

**Demand assessment report
for incremental capacity
between *Slovenia*
and *Hungary***

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

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A. Non-binding Demand indications

The involved Hungarian (HU) TSO FGSZ Ltd. (FGSZ) and Slovenian (SI) TSO Plinovodi d.o.o. (Plinovodi) have received non-binding demand indications for firm capacity at the interconnection points between the entry-exit system of FGSZ and the entry-exit system of Plinovodi.

Hungarian TSO FGSZ received non-binding demand indications for incremental capacities during the market demand survey conducted between 06.09.2018 and 03.10.2018 as defined in the 6th paragraph of the Article 26, Commission Regulation (EU) 2017/459.

The non-binding demand is referring to incremental capacities **Tornyiszentmiklós Exit**:

| From [entry-exit system name] “EXIT CAPACITY” | To [entry-exit system name] “ENTRY CAPACITY” | Gas year [yyyy/yy] | Amount [(kWh/h)/y] | Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below) | Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)] | Additional Information (e.g. type of capacity, if different from bundled firm freely allocable) |
|---|--|-----------------------|-----------------------|--|---|--|
| FGSZ | Plinovodi | 2019/20 | 50,000 | No | 3* | |
| FGSZ | Plinovodi | 2020/21 | 150,000 | No | 3* | |
| FGSZ | Plinovodi | 2021/22 | 250,000 | No | 3* | |
| FGSZ | Plinovodi | 2022/23 | 250,000 | No | 3* | |
| FGSZ | Plinovodi | 2023/24 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2024/25 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2025/26 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2026/27 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2027/28 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2028/29 | 3,260,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2029/30 | 3,010,000 | Yes | 3* | |
| FGSZ | Plinovodi | 2030/31 | 2,475,000 | Yes | 3* | |
| FGSZ | Plinovodi | 2031/32 | 2,475,000 | Yes | 3* | |
| FGSZ | Plinovodi | 2032/33 | 2,475,000 | Yes | 3* | |

* 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).

Slovenian TSO Plinovodi received non-binding demand indications for incremental capacities during the market demand survey conducted between 06.09.2018 and 03.10.2018 as defined in the 6th paragraph of the Article 26, Commission Regulation (EU) 2017/459.

The non-binding demand is referring to incremental capacities **Pince Entry**:

| From [entry-exit system name] “EXIT CAPACITY” | To [entry-exit system name] “ENTRY CAPACITY” | Gas year [yyyy/yy] | Amount [(kWh/h)/y] | Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below) | Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)] | Additional Information (e.g. type of capacity, if different from bundled firm freely allocable) |
|---|--|-----------------------|-----------------------|--|---|--|
| FGSZ | Plinovodi | 2023/24 | 3,366,050** | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2024/25 | 3,367,991** | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2025/26 | 3,369,932** | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2026/27 | 3,323,014** | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2027/28 | 3,124,384 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2028/29 | 3,125,868 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2029/30 | 3,128,836 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2030/31 | 2,597,489 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2031/32 | 2,600,000 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2032/33 | 2,602,511 | Yes (partially) | 3* | |
| FGSZ | Plinovodi | 2033/34 | 50,000 | No | 3* | |

* 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).

**additional seasonal demand has been indicated with 300,000 kWh/h/y capacity.

Hungarian TSO FGSZ received non-binding demand indications for incremental capacities during the market demand survey conducted between 06.09.2018 and 03.10.2018 as defined in the 6th paragraph of the Article 26, Commission Regulation (EU) 2017/459.

The non-binding demand is referring to incremental capacities **Tornyiszentmiklós Entry**:

| From [entry-exit system name] “EXIT CAPACITY” | To [entry-exit system name] “ENTRY CAPACITY” | Gas year [yyyy/yy] | Amount [(kWh/h)/y] | Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below) | Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)] | Additional Information (e.g. type of capacity, if different from bundled firm freely allocable) |
|---|--|-----------------------|-----------------------|--|---|--|
| Plinovodi | FGSZ | 2023/24 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2024/25 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2025/26 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2026/27 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2027/28 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2028/29 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2029/30 | 535,000 | Yes | 3* | |

* 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).

Slovenian TSO Plinovodi received non-binding demand indications for incremental capacities during the market demand survey conducted between 06.09.2018 and 03.10.2018 as defined in the 6th paragraph of the Article 26, Commission Regulation (EU) 2017/459.

