

NETWORK CODE ON INTEROPERABILITY AND DATA EXCHANGE RULES

4TH IMPLEMENTATION MONITORING REPORT

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Picture courtesy of Gas Connect Austria

1 INTRODUCTION

The EU's gas transmission grid harmonisation process started 13 years ago. In accordance with the procedure set out in [Article 6 of Regulation \(EC\) No 715/2009](#), ENTSOG led the development of the Network Code on Interoperability and Data Exchange Rules (INT NC). The INT NC was approved by the EU Gas Committee on 5 April 2015 as [Commission Regulation \(EU\) No 2015/703](#). The implementation date was 1 May 2016 except for Article 5 (Interconnection Agreement Template).

The European Network of Transmission System Operators for Gas (ENTSOG) was founded in line with Regulation (EC) 715/2009 and has played a key role in facilitating integration of the European gas markets, ensuring technical interoperability, and providing security of supply by gas infrastructure planning. Looking forward, ENTSOG is working on contributing to the net-zero decarbonisation by 2050, in particular, by the integration of renewable and low carbon gases via future-proof gas transmission pipelines, in line with the EU energy and climate goals. ENTSOG is working on the new challenges in a close dialogue with the European Commission (EC), the Agency for the Cooperation of Energy Regulators (ACER) and other stakeholders.

Pursuant to Article 8(8) of Regulation (EC) No 715/2009 as well as to Article 25 INT NC, ENTSOG is tasked to monitor and analyse the Network Code's implementation and report its findings to ACER. The main objective is to encourage and facilitate efficient gas trading and transmission across gas transmission systems within the European Union and thereby to move towards greater internal market integration.

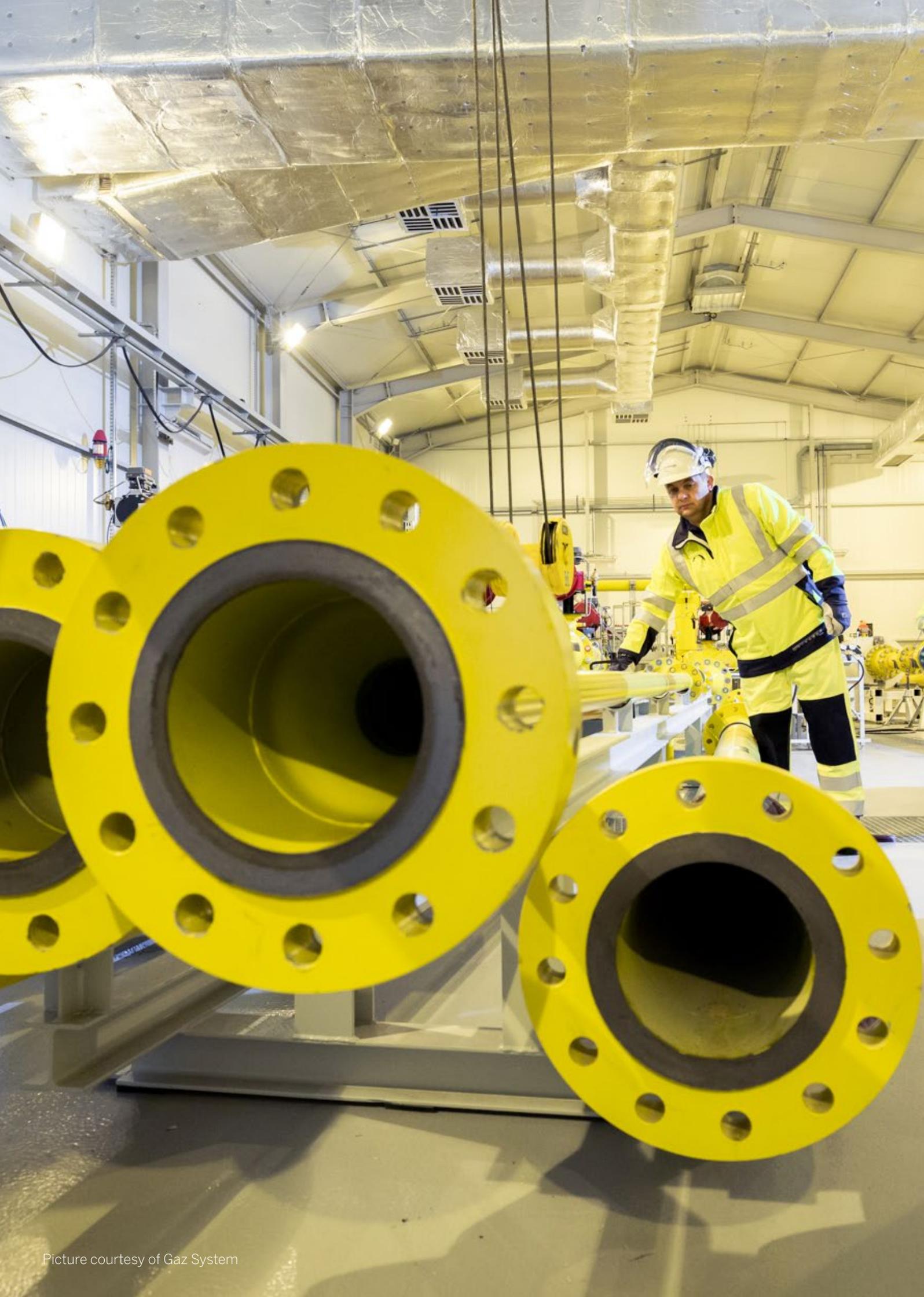
The 4th Implementation Monitoring Report (IMR) represents a confirmation of our members' continuous work on harmonising gas transmission in Europe in accordance with the INT NC. It provides a solid ground for ENTSOG's strategy on future development of the gas transmission grid within the European Union – [2050 Roadmap for Gas Grids the European Gas Transmission System Operators](#) (TSOs), the strategy that points main directions and essential ways of making the gas

grids ready for energy transition to renewable gases. ENTSOG members believe that successful implementation of the harmonisation of the gas transmission grid interoperability rules, markets rules, and security of supply stipulated in the Network Codes provide a reliable foundation for the future efficient utilisation of the gas transmission grid for renewable, decarbonised, and low-carbon gases.

Since ENTSOG received the mandate, it published three IMRs. The [1st IMR](#) was published in September 2016, the [2nd IMR](#) in April 2018, and the [3rd IMR](#) in August 2020. An [Annex 2](#) was added to the 3rd IMR in August 2021.

The 4th IMR assessment of TSOs' INT NC implementation covers a period of the years 2020–2021. TSOs provided ENTSOG with an updated set of data (as a questionnaire) on operated Interconnection Points (IPs) and their Interconnection Agreements' (IAs) compliance with the INT NC. It has allowed ENTSOG to fulfil its monitoring and reporting obligations.

The 4th IMR presents an overview of the progress of TSOs' implementation of the INT NC Articles' requirements on both sides of IPs operated within the European Union. Detailed overview through an article-by-article analysis is provided. In addition, detailed evidence of the IAs' compliance with the INT NC is presented in an Annex 1 for 18 IPs listed in the third list of IPs for detailed assessment that was agreed between ENTSOG and ACER for a review in 2021. Completion of the third list of detailed evidence implies that all European IPs eligible for IMR went through the analysis.



2 GENERAL CONSIDERATIONS

This report summarises the implementation status of each INT NC Article for all IPs operated by European gas TSOs within the EU. To receive input data, ENTSOG, in close cooperation with ACER, prepared a questionnaire in 2017. Since then, the questionnaire is used for the IMRs. During this round 35 TSOs submitted answers and evidence comments to the questions focusing on the mandatory provisions for TSOs stipulated in each INT NC Article. Other EU TSOs did not participate in the survey as they do not have IPs eligible for this report.

During the last two years a number of IPs changed their status as a result of the EU market harmonisation process, and some IPs became out of the IMR scope. An overview of IPs that are withdrawn from monitoring follows below. Some IPs that were included in newly established virtual interconnection points (VIPs) are still counted individually as

physical IPs in cases where adjacent countries' TSOs use different approaches in transferring existing gas contracts to VIPs. TSOs insisted on presenting physical IPs' IAs input data with complementing them by details from associated VIP agreements.

Here are some changes that happened in 2020–2021.

2.1 NEW IPS WITHIN THE EU DURING 2020–2021

No.	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
1	Balticconnector	21Z0000000004952	Gasgrid Finland	Elering	FI/EE
2	Kiemenai	21Z000000000153U	Ambergrid	Conexus	LT/LV
3	Haanrade	21Z000000000240Z	Thyssengas	Gasunie Transport Services	DE/NL
4	Nea Mesimvria	21Z000000000473C	DESFA	TAP	GR/TAP
5	Melendugno	21Z000000000474A	Snam Rete Gas	TAP	IT/TAP

- ▲ IP Balticconnector is commercial since the start of 2020. Previously the IP was granted a derogation period for implementing the requirements of INT NC. A detailed assessment was added to the IMR 2019 in the Annex 2 (published in 2021).
- ▲ IP Kiemenai (LT-LV)¹ in the Baltic region was a subject to Article 1(3) INT NC (a regulation derogation on the basis of Article 49 of Directive 2009/73/EC) until 2020. Starting from 1 January 2020, the IP became eligible for compliance with the requirements of INT NC. The IP was first mentioned in the IMR 2019.
- ▲ IP Haanrade is an IP since 1 April 2020. The IA is currently negotiated. It is included in the VIP TTF-THE-L serving low calorific gas flows. The “Agreement VIP TTF-THE-L” effective as of 1 October 2021 will be sent to ENTSOG and the German NRA (BNetzA) after signing is completed. An informal approval has been made already.
- ▲ A new IA between DESFA and TAP for IP NEA MESIMVRIA was signed on 17 November 2020. A detailed assessment is presented in Annex 1 of this IMR.
- ▲ A new IA between SNAM and TAP for IP MELENDUGNO was signed on 17 November 2020. A detailed assessment is presented in Annex 1 of this IMR.

¹ [IP KIEMENAI, LT-LV](#)

2.2 COMMON BALANCING ZONE FROM JANUARY 2020

No.	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
1	KARKSI	21Y0000000001359	Conexus	Elering	EE/LV

An IP KARKSI (EE-LV)² in the Baltic region was a subject to Art. 1(3) INT NC (a regulation derogation on the basis of Art. 49 of Directive 2009/73/EC) until 2020. The IP became part of a common bal-

ancing zone in relation to the use of gas transmission systems, capacity booking, nominations, and allocation. The IP KARKSI is therefore not included in the report.

2.3 TERMINATION OF INNER-GERMAN IPS DUE TO THE MARKET AREAS MERGER, FROM 1 OCTOBER 2021

No.	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
1	Achim II	37Z0000000070550	Fluxys Deutschland	Open Grid Europe	DE/DE
2	Ahlten	37Z000000006231B	Nowega	Open Grid Europe	DE/DE
3	Broichweiden Süd	37Z000000004913W	GASCADE Gastransport	Thyssengas	DE/DE
4	Bunder-Tief	37Z000000005000Z	Gasunie Deutschland Transport Services	Open Grid Europe	DE/DE
5	Emsbüren-Berge	37Z000000004972G	Gasunie Deutschland Transport Services	Thyssengas	DE/DE
6	Gernsheim	37Z000000006481P	GASCADE Gastransport	GRTgaz Deutschland	DE/DE
7	Kienbaum	37Z000000001078I	GASCADE Gastransport	Open Grid Europe	DE/DE
8	Lampertheim I	37Z0000000007905	GASCADE Gastransport	Open Grid Europe	DE/DE
9	Lampertheim IV	37Z000000001442N	GASCADE Gastransport	Terranets BW	DE/DE
10	Reckrod I	37Z000000004923T	GASCADE Gastransport	Open Grid Europe	DE/DE
11	Steinbrink	37Z000000006868I	Nowega	Open Grid Europe	DE/DE
12	Steinitz	21Z0000000002370	ONTRAS	Open Grid Europe	DE/DE
13	Wardenburg	37Z000000006389D	Gasunie Deutschland Transport Services	Open Grid Europe	DE/DE
14	Zone OGE (L)/Zone GUD (L)	37Y000000000288Q	Gasunie Deutschland Transport Services	Open Grid Europe	DE/DE

14 IPs within Germany were excluded from the IMR scope due to the German market area merger. On 1 October 2021 a single Germany-wide gas market area (Trading Hub Europe, THE) was announced as the merger of GASPOOL and NCG. As a result, shippers no longer need to execute operational

activities between the two formerly separate market areas in their transport bookings. The operation of the network remains subject to the same rules as before, as the market area merger was carried out without network expansion.

2 [IP KARKSI, EE-LV](#)

2.4 UK-EU BORDER'S IPS ARE EXCLUDED FROM IMR SCOPE DUE TO BREXIT, FROM 31 JANUARY 2020

No.	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
1	Bacton (IUK)	21Z000000000084N	Interconnector	NationalGrid	UK/UK
2	Bacton BBL	21Z000000000088F	BBL Company	NationalGrid	NL/UK
3	Moffat	21Z000000000081T	Gas Networks Ireland	NationalGrid/Premier Transmission Ltd.	IE/UK
4	South North CSEP	21Z000000000283H	Gas Networks Ireland	Gas Networks Ireland (UK)	IE/UK
5	Zeebrugge IZT	21Z0000000000074	Fluxys Belgium	Interconnector	BE/UK

IPs bordering the UK changed after Brexit and are now IPs with non-EU countries and thus moved outside of the IMR scope. Regulatory and market

arrangements for trading across IPs remain in power. Work is needed on both sides to ensure that market rules at IPs are maintained.

2.5 IPS MISSING IAS

No.	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
1	Negru Voda II, III (RO)/Kardam (BG)	21Z000000000160X	Bulgartransgaz	Transgaz	BG/RO
2	Petrzalka	21Z000000000175K	eustream	Gas Connect Austria	SK/AT

Two IPs are missing IAs. IP Petrzalka (AT-SK) has never been in operation, (excluded from IMR scope); IP Negru Voda II, III (RO)/Kardam (BG) is in

operation though it is still "missing some technical and legal conditions necessary for an IA" (according to comments from adjacent TSOs).

2.6 IMPLEMENTATION OF VIRTUAL INTERCONNECTION POINTS: STRENGTHENING MARKET INTEGRATION

ENTSOG is observing the progress in VIPs' formation in Europe. Article 19(9) of Regulation (EU) 2017/459 (CAM NC) on the establishment of virtual interconnection points provided guidelines for VIPs development within the EU. The gas markets are progressively implementing the recommendations with consideration of existing local conditions. The IPs that were included in newly established VIPs are still counted individually in this IMR as physical IPs in cases where adjacent countries' TSOs use different approaches in transferring existing gas

contracts to VIPs. TSOs presented physical IPs' IAs input data, complementing them with details from associated VIP agreements.

In addition to the 4 VIPs that were already reported in the IMR 2019 (VIP GCP GAZ-SYSTEM/ONTRAS, VIP IBERICO, VIP PIRINEOS, VIP VIRTUALYS), 3 VIPs were established in 2018-2019 (VIP France – Germany, VIP Waidhaus, VIP Brandov), 3 new VIPs have been organized during 2020-2021 (VIP TTF-THE-L, VIP DK-THE, VIP BENE), and 2 new VIPs went live on 1 April 2022 (VIP TTF-THE-H, VIP THE-ZTP).

2.7 OVERVIEW: IMPLEMENTATION OF VIRTUAL INTERCONNECTION POINTS (VIPS)

VIP	EIC for VIP	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
VIP TTF-THE-H (NCG & GASPOOL = Trading Hub Europe) from 01.04.2022	21Z0019743987060	Bocholtz	21Z000000000071W (OGE) / 21Z0000000002042 (TENP)	Open Grid Europe/ Fluxys TENP GmbH	Gasunie Transport Services	DE/NL
		Bocholtz-Vetschau	21Z000000000170U	Thyssengas	Gasunie Transport Services	DE/NL
		Bunde (DE) (GASCADE)/ Oude Statenzijl (H) (NL)	21Z000000000074Q	GASCADE Gastransport	Gasunie Transport Services	DE/NL
		Bunde (DE) (GUD)/ Oude Statenzijl (H) (NL)	21Z000000000076M	Gasunie Deutschland Transport Services	Gasunie Transport Services	DE/NL
		Oude Statenzijl	21Z0000000000750	Open Grid Europe	Gasunie Transport Services	DE/NL
VIP THE-ZTP (VIP Belgium-NCG) from 01.04.2022	21Z102938475601E	This new VIP combines the existing interconnection points Eynatten 1 and Eynatten 2 (BE) // Lichtenbusch/Raeren (DE)	21Z0000000000163	Eynatten-Raeren (OGE), Eynatten (Fluxys TENP), Lichtenbusch (TG), Eynatten (GASCADE)	Fluxys Belgium	DE/DE/BE
VIP TTF-THE-L from 01.10.2021	21Z012965309364T	Bunde (DE) (GTG Nord)/ Oude Statenzijl (L) (NL)	21Z000000000079G	Gastransport Nord	Gasunie Transport Services	DE/NL
		Bunde (DE) (GUD)/ Oude Statenzijl (L) (NL)	21Z000000000078I	Gasunie Deutschland Transport Services	Gasunie Transport Services	DE/NL
		Haanrade	21Z000000000240Z	Thyssengas	Gasunie Transport Services	DE/NL
		Tegelen	21Z000000000117Y	Open Grid Europe	Gasunie Transport Services	DE/NL
		Winterswijk (NL)/ Vreden (DE)	21Z000000000073S	Open Grid Europe	Gasunie Transport Services	DE/NL
		Zevenaar (NL)/ Elten (DE)	21Z000000000072U	Open Grid Europe/ Thyssengas	Gasunie Transport Services	DE/DE/NL
VIP DK-THE from 01.10.2021	21Z8273645914289	Ellund (OGE)	21Z0000000000260	Open Grid Europe	Energinet.dk	DE/DK
		Ellund (GUD)	21Z000000000144V	Gasunie Deutschland Transport Services	Energinet.dk	DE/DK
VIP BENE	21Z000000000503T	s Gravenvoeren Dilsen (BE) // 's Gravenvoeren/ Obbicht (NL) from Mar 2020	21Z000000000169F	Fluxys Belgium	Gasunie Transport Services	BE/NL
		Zelzate 1 (BE)/Zelzate (NL) from Mar 2020	21Z000000000019Y	Fluxys Belgium	Gasunie Transport Services	BE/NL
		Zelzate 2 (BE) // Zelzate 2 (NL) (ZEBRA PIJPLEIDING) from Jan 2021	21Z0000000000171	Fluxys Belgium	Gasunie Transport Services	BE/NL
VIP France-Germany from March 2019	21Z0000000004928	Obergailbach (FR)/ Medelsheim (DE)	21Z000000000039S	Open Grid Europe	GRTgaz	DE/FR
VIP Waidhaus from March 2019	21Z000000000489Y	Waidhaus	21Z0000000000162T	GRTgaz Deutschland	NET4GAS	DE /CZ
		Waidhaus	21Z0000000000236	Open Grid Europe	NET4GAS	DE /CZ

VIP	EIC for VIP	IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Country
VIP Brandov from November 2018	21Z0000000004863	Opal (DE)/Brandov Opal (CZ)	21Z000000000242V	OPAL Gastransport	NET4GAS	DE/CZ
		Brandov-STEGAL	21Z000000000091Q	GASCADE Gastransport	NET4GAS	DE/CZ
		IP Hora Svate Kateriny-Deutschneudorf	21Z0000000000228	ONTRAS	NET4GAS	DE/CZ
		IP Olbernhau-Hora Svate Kateriny	21Z0000000000920	GASCADE Gastransport GmbH	NET4GAS	DE/CZ
		IP Brandov-EUGAL	21Z0000000004839	GTS, Fluxys DE, GASCADE, ONTRAS	NET4GAS	DE/CZ
VIP GCP GAZ-SYSTEM/ONTRAS	21Z000000000456C			GAZ-SYSTEM	ONTRAS	PL/DE
VIP IBERICO	21Z000000000282J			Enagas	REN - Gasodutos	ES/PT
VIP PIRINEOS	21Z000000000285D			Enagas	Teréga	ES/FR
VIP VIRTUALYS	21Z0000000004847	Blaresnies H (BE)/Taisnières H (FR)	21Z000000000011D	Fluxys Belgium	GRTgaz	BE/FR

Open Grid Europe (OGE) (DE) view: The German Federal Network Agency (BNetzA) adopted a dual system for a transition period until the end of existing contracts. Contracts in place at the time of the introduction of the VIP (existing contracts) remain at the IP. There are no plans to provide a transfer option to the VIP. The technical capacity at the IP corresponds with the level of the capacity tied up in existing contracts on the date of establishment of the VIP. At the end of the contract, the capacity becomes available and is marketed at the VIP. If existing contracts on the other side of the border are transferred to the VIP, the existing contracts must be nominated on the German side at the IP and on the other side at the VIP. Together with the partner on the other side of the border, the German TSOs are working to ensure proper execution of the transportation contracts. In contrast to already concluded IP contracts, existing VIP contracts concluded at the current NCG and GASPOOL VIPs completely transferred to the new **THE VIPs**.

