



NATURAL GAS TRANSMISSION
MEMBER OF THE MOL GROUP

ENTSOG WORKSHOP on TRANSPARENCY

Implementation at FGSZ Ltd.

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FGSZ Ltd. Capacity Management Expert
November 23th, 2011

WWW.FGSZ.HU



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General information I.

Infrastructure



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- 5783 km long pipeline network
- Diameters 100-1400 mm
- Operational pressure 40-75 bar
- Daily peak firm **entry** capacity **132** Mcm/d
- 22 physical **entry** points: 3 interconnector, 12 production (5 commercial points) , 5 storage points (2 commercial points)
- 408 physical **exit** points, **230** Mcm/d (315 commercial domestic exit points, 3 crossborder exit points)
- 6 compressor stations, total compressor capacity: **233** MW



General information II.

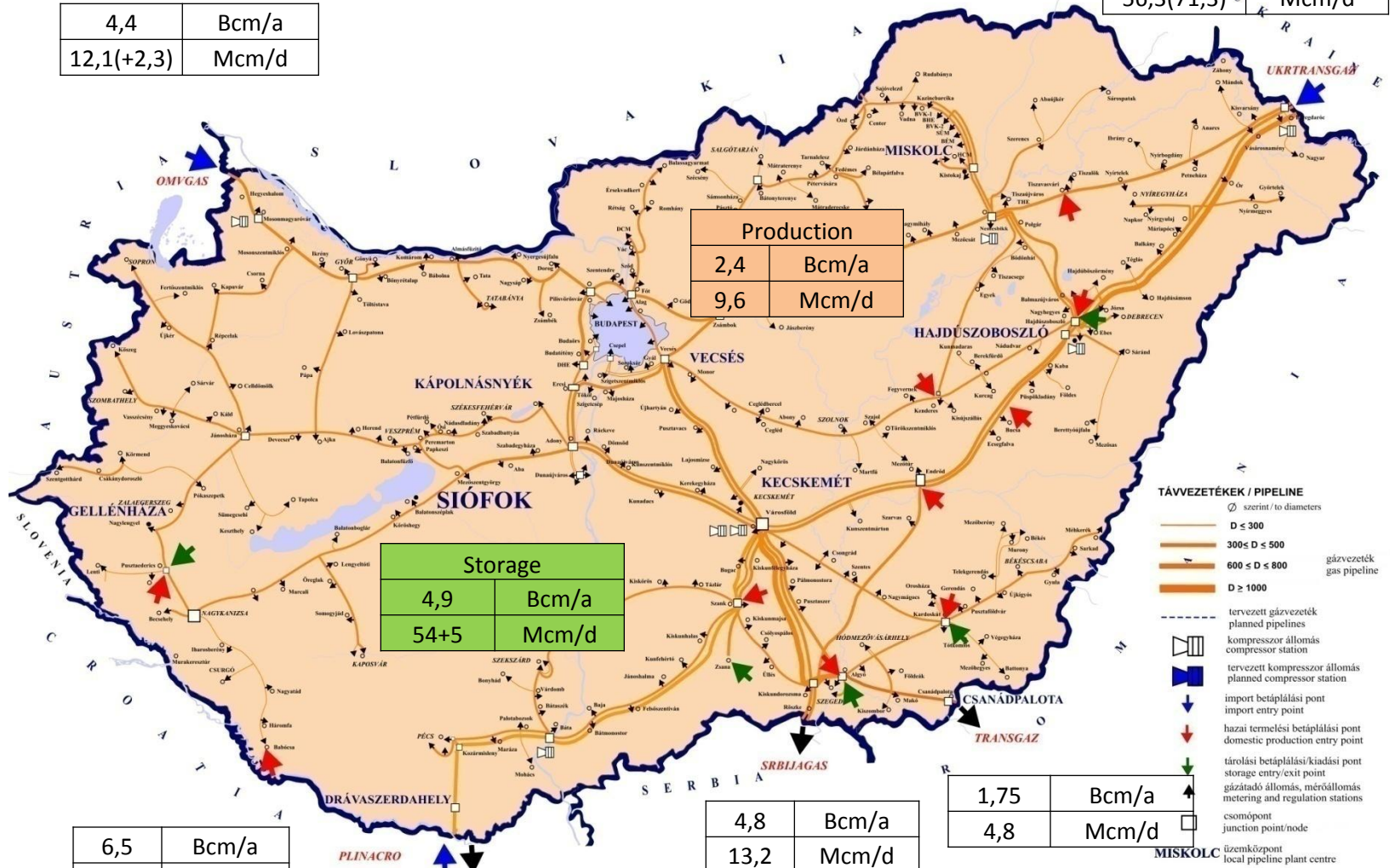
The System



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4,4	Bcm/a
12,1(+2,3)	Mcm/d

20,5 (26)	Bcm/a
56,3(71,3)	Mcm/d





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FGSZ Transparency Project: Background

Transparency obligations are arising from:

- ☐ **EU 3rd Energy package (especially EC 715/2009)**
- ☐ **Comitology on Annex 1 part 3 of EC 1775/2005 (and EC 715/2009).**

The main target:

To pursue a common European approach to implementation of transparency requirements under Regulation (EC) 715/2009.

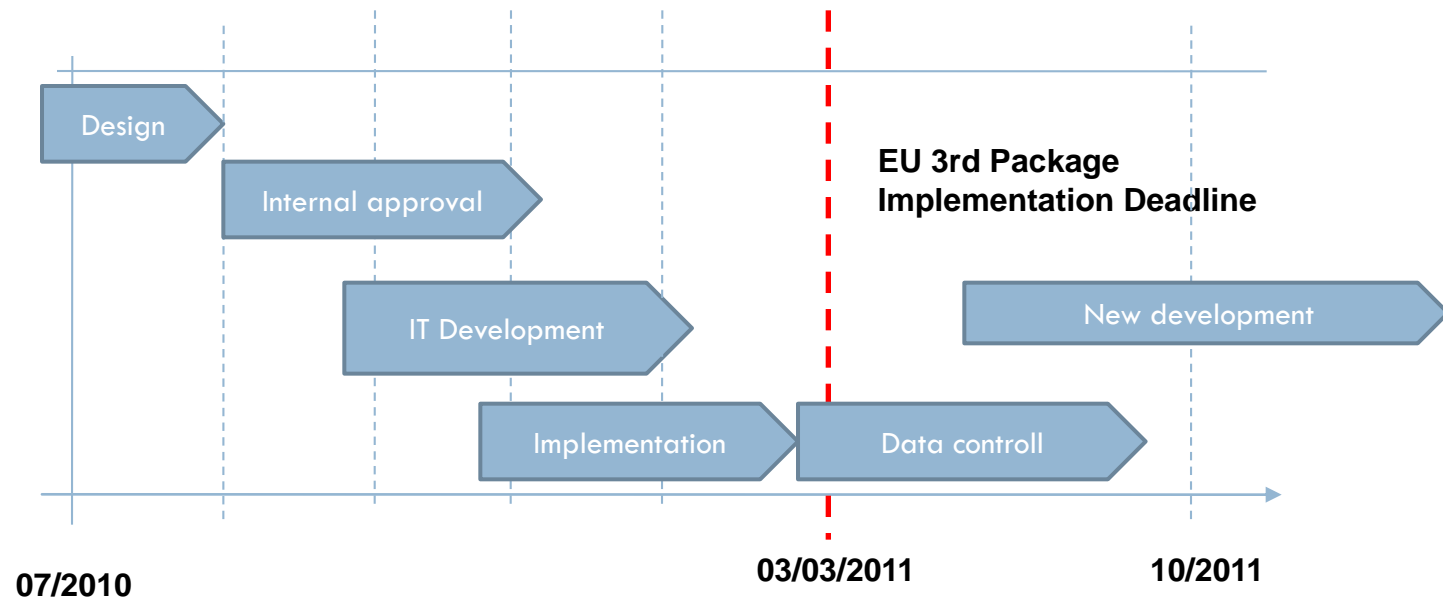




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FGSZ Transparency Project: Implementation I.