The non-binding demand is referring to incremental capacities **Pince Exit**:

| From [entry-exit system name] “EXIT CAPACITY” | To [entry-exit system name] “ENTRY CAPACITY” | Gas year [yyyy/yy] | Amount [(kWh/h)/y] | Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below) | Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)] | Additional Information (e.g. type of capacity, if different from bundled firm freely allocable) |
|---|--|-----------------------|-----------------------|--|---|--|
| Plinovodi | FGSZ | 2023/24 | 735,000** | Yes (partially) | 3* | |
| Plinovodi | FGSZ | 2024/25 | 735,000** | Yes (partially) | 3* | |
| Plinovodi | FGSZ | 2025/26 | 735,000** | Yes (partially) | 3* | |
| Plinovodi | FGSZ | 2026/27 | 735,000** | Yes (partially) | 3* | |
| Plinovodi | FGSZ | 2027/28 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2028/29 | 535,000 | Yes | 3* | |
| Plinovodi | FGSZ | 2029/30 | 535,000 | Yes | 3* | |

* 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).

**additional seasonal demand has been indicated with 300,000 kWh/h/y capacity for 2 years and 250,000 kWh/h/y for other 2 years.

Slovenian TSO Plinovodi also received non-binding demand for incremental capacities for the exit direction towards Italy during the non-binding market survey conducted according to Article 26, Regulation 2017/459. The non-binding demand for incremental capacities **Šempeter Exit** is 2,495,000 kWh/h/y starting from the gas year 2023/24 on and 2,475,000 kWh/h/y starting from the gas year 2026/2027 on, see in table below.

The non-binding demand is referring to incremental capacities **Šempeter Exit**:

| From [entry-exit system name] "EXIT CAPACITY" | To [entry-exit system name] "ENTRY CAPACITY" | Gas year [yyyy/yy] | Amount [(kWh/h)/y] | Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below) | Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)] | Additional Information (e.g. type of capacity, if different from bundled firm freely allocable) |
|---|--|-----------------------|-----------------------|--|---|--|
| Plinovodi | SRG | 2023/24 | 2,495,000 | No | 3* | |
| Plinovodi | SRG | 2024/25 | 2,495,000 | No | 3* | |
| Plinovodi | SRG | 2025/26 | 2,495,000 | No | 3* | |
| Plinovodi | SRG | 2026/27 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2027/28 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2028/29 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2029/30 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2030/31 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2031/32 | 2,475,000 | No | 3* | |
| Plinovodi | SRG | 2032/33 | 2,475,000 | No | 3* | |

* 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. Historical usage pattern

Tornyiszentmiklós (HU) / Pince (SI) interconnection point (IP) is a non-existing point and the historical usage pattern is not applicable here.

ii. Results of current annual yearly auction

First non-binding market demand assessment was conducted in 2017 and the results were published in Demand Assessment Report on 08.08.2017. TSOs involved in the process agreed that due to low demand indications they will not continue the incremental process. Therefore, in the recent annual yearly auctions (on 02.07.2018) there was no capacity offered for this joint interconnection point, consequently there is no booked capacity.

iii. Connection with GRIP, TYNDP and National Ten Year Development Proposal

The project included in national and regional network development plans (CEE GRIP, Southern Corridor) and ENTSOG TYNDP since 2015.

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

The analysis of the regional and wider gas market led the project promoters to propose a bi-directional HU-SI interconnection and create with this a bi-directional gas route Italy-Slovenia-Hungary.

Because of the benefits offered to the regional gas market the project was included in the third list of PCIs, adopted by Commission on November 2017. PCI list 2017 labelled project as “6.23 Hungary - Slovenia (Nagykanizsa - Tornyiszentmiklós (HU) - Lendava (SI) - Kidričevo) interconnection”.

The project is also included in the list of Central and South Eastern Europe Energy Connectivity (CESEC) projects. The project (labelled as “NSIEAST_17”) has also very good position among project candidates for PCI 2019 status.

On the third Three Seas Initiative summit (the Black Sea Initiative), held in Bucharest in September 2018, the HU-SI interconnector was included on the list of priority projects.

We strongly believe that the bidirectional gas route Italy – Slovenia – Hungary will strengthen positive welfare on the regional gas market in view of market coupling, security of supply and diverse access to gas sources.

The essential project benefits are: (i.) the access of the Hungarian and Central-East and South-European gas suppliers to gas sources on the Western European gas markets (e.g. Italy), access to the LNG sources in Italy and Northern Adriatic region and also potential route for new Black Sea gases to be delivered to Northern Italy via Hungary; (ii.) the access of Slovenian gas suppliers to Hungarian underground gas storage facilities; (iii.) the increase of the security of supply in Slovenia and the improvement of the N-

1 infrastructure standard; (iv.) the increase of the gas security supply in the region (regarding the possible events in the regional transmission systems); (v.) gas market integration – gas price differences mitigation between Italian gas hub and central European and Balkan price zone.