The VIP TTF-THE-L introduction for the low-calorific value gas flows IPs (Bunde (DE) (GTG Nord)/Oude Statenzijl (L) (NL), Bunde (DE) (GUD)/Oude Statenzijl (L) (NL), Haanrade (DE) (Thyssengas)/(NL)) between the market areas TTF and THE took place on 1 October 2021.

The VIPs VIP Brandov-GASPOOL and VIP Waidhaus NCG continue to exist beyond the market area merger and are renamed as VIP Brandov and VIP Waidhaus as of 1 October 2021 because a consolidation of the VIPs on the border to the Czech Republic is currently not planned³.

▲ OPAL Gastransport (DE) view: The VIP Brandov is operated by GASCADE Gastransport GmbH (GASCADE). The IP Brandov-OPAL is operated by OPAL Gastransport GmbH & Co. KG (OGT). Part of OGT's capacities on the OPAL are exempted from tariff and access regulation, while other capacities of OGT are fully regulated. OGT's fully regulated capacities at the IP Brandov-OPAL are virtually included in the VIP Brandov. OGT's exempted capacities at the IP Brandov-OPAL are still handled separately at OGT'S IP Brandov-OPAL. From the TSO's perspective both VIP and IP (OGT's IP Brandov-OPAL and the GASCADE-operated VIP Brandov, previously VIP Brandov-GASPOOL) are subject to the IMR.

3 See [here](#).

▲ NET4GAS (CZ) view: From the commercial point of view, there exists just one VIP Brandov that includes 5 IPs (Brandov-STEGAL, IP Hora Svate Kateriny-Deutschneudorf, IP Olbernhau-Hora Svate Kateriny, IP Brandov-OPAL and IP Brandov-EUGAL). However, it is not possible to merge all IAs of the IPs on the northern Czech-German border into the one VIP Brandov. These IPs are physically operated by different TSO(s) on the German side. This means that NET4GAS has concluded 5 different interconnection agreements with specific content with respective partners on the German side. All 5 IAs have to be mentioned separately for the purpose of the IMR.

The VIP DK-THE connecting Denmark to the single German market area was also introduced on 1 October 2021. The point combines capacity at Ellund from Open Grid Europe and Gasunie Deutschland Transport Services GmbH (GUD) on the German side with the Danish TSO Energinet.

VIP TTF-THE-H (NCG & GASPOOL=Trading Hub Europe (THE)) became operational between the market areas TTF and THE on 1 April 2022. This VIP results from the merging of the VIPs TTF-NCG-H and TTF-GASPOOL-H. The market was informed on 22 February 2022.

VIP THE-ZTP (VIP Belgium-NCG) became operational from 1 April 2022. This new VIP combines the existing interconnection points Eynatten 1 and Eynatten 2 (BE) // Lichtenbusch/Raeren (DE). On 2 June

2021, the companies Fluxys TENP GmbH (Fluxys TENP), GASCADE, GUD, OGE, and Thyssengas GmbH (TG) confirmed the introduction date for the VIP THE-ZTP as a result of the market area merger.

VIP-BENE (VIP Belgium-Netherlands) launched on 1 April 2020 and combines the IPs Zelzate 1, Zandvliet H and 's Gravenvoeren. Fluxys Belgium confirmed the integration of the IP Zelzate 2 into the VIP BENE on 1 January 2021. For avoidance of doubt, Hilvarenbeek L is not part of this VIP.

▲ Gasunie Transport Services (GTS) (NL) view: In the Netherlands GTS implemented VIPs in a so-called "hybrid solution". Meaning that physical IPs under a VIP remain to exist next to the VIP. Per each IP GTS has an IA or the ENTSOG template in which INT NC aspects are covered. The fact that VIPs now also exist is mentioned in the IMR answers to each specific physical IP. In GTS opinion – with this hybrid model in mind – it makes no sense to add the VIPs to the list of IPs, since it does not add any new information. Furthermore, all "physical aspects" are still valid in the respective IAs and are not included in the respective VIP contracts. In discussion with the German TSOs a common conclusion was reached. In discussion with Fluxys Belgium, it led to a difference in the answers. Where GTS has the hybrid VIP model, Fluxys Belgium has the so-called "VIP only" model, meaning that, on Fluxys Belgium's side, the IPs no longer exist as such.

2.8 AMENDMENTS SIGNED IN 2020–2021

IP name/location	EIC or identifier for IP	TSO 1	TSO 2	Amendments, 2020–2021
Csanadpalota (HU/RO)	21Z000000000236Q	FGSZ	Transgaz	Amendment 4 dated 02.06.2020 (gas quality specifications)
Dravaszerdahely (HU/HR)	21Z000000000249H	FGSZ	Plinacro	Amendment 2 dated 14.01.2020, Amendment 3 dated 15.12.2020
Negru Voda I (RO)/Kardam (BG)	21Z000000000159I	Bulgartransgaz	Transgaz	Addendum No. 6 dated 01.01.2020 (gas quality specifications), Addendum no. 7 dated 11.12.2020 (gas quality specifications), Addendum no. 8 dated 30.09.2021 (gas quality specifications)
Ruse (BG) - Giurgiu (RO)	21Z0000000002798	Bulgartransgaz	Transgaz	Addendum no. 3 dated 11.12.2020 (gas quality specifications), Addendum No. 4 dated 30.09.2021 (gas quality specifications)

New Amendments to IAs were reported. Changes concerning gas quality for IPs Csanadpalota, IAs Negru Voda 1 and Ruse/Giurgiu were initiated by Transgaz based on a decision of the Romanian NRA to set wider methane gas quality limits. The

situation at the IPs is maintained on the continuous basis in close cooperation by adjacent TSOs and monitored by respective NRAs through bilateral discussions in the TSO+NRA format.

3 SUMMARY AND CONCLUSIONS

Following ENTSOG's annual work programmes (AWP) [2021](#) and [2022](#), ENTSOG produced the 4th IMR in accordance with all mandatory obligations. The main requirement for IPs to be eligible for the IMR is its operation by TSOs within the European Union.

A significant change happened in the total number of IPs eligible for the IMR 2021 in comparison to the IMR 2019. The IMR 2019 included 69 IPs. The IMR 2021 is based on the analysis of 56 IPs and IAs between adjacent TSOs within the EU. 5 VIPs are included in the list. The physical connection points forming these VIP are out of scope. 1 IP remain missing IAs⁴: IP Petržalka (AT-SK) has never been in operation while IP Negru Voda II, III (RO)/Kardam (BG) is in operation though is still "missing some technical and legal conditions necessary for an IA" (according to comments from adjacent TSOs)⁵. The

implementation process of INT NC for the latter is in progress. Two major events took place during the last two years 2020-2021 that caused the reduction of the IPs eligible for the IMR: 5 IPs became IPs on the EU-border due to UK's Brexit from February 2020 and 14 IPs became part of a common balancing zone due to the market areas merger in Germany from 1 October 2021. At the same time three new IPs received signed IAs: MELENDUGNO (IT) by SNAM – Trans Adriatic Pipeline (TAP), NEA MESIMVRIA (GR) by DESFA – TAP, and Haanrade (DE-NL) by Thyssengas - Gasunie Transport Services.

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- 4 IP Kittsee – Petržalka connects gas infrastructure of GCA (Austria) and Eustream (Slovakia). The IP is excluded from the IMR 2021. Accelerated by the January 2009 gas supply crisis, the connection between Kittsee and Petržalka on the AT/SK border was physically completed. This short connecting transmission pipeline 200 m from the border on the Slovak side was constructed aiming to create an emergency distribution option for a residential area in the southern part of Bratislava called Petržalka. Owner of the assets on the Slovak side is Eustream. This pipeline is directly connected to the DSO system, and does not have any other transmission connection within the Eustream system. Physical flow is possible only in AT (exit)-SK (entry) direction to the SK DSO system. Based on available information this pipeline has never been used. At the moment there is no legal or regulatory basis for operation of this point as no IA has been signed by the AT/SK parties. There is no price decision for booking of capacities on SK side in force. The only real factors are the physical existence of the pipeline and an EIC code assigned to the IP.
- 5 Bulgartransgaz and Transgas have finalised a draft IA for IP Negru Voda II, III (RO)/Kardam (BG) in 2020 as unidirectional IP (only RO-BG direction). Currently, the TSOs are discussing the possibility to create VIP Negru Voda 1,2(RO)/Kardam (BG) by merging the existing IP Negru Voda 1(RO)/Kardam (BG) with the recently reversed GMS Negru Voda 2 and amend accordingly the existing IA.

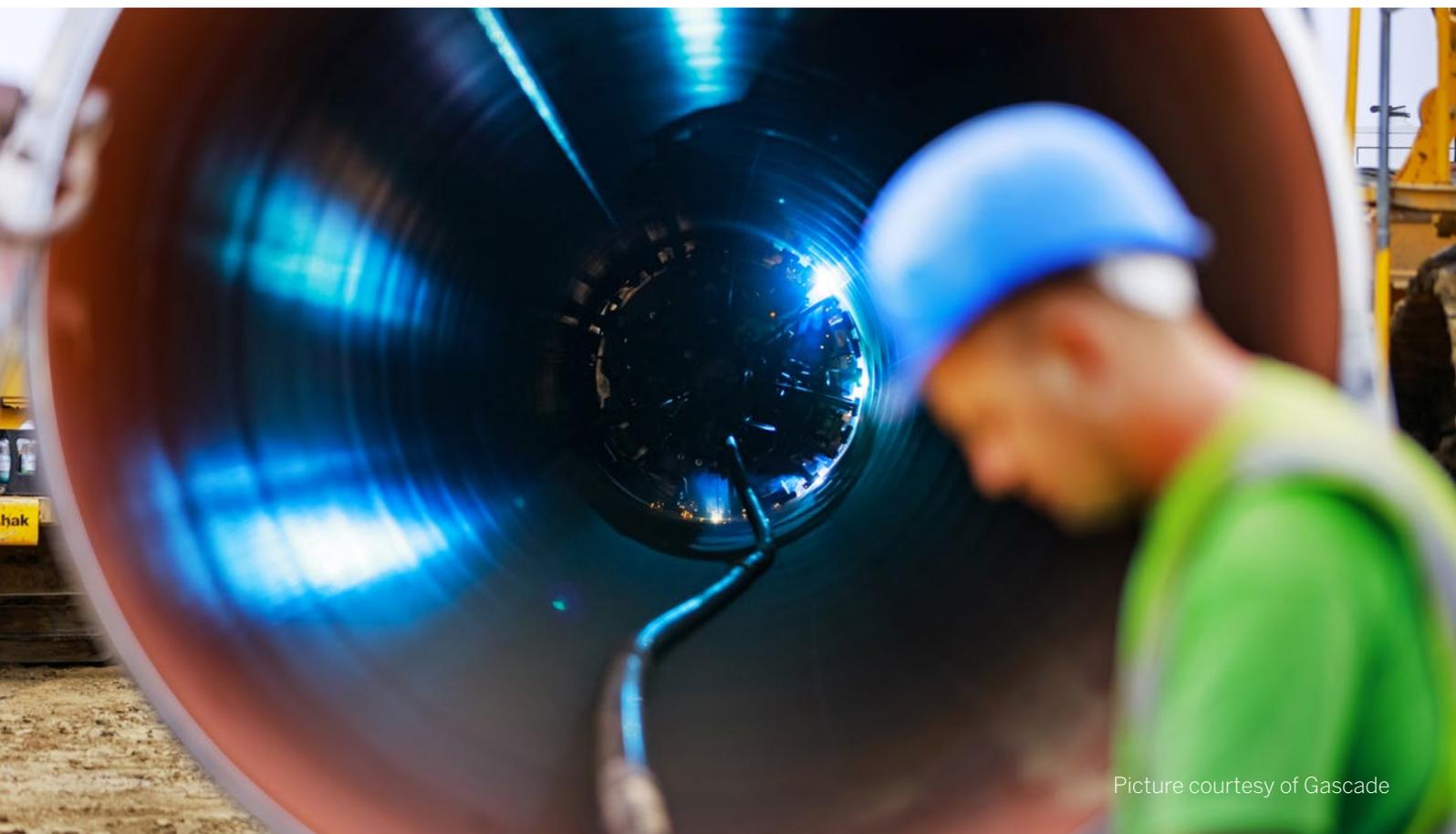


Table 1: IPs' overview 2020–2021

IP status	Number of IPs	Comments
IPs located in EU	75	• 10 IPs with non-EU Member States
IPs out of IMR 2021 scope	24	• 14 IPs became parts of common balancing zones (DE-DE)
IPs that received IAs after IMR 2019	5	• 3 IPs received IAs (IT-TAP, GR-TAP, DE-NL) • 2 IPs that were on derogation received full IP status in January 2020 (LT-LV)
IPs between EU TSOs within the European Union	56	IPs are subject to the IMR 2021
IP in operation, with IA in progress	1	Missing technical and legal conditions necessary for an IA. The IP Negru Voda II, III (RO) / Kardam (BG) (RO-BG) is counted but excluded from IMR 2021
IPs in operation with IA	55	IPs included in IMR 2019

Table 2: IAs in progress 2020–2021

IP Name/Location	% complete	Parts of IAs in progress towards compliance with INT NC
Negru Voda II, III (RO)/Kardam (BG)	NA	The parties have not signed an Interconnection Agreement yet as the conditions necessary for the conclusion of an IA are not met yet
Haanrade (DE-NL)	63 %	The IA is currently negotiated
Kiemenai (LT-LV)	89 %	Art. 7.3.a, b, f, i, j
Negru Voda I (RO)	94 %	Art. 6.4.b, Art.16
Giurgiu (RO)	94 %	Art. 6.4.b, Art.16
Csanadpalota (HU-RO)	95 %	Art.6.4.b, Art.16
Mosonmagyaróvár (HU)	96 %	Art.4.1, Art.4.2
Hora Svaté Kateřiny (CZ)/ Deutschneudorf (Sayda) (DE)	98 %	Art.10

ENTSOG's analysis of TSO replies, and review of the IAs included in IMR-2021 indicate that, during the last two years (after the 3rd IMR in 2019), the adjacent TSOs have continued their work on improving IAs and documenting TSOs' mutual consensus on the main terms and conditions envisaged in the INT NC. The evidence data confirms progressive improvement of results achieved by TSOs in INT NC implementation through establishing standard rules of IPs' operation. 75 % of the existing IAs have been amended with added provisions to the IAs that cover at least the terms and conditions defined in Articles 6–12 INT NC. In the IMR 2019, the value was 63 %. It should be noted that the lists of IPs are not identical since the IMR 2021 lost 19 IPs. Still, the comparison of data in percentages (%) between IMR-2019 and IMR-2021 carries a relative indication of progress. The percentage in brackets further in the report refers to IMR-2019. In 98 (97) %⁶ of the cases, TSOs fulfilled their obligations (according to Article 4 INT NC) to inform Network Users about IA provisions that may directly affect the Users. 1 (3) % are in progress for one recently established IP. The other 1 % was reported as "not applicable" for one IP because the IA was concluded before the

date of the INT NC application (1 May 2016), and amendments made after the entry into force of INT NC do not concern the information referred to in Article 4(2) INT NC.

For the majority of IAs, the "Rules for flow control" (Article 6 INT NC) and "Measurement principles" (Article 7 INT NC) were taken into consideration. The various requirements stemming from Article 6 (flow control, safety legislation, emergency plans, preventive action plans etc.) are 86 (82) %–100 (99) % covered in the IAs. The remaining percentages represent mainly "Not applicable" answers with TSOs' clarifying comments that the rules are "not included in IAs but existing in other technical and legal documentation." Replies regarding "Measurement principles for gas quantity and quality" (Article 7 INT NC) show 94(90)-98(96) % of TSOs' compliance with all paragraphs of the article. The remaining percentages indicate that the work is mainly "in progress".

The "Rules for the matching process" (Article 8 INT NC) received 95–100 (99) % compliance replies. 48 (56) % of TSOs specified a flow control equipment operator responsible for the matching

6 It should be noted that the lists of IPs are not identical since the IMR 2021 lost 19 IPs. Still, the comparison of % between IMR-2019 and IMR-2021 carries a relative indication of progress. The percentage in brackets further in the report refers to IMR-2019.

process, 52 (40) % reported that “roles are designated between the partners”. For all IPs the “lesser rule” is implemented as the matching rule (100 (96) %), and the operational balancing account (OBA) as the allocation rule (98 %; the percentage is below 100 % due to differences in TSOs’ interpretation of the “Not Applicable” answer).

- ▲ Compliance with Article 10 INT NC “Agreements on communication procedures in case of exceptional events” was reported in 99 (97) % of cases.
- ▲ Compliance with Article 11 INT NC “Settlement of disputes” was reported by 100 (96) % of TSOs.
- ▲ Compliance with Article 12 INT NC “Amendment process” was reported by 100 (95) % of TSOs.
- ▲ Compliance with Article 13 INT NC “Common set of units” used for data exchange and publication was reported by 98 (92) % of TSOs.

According to the results, TSOs are 100 % compliant with the requirements of Articles 15 and 19 INT NC that cover gas quality and odourisation issues and prescribe instruments for managing cross-border trade restrictions due to differences of gas quality or odourisation practices. No cross-border trade restrictions due to differences in gas quality or odourisation practices have been reported by the TSOs. Thus, the procedure stipulated in Article 15(2) INT NC does not apply. In response to the current situation on gas market in Europe due to reduced gas flows from Russia, and more gas from Norway and increased number of LNG supplies are received at the western coast of continent, involved TSOs are adapting their operational work to new requirements⁷.

96 (89) % of the TSOs comply with the obligations of Article 16 INT NC regarding publication of the gas quality parameters Wobbe Index (WI) and Gross Calorific Value (GCV) on an hourly basis for each entry IP.

Article 17 INT NC “Information provision on short-term gas quality variation” applies to the relevant entitled parties. According to Article 17(2)(a) to (c) INT NC, these parties are final customers, distribution system operators, storage operators. TSOs reported 86 (85) % compliance and 14 (15) % “No” answers with clarifying comments that these TSOs

do not have any party that falls under the eligibility criteria according to paragraph 17(2) INT NC: “No party falls under the eligibility criteria”. Therefore, TSOs are not obliged to define and maintain a list of parties according to paragraph 17(3)(a) INT NC.

The parameters the TSOs are providing to the relevant parties are mainly GCV, WI, and full gas composition. 51 (48) % of TSOs reported providing WI to the relevant parties, 68 (65) % of TSOs share GCV, and 41 (43) % of TSOs provide information about the full composition of gas. The main method of data communication is publishing it on the TSO’s website, 53 (53) %; second most frequently applied communication method is the Industrial or B2B protocol, 27 (28) %. The frequency of information update that TSOs maintain to inform the identified parties varies significantly from real-time (continuous) to yearly, with many TSOs agreeing with relevant parties to provide information only when the parameters of interest exceed a predefined threshold. Methods of communication are linked to the frequency. The lead time varies between immediate and several days.

Almost all TSOs (97 %) have met the data exchange security requirements as stated in Article 22 INT NC. Remaining 3 % represents one TSO answer with a comment “in progress”. In reference to Article 23 INT NC “Implementation of the common data exchange solutions”, 51 (70) % of TSOs reported that, besides the Document Based Data Exchange solution (AS4, EDIG@s xml), they are still using other data exchange solutions than those defined in Article 21 for data exchange requirements envisaged in point 2.2 of Annex I to Regulation (EC) No 715/2009, CAM/CMP NC, BAL NC, REMIT and INT NC. Among other versions are: 3.0 (2 TSOs), 3.5 (2 TSOs), 2.0 (3 TSOs), SOAP Web Services http/https (1 TSO), Custom profiles provided by the clients (1 TSO).

Following requirements of Article 24 INT NC “Development process for common network operation tools”, 95 (93) % of TSOs implemented the Common Data Exchange Solution as defined in ENTSOG’s Common Data Exchange Solution Table. The remaining TSOs reported the implementation work is “in progress” with temporary use of the optional solutions approved by NRAs.

7 At the date of writing this report, major flows originated from Norway or LNG are transported from the North-Western European coast to Germany, either via Belgium or via the Netherlands. Solutions also already exist to overcome the odourisation challenges and transport gas from France to Germany:

- From the Dunkirk LNG Terminal, GRTgaz transports via a non-odourised pipeline the gas to the Belgian border and Fluxys transports it to the Zeebrugge area and then further to Germany.
- Fluxys and OGE operate together a deodorisation plant at the Swiss-German border. This deodorisation plant has been built to de-odourise gas originally odourised in France and entering the German market.

