000	**0,0017516**	5 800 000	**0,0019633**	8 800 000	**0,0021749**	11 800 000	**0,0023865**	14 800 000	**0,0025981**	17 800 000	**0,0028097**	20 800 000	**0,0030213**	23 800 000	**0,0032329**
2 900 000	**0,0017587**	5 900 000	**0,0019703**	8 900 000	**0,0021819**	11 900 000	**0,0023935**	14 900 000	**0,0026051**	17 900 000	**0,0028168**	20 900 000	**0,0030284**	23 900 000	**0,0032400**
3 000 000	**0,0017658**	6 000 000	**0,0019774**	9 000 000	**0,0021890**	12 000 000	**0,0024006**	15 000 000	**0,0026122**	18 000 000	**0,0028238**	21 000 000	**0,0030354**	24 000 000	**0,0032470**

Annex 2

INDICATIVE SHORT-TERM FIRM CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if no FinEstLat system was created

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,1232448	0,0000000	0,1304010	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0457105	0,0000000	0,0483647	0,0000000
Quarter 2		0,0306988	0,0000000	0,0324813	0,0000000
Quarter 3		0,0310361	0,0000000	0,0328383	0,0000000
Quarter 4		0,0457105	0,0000000	0,0483647	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0156867	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
February		0,0143370	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0101130	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
March		0,0156867	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
April		0,0151807	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0107081	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
May		0,0104578	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
June		0,0101205	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0107081	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
July		0,0104578	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
August		0,0104578	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
September		0,0101205	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0107081	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
October		0,0104578	0,0003542	0,0003542	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
November		0,0151807	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0107081	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000
December		0,0156867	0,0010627	0,0010627	0,0000000	0,0000000	0,0000000	0,0110651	0,0003748	0,0003748	0,0000000	0,0000000	0,0000000

Multipliers

Kc=1.00	**Km=1.00**	**Kd=1.05**	**Kdl=1.05**

Seasonal factor

Sc=1.50	**Sm=1.50**	**Sd=3.00**	**Sdl=3.00**
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Annex 3

INDICATIVE SHORT-TERM FIRM CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if FinEstLat system is in place

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,2888725	0,0000000	0,0667545	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0785698	0,0000000	0,0181564	0,0000000
Quarter 2		0,0791502	0,0000000	0,0182905	0,0000000
Quarter 3		0,0800199	0,0000000	0,0184915	0,0000000
Quarter 4		0,0785698	0,0000000	0,0181564	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
February		0,0280037	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0064713	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
March		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
April		0,0296517	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
May		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
June		0,0296517	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
July		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
August		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
September		0,0296517	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
October		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
November		0,0296517	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
December		0,0306400	0,0011861	0,0013442	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000

Multipliers

Kc=1,1	**Km=1,25**	**Kd=1,5**	**Kdl=1,7**

Seasonal factor

Sc=1	Sm=1	Sd=1	Sdl=1
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Annex 4

INDICATIVE SHORT-TERM FIRM CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if there are flat entry tariffs in the FinEstLat system

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,1427700	0,0000000	0,0667545	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0388317	0,0000000	0,0181564	0,0000000
Quarter 2		0,0391185	0,0000000	0,0182905	0,0000000
Quarter 3		0,0395484	0,0000000	0,0184915	0,0000000
Quarter 4		0,0388317	0,0000000	0,0181564	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
February		0,0138403	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0064713	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
March		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
April		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
May		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
June		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
July		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
August		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
September		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
October		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
November		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0068521	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000
December		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0070805	0,0002741	0,0003106	0,0000000	0,0000000	0,0000000

Multipliers

Kc=1,1	**Km=1,25**	**Kd=1,5**	**Kdl=1,7**

Seasonal factor

Sc=1	Sm=1	Sd=1	Sdl=1
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Annex 5

INDICATIVE INTERRUPTIBLE CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if no FinEstLat system was created

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,1170825	0,0000000	0,1238809	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0651375	0,0000000	0,0689197	0,0000000
Quarter 2		0,0291639	0,0000000	0,0308572	0,0000000
Quarter 3		0,0294843	0,0000000	0,0311963	0,0000000
Quarter 4		0,0651375	0,0000000	0,0689197	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0223536	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
February		0,0204303	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0096074	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
March		0,0223536	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
April		0,0216325	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
May		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
June		0,0096145	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
July		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
August		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
September		0,0096145	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
October		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
November		0,0216325	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
December		0,0223536	0,0030286	0,0030286	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000