Time-table:





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FGSZ Transparency Project: Implementation II.

What was the main challenges:

- ☐ Ability to prepare IT system to publish all data
 - ☐ „near real time” data (daily)
 - ☐ to send data to other system automatically (ENTSOG TP)
- ☐ Historical data to download (first year 2010)
- ☐ Short time to make consultation with stakeholders about
 - ☐ relevant point
 - ☐ published point
- ☐ To make easier tariff calculator





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FGSZ Transparency Project: Implementation III.

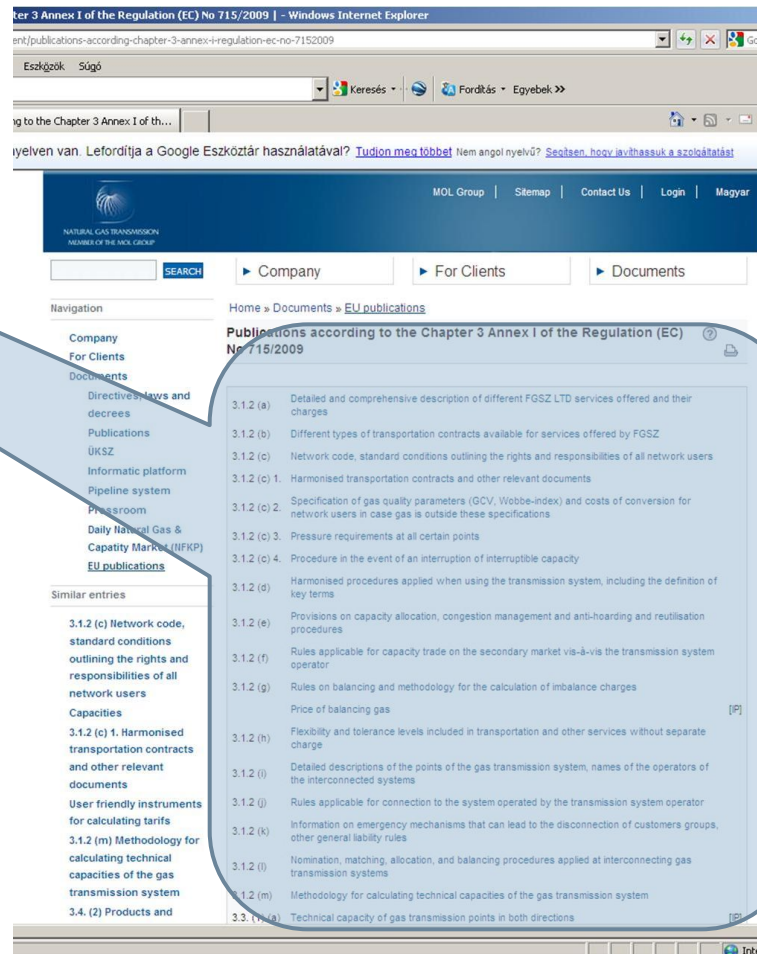
Transparency Guidelines (Amendment to Chapter 3 of Annex 1 of the Regulation No 715/2009)

The solution: Creating the appropriate structure for 715/2009

3.1.2 Content of publication

Transmission system operators shall publish at least the following information about their systems and services:

- (a) a detailed and comprehensive description of the different services offered and their charges;
- (b) the different types of transportation contracts available for these services;
- (c) the network code and/or the standard conditions outlining the rights and responsibilities of all network users including:
 1. harmonised transportation contracts and other relevant documents;
 2. if relevant for access to the system, for all relevant points as defined in paragraph 3.2 of this Annex, a specification of relevant gas quality parameters, including at least the gross calorific value and the Wobbe index, and the liability or costs of conversion for network users in case gas is outside these specifications;
 3. if relevant for access to the system, for all relevant points information on pressure requirements;
 4. the procedure in the event of an interruption of interruptible capacity, including, where applicable, the timing, extent, and ranking of individual interruptions (for example pro-rata or first-come-last-interrupted).
- (d) the harmonized procedures applied when using the transmission system, including the definition of key terms;
- (e) provisions on capacity allocation, congestion management and anti-hoarding and re-utilisation procedures;
- (f) the rules applicable for capacity trade on the secondary market vis-à-vis the transmission system operator;
- (g) rules on balancing and methodology for the calculation of imbalance charges;
- (h) if applicable, the flexibility and tolerance levels included in transportation and other services without separate charge, as well as any flexibility offered in addition to this and the corresponding charges;
- (i) a detailed description of the gas system of the transmission system operator and its relevant points of interconnection as defined in paragraph 3.2 of this Annex as well as the names of the operators of the interconnected systems or facilities.
- (j) the rules applicable for connection to the system operated by the transmission system operator;
- (k) information on emergency mechanisms, as far as it is the responsibility of the Transmission System Operator, such as measures that can lead to the