4 SURVEY PARTICIPANTS

The following European TSOs participated in the survey (35):

Country	TSO
Austria	Gas Connect Austria GmbH
Austria	Trans Austria Gasleitung GmbH
Belgium	Fluxys Belgium S.A.
Bulgaria	Bulgartransgaz EAD
Croatia	Plinacro d.o.o.
Czech Republic	NET4GAS s.r.o.
Finland	Gasgrid Finland Oy
France	GRTgaz SA
France	TEREGA
Germany	Bayernets GmbH
Germany	Fluxys TENP GmbH
Germany	GASCADE Gastransport GmbH
Germany	Gasunie Deutschland Transport Services GmbH
Germany	GRTgaz Deutschland GmbH
Germany	Gastransport Nord GmbH
Germany	Nowega GmbH
Germany	Ontras Gastransport GmbH
Germany	OPAL Gastransport GmbH*
Germany	Open Grid Europe GmbH
Germany	Terranets BW GmbH
Germany	Thyssengas GmbH
Greece	DESFA S.A.
Hungary	FGSZ
Italy	Snam Rete Gas S.p.A.
Latvia	Conexus Baltic Grid
Lithuania	AB Amber Grid
Luxembourg	Creos Luxembourg S.A. (derogation)
Netherlands	BBL Company V.O.F.
Netherlands	Gasunie Transport Services B.V.
Romania	Transgaz S.A.
Slovakia	eustream a.s.
Slovenia	Plinovodi d.o.o.
Spain	Enagas S.A.
Trans Adriatic Pipeline	TAP

* The input for OPAL Gastransport GmbH is provided by GASCADE



Picture courtesy of Enagas

5 INTERCONNECTION AGREEMENTS

The IMR survey covers Chapters II-V INT NC and addresses specific requirements of articles and paragraphs of the INT NC.

Only IPs operated by TSOs within the European Union were considered in this report.

To count the IPs, the following criteria were followed:

- ▲ Pipe-in-pipe situations are considered as a single IP (e. g., Ellund, Waidhaus, etc).
- ▲ IPs between two entry-exit zones operated only by one TSO and IPs that disappeared from the commercial offer (e.g., in connection with the establishment of VIPs) and therefore are not subject to booking procedures anymore are beyond the scope of the survey and were not included in the tables.
- ▲ Connection points between TSOs and DSOs or TSOs and SSOs across borders are beyond the scope of the survey.
- ▲ CAM relevant points with 3rd countries are not considered.

5.1 GENERAL PROVISIONS (ARTICLE 3)

Based on the input received from TSOs, 56 IPs⁸ are analysed in the report. IPs connecting to non-EU countries are beyond the scope of the survey.

The IMR shows that 55 out of 56 IPs are covered with IAs between adjacent TSOs. One IP is missing

Interconnection Agreements: IP Negru Voda II, III (RO)/Kardam (BG) is in operation though “missing technical and legal conditions necessary for an IA” (according to comments from adjacent TSOs: “The parties have not yet signed an interconnection agreement for the following reasons:

⁸ This list includes also VIPs. The physical connection points forming these VIP are out of scope.

Transgaz: The parties have not signed an Interconnection Agreement yet as the conditions necessary for the conclusion of an IA are not met yet (conclusion of IA on VIP Isaccea 2,3 and amendment of the legacy contract on T3 with Gazprom Export, valid until 31.12.2023). The INT NC implementation process is in progress. IP Negru Voda II, III (RO)/

Kardam (BG) is excluded from the report's results. An IP Haanrade operated by Thyssengas (DE) and Gasunie Transport Services (NL) is reported being mainly "in progress" towards achieving compliance with the certain requirements of INT NC. It is reflected in the tables presenting the total percentages of compliance status in the EU.

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
3. General provisions	3. Is there a signed IA in place?	98 %	2 %	0 %
	When was the last time the IA mandatory terms were amended or replaced?	75 %		25 %
	Do provisions of interconnection agreement cover at least the terms and conditions defined in articles 6–12 INT NC?	97 %	3 %	0 %

Provisions of the IAs are required to cover terms and conditions defined in Articles 6(12) INT NC. The analysis of TSOs' replies and IAs review indicate that, during the last two years since the IMR 2019, the adjacent TSOs have continued to work on improving IAs and documenting mutual consensus on the main terms and conditions envisaged in the

INT NC. One IA is in progress of signing (2% in the table above) is for a new IP Haanrade (NL/DE).

75 (63)% of the existing IAs have been amended at least once after the initial agreement. 25% of "Not applicable" answers include IAs that were signed before INT NC came into force and relatively newly signed IAs.

5.2 INFORMATION OBLIGATION (ARTICLE 4)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
4. Information obligations	4.1 Have you identified information contained in IA that directly affects NUs and informed them?	98 %	1 %	1 %
	4.2 Since application date of the INT NC and before concluding or amending an interconnection agreement, have you invited network users to comment on the proposed text for matching, allocation and communication of exceptional events?	78 %	1 %	21 %

Regarding TSOs' information obligation towards network users (NUs), in 98 (97) % of replies, TSOs confirmed that NUs were informed about the provisions of IAs that have a direct impact on them. The remaining 1 % is in progress or 1 % is not applicable. For the later cases TSOs provided comments explaining that IAs have been concluded before the date of application of the INT NC, and amendments made after the entry into force of INT NC do not concern the information directly affecting NUs.

Following Article 4(2) INT NC prescribing inviting NUs to comment on IAs, the majority of TSOs established communication with NUs in the IAs amendment process. 78 (55) % TSOs worked with

NUs on approval of IAs' changes mainly using public consultations via the TSO website. Many TSOs reported: "The information identified as directly impacting network users is made available via a market information on the company's website" and "Public consultation on the business rules and communication procedures are available [on the company's website]".

Remaining 21 (43) % "not applicable" answers refer to IAs that were signed before the INT NC came into force. Therefore, TSOs were not obliged to execute this provision.

5.3 RULES FOR FLOW CONTROL (ARTICLE 6)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
6. Rules for flow control	6.1.a Rules to facilitate a controllable, accurate, predictable and efficient gas flow.	99 %	1 %	0 %
	6.1.b. Rules for steering the gas flow across the interconnection point and for minimising the deviations from the flow pursuant to the matching process.	99 %	1 %	0 %
	6.1.c Designation of TSO responsible for steering	100 (99) %	0 (1) %	0 %
	6.2. The quantity and direction of the gas flow is decided on an hourly basis by the adjacent TSOs.	100 (98) %	0 (1) %	0 (1) %
	6.3.a Matching rule	99 %	1 %	0 %
	6.3.b Allocation rule	99 %	1 %	0 %
	6.3.c Flow control arrangements	98 (97) %	2 (3) %	0 %
	6.3.d Gas Quality including any arrangement pursuant to Article 15	79 (67) %	2 (1) %	19 (32) %
	6.3.d Odourisation including any arrangement pursuant to Article 19	19 (15) %	2 (0) %	79 (85) %
	6.4.a Safety legislation	8 (9) %	0 (2) %	11 (19) %
	6.4.b Emergency plans	86 (85) %	3 (4) %	11 %
	6.4.b Preventive action plans	86 (82) %	3 (4) %	11 (14) %
	6.4.c Exceptional events	100 (99) %	0 (1) %	0.0 %

The analysis of the respondents' answers shows that the adjacent TSOs agreed on most of the rules for flow control.

The various requirements stemming from Article 6 INT NC (flow control, safety legislation, emergency plans, preventive action plans, etc.) are 86 (82) %–99 % covered in the IAs. The remaining percentages represent mainly “Not applicable” answers with TSOs' comments that the rules are “not included in IAs but existing in other technical and legal documentation.”

Arrangements to manage gas quality and gas odourisation restrictions according to Articles 15 and 19 are often considered as not applicable “due to the non-existence of any cross-border trade restrictions” or “TSOs' cooperation to avoid restrictions due to gas quality differences.” Hence, there has been no need to start the formal cooperation procedures with NRA involvement as envisaged in these articles.

Article 6(2) and 6(4) INT NC do not require the provisions to be reflected in the wording of the IAs as long as the IAs do not prevent their fulfilment.

5.4 MEASUREMENT PRINCIPLES FOR GAS QUANTITY AND QUALITY (ARTICLE 7)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
7. Measurement principles for gas quantity and quality	7.1.a Details of the measurement standards applicable have be established.	98 (96) %	2 %	0 (1) %
	7.1.b Designation of the TSO responsible for Installation, Operation & Maintenance.	98 %	2 %	0 %
	7.3.a Description of the station and its equipment.	97 (92) %	3 (7) %	0 (1) %
	7.3.b Parameters and details: units, range, uncertainty and frequency of measurement.	97 (92) %	3 (7) %	0 (1) %
	7.3.c Calculations procedures.	93 %	2 %	5 %
	7.3.d Maximum permissible error in energy.	98 (96) %	2 %	0 (1) %
	7.3.e Data validation	98 (96) %	2 %	0 (1) %
	7.3.f Verification and adjustment	97 %	3 (4) %	0 (1) %
	7.3.g Data provision content and frequency	98 (96) %	2 %	0 (1) %
	7.3.h List of signal and alarms	93 (90) %	2 %	5 (7) %
	7.3.i Corrections to measurements	94 (92) %	3 %	3 (4) %
	7.3.j Equipment failure management	94 %	3 (4) %	3 (4) %
	7.3.k Rules for facility access, additional verification, modification, and attendance during calibration.	98 (96) %	2 %	0 (1) %

Replies regarding Article 7 INT NC “Measurement principles for gas quantity and quality” show 94(90)–98(96) % TSO compliance with all paragraphs of the article. The remaining answers

indicate work “in progress”, for example, “Inclusion [of amendments] into the IA is in progress. The designation of the responsible [operator] is part of the station’s documentation.”



Picture courtesy of Reganosa

5.5 RULES FOR THE MATCHING PROCESS (ARTICLE 8)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
8. Rules for the matching process	8.1.a Rules detailing the matching process have been established, taking into account the daily-hourly nomination arrangements where relevant.	100 (98) %	0 (1) %	0 (1) %
	8.1.b Rules detailing communication and processing of data have been established.	100 (96) %	0 (1) %	0 (3) %
	8.2; 8.5.a matching rule	100 (99) %	0 (1) %	0 %
	- Lesser rule as a matching rule	100 (96) %		
	- Other	0 (3) %		
	8.2.b In case "Other Rule" than the "Lesser Rule" is applied, have been network users invited to comment on it?	0 %	0 %	100 %
	8.2.c; 8.5.b TSO responsible for the matching process	100 (96) %	0 (4) %	0 %
	- TSO in control of the flow control equipment	48 (56) %		
	- other	52 (40) %		
	8.2.d. Has a time schedule taking no longer than two hours been defined?	95 (96) %	0 (1) %	0 %
	- other	5 (3) %		
	8.4 Are data exchange use and the harmonised information specified?	100 (99) %	0 (1) %	0 %

Paragraphs of Article 8 INT NC "Rules for the matching process" received 95–100 % positive compliance replies.

Article 8(5)(a) INT NC sets out the application of the lesser rule as matching rule by default. All 53 IPs are being operated under this principle.

48 % of TSOs specified a flow control equipment operator being responsible for the matching process, 52 % reported that responsibility "roles are designated between the partners".

Regarding the time schedule for the matching process, for 95 % TSOs confirmed that it does not take longer than 2 hours, which corresponds to the time frame described in Article 8 (5)(c) INT NC. The answers "other" do not reveal any special time schedule but only TSO's notification that the IA was signed before the INT NC.

In all IAs, the information and the data exchange mechanism have been defined.

5.6 RULES FOR ALLOCATION OF GAS QUANTITIES (ARTICLE 9)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
9. Rules for allocation of gas quantities	9.2 The allocation rule is in place.	100 (99) %	0 (1) %	0 %
	- OBA		98 (97) %	
	- Other	2 %		
	9.2 If the rule is OBA, it is recalculated by the TSO in control of the measurement equipment.	99 (96) %	0 (1) %	2 (3) %
	9.3.a Where the OBA applies, the allocations are equal to the confirmed quantities?	98 (96) %	0 (1) %	2 (3) %
	9.3.b the OBA is maintained as close to 0 as possible?	98 (96) %	2 (1) %	0 (3) %
	9.4 The OBA limits take into account specific characteristics of each IP and/or the interconnected transmission networks, in particular: physical characteristics, linepack capability of each transmission system, total technical capacity, gas flow dynamics	98 (92) %	2 (1) %	0 (7) %
9.5 If the rule is not OBA, what is it?	9 % exceptions		91 %	

TSOs are using the Operational Balancing Account (OBA) as the main allocation rule. However, in some cases they mentioned specific nuances and exceptions that are reflected in the answers on point 9.5 (9%). In one case, TSOs reported: users are “allocated as nominated (result like OBA) and differences are allocated to an internal market point”. Other answers clarified that “the pro-rata methodology is used exceptionally in case when OBA is not possible” or “use of the proportional allocation rule (in case the OBA Balance exceeds the Max OBA)”.

TSOs operating based on the OBA specified in comments that “the allocation to the network users

is equal to the confirmed quantities” and the OBA is maintained as close to zero as possible. In most IAs, if the rule is OBA, it is recalculated by the TSO in control of the measuring equipment.

Article 9(3)(c) INT NC does not require the provisions to be reflected in the wording of the IAs as long as the IAs do not prevent their fulfilment.

In most of the cases, the OBA limits take into account specific characteristics of each IP and/or the interconnected transmission networks, in particular: physical characteristics, the linepack capability of each transmission system, total technical capacity, etc.

5.7 COMMUNICATION PROCEDURES IN CASE OF EXCEPTIONAL EVENTS (ARTICLE 10)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
10. Communication procedures in case of exceptional events	10. In case of an "exceptional event", there is a procedure to inform adjacent TSOs and potentially affected network users.	99 (97) %	2 (3) %	0 %

For 53 IPs, adjacent TSOs have already agreed on and formalised the procedures to inform each other and potentially affected network users in

case of exceptional events. The remaining 2 IPs are in progress of implementing the requirements of this Article.

5.8 SETTLEMENT OF DISPUTES ARISING FROM IA (ARTICLE 11)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
11. Settlement of disputes arising from IA	11.1.a The dispute settlement mechanism specifies the applicable law.	100 (96) %	0 (1) %	0 (3) %
	11.1.b The dispute settlement mechanism specifies the court of jurisdiction or the terms and conditions of appointment of experts.	100 (96) %	0 (1) %	0 (3) %

This article is implemented for all 55 IPs. The comments for some IPs clarify that following the INT NC requirements the TSOs used the ENTSOG template

that stipulates the default terms regarding the settlement of disputes when these are not detailed in the interconnection agreement.

5.9 AMENDMENT PROCESS (ARTICLE 12)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
12. Amendment process	12. A transparent and detailed amendment process has been established	100 (95) %	0 (1) %	0 (4) %

This article is implemented for all reported 55 IPs. It should be noted that for some IPs with IAs signed before INT NC requirements when the ENTSOG template was used, the adjacent TSOs may use

the dispute settlement mechanisms developed in accordance with Article 11 INT NC if they fail to reach an agreement on the amendment process.

Picture courtesy of Enagas



6 UNITS

6.1 COMMON SET OF UNITS (ARTICLE 13)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
13. Common set of units	The set of units and reference conditions defined is used for every data exchange and publication related to regulation 715/2009	98 (91) %	2 (1) %	0 (7) %

The common set of units and reference conditions are in use in 98(91) % of cases for data exchange

and publication. One IA is in progress. “Not applicable” replies refer to the IAs signed before May 2015.

6.2 ADDITIONAL UNITS (ARTICLE 14)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
14. Additional units	Has an additional set of units been defined?	19 %	0 (1) %	81 (80) %

Implementation of the article is not mandatory. Usage of an additional set of units complementing the common set of units and reference conditions

for data exchange or data publications is applied in 12 IAs (19%). No changes from the IMR 2019.

7 GAS QUALITY

7.1 MANAGING CROSS-BORDER TRADE RESTRICTIONS DUE TO GAS QUALITY DIFFERENCES (ARTICLE 15)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
15. Managing cross-border trade restrictions due to gas quality differences	Is there any cross-border trade restriction due to gas quality that cannot be avoided by the standard operations of the TSOs and that has been recognised by NRAs?	100 (99) %		0 (1) %

According to the results, TSOs are 100% compliant⁹ with the requirements of Article 15 INT NC that cover gas quality issues and prescribe instruments for managing cross-border trade restrictions due to differences of gas quality. No cases were reported where different gas quality specifications on either

side of an IP was a barrier to cross-border trade. Activation of the procedure stipulated in Article 15(2) INT NC is therefore not reported by any TSO. An effective dialogue and cooperation on the operational level between the adjacent TSOs allows them to uphold a necessary level of gas quality^{10, 11, 12}.

7.2 SHORT-TERM MONITORING OF GAS QUALITY – DATA PUBLICATION (ARTICLE 16)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
16. Short-term monitoring of gas quality – data publication	Are WI and GCV published on your website for each IP that acts as an entry point and once per hour?	96 (89) %	3 (3) %	1 (8) %

Regarding obligations on short-term gas quality monitoring set out in Article 16 INT NC, a majority of TSOs, 96 (89)%, publish information on Wobbe Index and Gross Calorific Value on their websites. 1 TSO is still in the process of imple-

menting the obligation for its 3 IAs, while the data is available on the websites of the adjacent TSOs. 1 TSOs reported the requirement as “not applicable” referring to the fact that the adjacent TSOs are already publishing the data for the IP.

9 All answers reported “No” cross-border restrictions. Only one answer is “Not applicable” for IP Negru Voda II, III (RO) / Kardam (BG) (out of IMR-2021 analysis) that is in operation but missing the IA (not included in the report) – no restrictions reported.

10 In the IMR 2019 adjacent TSOs operating the IP Csanadpalota (HU-RO) reported that there are no cross-border trade restrictions even there are different gas quality standards and requirements in the region”. The situation at this IP is maintained in close cooperation on the continuous basis by adjacent TSOs and monitored by respective NRAs. Bilateral discussions in the TSO+NRA format aim to revise the minimum gas quality requirements set out in the Interconnection Agreement between Transgaz (RO) and FGSZ (HU). An outcome is signing Addendum no. 4 dated 02.06.2020 (amendment of the gas quality specifications).

11 Negru Voda I (RO) / Kardam (BG) Addendum no. 6 dated 01.01.2020 (amendment of the gas quality specifications), Addendum no. 7 dated 11.12.2020 (amendment of the gas quality specifications) Addendum no. 8 dated 30.09.2021 (amendment of the gas quality specifications).

12 For IP Ruse (BG) - Giurgiu (RO) Addendum no. 3 dated 11.12.2020 (amendment of the gas quality specifications) and Addendum no. 4 dated 30.09.2021 (amendment of the gas quality specifications) were initiated by Romanian TSO based on a decision of the Romanian NRA to set wider methane gas quality limits. Transgaz negotiated with Bulgartransgaz Amendments concerning gas quality for IAs of Negru Voda I and Ruse/Giurgiu.

7.3 PROVIDING INFORMATION ON SHORT-TERM GAS QUALITY VARIATION (ARTICLE 17)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
17 (3a)	Has the list of parties entitled to receive indicative gas quality information been defined?	86 (85) %	0 %	14 (15) %
17 (3b)	Has a process of cooperation been started to assess what information might be provided to the relevant parties?	81 (85) %	3 (0) %	16 (15) %
17 (3b) What information has been regarded relevant?	WI	51 (48) %		49 %
	GCV	68 (65) %		32 %
	Full composition	41 (43) %		59 %
	Other*	24 (8) %		76 %
17 (3b) What is the frequency of providing information?	15 min	4 (3) %		
	Hourly	25 (24) %		
	Daily	18 (17) %		
	Continuous	29 (33) %		
	Ad hoc	21 (20) %		
	Yearly	3 (3) %		
17 (3b) How long is the lead time?	immediate	30 (38) %		
	minutes	4 (3) %		
	1–2 hours	4 (3) %		
	hours	18 (14) %		
	days	7 %		
	asap	37 (35) %		
17 (3b) What is the method of communication?	E-mail	7 (6) %		
	Industrial or B2B protocol	27 (29) %		
	Mail	3 %		
	Phone	10 (9) %		
	Website	53 %		

* temperature, pressure, water dew point, sulphur, ethyl mercaptan, etc

For Article 17 INT NC “Information provision on short-term gas quality variation” as applies to the relevant entitled parties, 86 % of TSOs reported compliance with the requirement to define a list of parties entitled to receive indicative gas quality information. 14 % “No” answers were supplied with clarifying comments explaining that these TSOs do not have any party that falls under the eligibility criteria according to Article 17(2) INT NC. Therefore, they are not obliged to define and maintain a list of parties according to Article 17(3)(a) INT NC.

