



**Demand assessment report
for incremental capacity
between *Ukrainian* and
*Republic of Moldova gas transmission
systems***

2023-10-23

This report is a joint assessment of the potential for incremental capacity projects
conducted by



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A. Non-binding Demand indications

Considering that "Moldovatransgaz" LLC did not fulfill the requirements of the Third Energy Package and the unbundling process stipulated in Law No 108/2016 regarding natural gas (a commitment assumed with the accession of the Republic of Moldova to the Energy Community Treaty), the National Agency for Energy Regulation (ANRE) withdrew the license of "Moldovatransgaz" LLC. Thus, according to point 4 of the ANRE Decision no. 434/2023: "On 19.09.2023 "Vestmoldtransgaz" LLC became the successor in rights and obligations of "Moldovatransgaz" LLC".

In accordance with the requirements of Cap. V, section 5 of the Gas Network Code approved by ANRE Decision no. 420/2019, "Moldovatransgaz" LLC carried out the assessment of the market demand for the incremental capacity for the interconnection points. The evaluation of the potential demand for incremental capacity took place until 28.08.2023. Considering that after the completion of public consultations, VMTG have taken over the operation of the IP's with GTSOU (on 19.09.23), as a result the requests for non-mandatory capacity received on the IP's by "Moldovatransgaz" LLC cannot be taken into account.

During the public market demand assessment procedure, the interested gas market participants have sent indicative data on the incremental capacity for IP Oleksiivka, IP Grebenyky and IP Kaushany. The specified interconnection points between *the Gas Transmission System of Ukraine* operated by "**Gas Transmission System Operator of Ukraine**" LLC (hereinafter referred to as **GTSOU**) and the *Gas Transmission System of Republic of Moldova* operated by "**Vestmoldtransgaz**" LLC (hereinafter referred to as **VMTG**) since 19 September 2023 are located on the Ukraine - Republic of Moldova border and can be currently used for natural gas transmission both from Ukraine to Republic of Moldova and from Republic of Moldova to Ukraine.

In accordance with the Interconnection Agreement concluded between the GTSOU and VMTG, the following technical capacities are currently available:

Maximum technical capacity (currently offered on a firm basis)	IP Oleksiivka (UA>MD)	
	m ³ (0°C)/d	kWh/d
	7 362 000	84 269 000

Maximum technical capacity (currently offered on an interruptible basis if available Ananiiv- Bogorodchany transportation direction)	IP Oleksiivka (MD>UA)	
	m ³ (0°C)/d	kWh/d
	11 184 000	128 018 000

Maximum technical capacity (currently offered on a firm basis)	IP Grebenyky (UA>MD)	
	m ³ (0°C)/d	kWh/d
	27 960 000	320 045 000

Maximum technical capacity (currently offered on an interruptible basis).	Grebenyky (MD>UA)	
	m ³ (0°C)/d	kWh/d
	3 690 000	42 238 000

Maximum technical capacity (currently offered on an interruptible basis)	IP Kaushany (UA>MD)	
	m ³ (0°C)/d	kWh/d
	11 184 000	128 018 000

Maximum technical capacity (currently offered on a firm basis).	IP Kaushany (MD>UA)	
	m ³ (0°C)/d	kWh/d
	27 960 000	320 045 000

GTSOU received non-binding demand indications for firm capacity at the interconnection points Oleksiivka, Grebenyky and Kaushany on the border for future periods as described below.

The two TSOs (VMTG and GTSOU) have jointly agreed to consider just indicative requests submitted to GTSOU.

No non-binding capacity demand were submitted later than 8 weeks after the start of the incremental capacity process, respectively by 28 August 2023.

The following **aggregated non-binding demand indications received by GTSOU** for **firm** capacity at IP **Oleksiivka** (21Z00000000182N) have been used as a basis for this demand assessment:

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year [yyyy/yy]	Amount [(kWh/d)/y]	Amount [m3(0°C)/d/y]	Type of capacity [firm, interruptible]	Date when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information
Moldova	Ukraine	2024/2025	84 275 772	7 362 535	firm	2	
Moldova	Ukraine	2025/2026	94 943 591	8 924 501	firm	2	
Moldova	Ukraine	2026/2027	94 943 591	8 924 501	firm	2	
Moldova	Ukraine	2027/2028	94 943 591	8 924 501	firm	2	
Moldova	Ukraine	2028/2029	94 943 591	8 924 501	firm	2	
Moldova	Ukraine	2029/2030	94 943 591	8 924 501	firm	2	
Moldova	Ukraine	2030/2031	94 943 591	8 924 501	firm	2	

* The following standardised period shall be used for indicating the receiving date of the demand indication:

- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year’s yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year’s yearly capacity auction, but that will be considered in this incremental capacity cycle (9– 16 weeks after yearly auction in year).

