



# **Annual report on contractual congestions at interconnection points of the Energy Community Contracting Parties**

December 2021

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## INTRODUCTION

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### 1. About ECRB

The Energy Community Regulatory Board (ECRB) operates based on the Energy Community Treaty. As an institution of the Energy Community ECRB advises the Energy Community Ministerial Council and Permanent High Level Group on details of statutory, technical and regulatory rules and makes recommendations in the case of cross-border disputes between regulators.<sup>1</sup> ECRB is the independent regional voice of energy regulators in the Energy Community. ECRB's mission builds on three pillars: providing coordinated regulatory positions to energy policy debates, harmonizing regulatory rules across borders and sharing regulatory knowledge and experience.

### 2. Background

Congestion management procedures in the event of contractual congestion have been included in the *acquis communautaire* (acquis) of the Energy Community, in the form of a Decision of the Permanent High Level Group,<sup>2</sup> on 12 January 2018. The deadline for implementation of this decision was set to October 2018. According to paragraph 2.2.1(2) of the Annex 1 to Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015<sup>3</sup> (hereafter 'CMP Guidelines'), the ECRB has to publish by 1 June of every year, commencing with the year 2020, a monitoring report on congestion at interconnection points with respect to firm capacity products sold in the previous year, taking into consideration, to the extent possible, capacity trading on secondary market and the use of interruptible capacity.

The present report serves as a basis for implementation of firm-day-ahead use-it-or-lose-it mechanism ('FDA UIOLI'), as prescribed by paragraph 2.2.3 (1) of the CMP

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<sup>1</sup> [www.energy-community.org](http://www.energy-community.org). The Energy Community comprises the EU and Albania, Bosnia and Herzegovina, North Macedonia, Georgia, Kosovo\*, Moldova, Montenegro, Serbia and Ukraine. Armenia, Turkey and Norway are Observer Countries. Throughout this document the symbol \* refers to the following statement: This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Advisory Opinion on the Kosovo declaration of independence.

<sup>2</sup> Decision No 2018/01/PHLG-EnC of the Permanent High Level Group of the Energy Community of 12 January 2018 on amending Annex I to Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015 ([https://www.energy-community.org/dam/jcr:c7dde5f9-a070-48c9-9a9e-a07677e7206f/Decision\\_2018\\_01\\_PHLG.pdf](https://www.energy-community.org/dam/jcr:c7dde5f9-a070-48c9-9a9e-a07677e7206f/Decision_2018_01_PHLG.pdf)).

<sup>3</sup> ANNEX I to Regulation (EC) NO 715/2009 on conditions for access to the natural gas transmission networks, as amended at EU level by Commission Decision (EU) 2012/490 of 24 August 2012 and Commission Decision (EU) 2015/715 of 30 April 2015 ([https://www.energy-community.org/dam/jcr:d0f7d046-57cb-479a-a39a-9bce06065155/Regulation\\_715\\_2009\\_GAS.pdf](https://www.energy-community.org/dam/jcr:d0f7d046-57cb-479a-a39a-9bce06065155/Regulation_715_2009_GAS.pdf)).

Guidelines. Namely, the national regulatory authorities (NRAs; regulators) should require transmission system operators (TSOs) to apply FDA UIOLI if, on the basis of this report, it is shown that at interconnection points (IPs) demand exceeded offer at the reserve price when auctions are used in the course of capacity allocation procedures in the year covered by the monitoring report for products for use in either that year or in one of the subsequent two years:

- (a) for at least three firm capacity products with a duration of one month or
- (b) for at least two firm capacity products with a duration of one quarter or
- (c) for at least one firm capacity product with a duration of one year or more or
- (d) where no firm capacity product with a duration of one month or more has been offered.

In the following years, if the ECRB report on contractual congestions shows that a situation described above is unlikely to reoccur in the following three years, the NRAs may decide to terminate the FDA UIOLI mechanism.

Due to difficulties in obtaining necessary information, the present first report on contractual congestions is published with a delay of some months.