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Transparency Guidelines (Amendment to Chapter 3 of Annex 1 of the Regulation No 715/2009)

The solution: Detailed descriptions

Navigation: Home » Documents » [EU publications](#)

Company Publications according to the Chapter 3 Annex I of the Regulation (EC) No 715/2009

Company For Clients Documents

Directives, laws and decrees Publications ÜKSZ Informatic platform Pipeline system Pressroom Daily Natural Gas & Capacity Market (NFKP) **EU publications**

Similar entries

3.1.2 (a) Detailed and comprehensive description of different FGSZ Ltd. services offered and their charges

3.1.2 (b) Different types of transportation contracts available for services offered by FGSZ

3.1.2 (c) Network code, standard conditions outlining the rights and responsibilities of all network users

3.1.2 (c) 1. Harmonised transportation contracts and other relevant documents

3.1.2 (c) 2. Specification of gas quality parameters (GCV, Wobbe-index) and costs of conversion for network users in case gas is outside these specifications

3.1.2 (c) 3. Pressure requirements at all certain points

3.1.2 (c) 4. Procedure in the event of an interruption of interruptible capacity

3.1.2 (d) Harmonised procedures applied when using the transmission system, including the definition of key terms

3.1.2 (e) Provisions on capacity allocation, congestion management and anti-hoarding and reutilisation procedures

3.1.2 (f) Rules applicable for capacity trade on the secondary market vis-à-vis the transmission system operator

3.1.2 (g) Rules on balancing and methodology for the calculation of imbalance charges

3.1.2 (h) Price of balancing gas

3.1.2 (i) Flexibility and tolerance levels included in transportation and other services without separate charge

3.1.2 (j) Detailed descriptions of the points of the gas transmission system, names of the operators of the interconnected systems

3.1.2 (k) Rules applicable for connection to the system operated by the transmission system operator

3.1.2 (l) Information on emergency mechanisms that can lead to the disconnection of customers groups, other general liability rules

3.1.2 (m) Nomination, matching, allocation, and balancing procedures applied at interconnecting gas transmission systems

3.1.2 (n) Methodology for calculating technical capacities of the gas transmission system

3.3. (1) (a) Technical capacity of gas transmission points in both directions

Navigation: Home » [3.1.2 \(a\) Detailed and comprehensive description of different FGSZ Ltd. services offered and their charges](#)

Company For Clients Documents

3.1.2 (a) Detailed and comprehensive description of different FGSZ Ltd. services offered and their charges

Similar entries

3.1.2 (d) Harmonised procedures applied when using the transmission system, including the definition of key terms

3.1.2 (f) Rules applicable for capacity trade on the secondary market vis-à-vis the transmission system operator

3.4. (2) Products and relevant registration, acceptance times on the secondary capacity market

3.1.2 (c) 4. Procedure in the event of an interruption of interruptible capacity

3.1.2 (e) Provisions on capacity allocation, congestion management and anti-hoarding and reutilisation procedures

3.1.2 (m) Methodology for calculating technical capacities of the gas transmission system

3.4. (2) Products and

„A detailed and comparable description of the different services offered and their charges“

Services offered by FGSZ Ltd.