The parameters the TSOs provide to the relevant parties are mainly GCV, WI and full gas composition. 51 % of TSOs reported providing WI to the relevant parties, 68 % of TSOs share GCV, (an increase with respect to the previous IMR) and 41 % of TSOs provide information about the full composition of gas. Additionally, some TSOs also provide information on other parameters in special cases. The other parameters may include net calorific value (NCV),

pressure, temperature, methane, water dewpoint, hydrocarbon dewpoint, oxygen, hydrogen sulphide, total sulphur, relative density, mercaptans, ethyl mercaptan, Pe number, etc.

The most widespread data communication method is publishing it on the TSO website, 53 %; second frequently applied method are B2B protocols, 27 %. The frequency of information updates that TSOs maintain to inform the identified parties varies significantly from real-time (continuous) to yearly, with many TSOs agreeing with relevant parties to provide information only when the parameters of interest exceed a predefined threshold. There still remains a practice of providing gas quality data to final customers upon their request. Methods of communication are linked to the frequency (e.g., industrial or B2B protocols for continuous data provision vs. phone for emergency communication). The lead time varies between immediate (e.g., B2B communication) and several days.

7.4 MANAGING CROSS-BORDER TRADE RESTRICTIONS DUE TO DIFFERENCES IN ODORISATION PRACTICES (ARTICLE 19)

Article	Short description	Implemented % of IPs	In progress % of IPs	Not applicable % of IPs
19. Managing cross-border trade restrictions due to differences in odorisation practices	Is there any cross-border trade restriction due to differences in odorisation practices that cannot be avoided by the concerned TSOs and that has been recognised by NRAs?	100 (89) %		0 (11) %

There are no restrictions linked to odorisation practices for all reported IPs. In case of unforeseen situations, TSOs stated that “the IA refers directly to

the arrangements foreseen in the INT NC (Chapter IV, Article 19) in order to deal with any cross-border trade restriction that could happen.”

7.5 HYDROGEN IN INTERCONNECTION AGREEMENTS

Taking into account the European Commission proposal for a new regulation and directive for gas, ENTSOG introduced an additional voluntary question about the inclusion of hydrogen in current IAs. 23 TSOs provided answers (67 % of TSOs participating in this IMR).

The question was:

- Is hydrogen included explicitly in your Interconnection Agreements (IA) with adjacent TSOs? If yes, which H2 percentage(s) is stated?

The answers received were categorised in two groups:

- 21 TSOs (91 % of the participants) replied that hydrogen is not explicitly specified in their IAs.
- 2 TSOs (9 % of the participants) informed that hydrogen is mentioned in some of their IAs through a reference to the allowed hydrogen content which is specified in National Law.



Picture courtesy of Thyssengas



Picture courtesy of Enagas

8 DATA EXCHANGE

Implementing EDI, document-based data exchange is a significant undertaking for any business. Nevertheless, its application can positively affect business relationships between market stakeholders that work in the gas value chain. ENTSOG therefore introduced additional voluntary questions about the current status of Data Exchange & Communication protocols within the gas TSO community.

As a result of the IMR survey, it was found that the majority of TSOs are exchanging message-based data using the edig@s® XML format for integrated and document-based EDI data exchange. That said, the surveyed sample indicated that 9 TSOs apply interactive data exchange and 2 apply non-edig@s® syntax solutions for some data flows and associated processes.

In relation to communication protocols, from the IMR it can be clearly seen that the majority of TSOs that answered the survey apply the latest ENTSOG AS4 profile for document exchange communication. However, many TSOs still cater for older versions of the ENTSOG AS4 profile whilst some can also cater for 'other' protocols such as AS2 and email. It should be noted that several TSOs responded that they are planning to migrate from AS2 to AS4 in the near future.

8.1 DATA EXCHANGE SYSTEM SECURITY AND AVAILABILITY (ARTICLE 22)

Article	Short description	Implemented number of TSOs	In progress number of TSOs	Not applicable number of TSOs
22. Data exchange system security and availability	Are the data exchange system security and availability requirements met?	36 (40)*	1 (0)	0

* Data input from 2019 is included in the report if an update in 2021 was not received.

All TSOs reported that the data exchange system security and availability requirements as stated in Article 22 INT NC are met. One TSO reported "No"

answer with a comment "In progress (AS4 already in place with some TSOs)".

8.2 IMPLEMENTATION OF THE COMMON DATA EXCHANGE SOLUTIONS (ARTICLES 23(1) AND 24)

Article	Short description	Implemented number of TSOs	In progress number of TSOs	Not applicable number of TSOs
24.1 Implementation of the common data exchange solutions	Did you implement the common data exchange solution as defined in the Common Data Exchange Solution Table	36 (40)*	1 (0)	0

The common data exchange solution is specified in the ENTSOG Common Data Exchange Solution Table. The table includes a mandatory solution and an optional one, which vary depending on the data exchange requirements:

- ▲ For Nominations and Matching, the common solution is document-based data exchange, and the optional one is interactive data exchange.
- ▲ For the Capacity trading process, the common solution is interactive (except for communication of surrender capacity sold, document-based), and the optional one is document-based data exchange (or interactive for surrendered capacity). Most of the interactions with the network users are nevertheless to be carried out by the Auction Offices.

Following requirements of Articles 23(1) and 24 INT NC “Development process for common network operation tools”, 35 of TSOs implemented the common data exchange solution as defined in ENTSOG’s Common Data Exchange Solution Table. The remaining TSOs reported the implementation work is in progress with temporary use of the optional solutions approved by NRAs. One TSO commented about using the optional solutions (integrated and interactive) but not the mandatory one (document-based) with NRA approval. A newly established IP BALTICCONNECTOR currently mostly uses interactive solutions and is in progress of developing the AS4 document-based communication: with few shippers using AS4 and a few other shippers ready to use AS4 but have not started yet.

8.3 CONTINUED APPLICATION OF EXISTING SOLUTIONS (ARTICLE 23(2))

Article	Short description	Implemented number of TSOs	In progress number of TSOs	Not applicable number of TSOs
23.2. Other DE solutions than Art. 21	Do you use other data exchange solutions than defined in article 21 for data exchange requirements foreseen by point 2.2 of Annex I to Regulation (EC) No 715/2009, NC CAM/ CMP, NC BAL, NC, REMIT and NC INT.	18 (28)	19 (12)	0

18 TSOs indicated that, besides the document-based data exchange solution (AS4, EDIG@xml), they use other data exchange solutions additionally and in agreement with their NRAs as envisaged in Article 23 (2) and defined in Article 21 for data exchange requirements envisaged in point 2.2 of Annex I to Regulation (EC) No 715/2009, CAM/ CMP NC, BAL NC, REMIT and INT NC. It is 10 TSOs less than reported in IMR-2019 (28 “Yes” answers), 6 of these do not use other solutions anymore, another 4 are from the TSOs that became outside of the IMR scope.

Some TSOs’ answers were supplied with comments on the situation caused by “[a] minority of network users that cannot afford the IT developments required for automated [data] exchange... The decision has been consulted with the regulator, as well as with a broad representation of the market.”

8.4 DATA EXCHANGE COMMUNICATION PROTOCOL

ENTSOG introduced an additional voluntary question on Data Exchange. 23 TSOs provided the answers (67% of TSOs participating in this IMR).

The question was:

- Which exact AS4 profile(s) is/are in use across TSOs? If “other” or “ENTSOG AS4 profile other than version 3.6”, please state which one.

The results were:

- 18 TSOs are using ENTSOG AS4 version 3.6 profile (78%). 2 TSOs are using both AS4 version 3.6 and other forms (9%).
- 5 TSOs are using other than AS4 version 3.6 (22%).
- Among other versions are: 3.0 (2 TSOs), 3.5 (2 TSOs), 2.0 (3 TSOs), SOAP Web Services http/https (1 TSO), Custom profiles provided by the clients (1 TSO).
- 1 TSO is planning to implement ENTSOG AS4 version 3.6 in 2022.

8.5 ENTSOG AS4 USAGE PROFILE VERSION COMPATIBILITY

At any point in time there is a single current approved version of the ENTSOG AS4 Usage Profile, published on the ENTSOG website. The current version is 3.6, which has been in production use for over four years and is supported by 20 TSOs (87 %). It is compatible with the predecessor version 3.5 (published more than five years ago) on the outbound but not inbound exchanges.

All changes can be found in the change log at the end of the AS4 ENTSOG profile which can be found

[here](#). There is further information available on AS4 versions in the FAQ on ENTSOG’s website which goes into more detail [here](#).

It should be noted that many of the differences between usage profiles refer to configuration and that AS4 allows per-partner configurations. Several TSOs use various AS4 versions for different connections and are therefore able to accommodate different implements in the market.

8.6 CURRENT ONGOING ENTSOG AS4 PROFILE DEVELOPMENT SCHEDULED FOR 2023

It should be noted that there is an ongoing project in 2022 (at the time of writing) where ENTSOG and the EC eDelivery program are creating a new ENTSOG AS4 profile to improve the cyber security resilience. The updates will be non-backward compatible changes as they affect the common core of the AS4 profile. However, as many IT systems get revised at least once in a period of four years and configurations are updated for certificate changes

at least once per 3 years, this is an opportunity to review other changes. This could be an opportunity for TSOs to further harmonise on the newer, more secure up-and-coming AS4 version 4. A migration proposal is being established in order to facilitate the TSOs as they plan to migrate to the new AS4 version 4 profile. The migration should be expected to take place in 2023.



Picture courtesy of GRT Gaz

9 ANNEX 1: DETAILED ASSESSMENT OF THE IAS COMPLIANCE WITH THE INT NC: THIRD LIST OF IPS

As a complementary part of the Implementation Monitoring Report 2021, a third list of Interconnection Points had been selected and agreed between ENTSOG and ACER to document detailed evidence of IAs' compliance with the INT NC. The third detailed assessment includes 15 IPs. ENTSOG proactively added to the list three IPs with IAs signed during 2020–2021. The total number of IAs presented in Annex 1 are 18.

To collect an input update on the implementation of the INT NC by TSOs, ENTSOG continues to use the questionnaire created for the IMR 2017. This approach facilitates the data review required from TSOs as well as ENTSOG's data analysis. During this project iteration ENTSOG again would like to acknowledge the cooperative attitude shown by all TSOs that provided detailed evidence of IAs' compliance with the INT NC and clarifying comments to ENTSOG's questions about the implementation

work. The general conclusions from the data analysis described in the main body of this report are fully relevant to the IPs in the Annex 1. The analysis confirms that during the last two years since the IMR 2019, the adjacent TSOs have continued working on improving cooperation for documenting in IAs their new steps towards harmonisation and reaching consensus on the main terms and conditions envisaged in INT NC.

For a better overview of the IPs' status of compliance with the INT NC's Articles and paragraphs, a table of TSO answers is presented in colour. The evidence data is presented separately for each analysed IP and aggregated in three following tables – Part 1, Part 2, Part 3 – with 6 IPs in each. To make the information more compact and coherent, abbreviations and words in English were applied to replace some recurring phrases in TSOs' answers and words from IAs' written in other European languages (see the legend for clarification). The IAs of IPs that were included in newly established VIPs are shown individually in cases where adjacent TSOs use different approaches in transferring existing contracts to VIPs. TSOs involved in the detailed

evidence part of the report presented physical IPs' input data complementing it with details from associated VIP agreements.

With only few minor procedures that are still in progress for newly established IPs, all analysed IPs are operated in accordance with the INT NC. ENTSOG fully supports TSOs' initiatives in implementing all necessary measures. The readiness of the gas transmission grid for new endeavours and new challenges is a crucial element of the European Union's economic development. ENTSOG's aim is to facilitate and highlight the gas TSOs' continuous work towards synergy of a well-functioning gas market and operational security of gas supply with the commitment to decarbonise the energy sources¹³.

List of IPs for evidence analysis of IAs' compliance with the INT NC

Countries	Interconnection Points (IP)	TSO EIC	VIP	VIP EIC
Annex Part I				
DE/NL	Bocholtz	21Z000000000071W (OGE) / 21Z0000000002042 (TENP)	VIP TTF-THE-H	21Z0019743987060
DE/NL	Bocholtz-Vetschau	21Z000000000170U	VIP TTF-THE-H	21Z0019743987060
DE/NL	Bunde (DE) / Oude Statenzijl (H) (NL) (GASCADE)	21Z000000000074Q	VIP TTF-THE-H	21Z0019743987060
DE/NL	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	21Z000000000076M	VIP TTF-THE-H	21Z0019743987060
DE/NL	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)	21Z000000000079G	VIP TTF-THE-L	21Z012965309364T
DE/NL	Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)	21Z000000000078I	VIP TTF-THE-L	21Z012965309364T
DE/DK	Ellund	21Z0000000000260	VIP DK-THE	21Z8273645914289
DE/DK	Ellund	21Z000000000144V	VIP DK-THE	21Z8273645914289
DE/NL	Haanrade			
DE/NL	Oude Statenzijl	21Z0000000000750	VIP TTF-THE-H	21Z0019743987060
Annex Part II				
DE/NL	Tegelen			
DE/NL	Winterswijk (NL) / Vreden (DE)			
DE/NL	Zevenaar (NL) / Elten (DE)	21Z000000000072U	VIP TTF-THE-L	21Z012965309364T
BG/GR	Kulata (BG) / Sidirokastron (GR)			
BG/RO	Negru Voda I (RO) / Kardam (BG)			
BG/RO	Ruse (BG) - Giurgiu (RO)			
IT/TAP	MELENDUGNO			
GR/TAP	NEA MESIMVRIA			

13 [ENTSOG Roadmap 2050 for gas grids](#), [ENTSOG Roadmap for gas grids \(PDF\)](#)



Picture courtesy of Ontras

LEGEND Abbreviations/words applied

Abbreviations/ words applied	Original words/phrases
IP	Interconnection Point
VIP	Virtual Interconnection Point
IA	Interconnection Point Agr.
OM	Operating Manual
OBA	Operational Balancing Account
Agr.	Agr.
Amend.	Amend.
Anx.	Annex(es)
Appx.	Appendix
Ch.	Chapter
Exh.	Exh.
p.	page
pp.	pages
FCEO	Flow Control Equipment Operator
IA	Netzkopplungsvertrag (NKV) (DE)
OM	Betriebshandbuch (DE)
Appendix	Anhang (DE)
Chapter	Kapitel (DE)

LEGEND Answers

Answers	Description
Yes	Yes
PR	In progress
No	No
	Not applicable
FCEO	Flow Control Equipment Operator
OBA	Operational Balancing Account

9.1 OVERVIEW OF THE TSOs' ANSWERS

IP NAME/LOCATION	Bocholtz	Bocholtz-Veilschau	Bunde (DE) / Oude Statenzijl (H) (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)	Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)
IP's EIC	21Z0000000000071W / 21Z0000000000204Z (Fluxys)	21Z000000000170U	21Z0000000000074Q	21Z0000000000076M	21Z0000000000079G	21Z0000000000078I
TSO	Gasunie Transport Services / Open Grid Europe / Fluxys TENP	Gasunie Transport Services / Thyessengas	GASCADE Gastraport / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gastraport Nord / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services
Country	NL / DE	NL / DE	DE / NL	DE / NL	DE / NL	DE
Question	Answer	Answer	Answer	Answer	Answer	Answer
3. Is there a signed IA in place?	Yes	Yes	Yes	Yes	Yes	Yes
Were the IA mandatory terms amended or replaced?	Yes	Yes	Yes			Yes
3. Do provisions of IA cover the terms defined in articles 6–12 NC INT?	Yes	Yes	Yes	Yes	Yes	Yes
4.1 Have you identified information contained in IA that directly affects NUs and informed them?	Yes	Yes	Yes	Yes	Yes	Yes
4.2 Have you invited network users to comment on changes in IA?	Yes		Yes			
6.1.a Rules to facilitate a controllable, accurate, predictable and efficient gas flow.	Yes	Yes	Yes	Yes	Yes	Yes
6.1.b Rules for steering the gas flow across the interconnection point.	Yes	Yes	Yes	Yes	Yes	Yes
6.1.c Designation of TSO responsible for steering	Yes	Yes	Yes	Yes	Yes	Yes
6.2 The quantity and direction of the gas flow is decided on an hourly basis by the adjacent TSOs.	Yes	Yes	Yes	Yes	Yes	Yes
6.3.a Matching rule	Yes	Yes	Yes	Yes	Yes	Yes
6.3.b Allocation rule	Yes	Yes	Yes	Yes	Yes	Yes
6.3.c Flow control arrangements	Yes	Yes	Yes	Yes	Yes	Yes
6.3.d Gas Quality including any arrangement pursuant to Article 15		Yes	Yes	Yes	Yes	Yes
6.3.d Odourisation including any arrangement pursuant to Article 19		Yes			Yes	Yes
6.4.a Safety legislation	Yes	Yes	Yes	Yes	Yes	Yes
6.4.b Emergency plans	Yes	Yes	Yes	Yes	Yes	Yes
6.4.b Preventive action plans	Yes	Yes	Yes	Yes	Yes	Yes
6.4.c Exceptional events	Yes	Yes	Yes	Yes	Yes	Yes
7.1.a details of the measurement standards applicable established?	Yes	Yes	Yes	Yes	Yes	Yes
7.1.b Designation of the TSO responsible for Installation, Operation & Maintenance?	Yes	Yes	Yes	Yes	Yes	Yes

Ellund	Ellund	Haarrade	Oude Staterijl	Tegelen	Winterswijk (NL) / Vredten (DE)	Zevenaar (NL) / Eiflen (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO) / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
21Z00000000000260	21Z0000000000144V	21Z0000000000240Z	21Z00000000000750	21Z0000000000117Y	21Z0000000000073S	21Z0000000000072U	21Z0000000000020C	21Z0000000000159I	21Z00000000002798	21Z0000000000474A	21Z0000000000473C
Energinet.dk / Open Grid Europe	Energinet.dk / Gasunie Deutschland Transport Services	Thyssengas	Gasunie Transport Services / Open Grid Europe / Thyssengas	Bulgartansgaz / DESFA	Bulgartansgaz / Transgaz	Bulgartansgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP			
DK / DE	DK / DE	DE	NL / DE	NL / DE	NL / DE	NL / DE	BG / GR	BG / RO	BG / RO	IT	GR
Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes		Yes	Yes			Yes	Yes		Yes	
Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR					Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR						Yes	Yes		
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes(BG)/ PR(RO)	Yes(BG)/ PR(RO)	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes(BG)/ PR(RO)	Yes(BG)/ PR(RO)	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

IP NAME/LOCATION	Bocholtz	Bocholtz-Vetschau	Bunde (DE) / Oude Statenzijl (HY) (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (HY) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)	Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)
IP's EIC	21Z000000000071W / 21Z0000000002042 (Fluxys)	21Z000000000170U	21Z000000000074Q	21Z000000000076M	21Z000000000079G	21Z0000000000078I
TSO	Gasunie Transport Services / Open Grid Europe / Fluxys TEMP	Gasunie Transport Services / ThyssenGas	GASCADE Gastransport / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services
Country	NL / DE	NL / DE	DE / NL	DE / NL	DE / NL	DE
Question	Answer	Answer	Answer	Answer	Answer	Answer
7.3.a Description of the station and its equipment.	Yes	Yes	Yes	Yes	Yes	Yes
7.3.b Parameters and details: units, range, uncertainty and frequency of measurement.	Yes	Yes	Yes	Yes	Yes	Yes
7.3.c Calculations procedures.	Yes	Yes	Yes	Yes	Yes	Yes
7.3.d Maximum permissible error in energy.	Yes	Yes	Yes	Yes	Yes	Yes
7.3.e Data validation	Yes	Yes	Yes	Yes	Yes	Yes
7.3.f Verification and adjustment	Yes	Yes	Yes	Yes	Yes	Yes
7.3.g Data provision content and frequency	Yes	Yes	Yes	Yes	Yes	Yes
7.3.h List of signal and alarms	Yes	Yes	Yes	Yes	Yes	Yes
7.3.i Corrections to measurements	Yes	Yes	Yes	Yes	Yes	Yes
7.3.j Equipment failure management	Yes	Yes	Yes	Yes	Yes	Yes
7.3.k Rules for facility access, additional verification, modification and attendance during calibration.	Yes	Yes	Yes	Yes	Yes	Yes
8.1.a Have rules detailing the matching process been established?	Yes	Yes	Yes	Yes	Yes	Yes
8.1.b Have rules detailing communication and processing of data been established?	Yes	Yes	Yes	Yes	Yes	Yes
8.2; 8.5.a What is matching rule in place?	Lesser rule	Lesser rule	Lesser rule	Lesser rule	Lesser rule	Lesser rule
Description of the "other" rule						
8.2.b In case "Other Rule" have been network users invited to comment on it?						
8.2.c; 8.5.b Which is the TSO responsible for the matching process?	Other	Other	Other	Other	Other	Other
8.2.d Has a time schedule taking no longer than two hours been defined?	As in 8.5.c	As in 8.5.c	As in 8.5.c	As in 8.5.c	As in 8.5.c	As in 8.5.c
8.4 Are data exchange use and the harmonised information specified?	Yes	Yes	Yes	Yes	Yes	Yes
9.2 What is the allocation rule in place?	OBA	OBA	OBA	OBA	OBA	OBA
9.2 If the rule is OBA, is it recalculated by the TSO in control of the measurement equipment?	Yes	Yes	Yes	Yes	Yes	Yes