### **3. Scope and methodology**

The concept of contractual congestion is defined in Article 2(21) of the Regulation (EC) 715/2009 as a situation where the level of firm capacity demand exceeds the technical capacity. The procedures set by the CMP Guidelines target reducing contractual congestions, if identified. In the case the transmission capacity is allocated via auctions, it is clear that a contractual congestions exists, if the auction is cleared with an auction premium.

In the Energy Community Contracting Parties (hereafter 'Contracting Parties'), capacity allocation was not performed based on Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) 984/2013 (hereafter 'CAM NC') in the reporting period, except for Ukraine where the CAM NC is applied since June 2020. Therefore, the information on actual capacity demand was provided by the NRAs of the Contracting Parties to the extent it was available to them. For Ukraine, the information on the results of capacity auctions that were held in 2020 were also provided. In addition to capacity demand, other possible indicators of contractual congestion as well as the implementation of the CMP Guidelines were analyzed.

The present report covers IPs between adjacent entry-exit systems between the Contracting Parties with an operational gas market as well as between the Contracting Parties and neighboring EU Member States, whereby the information on the latter is available only for the Contracting Parties' side of the IP.

The report reflects the status quo with regard to capacity demand in the years 2020, 2021 and 2022. The information on the CMP Guidelines' implementation is related to 2021.

## FINDINGS

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### 1. Capacity bookings

In 2020, most of the capacity for the years, 2020, 2021 and 2022 at IPs between the Contracting Parties and between Contracting Parties and EU Member States was allocated based on long- term contracts, except in Ukraine, where all capacity is allocated in accordance with CAM NC.<sup>4</sup> In two Contracting Parties, Serbia and Ukraine, also a capacity of shorter duration was allocated in 2020:

- In Serbia, at the IP Kiskundoroszma - Horgos entry point from Hungary to Serbia and at IP Zvornik exit point from Serbia to Bosnia and Hercegovina yearly capacity was booked by three network users. The shipper BH Gas booked long term i.e. yearly capacity for 2019/2020 and 2020/2021 until end of March 2021 on both IPs in Serbia. The share of yearly booked capacity in total amount of technical capacity at the entry point Horgos added up to 12 % for the gas years 2019/2020 and 66 % for the gas years 2020/2021. For the IP Zvornik it amounted to 87 % for the gas years 2019/2020 and 82 % for the gas years 2020/2021. At the entry point Horgos, also monthly products were offered and booked in gas the years 2019/2020 and 2020/2021 by one network user. The capacity at IPs is allocated based on the Serbian TSO's invitation published on its web page and corresponding applications of network users. In case demand is higher than the available capacity, the allocation is done proportionally to the requests – meaning pro-rata allocation applied in case of congestion). However, the Serbian transmission system operator excluded the entry point Horgos from the “Invitation for contracting annual firm capacity” in 2019 and 2020. Capacity is offered for the next three gas years.

In Ukraine, starting from 6<sup>th</sup> July 2020, all IP capacities have been allocated via auctions in accordance with the CAM NC requirements. At the border with Poland, the GSA capacity allocation platform is used, at the other borders the RBP capacity allocation platform. All types of products (yearly, quarterly,

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<sup>4</sup> Since 06.07.2020, all capacities at IPs are allocated in line with the CAM NC. However, it has to be noted that the allocated capacity is not bundled at IPs, as required by Article 19 of CAM NC. The Ukrainian transmission network code stipulates rules for bundling of capacity at these points, according to which bundling is subject to agreement of neighboring transmission system operators. Such agreements were not in place in 2020.

monthly, daily and intra-day) were offered and booked at almost all IPs. During auctions held in 2020, the clearing price was not higher than the reserve price and only one round was carried out. The highest number of participants was eight. As of 1<sup>st</sup> July 2020, at the borders of Ukraine with Poland and Hungary, virtual interconnection points have been created, based on the conditions foreseen in the interconnection agreements. Thus, the exit and the entry IPs from/to Ukraine were merged virtually in one IP, so network users are offered an easier procedure for capacity booking and nomination. Backhaul flows are also used by the TSO for network users. These approaches are useful in the process of managing contractual congestion.