C. Conclusion for the initiation of an incremental capacity project/process

The summarized non-binding demand indications are as follows:

| Entry/Exit Points | 2019/2020 (kWh/h/y) | 2020/2021 (kWh/h/y) | 2021/2022 (kWh/h/y) | 2022/2023 (kWh/h/y) | 2023/2024 (kWh/h/y) | 2024/2025 (kWh/h/y) | 2025/2026 (kWh/h/y) | 2026/2027 (kWh/h/y) |
|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| ENTRY/Pince | 0 | 0 | 0 | 0 | 3,366,050 | 3,367,991 | 3,369,932 | 3,323,014 |
| EXIT/Tornyiszentmiklós | 50,000 | 150,000 | 250,000 | 250,000 | 3,260,000 | 3,260,000 | 3,260,000 | 3,260,000 |
| EXIT/Pince | 0 | 0 | 0 | 0 | 735,000 | 735,000 | 735,000 | 735,000 |
| ENTRY/Tornyiszentmiklós | 0 | 0 | 0 | 0 | 535,000 | 535,000 | 535,000 | 535,000 |
| EXIT/Šempeter | 0 | 0 | 0 | 0 | 2,495,000 | 2,495,000 | 2,495,000 | 2,475,000 |

| Entry/Exit Points | 2027/2028 (kWh/h/y) | 2028/2029 (kWh/h/y) | 2029/2030 (kWh/h/y) | 2030/2031 (kWh/h/y) | 2031/2032 (kWh/h/y) | 2032/2033 (kWh/h/y) | 20NN (kWh/h/y) |
|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------|
| ENTRY/Pince | 3,124,384 | 3,125,868 | 3,128,836 | 2,597,489 | 2,600,000 | 2,602,511 | 50,000 |
| EXIT/Tornyiszentmiklós | 3,260,000 | 3,260,000 | 3,010,000 | 2,475,000 | 2,475,000 | 2,475,000 | 0 |
| EXIT/Pince | 535,000 | 535,000 | 535,000 | 0 | 0 | 0 | 0 |
| ENTRY/Tornyiszentmiklós | 535,000 | 535,000 | 535,000 | 0 | 0 | 0 | 0 |
| EXIT/Šempeter | 2,475,000 | 2,475,000 | 2,475,000 | 2,475,000 | 2,475,000 | 2,475,000 | 0 |

According to the above assessed results of the non-binding demand indications, there is sufficient demand level for incremental capacity to be developed; therefore, incremental capacity project will be initiated.

Non-binding demand indications received in even years shall be considered according to the paragraph 7 of the Article 26, Commission Regulation (EU) 2017/459. Market Demand Assessment will be, according to the Article 26, Commission Regulation (EU) 2017/459, performed on a regular basis. Slovenian TSO opts to perform the assessment annually.

In the frame of the national development plans and gas system developments (TSOs, GRP and ENTSOG ten-year network development plans) interconnection Slovenia - Hungary will be further processed also considering the aspects of security of supply. Both neighbouring TSOs are interested in preserving the PCI-status of the project.

Based on initial analysis the project might be developed in several phases. Upcoming technical-economic analyses during the Design phase (Article 27, Commission Regulation (EU) 2017/459) will examine realisation of bidirectional capacity in a range from 12,000 up to 300,000 Sm³/h (conversion factor: 1 Sm³ = 10.755 kWh; see table below) targeting the end of 2021 at the earliest and the second phase project realisation reaching a higher offered capacity level aligned with the non-binding market needs targeting the end of 2023 at the earliest.

Identified capacity levels for further analysis in a potential project proposal:

| Sm ³ /h | kWh/h |
|--------------------|-----------|
| 12,000 | 129,060 |
| 50,000 | 537,750 |
| 230,000 | 2,473,650 |
| 300,000 | 3,232,500 |

The project promoter TSOs agreed on a timeline of upcoming activities compatible with and based on Commission Regulation (EU) 2017/459:

| Start date | Deadline | Description |
|------------|------------|---|
| 04.10.2018 | 21.11.2018 | Design phase |
| 21.11.2018 | 21.12.2018 | Public consultation |
| 01.07.2019 | | Annual auction for incremental capacity |
| | 31.12.2021 | Technical availability of the incremental capacity – for first phase |
| | 31.12.2023 | Technical availability of the incremental capacity – for second phase |

D. Planning

The initial, planned deadline of implementation of Tornyiszentmiklós bidirectional cross-border incremental firm capacity (HU>SI and SI>HU directions) is 31.12.2021 for phase one and 31.12.2023 for phase two.

E. Fees

For the incremental capacity cycle addressed by this report, involved TSOs did not introduce a fee for the evaluation and processing of non-binding demand indications.

F. Contact information

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