IP NAME/LOCATION	Bocholtz	Bocholtz-Vetschau	Bunde (DE) / Oude Statenzijl (HY) (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (HY) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)	Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)
IP's EIC	21Z000000000071W / 21Z0000000002042 (Fluys)	21Z000000000170U	21Z000000000074Q	21Z000000000076M	21Z000000000079G	21Z0000000000078I
TSO	Gasunie Transport Services / Open Grid Europe / Fluys TEMP	Gasunie Transport Services / ThyssenGas	GASCADE Gastransport / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services
Country	NL / DE	NL / DE	DE / NL	DE / NL	DE / NL	DE
Question	Answer	Answer	Answer	Answer	Answer	Answer
9.3.a Where the OBA applies, are the allocations equal to the confirmed quantities?	Yes	Yes	Yes	Yes	Yes	Yes
9.3.b Is the OBA maintained as close to 0 as possible?	Yes	Yes	Yes	Yes	Yes	Yes
9.4 Do the OBA limits consider specific characteristics of each IP?	Yes	Yes	Yes	Yes	Yes	Yes
9.5 If the rule is not OBA, what is it?						
10. In case of "exceptional event" is there a procedure to inform adjacent TSOs and affected network users?	Yes	Yes	Yes	Yes	Yes	Yes
11.1.a Does the dispute settlement mechanism specify the applicable law?	Yes	Yes	Yes	Yes	Yes	Yes
11.1.b Does the dispute settlement mechanism specify the court of jurisdiction?	Yes	Yes	Yes	Yes	Yes	Yes
12. Have you established an amendment process?	Yes	Yes	Yes	Yes	Yes	Yes
13. Is the set of units defined used for every data exchange and publication?	Yes	Yes	Yes	Yes	Yes	Yes
14. Has an additional set of units been defined?	No	No	No	No	No	No
15. Is there any cross-border trade restriction due to gas quality?	No	No	No	No	No	No
16. Are WI and GCV published on your website for each IP?	Yes	Yes	Yes	Yes	Yes	Yes
19. Is there any cross-border trade restriction due to differences in odorisation practices?	No	No	No	No	No	No

Ellund	Ellund	Haanrade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)	Zevenaar (NL) / Eiten (DE)	Kulata (BG) / Sidirokaston (GR)	Negru Voda I (RO) / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
21Z0000000000260	21Z000000000144V	21Z000000000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S	21Z000000000072U	21Z000000000020C	21Z000000000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
Energinet.dk / Open Grid Europe	Energinet.dk / Gasunie Deutschland Transport Services	Thyssengas	Gasunie Transport Services / Open Grid Europe / Thyssengas	Bulgartransgaz / DESFA	Bulgartransgaz / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP			
DK / DE	DK / DE	DE	NL / DE	NL / DE	NL / DE	NL / DE	BG / GR	BG / RO	BG / RO	IT	GR
Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer	Answer
Yes	Yes	yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Allocated as nominated	Allocated as nominated									Proportional allocation rule	Proportional allocation rule
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	PR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
No	No	No	No	No	No	No	No	No	No	No	No
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes(BG)/ PR(RO)	Yes(BG)/ PR(RO)	Yes	Yes
No	No	No	No	No	No	No	No	Yes	Yes	No	No

9.2 EVIDENCE

EVIDENCE OF COMPLIANCE – PART 1

IP NAME/LOCATION	Bocholtz (DE) / (NL)	Bocholtz-Vetschau	Bunde Oude Statenzijl (H
EIC or identifier for IP	21Z0000000002042, 21Z000000000071W, 21Y---A001A024-V	21Z000000000170U	21Z00000
TSO	Fluxys TENP / Open Grid Europe / Gasunie Transport Services	Thyssengas / Gasunie Transport Services	GASCADE Ga Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-G-A0A0A-U T / 21X-NL-A-A0A0A-Z	21X-DE-H- 21X-NL-A
Country	DE / NL	DE / NL	DE /
Question	Evidence	Evidence	Evid
2.1 Please add any missing or strike-through any superfluous IPs or indicate any other Amendments and justify the changes.			
3. Is there a signed IA in place?	Fluxys: ENTSOG Interconnection Agr. tpl INT0647 16 Dec. 2015 final ENTSOG, email 30 May 2016 BNetzA, upload 25 May 2016 Upload of "VIP Agr." to BNetzA: 16 July 2020 OGE sent ENTSOG IA tpl to ENTSOG and BNetzA. On 13 July 2020 OGE sent "VIP Agr." to ENTSOG and BNetzA. GTS: Sent to ACM on 26-7-2017 VIP Agr. for VIP TTF-THE-H will be send to ACM after signing process is finalized.	not sent to ENTSOG since conclusion of IA dates prior to coming into force of NC INT	To ENTSOG 16-6-2017 VIP Agr. for VIP TTF-THE-H ACM after signing pro
When were IA mandatory terms amended or replaced the last time?	ENTSOG IA tpl 29 April 2016, "VIP Agr." signed 10 June 2020	VIP-Agr. for H-Gas of GTS and NetConnect Germany	
Do provisions of interconnection Agr. cover at least the terms and conditions defined in Articles 6–12 NC INT?	INT NC, Art.5 3 in connection with signed ENTSOG IA tpl		
4.1 Have you identified information contained in IA that directly affects NUs and informed them?	Fluxys TENP informed their network users via a market information on their website: Link	thyssengas: Link gasunietransportservices.nl: Link	gasunietransportservi

(DE) / (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)
0000074Q	21Z000000000076M	21Z000000000079G(GTG Nord) / 21Z000000000078I (GUD)	21Z000000000079G
Gastransport / Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gastransport Nord / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services
AOA0A-L / -AOA0A-Z	21X-DE-D-A0A0A-K / 21X-NL-A-A0A0A-Z	21X-DE-D-A0A0A-K(GUD) / 21X0000000011320 / 21X-NL-A-A0A0A-Z	21X0000000011320 / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
7 and ACM on 26-7- THE-H will be send to process is finalized	IA Oude H was concluded 29.04.2016 sent to ENTSOG on 11th May 2016 signed VIP Agr. for VIP-TTF-GASPOOL-H already sent to ENTSOG	Gastransport Nord: e-mail from 17.01.2017 to ENTSOG // Send VIP TTF-THE-L Agr. is still open GTS DE: IA Oude L was concluded 29.04.2016 sent to ENTSOG on 11th May 2016 signed VIP Agr. for VIP TTF-THE-L already sent to ENTSOG GTS NL: Sent to ACM on 26-7-2017 VIP Agr. for VIP TTF-THE-L will be send to ACM after signing process is finalized.	e-mail from 17.01.2017 to ENTSOG // Send VIP TTF-THE-L Agr. is still open
	no amendment	Exh. L (OBA) was attached 16.11.2018	
		e-mail from 17.01.2017 to ENTSOG	e-mail from 17.01.2017 to ENTSOG
ices.nl: Link	gasunie.de – Allocation rule OBA is listed in the pricelist available on GUD homepage: Link – Matching Rule: “Lesser of” regulated in general terms & conditions for entry/exit contracts available on GUD homepage: Link – In case of exceptional events Shipper will be informed by UMM and Mail if possible: Link	gtg-nord.de: Link GTS DE: – Allocation rule OBA is listed in the pricelist available on GUD homepage: Link – Matching Rule: “Lesser of” regulated in general terms & conditions for entry/exit contracts available on GUD homepage: Link – In case of exceptional events Shipper will be informed by UMM and Mail if possible: Link GTS NL: Link	gtg-nord.de: Link

IP NAME/LOCATION	Bocholtz (DE) / (NL)	Bocholtz-Vetschau	Bunde Oude Statenzijl (H
EIC or identifier for IP	21Z0000000002042, 21Z000000000071W, 21Y---A001A024-V	21Z000000000170U	21Z00000
TSO	Fluxys TENP / Open Grid Europe / Gasunie Transport Services	Thyssengas / Gasunie Transport Services	GASCADE Ga Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-G-A0A0A-U T / 21X-NL-A-A0A0A-Z	21X-DE-H- 21X-NL-A
Country	DE / NL	DE / NL	DE /
Question	Evidence	Evidence	Evid
4.2 Since application date of the INT NC and before concluding or amending an interconnection Agr., have you invited network users to comment on the proposed text for matching, allocation, and communication of exceptional events?	Fluxys: Link OGE published a Market Message and an Article with a link to the document and a return address for the network users' replies on their website. OGE started the consultation for "VIP-Agr." on the OGE internet page on 29 January 2020. Regarding the VIP Agr., on its website GTS published an article with a link to the document and a return address for the network users' replies.	Thyssengas carried out a Consultation of Regulations of IA "VIP TTF-THE-H" regarding Matching, Allocation and Communication Process on 29 January 2020 giving the network users the possibility for remarks by 29 March 2020 Link	The IA was concluded vant parts were amen cation date of INT NC. Regarding the VIP Agr published an Article w ment and a return ad users' replies
6.1.a Rules to facilitate a controllable, accurate, predictable, and efficient gas flow.	IA ENTSGO tpl: Art. 1 INT NC Art. 6.1.a and Art. 5 of "VIP Agr."	results from IA in general in combination with NC INT Art. 6.1.a and Art. 5.1–5.5 of "Agr. VIP TTF-THE-H" (VIP Agr. prevails)	IA Art. 5 and Exh. H. Dis
6.1.b Rules for steering the gas flow across the interconnection point and for minimising the deviations from the flow pursuant to the matching process.	IA ENTSGO tpl: Art. 1 INT NC Art. 6.1.b and Art. 5.3 of "VIP-Agr."	IA Exh. H Art 6, Exh. J and Art. 5.3 of "Agr. VIP TTF-THE-H"	IA Art. 5 and Exh. H./L.
6.1.c Designation of TSO responsible for steering	ENTSGO IA tpl, no. 1.1 and Art. 5.1 of "VIP-Agr."	IA Art. 4.2.2.; Exh. C 1 and Art. 5.2 of "Agr. VIP TTF-THE-H"	IA Exh. H. Dispatching
6.2. The quantity and direction of the gas flow is decided on an hourly basis by the adjacent TSOs.	IA ENTSGO tpl: Art. 1 INT NC Art. 6.2 and Art. 4.3 of "VIP-Agr."	IA Exh. H Art. 6; Exh. J Art. 2 and Art. 4.3 of "Agr. VIP TTF-THE-H"	IA Exh. J. Matching Art Art. 4.3 VIP Agr. for VIP
6.3.a Matching rule	IA ENTSGO tpl: Art. 1 INT NC Art. 6.3.a and Art. 3.1 of "VIP-Agr."	IA Exh. H Art. 6 and Art. 4.3 of "Agr. VIP TTF-THE-h"	Lesser of rule. IA Exh...
6.3.b Allocation rule	IA ENTSGO tpl: Art. 1 INT NC Art. 6.3.b and Art. 7.1 of "VIP-Agr."	IA Exh. L and Art. 7.1 of "Agr. VIP TTF-THE-H"	IA Exh. I. Allocation Art. 7.1 VIP Agr. for VIP
6.3.c Flow control arrangements	IA ENTSGO tpl: Art. 1 INT NC Art. 6.3.c and Anx."A of "VIP Agr."	Art. 9 IA; Art. 6 Exh. H and Art. 6.1 of "Agr. VIP TTF-THE-H"	IA Exh. H./L. Dispatchi Art. 6.3 VIP Agr. for VIP
6.3.d Gas Quality including any arrangement pursuant to Art. 15	No arrangements in place.	IA Art. 4.1., Art. 4.2.	IA Art. 5 and Exh. B. Ga Pressure

(DE) / (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)
0000074Q	21Z000000000076M	21Z000000000079G(GTG Nord) / 21Z000000000078I (GUD)	21Z000000000079G
Gas transport / Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gastransport Nord / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services
A0A0A-L / -A0A0A-Z	21X-DE-D-A0A0A-K / 21X-NL-A-A0A0A-Z	21X-DE-D-A0A0A-K(GUD) / 21X0000000011320 / 21X-NL-A-A0A0A-Z	21X0000000011320 / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
before – and no relevant parts were amended after – the application date of INT NC. On its website GTS published an article with a link to the document and a return address for the network users' replies.	There was no market consultation for IA acc. to Art.4.2. INT NC as the IA was signed before 01. May 2016 There was a market consultation for VIP Agr.	On GTG website published an article for network user replies. Also provided a link to the consultation document. GTS DE: There was no market consultation for IA acc. to Art.4.2. INT NC as the IA was signed before 01. May 2016 There was a market consultation for VIP Agr. GTS NL: The IA was concluded before – and no relevant parts were amended after – the application date of INT NC. Regarding the VIP Agr., on its website GTS published an article with a link to the document and a return address for the network users' replies.	On GTG website published an Article for network user replies. Also provided a link to the consultation document
Dispatching	IA Art.4 and 5 and Exh.H. Dispatching	IA Art.4 and 5 and Exh. H. Dispatching	IAIA Art.4 and Exh.H
Dispatching/OBA	IA Art.4 + 5 and Exh.H./L. Dispatching/OBA	IA Art.4 + 5 and Exh. H./L. Dispatching/OBA	IA Art.4 and Exh.H/L
Art.3 (GASCADE)	IA Exh.H. Dispatching Art.5 (GUD)	IA Exh. H (GTG Nord), Dispatching Art.5 (GUD)	IA Exh.H (GTG Nord)
Art.2. and 4. P-TTF-GASPOOL-H	IA Art.7 Exh.J. Matching Art.2. and 4. VIP Agr. for VIP-TTF-GASPOOL-H	IA Art.7 Exh. J. Matching Art.2. and 4. VIP Agr. for VIP TTF-THE-L	IA Exh.J VIP Agr. for VIP TTF-THE-L
Exh.J. Matching Art.4	Lesser Rule. IA Art.7 Exh.J. Matching Art.4	Lesser Rule. IA Art.7 Exh. J. Matching Art.4	Lesser of rule. IA Exh.J
P-TTF-GASPOOL-H	IA Art.7 and Exh.I Allocation VIP Agr. for VIP-TTF-GASPOOL-H	IA Art.7 and Exh. I Allocation VIP Agr. for VIP TTF-THE-L	IA Exh.I VIP Agr. for VIP TTF-THE-L
Dispatching/OBA P-TTF-GASPOOL-H	IA Art.5 Exh.H./L. Dispatching/OBA VIP Agr. for VIP-TTF-GASPOOL-H	IA Art.5 Exh. H./L. Dispatching/OBA VIP Agr. for VIP TTF-THE-L	IA Exh.H and L VIP Agr. for VIP TTF-THE-L
Gas Quality and Pressure	IA Art.4 and Exh.B. Gas Quality and Pressure	IA Art.4 and Exh. B. Gas Quality and Pressure	IA Art.4, Exh.B

IP NAME/LOCATION	Bocholtz (DE) / (NL)	Bocholtz-Vetschau	Bunde Oude Statenzijl (H
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TSO	Fluxys TENP / Open Grid Europe / Gasunie Transport Services	Thyssengas / Gasunie Transport Services	GASCADE Ga Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-G-A0A0A-U T / 21X-NL-A-A0A0A-Z	21X-DE-H- 21X-NL-A
Country	DE / NL	DE / NL	DE /
Question	Evidence	Evidence	Evid
6.3.d Odourisation including any arrangement pursuant to Art.19	No arrangements in place.	IA Art. 4.1., Art.4.2.	
6.4.a Safety legislation	IA ENTSOG tpl: Art.1 INT NC Art.6 4 a	no explicit rule in IA necessary since allowed by law; NC INT Art.6.4a	IA Exh.C. Pressure safe
6.4.b Emergency plans	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b	no explicit rule in IA necessary since allowed by law; NC INT Art.6.4b	IA Exh.H. Dispatching
6.4.b Preventive action plans	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b	no explicit rule in IA necessary since allowed by law; NC INT Art.6.4c	IA Exh.H. Dispatching
6.4.c Exceptional events	IA ENTSOG tpl: Art.1 INT NC Art.6 4 c and Art.8 of "VIP-Agr."	Art.8 of "Agr. VIP TTF-THE-H" refers to INT NC	IA Exh.H. Dispatching Art.8 VIP Agr. for VIP-
7.1.a details of the measurement standards applicable established?	IA ENTSOG tpl: Art.2 INT NC Art.7 1 a	IA Art. 7, Exh. E, Exh. N	IA Art.7 Exh.B/E/N
7.1.b Designation of the TSO responsible for Installation, Operation & Maintenance?	IA ENTSOG tpl: Art.2.1 INT NC Art.7 1 b	IA Art. 7, Exh. D, Exh. N	IA Art.7 Exh.B/E/N
7.3.a Description of the station and its equipment.	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 a	IA Exh. A, Exh. C, Exh. D, Exh. E, Exh. M	IA Art.7 Exh.B/E/N
7.3.b Parameters and details: units, range, uncertainty, and frequency of measurement.	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 b	IA Art. 7, Exh. B, Exh. C, Exh. E DVWG Working sheet G 486 Link	IA Art.7 Exh.B/E/N
7.3.c Calculations procedures.	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 c	IA Exh. E	IA Art.7 Exh.B/E/N
7.3.d Maximum permissible error in energy.	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 d	IA Art. 7, Exh. E	IA Art.7 Exh.B/E/N
7.3.e Data validation	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 e	IA Exh. E	IA Art.7 Exh.B/E/N
7.3.f Verification and adjustment	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 f	IA Art. 7, Exh. E	IA Art.7 Exh.B/E/N
7.3.g Data provision content and frequency	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 g	IA Exh. D, Exh. E	IA Art.7 Exh.B/E/N
7.3.h List of signal and alarms	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 h	IA Exh. E	IA Exh.G
7.3.i Corrections to measurements	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 i	IA Exh. E	IA Art.7 Exh.B/E/N
7.3.j Equipment failure management	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 j	IA Exh. E, Exh. H	IA Art.7 Exh.B/E/N
7.3.k Rules for facility access, additional verification, modification, and attendance during calibration.	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 k	IA Art. 7, Exh. D, Exh. E	IA Art.5

(DE) / (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)
0000074Q	21Z000000000076M	21Z000000000079G(GTG Nord) / 21Z000000000078I (GUD)	21Z000000000079G
Gastransport / Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gastransport Nord / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services
A0A0A-L / -A0A0A-Z	21X-DE-D-A0A0A-K / 21X-NL-A-A0A0A-Z	21X-DE-D-A0A0A-K(GUD) / 21X0000000011320 / 21X-NL-A-A0A0A-Z	21X0000000011320 / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
Safety and Control	IA Art. 4 and Exh.C. Pressure safety and Control	IA Art. 4 and Exh. C. Pressure safety and Control	IA Art 4, Exh.C
Art.2 and 4.	IA Art.5 Exh.H Dispatching Art.1. and 6	IA Art.5 Exh. H Dispatching Art.1. and 6	IA Exh.H
Art. 4.	IA Art.5 Exh.H Dispatching Art.6	IA Art.5 Exh. H Dispatching Art.6	IA Exh.H
Art.2. and 4. TTF-GASPOOL-H	IA Art.5 Exh.H Dispatching Art.6 VIP Agr. for VIP-TTF-GASPOOL-H	IA Art.5 Exh. H Dispatching Art.6 VIP Agr. for VIP TTF-THE-L	IA Exh.H VIP Agr. for VIP TTF-THE-L
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Main Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Main Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Art.6 Exh.B/E/N	IA Art.6 Exh. B/E/N	IA Art 6, Exh.B / E
	IA Exh.G	IA Exh. G	IA Exh.E / G
	IA Art.6 Exh.E/N	IA Art.6 Exh. E/N	IA Art 6, Exh. E
	IA Art.6 Exh.E/N	IA Art.6 Exh. E/N	IA Art 6, Exh. E
	IA Art.5.	IA Art.5.	IA Main Art 5

IP NAME/LOCATION	Bocholtz (DE) / (NL)	Bocholtz-Vetschau	Bunde Oude Statenzijl (H
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Country	DE / NL	DE / NL	DE /
Question	Evidence	Evidence	Evid
8.1.a Have rules detailing the matching process been established, taking into account the daily-hourly nomination arrangements where relevant?	IA ENTSOG tpl: Art.3 INT NC Art.8 1 and Art.3.1 to 3.3 of "VIP-Agr."	IA Exh. I, Exh. J and Art.3.1–3.3 VIP Agr.	IA Exh.J. Matching 3.1–3.3 VIP Agr. for V
8.1.b Have rules detailing communication and processing of data been established?	IA ENTSOG tpl: Art.3 INT NC Art.8 1 and Art.3.4 to 3.6 of "VIP-Agr."	IA Exh. I, Exh. J and VIP-Agr.: Art.3.4–3.6	IA Exh.J. Matching Art.3.4–3.6 VIP Agr. f GASPOOL-H
8.2; 8.5.a What is matching rule in place?	IA ENTSOG tpl: Art.3.1 INT NC Art.8 2	IA Exh. J	IA Exh.J. Matching
Description of the "other" rule		No other rule implemented	Not applicable
8.2.b In case "Other Rule" than the "Lesser Rule" is applied, have been network users invited to comment on it?		No other rule implemented	Not applicable
8.2.c; 8.5.b Which is the TSO responsible for the matching process?	Side letter to ENTSOG IA tpl and Art.3.1 of "VIP-Agr."	IA F1.4. VIP Agr.: Art.3.1	IA Exh.J. Matching Art.3.1 VIP Agr. for VIP
8.2.d Has a time schedule taking no longer than two hours been defined?	ENTSOG IA tpl, no. 3.3 and Art.3.1 of "VIP-Agr."	matching process in accordance with EASEEgas Common Business Practices VIP-Agr. Art.3.1	IA Exh.J. Matching
8.4 Are data exchange use and the harmonised information specified?	IA ENTSOG tpl: Art.3 INT NC Art.8 4 and Art.3.1 of "VIP-Agr."	specifications are set out in Edig@s messages	IA Exh.J. Matching
9.2 What is the allocation rule in place?	ENTSOG IA tpl, no. 4.1 INT NC Art.9 2 and Art.6 of "VIP-Agr."	IA Exh. L VIP- Agr.: Art.6	IA Exh.I. Allocation and Art.6 VIP Agr. for VIP-
9.2 If the rule is OBA, is it recalculated by the TSO in control of the measurement equipment?	ENTSOG IA tpl, no. 4.2 INT NC Art.9 2 and Art.6.1 of "VIP-Agr."	IA Exh. L VIP-Agr.: Art.6 .1	IA Exh.I. Allocation and Art.6.1 VIP Agr. for VIP
9.3.a Where the OBA applies, are the allocations equal to the confirmed quantities?	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 a and Art.7.1 of "VIP-Agr."	IA Exh. I VIP-Agr.: Art.7.1	IA Exh.I. Allocation and Art.7.1 VIP Agr. for VIP
9.3.b Is the OBA maintained as close to 0 as possible?	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 b	IA Exh. L	IA Exh.L. OBA Art.5.3 VIP Agr. for VIP
9.4 Do the OBA limits take into account specific characteristics of each IP and/or the interconnected transmission networks, in particular: physical characteristics, linepack capability of each transmission system, total technical capacity, gas flow dyna	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 c	IA does not contain explicit rule regarding 9.3c (i) to (iv) but OBA limits take parameters into account	IA Exh.L. OBA
9.5 If the rule is not OBA, what is it?			