The information on capacity bookings at IPs in Serbia and Ukraine is to a certain extent available in Annex I of this report. For all other IPs in the Contracting Parties, only information on technical capacity may be found in Annex I.<sup>5</sup> Some information on the Observer Country Armenia is also available in this Annex.

**Based on the information on capacity bookings in the Contracting Parties in 2020, it can be concluded that there were no contractual congestions on the analyzed interconnection points.**

## 2. Other possible indicators of contractual congestion

In the absence of the CAM NC implementation in all Contracting Parties, except Ukraine, which would allow using auction results as the main source of data for identification of contractual congestion, another set of indicators was agreed by the ECRB Gas Working Group. These indicators should point out to a demand for capacity exceeding the offer. In this respect, the following aspects were analyzed for the IPs of the Contracting Parties:

- ✓ Whether there was any unsuccessful capacity request;
- ✓ Whether there was any non- offer of capacity;
- ✓ Whether there was any interruptible capacity offer and, if so, whether there was any booking of interruptible capacity; and
- ✓ Whether there was any trade of capacity on secondary market.

The responses reveal that there was no unsuccessful capacity request for the IPs of the Contracting Parties. The transmission system operators of the Contracting Parties did not publish any information on the occurrence of unsuccessful capacity request for firm capacity products. In Ukraine, the TSO declared that due to repair works in the period of 01.09.2020 – 21.09.2020 there was no capacity offered at the IP Budince (entry/exit to Slovakia) during the mentioned period.

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<sup>5</sup> The NRAs also provided data on monthly physical flows and, in some cases, on daily peaks. This information was used as a support to the analysis, but is not included in the report.

Non- offer of firm capacity could indicate that the firm capacity is fully booked or that a part of capacity is withdrawn from the market, whereby the first indication may point out to an existence of contractual congestion and the second reveals the lack of third party access to the transmission capacity. In the Contracting Parties, there was no indication of the fully reserved capacity.

Booking of interruptible capacity at an IP, other than for backhaul, may also suggest that capacity demand exceeds capacity offer. It is also a requirement of Article 2.2.1 of the CMP Guidelines to take into consideration the use of interruptible capacity when monitoring congestions at IPs.

In Serbia, at the IP between Hungary and Serbia (Horgos) 85,185,702 kWh/day of yearly interruptible capacity was booked in the gas year 2019/2020 out of 153.870.164 kWh/day offered. No monthly or daily capacity bookings took place in the gas year 2020/2021, compared to 68,712,163 kWh/day monthly booked on the IP Horgos and 20,530,796 kWh/day monthly booked on the IP between Serbia and Bosnia and Herzegovina (Zvornik) for the gas year 2019/2020. The reason for using interruptible capacity in Serbia is of procedural nature. Namely, according to the applicable network code, the TSO offers the same amount of firm and interruptible capacity for all capacity products. If network users miss the deadline for requesting firm capacity, they request an interruptible capacity at a later stage, but this does not mean that all firm capacity was already booked. For the gas year 2020/2021, only firm capacity was booked.

In Ukraine, all capacity at the IP Hermanowize and Beregdaroc is offered on interruptible basis, as prescribed by the relevant interconnection agreements, while 36% and 21 % of technical capacity was offered on interruptible basis at the IP Budince (entry) and Budince (exit) respectively in the 2019/2020 gas year. However, according to the regulatory authority of Ukraine, these offers of interruptible capacity do not point towards contractual congestions. Rather, capacity is offered on interruptible basis due to the conditions of Interconnection agreements signed between TSOs. Likewise, the highest rate of interruptible capacity booking amounted 79 % at the IP Budince.

In the other Contracting Parties, no interruptible capacity was offered.

Finally, ECRB investigated whether there was any trading of IP capacities on the secondary market in 2020. Based on the information provided by the NRAs, there was no such a commercial activity in the Contracting Parties.