Kpārsl=0.05

Seasonal factor

Sc=1.50	Sm=1.50	Sd=3.00	Sdl=3.00
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Annex 6

INDICATIVE INTERRUPTIBLE CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if FinEstLat system is in place

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,2744289	0,0000000	0,0634168	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0746413	0,0000000	0,0172486	0,0000000
Quarter 2		0,0751926	0,0000000	0,0173760	0,0000000
Quarter 3		0,0760189	0,0000000	0,0175669	0,0000000
Quarter 4		0,0746413	0,0000000	0,0172486	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0266036	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Kpārsl=0.05

Seasonal factor

Sc=1	Sm=1	Sd=1	Sdl=1
Q1,Q4	Jan,Feb, Mar,Apr, Nov,Dec	Jan,Feb, Mar,Apr, Nov,Dec	Jan,Feb, Mar,Apr, Nov,Dec

Annex 7

INDICATIVE INTERRUPTIBLE CAPACITY PRODUCT TARIFFS FOR TARIFF PERIOD 01.01.2020-30.09.2022 if there are flat entry tariffs in the FinEstLat system

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage Tie kr	To other entry-exit system Tiz	To storage Tiz kr
Long-term capacity tariffs	kWh / day/ year	0,1356315	0,0000000	0,0634168	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0368901	0,0000000	0,0172486	0,0000000
Quarter 2		0,0371626	0,0000000	0,0173760	0,0000000
Quarter 3		0,0375710	0,0000000	0,0175669	0,0000000
Quarter 4		0,0368901	0,0000000	0,0172486	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0131483	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Kpārsl=0.05

Seasonal factor

Sc=1	Sm=1	Sd=1	Sdl=1
Q1,Q4	Jan,Feb, Mar,Apr, Nov,Dec	Jan,Feb, Mar,Apr, Nov,Dec	Jan,Feb, Mar,Apr, Nov,Dec

Annex 8

INDICATIVE TARIFFS ON THE PRODUCTS OF THE INTERRUPTABLE VIRTUAL COUNTER FLOW CAPACITY TO BE INTERRUPTED if no FinEstLat system was created

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tp virt ie	From storage Tp virt ie kr	To other entry-exit system T p virt iz	To storage Tp virt iz kr
Long-term capacity tariffs	kWh / day/ year	0,1170825	0,0000000	0,1238809	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0434250	0,0000000	0,0459465	0,0000000
Quarter 2		0,0291639	0,0000000	0,0308572	0,0000000
Quarter 3		0,0294843	0,0000000	0,0311963	0,0000000
Quarter 4		0,0434250	0,0000000	0,0459465	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0149024	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
February		0,0136202	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0096074	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
March		0,0149024	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
April		0,0144217	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
May		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
June		0,0096145	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
July		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
August		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
September		0,0096145	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
October		0,0099349	0,0003365	0,0003365	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
November		0,0144217	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0101727	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000
December		0,0149024	0,0010095	0,0010095	0,0000000	0,0000000	0,0000000	0,0105118	0,0003560	0,0003560	0,0000000	0,0000000	0,0000000

Multiplier

Kvirt=0.95

Annex 9

INDICATIVE TARIFFS ON THE PRODUCTS OF THE INTERRUPTABLE VIRTUAL COUNTER FLOW CAPACITY TO BE INTERRUPTED if FinEstLat system is in place

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tp virt ie	From storage Tp virt ie kr	To other entry-exit system T p virt iz	To storage Tp virt iz kr
Long-term capacity tariffs	kWh / day/ year	0,2744289	0,0000000	0,0634168	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0746413	0,0000000	0,0172486	0,0000000
Quarter 2		0,0751926	0,0000000	0,0173760	0,0000000
Quarter 3		0,0760189	0,0000000	0,0175669	0,0000000
Quarter 4		0,0746413	0,0000000	0,0172486	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl	Monthly Tp virt ie m	Daily Tp virt ie d	Within day Tp virt ie dl
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0266036	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Multiplier