(DE) / (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)
0000074Q	21Z000000000076M	21Z000000000079G(GTG Nord) / 21Z000000000078I (GUD)	21Z000000000079G
Gas transport / Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gastransport Nord / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services
A0A0A-L / A0A0A-Z	21X-DE-D-A0A0A-K / 21X-NL-A-A0A0A-Z	21X-DE-D-A0A0A-K(GUD) / 21X0000000011320 / 21X-NL-A-A0A0A-Z	21X0000000011320 / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
VIP-TTF-GASPOOL-H	IA Art. 7 and Exh.J (Matching) VIP Agr. for VIP-TTF-GASPOOL-H	IA Art. 7 and Exh. J (Matching) VIP Agr. for VIP TTF-THE-L	IA Main Art 7, Exh. J VIP Agr. for VIP TTF-THE-L
for VIP-TTF-	IA Exh.J VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. J VIP Agr. for VIP TTF-THE-L	IA Exh.J VIP Agr. for VIP TTF-THE-L
	IA Exh.J	IA Exh. J	IA Exh.J
P-TTF-GASPOOL-H	IA Exh.J VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. J VIP Agr. for VIP TTF-THE-L	IA Exh.J VIP Agr. for VIP TTF-THE-L
	IA Exh.J	IA Exh. J	IA Exh.J
	IA Exh.J	IA Exh. J	IA Exh.J
d L. OBA TTF-GASPOOL-H	IA Exh.I. Allocation and L. OBA VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. I. Allocation and L. OBA VIP Agr. for VIP TTF-THE-L	IA Exh.I /L VIP Agr. for VIP TTF-THE-L
d L. OBA P-TTF-GASPOOL-H	IA Exh.I VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. I VIP Agr. for VIP TTF-THE-L	IA Exh.I /L VIP Agr. for VIP TTF-THE-L
d L. OBA P-TTF-GASPOOL-H	IA Exh.L VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. L VIP Agr. for VIP TTF-THE-L	IA Exh.I /L VIP Agr. for VIP TTF-THE-L
P-TTF-GASPOOL-H	IA Exh.L. OBA VIP Agr. for VIP-TTF-GASPOOL-H	IA Exh. L. OBA VIP Agr. for VIP TTF-THE-L	IA Exh.L VIP Agr. for VIP TTF-THE-L
	IA does not contain explicit rule regarding 9.3c (i) to (iv) but OBA limits take parameters into account	IA Exh. L	IA Exh.L

IP NAME/LOCATION	Bocholtz (DE) / (NL)	Bocholtz-Vetschau	Bunde Oude Statenzijl (H
EIC or identifier for IP	21Z0000000002042, 21Z000000000071W, 21Y---A001A024-V	21Z000000000170U	21Z00000
TSO	Fluxys TENP / Open Grid Europe / Gasunie Transport Services	Thyssengas / Gasunie Transport Services	GASCADE Ga Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-G-A0A0A-U T / 21X-NL-A-A0A0A-Z	21X-DE-H- 21X-NL-A
Country	DE / NL	DE / NL	DE /
Question	Evidence	Evidence	Evid
10. In case of “exceptional event” is there a procedure to inform adjacent TSOs and potentially affected network users?	ENTSOG IA tmpl, no. 5.1 INT NC Art.10 and Art.8 of “VIP-Agr.”	IA Art.4, Art.11 direct contact with network users via Edig@s messages and telephone REMIT	IA Exh.H, Urgent mark Art.8 VIP Agr. for VIP-
11.1.a Does the dispute settlement mechanism specify the applicable law?	INT NC Art.11 2 and Art.15.5 of “VIP-Agr.”	IA Art.16	IA Art.16 Art.15.5 VIP Agr. for V
11.1.b Does the dispute settlement mechanism specify the court of jurisdiction or the terms and conditions of appointment of experts?	INT NC Art.11 2 and Art.15.4 of “VIP-Agr.”	IA Art.16	IA Art.16 Art.15.4 VIP Agr. for V
12. Have you established a transparent and detailed Amend. process?	INT NC Art.12 2 and Art.14.1 of “VIP-Agr.”	IA Art.15, Exh. C, Exh. E	IA Art.14 Art.14 VIP Agr. for VIP
13. Is the set of units and referenced conditions defined used for every data exchange and publication?	NC INT Art.13 2.	IA Art.15, Exh. B, Exh. C, Exh. E	IA Art.1
14. Has an additional set of units been defined?			
15. Is there any cross-border trade restriction due to gas quality that cannot be avoided by the standard operations of the TSOs and that has been recognised by NRAs?			
16. Are WI and GCV published on your website for each IP that acts as an entry point and once per hour?	Fluxys Deutschland GmbH: Link gasunietransportservices.nl: Link Open Grid Europe publishes WI and GCV here: Link	Thyssengas: Link	gasunietransportservi
19. Is there any cross-border trade restriction due to differences in odourisation practices that cannot be avoided by the concerned TSOs and that has been recognised by NRAs?			
Comments to any of the previous questions	ENTSOG IA tmpl is signed – INT0647 16 Dec. 2015 final ENTSOG, email 30 May 2016 BNetzA, upload 25 May 2016 “VIP Agr.” is prevailing. Not harmonized with GTS.	In case and to the extent of any conflict or inconsistency between the provisions of this VIP Agr. and the IAs, the VIP Agr. shall prevail.	

(DE) / (NL) (GASCADE)	Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Bunde (DE) / Oude Statenzijl (L) (NL)	Bunde (DE) / Oude Statenzijl (L) (NL) (GTG Nord)
0000074Q	21Z000000000076M	21Z00000000079G(GTG Nord) / 21Z00000000078I (GUD)	21Z00000000079G
Gas transport / Transport Services	Gasunie Deutschland Transport Services / Gasunie Transport Services	Gasunie Deutschland Transport Services / Gastransport Nord / Gasunie Transport Services	Gastransport Nord / Gasunie Transport Services
A0A0A-L / A0A0A-Z	21X-DE-D-A0A0A-K / 21X-NL-A-A0A0A-Z	21X-DE-D-A0A0A-K(GUD) / 21X0000000011320 / 21X-NL-A-A0A0A-Z	21X0000000011320 / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
Market message / TTF-GASPOOL-H	IA Exh.H, Urgent market message	IA Exh. H and J	IA Exh.H and J
VIP-TTF-GASPOOL-H	IA Art.15 VIP Agr. for VIP-TTF-GASPOOL-H	IA Art 15 VIP Agr. for VIP TTF-THE-L	IAIA Art 15 VIP Agr. for VIP TTF-THE-L
VIP-TTF-GASPOOL-H	IA Art.15 VIP Agr. for VIP-TTF-GASPOOL-H	IA Art 15 VIP Agr. for VIP TTF-THE-L	IAIA Art 15 VIP Agr. for VIP TTF-THE-L
VIP-TTF-GASPOOL-H	IA Art.14 VIP Agr. for VIP-TTF-GASPOOL-H	IA Art 14 VIP Agr. for VIP TTF-THE-L	IAIA Art 14 VIP Agr. for VIP TTF-THE-L
	IA Art.1	IA Art 1	IAIA Art 1
Resources.nl: Link	Gasunie Deutschland: Link	Gasunie Deutschland: Link GTS NL: Link	Gasunie Deutschland: Link

EVIDENCE OF COMPLIANCE – PART 2

IP NAME/LOCATION	Ellund	Ellund	Haar
EIC or identifier for IP	21Z000000000260	21Z00000000144V	21Z00000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	Thysse Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G-21X-NL-A
Country	DE / DK	DE / DK	DE /
Question	Evidence	Evidence	Evid
2.1 Please add any missing or strike-through any superfluous IPs or indicate any other Amendments and justify the changes.	IA Ellund has been updated on 24.06.2020. The old IA has been replaced. ENERGINET. DK uses 21Y---A001A002-8. 21Z000000000260 – for Open Grid Europe	IA Ellund has been updated on 24.06.2020. The old IA has been replaced. ENERGINET. DK uses 21Y---A001A002-8. 21Z000000000144V – for Gasunie DE	
3. Is there a signed IA in place?	It has been sent to ENTSOG via E-Mail 5 September 2020 from GUD on behalf of all partners. It has also been provided to Bundesnetzagentur via their portal.	It has been sent to ENTSOG via E-Mail 4 September 2020 from GUD on behalf of all partners. It has also been provided to Bundesnetzagentur via their portal.	Haanrade is IP since 2020. It is currently negotiated and will be effective as of 1 Oct 2020. ENTSOG and BNetzA have completed. An informal agreement is already.
When were IA mandatory terms amended or replaced the last time?	24th June 2020	Update of IA Ellund was signed on 24.06.2020	
Do provisions of interconnection Agr. cover at least the terms and conditions defined in Arts 6–12 NC INT?			
4.1 Have you identified information contained in IA that directly affects NUs and informed them?	Open Grid Europe informed the network users via consultation and a market information on its website: Link	Gasunie Deutschland informed the network users via consultation and a market information on its website: Link	thysse gas: Link
4.2 Since application date of the INT NC and before concluding or amending an interconnection Agr., have you invited network users to comment on the proposed text for matching, allocation, and communication of exceptional events?	Yes, via Website, Market Message and E-mail on 06 December 2019 Dear Sir/Madam, In accordance with Art. 4 (2) commission regulation (EU) 2015/703 (network code on interoperability and data exchange rules) Open Grid Europe GmbH invites their network users to comment on the proposed wording following provisions updated interconnection Agr. between Energinet Gas TSO A/S and Open Grid Europe GmbH concerning the cooperation at interconnection point Ellund by 06 February 2019.	Yes, via website and E-Mail on 06 December 2018: “According to Art. 4 (2) Commission regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules (NC INT) Gasunie Deutschland Transport Services GmbH invites their network users to comment on the Interconnection Agreements at the cross-border point Ellund. If your company uses or plans to use capacities at the cross-border point Ellund, you will be given the opportunity to send us your remarks, objections and proposals on the rules for matching, allocation and communication procedures. Please send your answer to mailbox Transport@gasunie.de by 6th Feb. 2019. Please find more information on Gasunie Deutschland website: Link	
6.1.a Rules to facilitate a controllable, accurate, predictable, and efficient gas flow.	Appx.F Nr. 2 (p.38) “All Parties shall cooperate in order to execute the physical deliveries and offtakes with the best possible regularity to enable a controllable, accurate, predictable and efficient Gas flow across the IP.”	Appx.F Nr. 2 (p.38) “All Parties shall cooperate in order to execute the physical deliveries and offtakes with the best possible regularity to enable a controllable, accurate, predictable and efficient Gas flow across the IP.”	Art.5.1–5.6 of “Agr. V

Grade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
AOA0A-U / -AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
2020-04-01. The IA is "Agr. VIP TTF-THE-L" 2021 will be send to after signing is com-approval has been made	OGE sent ENTSOG IA tpl to ENTSOG and BNetzA. On 13 July 2020 OGE sent "VIP Agr." to ENTSOG and BNetzA. GTS NL: Sent to ACM on 26-7-2017 VIP Agr. for VIP TTF-THE-H will be send to ACM after signing process is finalized	Yes, OGE sent ENTSOG IA tpl to ENTSOG and BNetzA. "Agr. VIP TTF-THE-L" effective as of 1 Oct 2021 will be send to ENTSOG and BNetzA after signing is completed. GTS NL: Sent to ACM on 26-7-2017 VIP Agr. for VIP TTF-THE-L will be send to ACM after signing process is finalized.	Yes, OGE sent ENTSOG IA tpl to ENTSOG and BNetzA. "Agr. VIP TTF-THE-L" effective as of 1 Oct 2021 will be send to ENTSOG and BNetzA after signing is completed. GTS NL: Sent to ACM on 26-7-2017 VIP Agr. for VIP TTF-THE-L will be send to ACM after signing process is finalized
	17 June 2020	1 Oct 2021	1 Oct 2021
	INT NC, Art.5 3 in connection with signed ENTSOG IA tpl OGE informed their network users via a market information on their website: Link GTS NL: Link	INT NC, Art.5 3 in connection with signed ENTSOG IA tpl OGE informed their network users via a market information on their website: Link GTS NL: Link	INT NC, Art.5 3 in connection with signed ENTSOG IA tpl OGE informed their network users via a market information on their website: Link GTS NL: Link
	OGE published a Market Message and an Article with a link to the document and a return address for the network users' replies on their website OGE started the consultation for "VIP-Agr." on the OGE internet page on 29 January 2020. GTS NL: Regarding the VIP Agr., on its website GTS published an article with a link to the document and a return address for the network users' replies.	OGE published a Market Message and an Article with a link to the document and a return address for the network users' replies on their website OGE started the consultation for "Agr. VIP TTF-THE-L" on the OGE internet page on 13 July 2021. GTS NL: Regarding the VIP Agr., on its website GTS published an article with a link to the document and a return address for the network users' replies.	OGE published a Market Message and an Article with a link to the document and a return address for the network users' replies on their website OGE started the consultation for "Agr. VIP TTF-THE-L" on the OGE internet page on 13 July 2021. GTS NL: Regarding the VIP Agr., on its website GTS published an article with a link to the document and a return address for the network users' replies
IP TTF-THE-L'	IA ENTSOG tpl: Art. 1 INT NC Art.6.1a and Art.5 of "VIP-Agr."	IA ENTSOG tpl: Art. 1 INT NC Art.6.1a and Art.5.1–5.6 of "Agr. VIP TTF-THE-L"	IA ENTSOG tpl: Art. 1 INT NC Art.6.1a and Art.5.1–5.6 of "Agr. VIP TTF-THE-L"

IP NAME/LOCATION	Ellund	Ellund	Haarlem
EIC or identifier for IP	21Z0000000000260	21Z000000000144V	21Z0000000000000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	ThyssenKrupp Energy Services / Gasunie Transport Services
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G-21X-NL-A
Country	DE / DK	DE / DK	DE / NL
Question	Evidence	Evidence	Evidence
6.1.b Rules for steering the gas flow across the interconnection point and for minimising the deviations from the flow pursuant to the matching process.	Appx.F Nr. 2 (p.38) "The Parties shall endeavour to keep the difference between the actual flow and the sum of confirmed quantities as close as possible to zero"	Appx.F Nr. 2 (p.38) "The Parties shall endeavour to keep the difference between the actual flow and the sum of confirmed quantities as close as possible to zero"	Art.5.5 of "Agr. VIP TT"
6.1.c Designation of TSO responsible for steering	Appx.F Nr. 2 (p.38). "The Dispatching Service Provider shall be responsible for steering the Gas flow across the IP..." In addition responsibilities are listed in Appx.H Table 4 (p.42)	Appx.F Nr. 2 (p.38). "The Dispatching Service Provider shall be responsible for steering the Gas flow across the IP..." In addition responsibilities are listed in Appx.H Table 4 (p.42)	Art.5.3 of "Agr. VIP TT"
6.2 The quantity and direction of the gas flow is decided on an hourly basis by the adjacent TSOs.	Appx.F Nr. 2 (p.38)	Appx.F Nr. 2 (p.38)	Art.4.3 of "Agr. VIP TT"
6.3.a Matching rule	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – the result matching process"	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – the result matching process"	Art.3.1 of "Agr. VIP TT"
6.3.b Allocation rule	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – the OBA correction"	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – the OBA correction"	Art.7.1 of "Agr. VIP TT"
6.3.c Flow control arrangements	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any efficient flow control arrangements agreed between the Parties (including swaps)"	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any efficient flow control arrangements agreed between the Parties (including swaps)"	Art.6.3 of "Agr. VIP TT"
6.3.d Gas Quality including any arrangement pursuant to Art. 15	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any arrangement managing cross-border trade restrictions due to gas quality differences and/or odourisation practices"	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any arrangement managing cross-border trade restrictions due to gas quality differences and/or odourisation practices"	
6.3.d Odourisation including any arrangement pursuant to Art. 19	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any arrangement managing cross-border trade restrictions due to gas quality differences and/or odourisation practices"	Appx.F Nr. 2 (p.38) "The Parties shall decide on the quantity gas flow for each hour gas day (scheduled flow). The scheduled flow shall reflect: [...] – any arrangement managing cross-border trade restrictions due to gas quality differences and/or odourisation practices"	
6.4.a Safety legislation	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: -comply with provisions laid down in national or Union safety legislation applicable to the IP"	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: -comply with provisions laid down in national or Union safety legislation applicable to the IP"	no explicit rule in IA ne allowed by law; NC INT

Trade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
A0A0A-U / A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
F-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 1 b and Art.5.3 of "VIP-Agr."	IA ENTSOG tml: Art. 1 INT NC Art.6 1 b and Art.5.5 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 1 b and Art.5.5 of "Agr. VIP TTF-THE-L"
F-THE-L"	ENTSOG IA tml, no. 1.1 and Art.5.1 of "VIP-Agr."	ENTSOG IA tml, no. 1.1 and Art.5.4 of "Agr. VIP TTF-THE-L"	ENTSOG IA tml, no. 1.1 and Art.5.3 of "Agr. VIP TTF-THE-L"
F-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 2 and Art.4.3 of "VIP-Agr."	IA ENTSOG tml: Art. 1 INT NC Art.6 2 and Art.4.3 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 2 and Art.4.3 of "Agr. VIP TTF-THE-L"
F-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6.3a and Art.3.1 of "VIP-Agr."	IA ENTSOG tml: Art. 1 INT NC Art.6.3a and Art.3.1 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6.3a and Art.3.1 of "Agr. VIP TTF-THE-L"
F-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 3 b and Art.7.1 of "VIP-Agr."	IA ENTSOG tml: Art. 1 INT NC Art.6 3 b and Art.7.1 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 3 b and Art.7.1 of "Agr. VIP TTF-THE-L"
F-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 3 c and Art.6.3 of "VIP-Agr."	IA ENTSOG tml: Art. 1 INT NC Art.6 3 c and Art.6.3 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.1 INT NC Art.6 3 c and Art.6.3 of "Agr. VIP TTF-THE-L"
	No arrangements in place.	No arrangements in place.	No arrangements in place.
	No arrangements in place.	No arrangements in place.	No arrangements in place.
necessary since T Art.6.4a	IA ENTSOG tml: Art.1 INT NC Art.6 4 a	IA ENTSOG tml: Art. 1 INT NC Art.6 4 a	IA ENTSOG tml: Art.1 INT NC Art.6 4 a