### **3. Implementation of congestion management procedures**

Application of congestion management procedures in the event of contractual congestion is an obligation introduced by the CMP Guidelines. Capacity made available after congestion management procedures has to be offered by transmission system operators in the regular allocation process. For the purpose of this report, the regulators were asked to provide an overview of the congestion management procedures implemented by their respective transmission system operators.

The responses showed that only in Ukraine CMP measures are stipulated in the applicable rules (transmission network code), namely a long-term use-it-or-lose-it mechanism, surrender of contracted capacity and oversubscription and a buy-back scheme. In practice, however, they would be hardly applied, due to the fact that the capacity offered via congestion management procedures should be firm. The transmission system operator, on the other side, concludes gas transmission contracts with network users only for interruptible capacity at the IP Hermanowize and Beregdaroc based on the signed interconnection agreements.

In all other Contracting Parties, none of the congestion management procedures was applied until June 2021.



## CONCLUSIONS AND RECOMMENDATIONS

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Having in mind that the CAM NC was not used for transmission capacity allocation in the Contracting Parties in 2020, the identification of possible contractual congestions was performed based on the information on actual capacity demand, provided by the NRAs of the Contracting Parties. In addition to capacity demand, other possible indicators of contractual congestion as well as the implementation of CMP Guidelines were analyzed.

Based on the information on capacity bookings in the Contracting Parties in 2020, it can be concluded that there were no contractual congestions on the analyzed interconnection points. Other possible indicators did also not point out to existence of contractual congestions. Therefore, with reference to Articles 2.2.1 and 2.2.3 of CMP Guidelines, **the ECRB concludes that the national regulatory authorities of the Contracting Parties do not have to request transmission system operators to apply firm day-ahead use-it-or-lose-it mechanism.**

On the other side, during this analysis, ECRB identified a number of obstacles stemming from data availability, consistency and reliability and **invites the transmission system operators to comply without delay with transparency related provisions of Regulation (EC) 715/2009 and, in particular, Annex I of that Regulation.**

Finally, **ECRB invites Governments, national regulatory authorities and transmission system operators of the Contracting Parties and, where relevant, neighboring EU Member States, to enable full implementation of the CMP Guidelines and the CAM NC on interconnection points between the Contracting Parties and between the Contracting Parties and EU Members States.** In this respect, the ECRB recognizes substantial efforts of the Ukrainian national regulatory authority in enabling implementation of the CAM NC and the CMP Guidelines in Ukraine in 2020.

## ANNEX I - TECHNICAL AND BOOKED CAPACITY

Interconnection point	Information on capacity
<p><b>IP Kiskundoroszma - Horgos</b> <b>Hungary to Serbia</b></p>	<p>Technical capacity: 153,870,164 kWh/day</p> <p>Booked yearly capacity in 2019/2020 gas year: 18,070,671 kWh/day, in the 2020/2021 gas year: 102,347,471 kWh/day from which 86,957,471 kWh/day based on allocation (85,448,184 kWh/day for network users in Serbia and 1.509.287 kWh/day for network users in Bosnia and Herzegovina and 15,390,000 kWh/day is allocated to BH Gas based on long-term contract.</p> <p>2 monthly products were booked in 2020 (August and December). The maximal booked monthly capacity was 30,780,000 kWh/day in December 2020.</p> <p>No daily products were booked.</p> <p>In 2020, there was no booking of yearly capacity for the gas years 2021/2022 and 2022/2023.</p>
<p><b>IP Zvornik</b> <b>Serbia to Bosnia to Herzegovina</b></p>	<p>Technical capacity: 20,526,314 kWh/day</p> <p>Booked yearly capacity in the 2019/2020 gas year: 17,883,647 kWh/day, in the 2020/2021 gas year: 16,899,287 kWh/day (15,420,000 kWh/day is allocated to BH Gas based on a long-term contract until end of March 2021.)</p> <p>The yearly capacity for gas years 2021/2022 and 2022/2023 was not booked in 2020.</p>
<p><b>IP Zdilovo – Kuystendil</b> <b>Bulgaria to North Macedonia</b></p>	<p>Technical capacity: 20,820,000 kWh/day</p>