Kvirt=0.95

Annex 10

INDICATIVE TARIFFS ON THE PRODUCTS OF THE INTERRUPTABLE VIRTUAL COUNTER FLOW CAPACITY TO BE INTERRUPTED if there are flat entry tariffs in the FinEstLat system

2020-2022 darft tariff	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tp virt ie	From storage Tp virt ie kr	To other entry-exit system T p virt iz	To storage Tp virt iz kr
Long-term capacity tariffs	kWh / day/ year	0,1356315	0,0000000	0,0634168	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day/ quarter	0,0368901	0,0000000	0,0172486	0,0000000
Quarter 2		0,0371626	0,0000000	0,0173760	0,0000000
Quarter 3		0,0375710	0,0000000	0,0175669	0,0000000
Quarter 4		0,0368901	0,0000000	0,0172486	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tp virt ie m	**Daily Tp virt ie d**	**Within day Tp virt ie dl**	**Monthly Tp virt ie m**	**Daily Tp virt ie d**	**Within day Tp virt ie dl**	**Monthly Tp virt ie m**	**Daily Tp virt ie d**	**Within day Tp virt ie dl**	**Monthly Tp virt ie m**	**Daily Tp virt ie d**	**Within day Tp virt ie dl**
January	Monthly - kWh / day/ month Daily, within day - kWh /day	0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0131483	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Annex 11

Average current tariffs* for firm yearly, daily capacity products at entry points of TSOs in EU*****

TSO	TSOs' average Firm Capacity tariffs at EU Entry points		
	For Yearly Capacity	For Daily Capacity (annual average)	
	EUR/MWh/d/year	Average of months of 2018	EUR/MWh/d
NET4GAS (Czech Republic)	30,06	January-December	0,12
GAZ-SYSTEM S.A. (Poland)	262,23	January-December	1,60
Eustream (Slovakia)	129,67	January-September	1,06
Gas Connect Austria (Austria)	41,74	from 01.10.2017	0,14
TAG (Austria)	28,96	Currently applied	0,10
FGSZ (Hungary)	172,90	January-December	0,90
Plinovodi (Slovenia)	97,26	January-December	0,86
Plinacro Ltd (Croatia)	325,19	January-December	3,98
Transgaz (Romania)	137,88	January-September	0,98
Bulgartransgaz (Bulgaria)	86,37	January-September	0,55
DESFA (Greece)	145,70	January-December	0,57
Fluxys Belgium (Belgium)	30,50	January-December	0,13
Energinet.dk (Denmark)	73,48	January-September	0,28
GRTgaz (France)	97,58	01.04.2018-31.03.2019	0,35
TIGF (France)	103,32	from 01.04.2018	0,43
GTS (Netherlands)	43,84	January-September	0,18
Open Grid Europe (Germany)	155,23	January-December	0,60
GRTgaz Deutschland	120,25	January-December	0,46
GASCADE Gastransport (Germany)	110,00	January-December	0,42
Gasunie Deutschland (Germany)	170,30	January-December	0,65
jordgas Transport (Germany)	76,56	January-December	0,29
Thyssengas (Germany)	133,33	January-December	0,51
Fluxys TENP (Germany)	67,82	January-September	0,23
bayernets (Germany)	54,05	January-December	0,21
ONTRAS (Germany)	179,46	January-December	0,69
Fluxys Deutschland (Germany)	165,12	January-December	0,63
NEL Gastransport (Germany)	89,58	January-December	0,34
OPAL Gastransport (Germany)	17,92	January-December	0,07
Snam Rete Gas (Italy)	115,28	January-September	0,47
REN (Portugal)	121,80	from July'18-to Sep'19	0,67
Enagas (Spain)	130,18	January-September	1,08
National Grid Gas (UK)	300,02	01.10.2017-01.10.2018	0,82
Interconnector (UK)	70,43	01.10.2017-01.10.2018	1,16
Gas Network Ireland (Ireland)	359,18	from 01.10.2017	2,87
GMO NI (UK: Northern Ireland)	252,27	from 01.10.2017	5,94
Average	128,44		0,67
Standard error	14,33		
Indicative reference price	**142,77**		