IP NAME/LOCATION	Ellund	Ellund	Haarlem
EIC or identifier for IP	21Z000000000260	21Z00000000144V	21Z000000000000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	ThyssenKrupp Energy Services / Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G-21X-NL-A
Country	DE / DK	DE / DK	DE / NL
Question	Evidence	Evidence	Evidence
6.4.b Emergency plans	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -comply with requirements laid down in Emergency Plans and Preventive Action Plans developed in accordance with Regulation (EU) No 1938/2017 European Parliament and Council"	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -comply with requirements laid down in Emergency Plans and Preventive Action Plans developed in accordance with Regulation (EU) No 1938/2017 European Parliament and Council"	no explicit rule in IA ne allowed by law; NC INT
6.4.b Preventive action plans	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -comply with requirements laid down in Emergency Plans and Preventive Action Plans developed in accordance with Regulation (EU) No 1938/2017 European Parliament and Council"	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -comply with requirements laid down in Emergency Plans and Preventive Action Plans developed in accordance with Regulation (EU) No 1938/2017 European Parliament and Council"	no explicit rule in IA ne allowed by law; NC INT
6.4.c Exceptional events	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -react in case the operator's system is affected by an Exceptional Event."	Appx.F Art.2.2 (p.39) "The quantity of Gas may be altered, if this is needed, in order to: [...] -react in case the operator's system is affected by an Exceptional Event."	Art.8 of "Agr. VIP TTF-
7.1.a details of the measurement standards applicable established?	Appx.E Art.1 (p.32) mentions the „Richtlinien der Gasunie Transport Service GmbH für die Planung, Errichtung und den Betrieb eines Netzanschluss“. These Guideline refers to different German rules and standards to be applied. There is also a reference to German MessEV and PTB rules in the IA Art.1 definition "Calibration Error limit"	Appx.E Art.1 (p.32) mentions the „Richtlinien der Gasunie Transport Service GmbH für die Planung, Errichtung und den Betrieb eines Netzanschluss“. These Guideline refers to different German rules and standards to be applied. There is also a reference to German MessEV and PTB rules in the IA Art.1 definition "Calibration Error limit"	
7.1.b Designation of the TSO responsible for Installation, Operation & Maintenance?	First paragraph of Art.7 Measurement (p.12) as well as Appx.H List of Responsibilities (p.42)	First paragraph of Art.7 Measurement (p.12) as well as Appx.H List of Responsibilities (p.42)	
7.3.a Description of the station and its equipment.	Appx.E Measurement and revision procedures: Art.2 (p.32) Measurements describes the station including a drawing and a table with details metering equipment	Appx.E Measurement and revision procedures: Art.2 (p.32) Measurements describes the station including a drawing and a table with details metering equipment	
7.3.b Parameters and details: units, range, uncertainty, and frequency of measurement.	Appx.E table 3 Metering Equipment (p.34)	Appx.E table 3 Metering Equipment (p.34)	
7.3.c Calculations procedures.	All relevant parameters are measured. No need for additional calculation.	All relevant parameters are measured. No need for additional calculation.	
7.3.d Maximum permissible error in energy.	Definition "Calibration Error limit" (p.5) and Appx.E table 3 Metering Equipment (p.34) which contains the limits for each equipment	Definition "Calibration Error limit" (p.5) and Appx.E table 3 Metering Equipment (p.34) which contains the limits for each equipment	

Trade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
A0A0A-U / A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
necessary since T Art.6.4b	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b	IA ENTSOG tpl: Art. 1 INT NC Art.6 4 b	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b
necessary since T Art.6.4c	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b	IA ENTSOG tpl: Art. 1 INT NC Art.6 4 b	IA ENTSOG tpl: Art.1 INT NC Art.6 4 b
"THE-L"	IA ENTSOG tpl: Art.1 INT NC Art.6 4 c and Art.8 of "VIP-Agr."	IA ENTSOG tpl: Art. 1 INT NC Art.6 4 c and Art.8 of "Agr. VIP TTF-THE-L"	IA ENTSOG tpl: Art.1 INT NC Art.6 4 c and Art.8 of "Agr. VIP TTF-THE-L"
	IA ENTSOG tpl: Art.2 INT NC Art.7 1 a	IA ENTSOG tpl: Art.2 INT NC Art.7 1 a	IA ENTSOG tpl: Art.2 INT NC Art.7 1 a
	IA ENTSOG tpl: Art.2.1 INT NC Art.7 1 b	IA ENTSOG tpl: Art.2.1 INT NC Art.7 1 b	IA ENTSOG tpl: Art.2.1 INT NC Art.7 1 b
	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 a	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 a	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 a
	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 b	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 b	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 b
	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 c	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 c	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 c
	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 d	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 d	IA ENTSOG tpl: Art.2.2 INT NC Art.7 3 d

IP NAME/LOCATION	Ellund	Ellund	Haarlem
EIC or identifier for IP	21Z000000000260	21Z00000000144V	21Z000000000000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	ThyssenKrupp Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G- 21X-NL-A
Country	DE / DK	DE / DK	DE / NL
Question	Evidence	Evidence	Evidence
7.3.e Data validation	Appx.E Art.2 Measurements “Volume measurement is currently performed in up to two (2) main meter runs. Each meter run is equipped with two (2) gas meters which are installed in permanent series connection. The gas meters operate according to different physical metering principles.” (p.32) “The metering station has a redundancy of 1+1.” (p.33)	Appx.E Art.2 Measurements “Volume measurement is currently performed in up to two (2) main meter runs. Each meter run is equipped with two (2) gas meters which are installed in permanent series connection. The gas meters operate according to different physical metering principles.” (p.32) “The metering station has a redundancy of 1+1.” (p.33)	
7.3.f Verification and adjustment	Appx.E Art.4 “Testing of measurement equipment” (p.35), Art.5 “Error Correction” describes the methods (i-iv) to calculate substitute values	Appx.E Art.4 “Testing of measurement equipment” (p.35), Art.5 “Error Correction” describes the methods (i-iv) to calculate substitute values	
7.3.g Data provision content and frequency	Appx.D telemetry (p.30) contains information on the data which has to be provided	Appx.D telemetry (p.30) contains information on the data which has to be provided	
7.3.h List of signal and alarms	Appx.D telemetry (p.31) “A detailed list of signals will be maintained on operational level...”	Appx.D telemetry (p.31) “A detailed list of signals will be maintained on operational level...”	
7.3.i Corrections to measurements	Appx.D Art.5 Error Correction (p.35) describe how errors will be corrected	Appx.D Art.5 Error Correction (p.35) describe how errors will be corrected	
7.3.j Equipment failure management	Appx.E Art.4 “Testing of measurement equipment” (p.35) describes how to proceed when error limits are exceeded	Appx.E Art.4 “Testing of measurement equipment” (p.35) describes how to proceed when error limits are exceeded	
7.3.k Rules for facility access, additional verification, modification, and attendance during calibration.	Art.7 “Measurement” (p12) and Appx.E Art.4 “Testing of measurement equipment” last paragraph (p.35)	Art.7 “Measurement” (p12) and Appx.E Art.4 “Testing of measurement equipment” last paragraph (p.35)	
8.1.a Have rules detailing the matching process been established, taking into account the daily-hourly nomination arrangements where relevant?	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.3.1–3.3 of “Agr. V”
8.1.b Have rules detailing communication and processing of data been established?	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.3.4–3.6 of “Agr. V”
8.2; 8.5.a What is matching rule in place? Description of the “other” rule	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) “The lesser rule [...] shall apply.”	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) “The lesser rule [...] shall apply.”	INT NC Art.8.5
8.2.b In case “Other Rule” than the “Lesser Rule” is applied, have been network users invited to comment on it?			
8.2.c; 8.5.b Which is the TSO responsible for the matching process?	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) and Appx.H List of Responsibilities (p.42): Dispatching Service Provider	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) and Appx.H List of Responsibilities (p.42): Dispatching Service Provider	Art.3.1 a of “Agr. VIP T”

Trade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
A0A0A-U / A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 e	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 e	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 e
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 f	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 f	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 f
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 g	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 g	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 g
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 h	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 h	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 h
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 i	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 i	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 i
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 j	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 j	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 j
	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 k	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 k	IA ENTSOG tml: Art.2.2 INT NC Art.7 3 k
IP TTF-THE-L"	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.1–3.3 "VIP-Agr."	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.1–3.3 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.1–3.3 of "Agr. VIP TTF-THE-L"
IP TTF-THE-L"	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.4–3.6 "VIP-Agr."	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.4–3.6 of "Agr. VIP TTF-THE-L"	IA ENTSOG tml: Art.3 INT NC Art.8 1 and Art.3.4–3.6 of "Agr. VIP TTF-THE-L"
	IA ENTSOG tml: Art.3.1 INT NC Art.8 2	IA ENTSOG tml: Art.3.1 INT NC Art.8 2	IA ENTSOG tml: Art.3.1 INT NC Art.8 2
TTF-THE-L"	Side letter to ENTSOG IA tml and Art.3.1 a "VIP-Agr."	Side letter to ENTSOG IA tml and Art.3.1a of "Agr. VIP TTF-THE-L"	Side letter to ENTSOG IA tml and Art.3.1a of "Agr. VIP TTF-THE-L"

IP NAME/LOCATION	Ellund	Ellund	Haarlem
EIC or identifier for IP	21Z000000000260	21Z00000000144V	21Z000000000000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	ThyssenKrupp Energy Services / Gasunie Transport Services
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G-21X-NL-A
Country	DE / DK	DE / DK	DE / NL
Question	Evidence	Evidence	Evidence
8.2.d Has a time schedule taking no longer than two hours been defined?	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.3.1 of “Agr. VIP TTF-”
8.4 Are data exchange use and the harmonised information specified?	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	Art.4 “Matching...” (p.10) and Appx.F Art.1 (p.37) NOM BRS and CBP Nomination and Matching shall apply	specifications are set in the TSO rules
9.2 What is the allocation rule in place?	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.1 (p.40)	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.1 (p.40)	Art.6 of “Agr. VIP TTF-”
9.2 If the rule is OBA, is it recalculated by the TSO in control of the measurement equipment?	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.2 (p.40) and Art.4 (p.41) Dispatching Service Provider	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.2 (p.40) and Art.4 (p.41) Dispatching Service Provider	Art.6.1 of “Agr. VIP TTF-”
9.3.a Where the OBA applies, are the allocations equal to the confirmed quantities?	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.1 (p.40) “Each Party shall allocate the quantities [...] according to the confirmed quantities [...]”	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.1 (p.40) “Each Party shall allocate the quantities [...] according to the confirmed quantities [...]”	Art.7.1. of “Agr. VIP TTF-”
9.3.b Is the OBA maintained as close to 0 as possible?	Appx.F Art.2 (p.38) “The Parties shall endeavour to keep the difference between the actual flow and the sum of confirmed quantities as close as possible to zero”	Appx.F Art.2 (p.38) “The Parties shall endeavour to keep the difference between the actual flow and the sum of confirmed quantities as close as possible to zero”	
9.4 Do the OBA limits take into account specific characteristics of each IP and/or the interconnected transmission networks, in particular: physical characteristics, linepack capability of each transmission system, total technical capacity, gas flow dynamics?	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.2 (p.40). In the process of determining the OBA limit, the rules and obligations of INT NC Art.9.3 (c) have been taken into account. Therefore the agreed OBA limit reflects the characteristics of each IP.	Art.5 “Allocation of gas quantities and OBA” (p.10) and Appx.G Art.2 (p.40). In the process of determining the OBA limit, the rules and obligations of INT NC Art.9.3 (c) have been taken into account. Therefore the agreed OBA limit reflects the characteristics of each IP.	
9.5 If the rule is not OBA, what is it?			
10. In case of “exceptional event” is there a procedure to inform adjacent TSOs and potentially affected network users?	Art.12.1 “Communication procedures in case of exceptional events” (p.16)	Art.12.1 “Communication procedures in case of exceptional events” (p.16)	Art.8 of “Agr. VIP TTF-”
11.1.a Does the dispute settlement mechanism specify the applicable law?	Art.15 Applicable venue and law (p.18) mentions the applicable law	Art.15 Applicable venue and law (p.18) mentions the applicable law	Art.15.5 of “Agr. VIP TTF-”
11.1.b Does the dispute settlement mechanism specify the court of jurisdiction or the terms and conditions of appointment of experts?	Art.15 Applicable venue and law (p.18) mentions the court of jurisdiction and the arbitration rules	Art.15 Applicable venue and law (p.18) mentions the court of jurisdiction and the arbitration rules	Art.15.4 of “Agr. VIP TTF-”
12. Have you established a transparent and detailed Amend. process?	Art.9 Amendment (p.13)	Art.9 Amendment (p.13)	Art.14.1 of “Agr. VIP TTF-”
13. Is the set of units and referenced conditions defined used for every data exchange and publication?	Art.1 Definition “Gross Calorific Value” and “Normal Conditions” and units in Appx.D Telemetry	Art.1 Definition “Gross Calorific Value” and “Normal Conditions” and units in Appx.D Telemetry	
14. Has an additional set of units been defined?			

Grade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
AOA0A-U / AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z	21X-DE-C-AOA0A-T / 21X-NL-A-AOA0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
F-THE-L"	ENTSOG IA tpl, no. 3.3 and Art.3.1 "VIP-Agr."	ENTSOG IA tpl, no. 3.3 and Art.3.1 of "Agr. VIP TTF-THE-L"	ENTSOG IA tpl, no. 3.3 and Art.3.1 of "Agr. VIP TTF-THE-L"
out in Edig@s mes-	IA ENTSOG tpl: Art.3 INT NC Art.8 4 and Art.3.1 "VIP-Agr."	IA ENTSOG tpl: Art.3 INT NC Art.8 4 and Art.3.1 of "Agr. VIP TTF-THE-L"	IA ENTSOG tpl: Art.3 INT NC Art.8 4 and Art.3.1 of "Agr. VIP TTF-THE-L"
THE-L"	ENTSOG IA tpl, no. 4.1 INT NC Art.9 2 and Art.6 "VIP-Agr."	ENTSOG IA tpl, no. 4.1 INT NC Art.9 2 and Art.6 of "Agr. VIP TTF-THE-L"	ENTSOG IA tpl, no. 4.1 INT NC Art.9 2 and Art.6 of "Agr. VIP TTF-THE-L"
F-THE-L"	ENTSOG IA tpl, no. 4.2 INT NC Art.9 2 and Art.6.1 "VIP-Agr."	ENTSOG IA tpl, no. 4.2 INT NC Art.9 2 and Art.6.1 of "Agr. VIP TTF-THE-L"	ENTSOG IA tpl, no. 4.2 INT NC Art.9 2 and Art.6.1 of "Agr. VIP TTF-THE-L"
F-THE-L"	ENTSOG IA tpl, no. 4.1 INT NC Art.9.3a, and Art.7.1 "VIP-Agr."	ENTSOG IA tpl, no. 4.1 INT NC Art.9.3a, and Art.7.1 of "Agr. VIP TTF-THE-L"	ENTSOG IA tpl, no. 4.1 INT NC Art.9.3a, and Art.7.1 of "Agr. VIP TTF-THE-L"
	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 b and Art.5.3 "VIP-Agr."	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 b	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 b and Art.5.3 of "Agr. VIP TTF-THE-L"
	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 c	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 c	ENTSOG IA tpl, no. 4.1 INT NC Art.9 3 c
THE-L"	ENTSOG IA tpl, no. 5.1 INT NC Art.10 and Art.8 "VIP-Agr."	ENTSOG IA tpl, no. 5.1 INT NC Art.10 and Art.8 of "Agr. VIP TTF-THE-L"	ENTSOG IA tpl, no. 5.1 INT NC Art.10 and Art.8 of "Agr. VIP TTF-THE-L"
TTF-THE-L"	INT NC Art.11 2 and Art.15.5 "VIP-Agr."	INT NC Art.11 2 and Art.15.5 of "Agr. VIP TTF-THE-L"	INT NC Art.11 2 and Art.15.5 of "Agr. VIP TTF-THE-L"
TTF-THE-L"	INT NC Art.11 2 and Art.15.4 "VIP-Agr."	INT NC Art.11 2 and Art.15.4 of "Agr. VIP TTF-THE-L"	INT NC Art.11 2 and Art.15.4 of "Agr. VIP TTF-THE-L"
TTF-THE-L"	INT NC Art.12 2 and Art.14.1 "VIP-Agr."	INT NC Art.12 2 and Art.14 of "Agr. VIP TTF-THE-L"	INT NC Art.12 2 and Art.14 of "Agr. VIP TTF-THE-L"
	NC INT Art.13 2.	NC INT Art.13 2.	NC INT Art.13 2.

IP NAME/LOCATION	Ellund	Ellund	Haarlem
EIC or identifier for IP	21Z0000000000260	21Z000000000144V	21Z0000000000000
TSO	Open Grid Europe / Energinet	Gasunie Deutschland Transport Services / Energinet	ThyssenKrupp Gasunie Trans
EIC or identifier for TSO	21X-DE-C-A0A0A-T / 10X1001A1001A248	21X-DE-D-A0A0A-K / 10X1001A1001A248	21X-DE-G-21X-NL-A
Country	DE / DK	DE / DK	DE / NL
Question	Evidence	Evidence	Evidence
15. Is there any cross-border trade restriction due to gas quality that cannot be avoided by the standard operations of the TSOs and that has been recognised by NRAs?			
16. Are WI and GCV published on your website for each IP that acts as an entry point and once per hour?	Open Grid Europe Website: Link	Gasunie Deutschland Website: Link	thyssengas: Link
19. Is there any cross-border trade restriction due to differences in odourisation practices that cannot be avoided by the concerned TSOs and that has been recognised by NRAs?			
Comments to any of the previous questions	Note: There is currently running a consultation of VIP Agr. DK-THE (implementation VIP due to the German market merger)	Note: There is currently running a consultation of VIP Agr. DK-THE (implementation VIP due to the German market merger)	

Trade	Oude Statenzijl	Tegelen	Winterswijk (NL) / Vreden (DE)
0000240Z	21Z0000000000750	21Z000000000117Y	21Z000000000073S
Gas / Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services	Open Grid Europe / Gasunie Transport Services
A0A0A-U / A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z
/ NL	DE / NL	DE / NL	DE / NL
Evidence	Evidence	Evidence	Evidence
	Open Grid Europe publishes WI and GCV here: Link GTS NL: Link	Open Grid Europe publishes WI and GCV here: Link GTS NL: Link	Open Grid Europe publishes WI and GCV here: Link
	ENTSOG IA tpl is signed. "VIP Agr." is prevailing.	ENTSOG IA tpl is signed. "Agr. VIP TTF-THE-L" is prevailing.	ENTSOG IA tpl is signed. "Agr. VIP TTF-THE-L" is prevailing.