Interconnection point	Information on capacity
<b>IP Drozdovichi<sup>6</sup></b> <b>Ukraine to Poland</b>	Technical capacity: 177 893 kWh/day, out of which 95 797 kWh/day is offered for backhaul purpose.  Quarterly, monthly and daily products were booked, including the backhaul needs.
<b>IP Hermanovize<sup>7</sup></b> <b>Poland to Ukraine</b>	Technical capacity from January to April and from September to December 2020: 67,971,215 kWh/day, from May to August: 45,668,161  Daily, monthly and yearly capacity was booked in 2020.
<b>GCP Gaz-System/UA TSO (VIP)<sup>8</sup></b> <b>Ukraine to Poland</b>	Technical capacity from July to September 2020: 177,893,417 kWh/day, from October to December: 204,975,698 kWh/day.  Yearly, Quarterly, monthly and daily products were booked. The biggest amount of capacity was booked as yearly product – 117,887,578 kWh/day.
<b>GCP Gaz-System/UA TSO (VIP)<sup>9</sup></b> <b>Poland to Ukraine</b>	Technical capacity from July to September 2020: 137,004,482 kWh/day, from October to December: 164,192,968 kWh/day.  Quarterly, monthly and daily products were booked. The biggest monthly product was booked by 3 network users in September – 14,166,147 kWh/day, and the biggest daily was booked in July by 11 network users – 57,372,917 kWh/day (in average).

<sup>6</sup> Drozdovychi IP was functioning during period of 1 January 2020 - 30 June 2020.

<sup>7</sup> Hermanovyschi IP was functioning during period of 1 January 2020 - 30 June 2020.

<sup>8</sup> "GCP GAZ-SYSTEM/UA TSO" virtual interconnection point has been functioning since 1 July 2020, Drozdovychi and Hermanovyschi IPs were functioning during period of 1 January 2020 - 30 June 2020.

<sup>9</sup> "GCP GAZ-SYSTEM/UA TSO" virtual interconnection point has been functioning since 1 July 2020, Drozdovychi and Hermanovyschi IPs were functioning during period of 1 January 2020 - 30 June 2020.

Interconnection point	Information on capacity
<b>IP Budince</b> <b>Slovakia to Ukraine</b>	Technical capacity: 254,892,059 kWh Yearly, quarterly, monthly and daily capacities were booked in 2020. The biggest amount of capacity was booked by 12 network users as quarterly products – 134,480,031 kWh/day.
<b>IP Uzgorod - Velke Kapushany,</b> <b>Ukraine to Slovakia</b>	Technical capacity: 2,993,919,649 kWh/day In 2020, yearly and quarterly capacity products were booked in the exit direction. Monthly and daily capacities in the entry direction.
<b>IP Beregdaroc<sup>10</sup></b> <b>Hungary to Ukraine</b>	Technical capacity: 207,099,798 kWh/day In 2020, quarterly, monthly, daily capacities were booked. The biggest amount of capacity was booked by 20 network users as daily products – 147,745,718 kWh/day (in average).
<b>IP Beregovo<sup>11</sup></b> <b>Ukraine to Hungary</b>	Technical capacity: 426,944,120 kWh/day In 2020, yearly and daily capacities were booked.
<b>VIP Bereg<sup>12</sup></b> <b>Hungary to Ukraine</b>	Technical capacity: 1,001,513,384 kWh/day In 2020, quarterly, monthly and daily products were booked. The biggest amount of capacity was booked with daily product – 154,961,100 kWh/day (in average).

<sup>10</sup> Beregovo and Beregdaroc IPs have been merged into one VIP - "Bereg" (since 1 May 2020).

<sup>11</sup> Beregovo and Beregdaroc IPs have been merged into one VIP - "Bereg" (since 1 May 2020).