- ▶ Long-term
- ▶ Monthly
- ▶ Daily
- ▶ Backhaul
- ▶ Daily, non-nominated capacity

1. Long-term capacity booking

(a) The term for long term capacity booking is at least one gas year or an integral multiple thereof. In the event of a one year booking, the term of use shall commence at 06:00 a.m. on the 1st of July and terminate at 06:00 a.m. on the 1st of July of the next calendar year. In the event of a multiple-year contract, the booking period shall commence at 06:00 a.m. on the 1st of July of the booking year and terminate at 06:00 a.m. on the 1st of July, at the end of the last booked gas year.

(b) The Transmission System Operator shall only offer interruptible capacity if it has no available non-interruptible capacity at the given network point. Interruptible capacities may only be booked for the following gas year, upon the offer of the Transmission System Operator.

(c) Only registered non-interruptible capacity – as specified in the provisions of section 5.4.2 and verified with a certificate issued within 30 days - can be booked for a term longer than one gas year.

(d) 20% of the physical capacity of the points of special importance shall be retained for capacity requests for one year or shorter periods.

1.1. Handling of long term capacity booking requests for the following gas year

(a) Those requesting capacities may submit their booking requests based on their registered capacities for the following gas year starting on the 1st of July, with respect to the published available capacities until the 28th of February each year, through the Informatic Platform of the Transmission





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FGSZ Transparency Project: Implementation III.

Transparency Guidelines (Amendment to Chapter 3 of Annex 1 of the Regulation No 715/2009)

The solution: Available capacities

Regulation (EC) No 715/2009 | - Windows Internet Explorer

ng-chapter-3-annex-1-regulation-ec-no-7152009

ex 1 of th...

tilja a Google Eszköztár használatával? [Tudjon meg többet](#) Nem angol nyelvű? [Segítsen, hogy javíthassuk a szolgáltatást](#)

3.1.2 (h)	Flexibility and tolerance levels included in transportation and other services without separate charge	
3.1.2 (i)	Detailed descriptions of the points of the gas transmission system, names of the operators of the interconnected systems	
3.1.2 (j)	Rules applicable for connection to the system operated by the transmission system operator	
3.1.2 (k)	Information on emergency mechanisms that can lead to the disconnection of customers groups, other general liability rules	
3.1.2 (l)	Nomination, matching, allocation, and balancing procedures applied at interconnecting gas transmission systems	
3.1.2 (m)	Methodology for calculating technical capacities of the gas transmission system	
3.3. (1) (a)	Technical capacity of gas transmission points in both directions	[IP]
3.3. (1) (b)	Contracted interruptible and non-interruptible capacities in both directions at all points of the gas transmission system	[IP]
3.3. (1) (c)	Nominations and re-nominations in both directions	[IP]
3.3. (1) (d)	Available firm and interruptible capacity in both directions	[IP]
3.3. (1) (e)	Actual physical flows	[IP]
3.3. (1) (f)	Planned and actual interruption of interruptible capacity	[IP]
3.3. (1) (g)	Planned and unplanned interruptions to firm services due to maintenance, restoration information	[IP]
3.3. (4)	Daily gas quality measures at points	[IP]
3.3. (5)	Physical, available and booked capacities subject to the current, and the next 10 years	[IP]
3.4. (1)	Offered and contracted capacities on the secondary capacity market	[IP]
3.4. (2)	Products and relevant registration, acceptance times on the secondary capacity market	
3.4. (3)	Network user imbalance and relevant cost data	
3.4. (4)	Other flexible service not on the occasion of tolerance	
3.4. (5)	Gas amount per balancing zone in the transmission system	[IP]
3.4. (6)	User friendly instruments for calculating tariffs	

Internet Explorer

Google

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Bilateral Capacities Capacities Past Gas Quality Measure Interruptions

Nominations and Flows

kWh (25°/0°) MJ (15°/15°) m³ (0°) m³ (15°)

Ukrán/magyar határ betáplálási pont Beregovo felől

The interface displays information that were created by calculation.
The content of the page does not constitute any business offer.