The following **aggregated non-binding demand indications received by GTSOU** for **firm** capacity at IP **Kaushany** (21Z00000000179C) have been used as a basis for this demand assessment:

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year [yyyy/yy]	Amount [(kWh/d)/y]	Amount [m3(0°C)/d/y]	Type of capacity [firm, interruptible]	Date when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information
Ukraine	Moldova	2024/2025	128 013 830	11 183 597	firm	2	
Ukraine	Moldova	2025/2026	192 020 746	16 775 396	firm	2	
Ukraine	Moldova	2026/2027	192 020 746	16 775 396	firm	2	
Ukraine	Moldova	2027/2028	192 020 746	16 775 396	firm	2	
Ukraine	Moldova	2028/2029	192 020 746	16 775 396	firm	2	
Ukraine	Moldova	2029/2030	192 020 746	16 775 396	firm	2	
Ukraine	Moldova	2030/2031	192 020 746	16 775 396	firm	2	

* The following standardised period shall be used for indicating the receiving date of the demand indication:

- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year’s yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year’s yearly capacity auction, but that will be considered in this incremental capacity cycle (9– 16 weeks after yearly auction in year).

The following **aggregated non-binding demand indications received by GTSOU** for **firm** capacity at IP **Grebenyky** (21Z000000000178E) have been used as a basis for this demand assessment:

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year [yyyy/yy]	Amount [(kWh/d)/y]	Amount [m3(0°C)/d/y]	Type of capacity [firm, interruptible]	Date when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information
Moldova	Ukraine	2024/2025	74 674 734	6 523 765	firm	2	
Moldova	Ukraine	2025/2026	128 013 830	11 183 597	firm	2	
Moldova	Ukraine	2026/2027	128 013 830	11 183 597	firm	2	
Moldova	Ukraine	2027/2028	128 013 830	11 183 597	firm	2	
Moldova	Ukraine	2028/2029	128 013 830	11 183 597	firm	2	
Moldova	Ukraine	2029/2030	128 013 830	11 183 597	firm	2	
Moldova	Ukraine	2030/2031	128 013 830	11 183 597	firm	2	

* The following standardised period shall be used for indicating the receiving date of the demand indication:

- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year’s yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year’s yearly capacity auction, but that will be considered in this incremental capacity cycle (9– 16 weeks after yearly auction in year).

B. Demand assessment

i. Results of current auctions for yearly capacity

The firm capacity at the interconnection points IP Oleksiivka (flow direction from Republic of Moldova to Ukraine), IP Grebenyky (flow direction from Republic of Moldova to Ukraine) and IP Kaushany (flow direction from Ukraine to Republic of Moldova) was not offered at the current annual auction.

For IP Grebenyky (flow direction from Republic of Moldova to Ukraine) and IP Kaushany (flow direction from Ukraine to Republic of Moldova), on the Ukrainian side, the existing technical capacity has been offered on an interruptible basis, but has not been requested and booked. Capacity of IP Oleksiivka (flow direction from Republic of Moldova to Ukraine) has not been offered on the auctions on an interruptible basis due to the absence of physical flow via Ananiiv-Bogorodchany transportation direction. Interruptible capacity allocation of IP Oleksiivka (flow direction from Republic of Moldova to Ukraine) is carried out only for the daily and within day products. Gas transportation via IP Oleksiivka (flow direction from Republic of Moldova to Ukraine) is possible only in backhaul mode.

For IP Grebenyky (flow direction from Republic of Moldova to Ukraine) and IP Kaushany (flow direction from Ukraine to Republic of Moldova), on the Republic of Moldova side, the existing technical capacity has been offered on an interruptible basis, but has not been requested and booked.