<sup>12</sup> The "Bereg" virtual interconnection point has been functioning since 1 May 2020, Beregovo and Beregdaroc IPs were functioning during the period of 1 January 2020 - 30 April 2020.

Interconnection point	Information on capacity
<b>VIP Bereg<sup>13</sup></b> <b>Ukraine to Hungary</b>	Technical capacity: 518,280,521 kWh/day In 2020 yearly, quarterly, monthly and daily products were booked. The biggest amount of capacity was booked with yearly product – 303,746,371 kWh/day.
<b>IP Orlovka - Isaccea I</b> <b>Ukraine to Romania</b>	Technical capacity: 202,851,597 kWh/day. In 2020 yearly, monthly and monthly products were booked. The biggest amount of capacity was booked with the yearly product – 122,135,779 kWh/day.
<b>IP Orlovka - Isaccea I</b> <b>Romania to Ukraine</b>	Technical capacity: 169,928,040 kWh/day (January – September), 122,135,779 kWh/day (October – December). In 2020, yearly and daily products were booked. The biggest amount of capacity was booked as yearly product – 42,057,190 kWh/day.
<b>IP Oleksiivka</b> <b>Ukraine to Moldova</b>	Technical capacity: 83,901,970 kWh/day. In 2020 yearly, quarterly and monthly products were booked. The biggest amount of capacity was booked as yearly product – 53,102,512 kWh/day.
<b>IP Ananiv</b> <b>Ukraine to Moldova</b>	Technical capacity: 170,990,090 kWh/day Not used in 2020.
<b>IP Lymanske</b> <b>Ukraine- Moldova</b>	Technical capacity: 7,800,000 kWh/day Not used in 2020.
<b>IP Grebenyky</b> <b>Ukraine to Moldova</b>	Technical capacity: 42,057,190 kWh/day. In 2020 yearly, quarterly, monthly and daily products were booked. The biggest amount of capacity was booked as yearly product – 42,057,190 kWh/day.

<sup>13</sup> The "Bereg" virtual interconnection point has been functioning since 1 May 2020, Beregovo and Beregdaroc IPs were functioning during the period of 1 January 2020 - 30 April 2020.

Interconnection point	Information on capacity
<b>IP Grebenyky</b> <b>Moldova to Ukraine</b>	Technical capacity: 382,338,089 kWh/day. In 2020 yearly, monthly and daily products were booked. The biggest amount of capacity was booked with as yearly product – 207,099,798 kWh/day.
<b>IP Kaushany</b> <b>Ukraine to Moldova</b>	Technical capacity: 127,446,030 kWh/day In 2020 yearly, quarterly, monthly and daily products were booked. The biggest amount of capacity was booked as yearly product – 123,197,829 kWh/day.
<b>IP Kaushany</b> <b>Moldova to Ukraine</b>	Technical capacity: 382,338,089 kWh/day In 2020, only yearly product was booked (42,057,190 kWh/day).
<b>IP Sudzha</b> <b>Ukraine to Russia</b>	Technical capacity: 1,600,509,724 kWh/day (January – September), 1,759,817,261 (October – December). In 2020 yearly, quarterly, and monthly products were booked. The biggest amount of capacity was booked as yearly product – 1,759,817,261 kWh/day.
<b>IP Sokhranovka</b> <b>Ukraine to Russia</b>	Technical capacity: 291,001,768 kWh/day. In 2020, yearly and daily products were booked.

## ANNEX II- INTERCONNECTION POINTS AND CAPACITIES IN GEORGIA AND ARMENIA

Interconnection point	Information on capacity
Russia- Georgia	Technical capacity: 174,912,000 kWh/day
Azerbaijan- Georgia	Technical capacity: 92,922,000 kWh/day
Armenia- Georgia	Technical capacity: 27,330,000 kWh/day Not used in 2020.
Georgia- Armenia	Technical capacity: 130,000,000 kw h/day Booked yearly flow in 2020: 22,669 GWh
Iran- Armenia	Booked yearly flow in 2020: 3,972 GWh