Search Network Point:

Select Network Point:

in 39W-SFABABOCS1ZEN-V | Babócsa "REGIONALIS"
in 212-000000000003-C | Osztrák/magyar határ betáplálási pont Baum
out 39Z-FAABABOCS1IGN-E | Ába
out 39Z-MIABAUJHOSSEN-S | Ábaújkér
out 39W-KEALGYOCSZEN-O | Algyő III Kiadás a magyar rendszerről CsP

Date		Firm	Interruptible	Booked
2011-09-30	Total	594 881 153 kWh/d	594 881 153 kWh/d	288 265 381 kWh/d
	Booked	288 265 381 kWh/d	0 kWh/d	0 kWh/d
	Available	306 615 772 kWh/d	0 kWh/d	288 265 381 kWh/d
2011-10	Total	594 881 153 kWh/d	594 881 153 kWh/d	313 918 922 kWh/d
	Booked	313 918 922 kWh/d	0 kWh/d	0 kWh/d
	Available	280 962 230 kWh/d	0 kWh/d	313 918 922 kWh/d
2011-11	Total	594 881 153 kWh/d	594 881 153 kWh/d	313 918 922 kWh/d
	Booked	313 918 922 kWh/d	0 kWh/d	0 kWh/d
	Available	280 962 230 kWh/d	0 kWh/d	313 918 922 kWh/d



FGSZ Transparency Project: Implementation III.



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Main menu points

- Secondary market transaction data
- Capacity data booked and available

(physical capacity, firm,
interruptible,
backhaul)

- Historical data
- Gas Quality Measured parameters (NCV, GCV)
- Interruptions
- Nomination and flows (daily data)

http://fgsz.hu/en/pub_data/21Z000000000139O/capacities

Search Network Point:
Ba
Select Network Point:
in 39W-GEBA0CS1ZEN-V | Babócsa "REGIONALIS"
in 212-000000000003-C | Osztrák/magyar határ betáplálási pont Baum
out 39Z-KAABA00011GN-E | Aba
out 39Z-MIABAUK11GN-S | Abaújkér
out 39W-KEALGY003EEN-O | Algyő III Kiadás a magyar rendszerről CsP

Date	Firm	Interruptible	Backhaul
2011-09-30	Total	594 881 153 kWh/d	288 265 381 kWh/d
	Booked	288 265 381 kWh/d	0 kWh/d
	Available	306 615 772 kWh/d	288 265 381 kWh/d
2011-10	Total	594 881 153 kWh/d	313 918 922 kWh/d
	Booked	313 918 922 kWh/d	0 kWh/d
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Main menu points

- Search Network Point
- Languages (Hungarian and English)
- Line pack data hourly update, end of day data → historical data
- Units (kWh; MJ; m³ (0); m³ (15) entry daily, exit daily and hourly
- The data are downloadable in excel

Unit Beregovo felől | - Windows Internet Explorer

data/21Z0000000001390/capacities

Eszközök Súlyó

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betáplálási pont Beregovo felől

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Bilateral Capacities Capacities Past Gas Quality Measure Interruptions

Nominations and Flows

kWh (25°/0°) MJ (15°/15°) m³ (0°) m³ (15°)

Ukrán/magyar határ betáplálási pont Beregovo felől

The interface displays information that were created by calculation.
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Search Network Point:

Select Network Point:

in	out	Station
39W-GEBA0CS1ZEN-V	39Z-KAABA00011GN-E	Babócsa "REGIONALIS"
212-000000000003-C	39Z-MIABA0UK11GN-S	Osztrák/magyar határ betáplálási pont Baum
39W-KEALGY003EEN-O	39W-KEALGY003EEN-O	Algyő III Kiadás a magyar rendszerről CsP

	Total	594 881 153 kWh/d	594 881 153 kWh/d	288 265 381 kWh/d
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http://fgsz.hu/en/pub_data/21Z0000000001390/capacities





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FGSZ Transparency Project: Improvements

The future plans for improvements:

- ❑ Data download – particularly if more than one point needed
 - ❑ Download data more than one point in the same time
 - ❑ Download data with graph
- ❑ Network point selection from map
- ❑ To make new user friendly tariff calculator





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Thank you for your attention

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