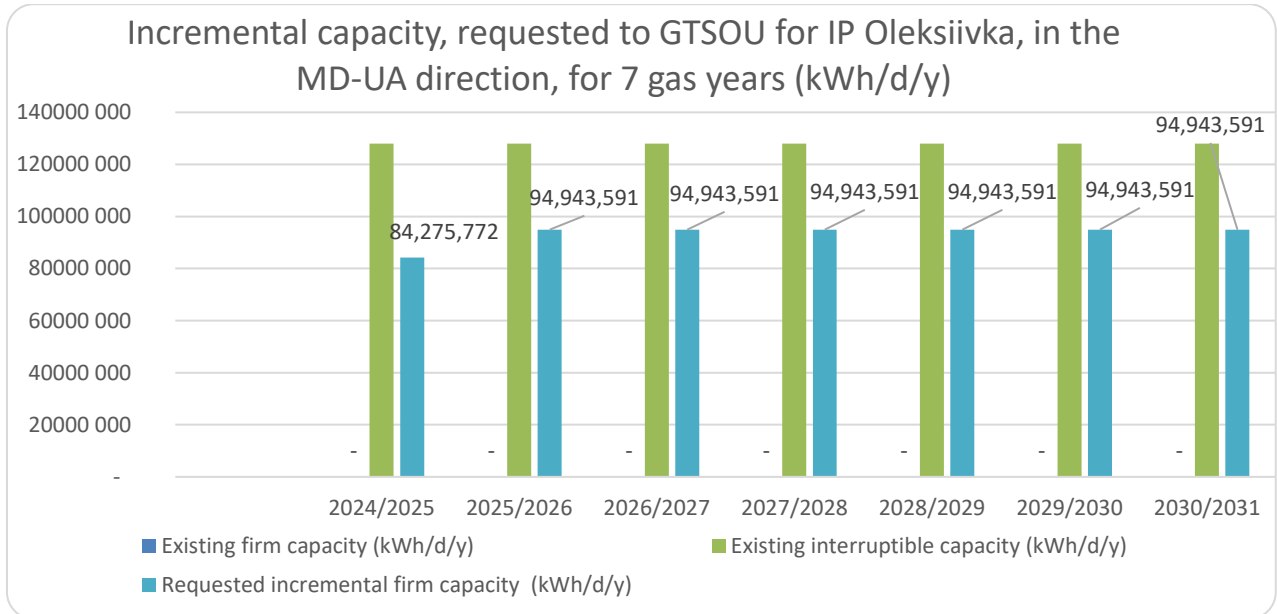
Auctions results may be found on the Regional Booking Platform webpage: <https://ipnew.rbp.eu/Rbp.eu/#/capacityauction-list>

ii. Expected amount, direction and duration of demand for incremental capacity

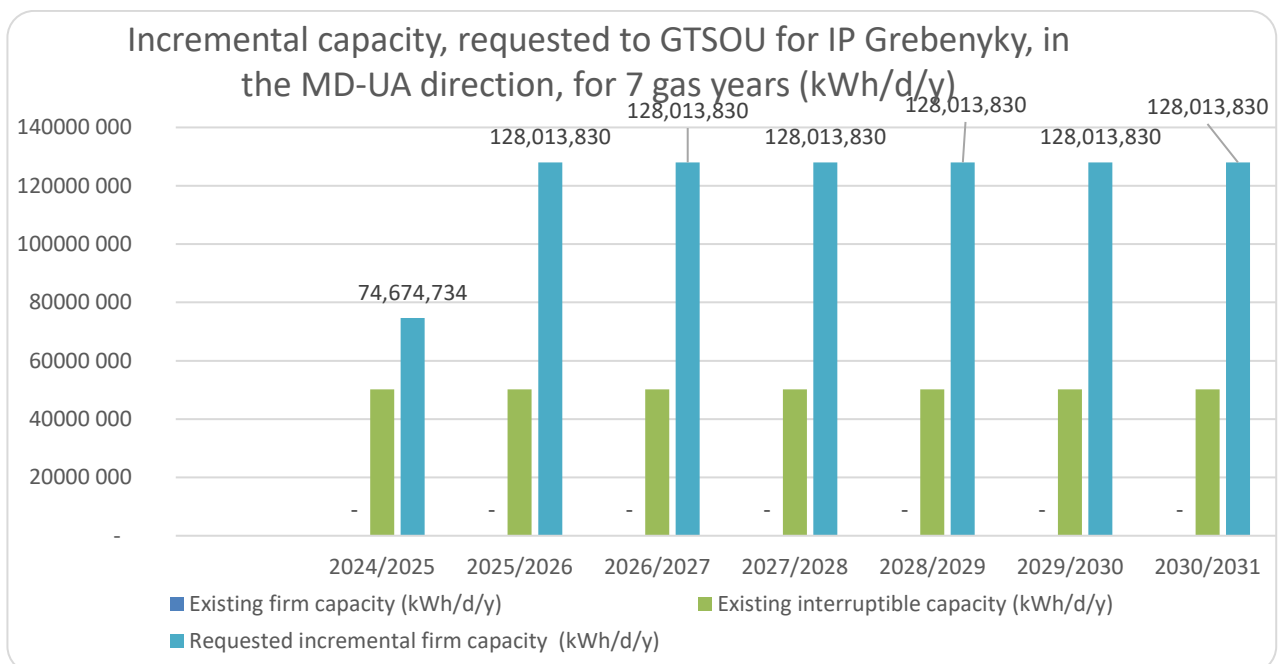
The evaluation of the demand for incremental capacity is based on the existing technical capacity and the non-binding requests for incremental capacity between the entry-exit systems. The analysis focuses on the requested transport direction as well as for each side of the entry-exit system.

For IP Oleksiivka (flow direction from Republic of Moldova to Ukraine), the cumulated non-binding incremental capacity indications received by GTSOU are at the **maximum level of 94 943 591 kWh/d/year** for 6 gas years (2025/2026 to 2030/2031). Also it is at the level of **84 275 772kWh/d/year** for 1 gas year (2024/2025). **The existing technical capacity on this direction (128 018 000 kWh/d/year) is offered temporarily on interruptible basis** due to the absence of physical flow via Ananiiv-Bogorodchany transportation

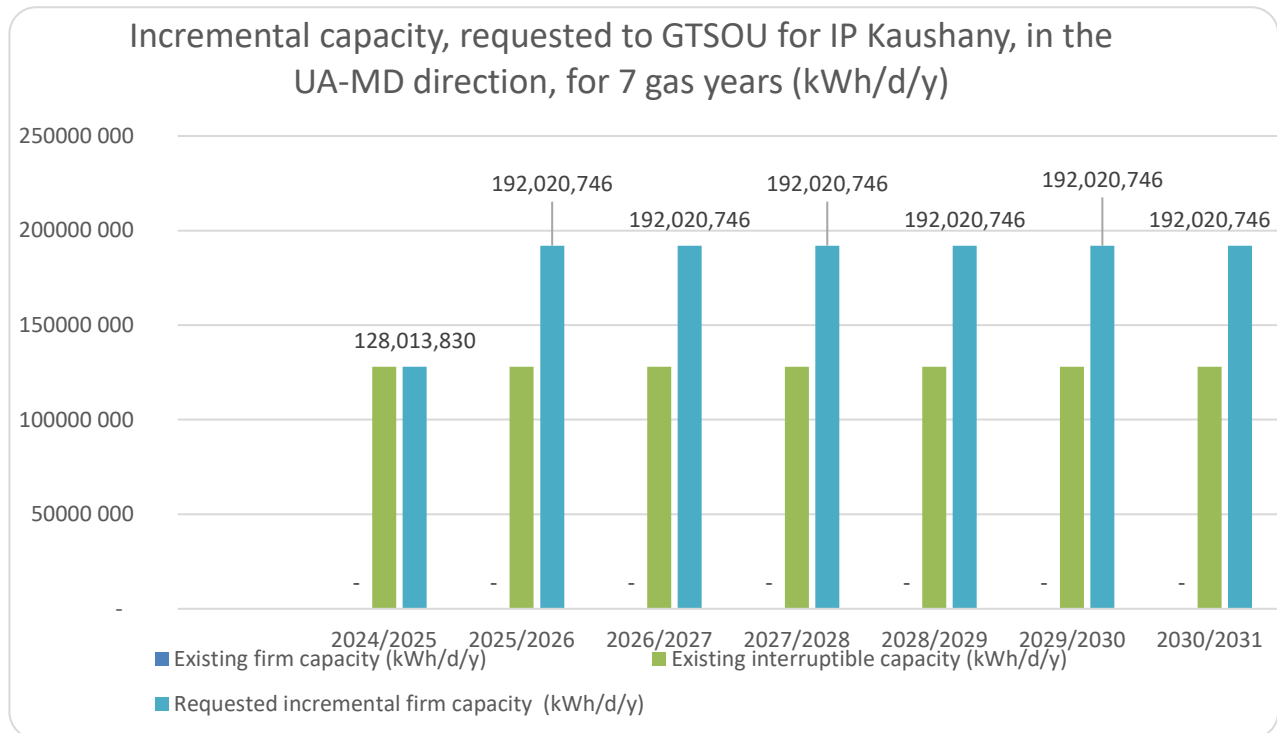
direction.



For IP Grebenyky (flow direction from Republic of Moldova to Ukraine), the cumulated non-binding incremental capacity indications received by GTSOU are at the **maximum level of 128 013 830 kWh/d/year** for 6 gas years (2025/2026 to 2030/2031). Also, it is at the level of **74 674 734 kWh/d/year** for 1 gas year (2024/2025). **The existing technical capacity on this direction (42 238 000 kWh/d/year) is offered temporarily on interruptible basis.**



For IP Kaushany (flow direction from Ukraine to Republic of Moldova), the cumulated non-binding incremental capacity indications received by GTSOU are at the **maximum level of 192 020 746 kWh/d/year** for 6 gas years (2025/2026 to 2030/2031). Also it is at the level of **128 013 830 kWh/d/year** for 1 gas year (2024/2025). **The existing technical capacity on this direction (128 018 000 kWh/d/year) is offered temporarily on interruptible basis.**



On the Ukrainian side the corresponding project “*Transportation of natural gas through Trans-Balkan pipeline in two directions*” was studied in the national TYNDP 2020-2029.

The Trans-Balkan infrastructure will increase the security of supply in Ukraine, Republic of Moldova and the southeast European region. Trans-Balkan infrastructure also can be used for gas transportation from Greek and Turkish LNG terminals and from the Caspian countries, including Azerbaijan, to Europe. We believe, that more efficient usage of the existing infrastructure, including the Ukrainian and Republic of Moldova pipelines, Ukrainian underground gas storages, is essential in tackling significant gas supply challenges in Europe, especially given the change in the supply from Russia. The Trans-Balkan Pipeline serves as a vital energy link connecting Ukraine and Republic of Moldova with countries in Southeast Europe.

For example, during June-September 2023, Moldovan side actively injected gas to Ukrainian underground gas storages mainly from the south direction via Trans-Balkan pipeline, namely through the gas transmission systems of Bulgaria, Romania and Ukraine. Since the beginning of 2023, over 500 mcm of natural gas from Moldova to Ukraine, which were injected to Ukrainian underground gas storages.

C. Conclusions for the (non)-initiation of an incremental capacity project/process

The cumulative non-binding indications received by GTSOU described at chapter B. The existing technical capacity is available only on interruptible basis. The two TSOs will make joint efforts, so that the existing capacity may be offered to the market as firm capacity as soon as possible.

Based on the evaluation of the received non-binding indications as presented in chapter A, and based on the analysis made at chapter B, we conclude that for **IP Oleksiivka (flow direction from Republic of Moldova to Ukraine), IP Grebenyky (flow direction from Republic of Moldova to Ukraine) and IP Kaushany (flow direction from Ukraine to Republic of Moldova)**, the next phase of this incremental capacity process will be initiated.

A technical study is necessary to be prepared for these IPs and these transmission direction to determine the feasibility of an incremental capacity project to cover the peak of the cumulated firm capacity demand, presented in chapter B.

Offer levels will be assessed later, since they are an output of the technical study thoroughly taking into account aspects of technical feasibility.

Therefore, in the upcoming design phase the **two involved TSOs will conduct technical studies based on the expected demand for incremental capacity for IP Oleksiivka (flow direction from Republic of Moldova to Ukraine), IP Grebenyky (flow direction from Republic of Moldova to Ukraine) and IP Kaushany (flow direction from Ukraine to Republic of Moldova)**, in line with the considerations presented in chapter B and the conclusions at chapter C.

D. Provisional timeline

The involved TSOs plan to conduct the technical studies according to the following provisional timeline:

Provisional timeline
12 weeks for design phase and preparation of consultation documents
Publication of consultation documents
1-2 months for public consultation
Submission of the project proposal to NRAs
6 months period for national regulatory authorities to publish coordinated decisions on the project proposal
Publication of the approved parameters by NRAs and of a template of the contract(s) related to the capacity to be offered
Yearly capacity auction/economic test

The stated dates have provisional character and might therefore be subject to changes.

E. Interim arrangements for the auction of existing capacity on the concerned IP(s)

There is no interim arrangement.

F. Fees

The involved TSOs will not charge fees for activities resulting from the submission of non-binding demand indications.

G. Contact information



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