EVIDENCE OF COMPLIANCE – PART 3

IP NAME/LOCATION	Zevenaar (NL) / Elten (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO)
EIC or identifier for IP	21Z000000000072U	21Z000000000020C	21Z0000000000000
TSO	Thyssengas / Open Grid Europe / Gasunie Transport Services	DESFA / Bulgartransgaz	Bulgartransgaz
EIC or identifier for TSO	21X-DE-G-A0A0A-U / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-GR-A-A0A0A-G / 21X-BG-A-A0A0A-C	21X-BG-A-A0A0A-A / 21X-RO-A-A0A0A-A
Country	DE / NL	GR / BG	BG / RO
Question	Evidence	Evidence	Evidence
2.1 Please add any missing or strike-through any superfluous IPs or indicate any other Amendments and justify the changes.	1st Oct 2021		
3. Is there a signed IA in place?	based on ENTSGO template; sent to ENTSGO 24th June 2016; "Agr. VIP TTF-THE-L" effective as of 1 Oct 2021 will be sent to ENTSGO and BNetzA after signing is completed. An informal approval has been made already	IA was concluded on 24.06.2016. IA No2 signed on 14.06.2017 Amend. 1 dated 13.12.2019. The revision 2 of IA between DESFA and BULGARTRANGAZ for the IP 'Kulata (BG) / Sidirokastron (GR)' was sent to the Greek NRA on 19.06.2017 (DESFA's letter with ref. no. 106659/19.06.2017) and to ENTSGO via e-mail on 20.06.2017. Amend. 1 to the IA was signed on December 13, 2019 and sent to the Greek NRA on 25.02.2020 (DESFA's letter with ref. no.: 129177/25.02.2020) and to the ENTSGO on 25.02.2020 (DESFA's letter with ref. no. 129178/25.02.2020).	IA was concluded on 14.06.2017
When were IA mandatory terms amended or replaced the last time?			Amend. 1 dated 01.10.2016 Amend. 2 dated 30.03.2017 Amend. 3 30.04.2019 (Amend. 1) Addend. 4 dated 06.11.2019 (implementation) Addend. 5 dated 20.11.2019 (technical conditions) Addend. no.6 dates (Addend. 6) conditions Anx. 5A and 5B Addend. 7 dates 11.11.2019 (technical conditions) Addend. 8 dates 30.03.2020 (technical conditions)
Do provisions of interconnection Agr. cover at least the terms and conditions defined in Articles 6–12 NC INT?	INT NC, Art.5 3 in connection with signed ENTSGO IA template	Art.4, 5, 10 and 11 IA.	Art.4 to Art.8; Art.14; Quality Specification (QTS)
4.1 Have you identified information contained in IA that directly affects NUs and informed them?	Thyssengas: Link Information that directly affects the network users are rules for the matching process, rules for the allocation of gas quantities and communication procedures in case of exceptional event. OGE informed their network users via a market information on their website: OGE: Link gasunie transportservices.nl: Link	Art.1, 4 and §5.6 IA.	Bulgartransgaz: Link transgaz.ro: Link

Country / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
00000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
Gas / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / -A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
Y RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
			An IA between DESFA and TAP for the IP Nea Mesimvria was signed on 17 Nov 2020.
14.07.2016	IA was concluded on 03.01.2017	17-Nov-20	17-Nov-20
0.2016 1.2017 business rules) 1.2019 (reverse flow 2.2019 (Amend. Amend. technical con- B gas quality) 2.2020 (Amend. A and 5B gas quality) 9.2021 (Amend. A and 5B gas quality)	Amend. 1 dated 30.04.2019. Amend. 2 dated 04.10.2019. Amend. 3 dated 11.12.2020. Amend. 4 dated 30.09.2021.	17 November 2020	Included in various IA Arts
Art.18; Anx. – Gas (Anx.5); Anx.7 (TOC);	Art.4 to Art.8; Art.14; Art.18; Anx. – Gas Quality Specifications for both delivery directions (Anx. 5A&5B); Anx. 7A&7B (TOCs);	Included in various IA Articles	The information identified as directly impacting TAP Network Users is made available in TAP Network Code published at this Link Art.4, 5, 6, 13 and 14 IA.
	Public consultation on the business rules and communication procedures in case of exceptional events available at: Bulgartransgaz: Link transgaz.ro: Link	The information identified as directly impacting network users is made available through SRG Network Code published at the following link: snam.it – Link The information identified as directly impacting TAP Network Users is made available in TAP Network Code published at this Link	The Public Consultation was launched on 30 Sept 2019 and lasted until 29 November 2019, following Art. 4.2 INT NC. The information has been published at the following link on TAP website: Link desfa.gr The Public Consultation was launched on 30 Sept 2019 and lasted until 29 November 2019: Link

0) / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
0000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
gaz / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / -A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
/ RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
Amend. IA has not ns of Art.4.2.	Bulgartransgaz: Link Transgaz: The further Amend. IA has not been subject provisions of Art.4.2.	The public consultation was launched on 30 September 2019, pursuant to Art. 4.2 INT NC. The information has been published at the following link: SNAM – Link TAP – Link	IA Art.11
	p.10, Art.5, §5.1;	IA Art.12 p.24–25	IA Art.11 and Art.6
	p.10, Art.5, §5.1;	IA Art.12 p.24–25 and Art.6 p.16–20	IA Art.11 and Art.6.1.2
	p.5, Art.1 (Downstream Operator); p.9, Art.1 (Upstream Operator); p.10, Art.5, §5.1;	IA Art.12 p.24–25 and Art.6.1.2 p.17	IA Art.11
	on hourly basis as per p.10, Art.5, §5.3;	IA Art.12 p.24–25	IA Art.5.5
Art.14, primul para- fificația privind .5A&5B);	p.10, Art.5, §5.1;	IA Art.5.4 p.15–16	IA Art.6
Art.14, primul para- fificația privind .5A&5B);	p.10, Art.5, §5.5;	IA Art.6 p.16–20	IA Art.11
	p.10, Art.5, §5.1;	IA Art.12 p.24–25	IA Art.10, Anx.3
Art.14, first para- s Quality & 5B);	p.9, Art.6; p.19, Art.14, first paragraph; Anx. pp.7 – 8, Gas Quality Specification (Anx. 5A&5B);	IA art 11	
Art.14, first para- s Quality & 5B);	p.9, Art.6; p.19, Art.14, first paragraph; Anx. pp.7 – 8, Gas Quality Specification (Anx. 5A&5B);		IA Art.11

IP NAME/LOCATION	Zevenaar (NL) / Elten (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO)
EIC or identifier for IP	21Z000000000072U	21Z000000000020C	21Z00000000000000
TSO	Thyssengas / Open Grid Europe / Gasunie Transport Services	DESFA / Bulgartransgaz	Bulgartransgaz
EIC or identifier for TSO	21X-DE-G-A0A0A-U / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-GR-A-A0A0A-G / 21X-BG-A-A0A0A-C	21X-BG-A-A0A0A-G / 21X-RO-A-A0A0A-G
Country	DE / NL	GR / BG	BG / RO
Question	Evidence	Evidence	Evidence
6.4.a Safety legislation	IA ENTSOG tpl: Art. 1 NC INT Art. 6.4a		p.10, Art. 6.3, §6.3.3;
6.4.b Emergency plans	IA ENTSOG tpl: Art. 1 NC INT Art. 6.4b		EP is amended but the IA
6.4.b Preventive action plans	IA ENTSOG tpl: Art. 1 NC INT Art. 6.4b		PAP is amended but the IA
6.4.c Exceptional events	IA ENTSOG tpl: Art. 1 NC INT Art. 6.4c and Art. 8 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	§5.6 IA.	p.5, Art.1; p.16–17, A
7.1.a details of the measurement standards applicable established?	IA ENTSOG tpl: Art. 2, NC INT Art. 7.1a	Anx. 4 IA.	Anx. 7 (TOC) p.3, Ch.1 Art. 3.1; p. 13, Art. 3.2; Anx. 7.2, Art. 1.3;
7.1.b Designation of the TSO responsible for Installation, Operation & Maintenance?	IA ENTSOG tpl: Art. 2.1 NC INT Art. 7.1b	Art. 5.3 IA.	p.9, Art. 6; pp. 9–10 A received from GMS Ne
7.3.a Description of the station and its equipment.	IA ENTSOG tpl: Art. 2.2, NC INT Art. 7.3a	Anx. es 4 and 5 IA.	Anx. 7 (TOC) p.5, Ch.3 description Negru Voda equipment (Anx. 7.1);

RO / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
00000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
Transgaz / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
	p.11, Art.6.3, §6.3.4;	IA Art.12 p.24–25	IA Art.11 and Art.13
There is no reference in	EP is amended but there is no reference in the IA	IA Art.12 p.24–25 and Art.14 p.28	IA Art.11 and Art.13
There is no reference in	PAP is amended but there is no reference in the IA	IA Art.12 p.24–25	IA Art.13, §5.4 I
Art.14;	p.5, Art.1; pp.19–20, Art.14;	IA Art.14 p.27	IA Art.9 further detailed in the IA Anx.2 (OM)
p.5, Art.3.7; p.13, p.14, §3.5; p.25,	Anx. 7A (TOC GMS Giurgiu) p.4, Art.1.1; p.6, Art.2.1.7; p.7, Art.2.2.1; p.8, Art.2.2.3 §5; p.11, Art.2.2.10.5; p.13, §3.3; p.14–15, Art.3.4.2.4, §3 and §4, p.15, Art.3.4.3 and Art.3.4.4; p.24–25, Art.2.2.3, Method for the determination gas quantity (volume and energy) (Anx.7.1); pp.29–30, Art.2, §4, §6, §11, par.15, par.17, Technical description metering station, metering and control systems, electrical equipment (Anx.7.2); p.48, Art.1, §3, Gas quality metering at the gas metering station (Anx.7.5); p.49, Art.2.2.1, Gas quality metering at the gas metering station (Anx.7.5); Anx.7B (TOC GMS Ruse p.4, Art.1; p.7, Art.11.1; p.8, Art.11.8; p.9, Art.12.13 and 13.1; p.10, Art.13.13, 13.16 and 13.17; p.11, Art.13.19, 14.3 and 15.3; p.13, Art.20.4, 20.10, 20.12.1, 20.12.3, 20.14.1 and 20.14.2; p.14–15, table no. 2; p.17, Art.24.1.1, 24.1.2 and 24.1.3; p.21, Art.28.15; p.26, Art.1.6, Formulae for calculation natural gas quantities (Anx.7.2); p.33, Art.5.3.4 and Art.5.4.2, Procedures for checking and inspecting the metering systems, the pressure and temperature metering devices (Anx.7.3);	IA Art.10 p.22 further detailed in the IA Anx.1 (OM)	IA Art.8
Anx. – Data to be received from Voda 1 (Anx.8);	p.11, Art.6.3, §6.3.1; Anx. pp.11–12, Data to be received from GMS Giurgiu (Anx.8A); pp.13–14, Data to be received from GMS Ruse (Anx.8B);	IA Art.9 p.22–23	Anx.2 (OM) of IA
pp.19–24 Technical description of GMS metering	Anx.7A (TOC GMS Giurgiu) pp.29–31, Technical description metering station, metering and control systems, electrical equipment (Anx.7.2); Anx.7B (TOC GMS Ruse) p.5–8, Part II Technical description of GMS Ruse, operation mode measuring and control systems and the requirements thereto; p.22, Part VIII Control system of Gas measuring station (GMS) “Ruse”;	Anx.1 (OM) of IA	IA Art.9. Other requirements have been agreed by the parties in the OM (Anx.2 of IA)

IP NAME/LOCATION	Zevenaar (NL) / Elten (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO)
EIC or identifier for IP	21Z000000000072U	21Z000000000020C	21Z0000000000000000
TSO	Thyssengas / Open Grid Europe / Gasunie Transport Services	DESFA / Bulgartransgaz	Bulgartransgaz
EIC or identifier for TSO	21X-DE-G-A0A0A-U / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-GR-A-A0A0A-G / 21X-BG-A-A0A0A-C	21X-BG-A-A0A0A-A / 21X-RO-A-A0A0A-A
Country	DE / NL	GR / BG	BG / RO
Question	Evidence	Evidence	Evidence
7.3.b Parameters and details: units, range, uncertainty, and frequency of measurement.	IA ENTSOG tpl: Art.2.2, NC INT Art.7.3b	Anx.4 IA.	Anx. pp.9–10, Anx. – from GMS Negru Voda (TOC) p.9 Ch.7;
7.3.c Calculations procedures.	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 c	Anx.4 IA.	Anx.7 (TOC) pp.25–3 calculation energy quant
7.3.d Maximum permissible error in energy.	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 d	§5.4.1.1 and Anx.4 IA.	The amount of energy metered value, energy performed outside meter product metered volume calculated on the basis determined by the GC. The tion of Negru Voda I G (TOC), Ch.2, Art.2.2; Art.3.9, the maximum determination is 0.2% (TOC), Art.7.1, let. a. accepted limits difference Pay and Check system Art.7.1 Anx.7 (TOC).
7.3.e Data validation	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 e	§4.5.6 IA.	Anx.7 (TOC) p.7, Art.5
7.3.f Verification and adjustment	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 f	§5.4.1.3, 5.4.2.8 and Anx.4 IA.	Anx.7 (TOC) pp.32–3 metering equipment t (Anx.7.3);
7.3.g Data provision content and frequency	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 g	Art.6 IA.	p.17, Art.15, §15.1 and pp.9–10, Data to be r Negru Voda 1 (Anx.8)
7.3.h List of signal and alarms	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 h	Art.6 IA.	Anx.7 (TOC) p.5, Art.3
7.3.i Corrections to measurements	IA ENTSOG tpl: Art.2.2 NC INT Art.7.3 i	§5.4.1.4 IA	Anx.7 (TOC) p.10, Art. and Art.8.8;

RO / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
0000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
Transgaz / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / -A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
Data to be received in Anx.1 (Anx.8); Anx.7	Anx.7A (TOC GMS Giurgiu) pp.45–46, Accuracy and operating ranges metering equipment (Anx.7.4); Anx.7B (TOC GMS Ruse) – page. 13–16, Art.21;	IA Art.8 pp.22. Other requirements have been agreed by the parties in the OM (Anx.1 of IA)	Anx.2 (OM) of IA
Method for the calculation (Anx.7.2);	Anx.7A (TOC GMS Giurgiu) pp.23–27, Method for the determination of gas quantity (volume and energy) (Anx.7.1); Anx.7B (TOC GMS Ruse) p.25–27, Formulae for calculation natural gas quantities (Anx.7.2);	Anx.1 (OM) of IA	Anx.2 (OM) of IA
is not a directly determination is metering system, by the time and the GCV calculation composition determination technical documents - MS is part Anx.7 Ch.3, Art.3.6 and error upon GCV % according to Anx.7 The maximum differences between the are provided in	The amount of energy is not a metered value, the energy determination is performed outside the metering system by the product metered volume and the GCV calculated from the composition determined by the GC. The maximum energy determination error is presented per components in Anx.7A (TOC GMS Giurgiu), p.45, Art.1.1, Accuracy and operating ranges metering equipment (Anx.7.4) and Anx.7B (TOC GMS Ruse) – pp.13–16, Art.21;	Anx.1 (OM) of IA	Anx.2 (OM) of IA
5.1; p.10, Art.9;	Anx.7A (TOC GMS Giurgiu) – p.17, Art.4.2.1; Anx.7B (TOC GMS Ruse) p.39, Monthly and daily report, p.22, Art.37 – 38, p.1, p.38–39, Anx.7 and Anx.8;	Anx.1 (OM) of IA	Anx.2 (OM) of IA
3 Verification the metering devices	Anx.7A (TOC GMS Giurgiu) – p.32–42, Procedures for testing and calibrating the metering systems the pressure and temperature metering equipment and the test periods (Anx.7.3); Anx.7B (TOC GMS Ruse) p.28–34, Procedures for checking and inspecting the metering systems, the pressure and temperature metering devices (Anx.3);	Anx.1 (OM) of IA	IA Art.12 further detailed in the Anx.2 (OM) and Anx.7 (Exchange of Operational Data) of IA
and 15.2; Anx. received from GMS	p.20, Art.15, §15.1 and 15.2; Anx. p.11–12 Data to be received from GMS Giurgiu (Anx.8A); p.13–14 Data to be received from GMS Ruse (Anx.8B);	IA Art.13 p.26 further detailed in the Anx.1 (OM) and Anx.6 (Exchange of Operational Data) of IA	Anx.7 (Exchange of Operational Data) of IA
3.3;	Anx.7A (TOC Giurgiu) p.5, Art.1.5; Anx.7B (TOC GMS Ruse) p.5, Art.6;	Anx.6 (Exchange of Operational Data) of IA	Anx.2 (OM) of IA
9; pp.11–12, Art.8.7	Anx.7A (TOC Giurgiu) p.10, Art.2.2.8.4.; Anx.7B (TOC GMS Ruse) p.19, Art.26.3.6 – 26.3.8;	Anx.1 (OM) of IA	Anx.2 (OM) of IA

RO / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
21Z0000000002798	21Z0000000002798	21Z000000000474A	21Z000000000473C
Bulgartansgaz / Transgaz	Bulgartansgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
BG / RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
Art.8.7;	Anx.7A (TOC GMS Giurgiu) pp.8–9, Art.2.2.5.5; p.26, Art.1.3, Method for the determination Gas quantity (volume and energy) (Anx.7.1); p.36, Art.1.2.2.4, Procedures for testing and calibrating the metering systems the pressure and temperature metering equipment and the test periods (Anx.7.3); p.47, Art.2.2.2; Anx.7B (TOC GMS Ruse) p.19 – 20, Art.27.5 – 27.9, p.16 Art.22.7, p.28–34, Procedures for checking and inspecting the metering systems, the pressure and temperature metering devices (Anx.3);	Anx.1 (OM) of IA	Art.9, Anx.2 (OM) of IA
Art.2; Anx.7 (TOC) p.5, p.10 Art.7;	p.11, Art.6.3, §6.3.2; Anx.7A (TOC GMS Giurgiu) pp.4–5, Art.1.4 (Art.1.4.1 and Art.1.4.2.); Anx.7B (TOC GMS Ruse) p.4–5, Art.4;	Anx.1 (OM) of IA	IA Art.5
	p.12, Art.7.3, §d);	IA Art.5.4 p.15–16	IA Art.5
	p.12–13, Art.7.3;	IA Art.5.5 p.16	IA Art.5
for nominations; (d) – for renominations;	p.12, Art.7.3, §e) – for nominations; pp.12–13, Art.7.3, §g) – for renominations;	IA Art.5.5 p.16	
			IA Art.1, Art.5
System Operator , §(c);	p.7, Art.1 (Matching System Operator (MSO)); p.12, Art.7.3, §e);	IA Art.5 p.13	IA Art.5.2, 5.3
, §(b) and §(c) – for §(d) – for renominations;	p.12, Art.7.3, §(a), §(b), §(c), §(d), §(e) and §(f) – for nominations, Art.7.3, §(g) – for renominations;	IA Art.5.2 p.13 – 14	IA Art.5.6 & Anx.7
d Art.7.2; p.17, f, Network User Anx.1A), Network User em (Anx.1B), Notification (Anx.2), Notification (Anx.3);	pp.11–13, Art.7.1 and Art.7.3; p.20, Art.15.3; Anx. pp.1–5, Network User Transgaz’s System (Anx.1A), Network User Bulgartansgaz’s System (Anx.1B), Processed Quantities Notification (Anx.2), Confirmed Quantities Notification (Anx.3);	IA Art.5.4 p.16 and related Anx. es 6	IA Art.6.1
	p.13, Art.8, §8.1	IA Art.6.1 p.16 – 17	IA Art.6.1.2

IP NAME/LOCATION	Zevenaar (NL) / Elten (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO)
EIC or identifier for IP	21Z000000000072U	21Z000000000020C	21Z0000000000000
TSO	Thyssengas / Open Grid Europe / Gasunie Transport Services	DESFA / Bulgartransgaz	Bulgartransgaz
EIC or identifier for TSO	21X-DE-G-A0A0A-U / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-GR-A-A0A0A-G / 21X-BG-A-A0A0A-C	21X-BG-A-A0A0A-A / 21X-RO-A-A0A0A-A
Country	DE / NL	GR / BG	BG / RO
Question	Evidence	Evidence	Evidence
9.2 If the rule is OBA, is it recalculated by the TSO in control of the measurement equipment?	IA ENTSOG tmp: Art.4.2 and Art.6.1 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	§4.6 IA.	p.13, Art.9.5;
9.3.a Where the OBA applies, are the allocations equal to the confirmed quantities?	IA ENTSOG tmp: Art.4.1 NC INT Art.9.3a and Art.7.1 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	§4.5.2 IA.	p.11, Art.8.2;
9.3.b Is the OBA maintained as close to 0 as possible?	IA ENTSOG tmp: Art.4.1 NC INT Art.9.3b	§4.6 IA.	p.12, Art.9.1;
9.4 Do the OBA limits take into account specific characteristics of each IP and/or the interconnected transmission networks, in particular: physical characteristics, linepack capability of each transmission system, total technical capacity, gas flow dynamics?	IA ENTSOG tmp: Art.4.1 NC INT Art.9.3c	§4.6.2 IA.	p.12, Art.9.2;
9.5 If the rule is not OBA, what is it?			pp.11–12, Art.8.3 – allocations pro-rata allocations applied)
10. In case of "exceptional event" is there a procedure to inform adjacent TSOs and potentially affected network users?	IA ENTSOG tmp: Art.5.1 and Art.8 of "Agr. VIP TTF-THE-L"	§5.6 IA.	pp.16–17, Art.14;
11.1.a Does the dispute settlement mechanism specify the applicable law?	NC INT Art.11.2 and Art.15.5 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	§10.1 IA.	p.18, Art.18;
11.1.b Does the dispute settlement mechanism specify the court of jurisdiction or the terms and conditions of appointment of experts?	NC INT Art.11.2 and Art.15.4 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	§10.3 IA.	p.18, Art.18;
12. Have you established a transparent and detailed Amend. process?	NC INT Art.12.2 and Art.14.1 of "Agr. VIP TTF-THE-L" (VIP Agr. prevails)	Art.11 IA.	p.9, Art.4;
13. Is the set of units and referenced conditions defined used for every data exchange and publication?	NC INT Art.13.2	Art.1, §4.2.1, Art.6 and §5.8.2 IA.	pp.5–7, Art.1 (Capacity expressed in energy units (Superior) Calorific Value Normal Reference Conditions) Cubic Meter (V(0)/m³ conditions); Anx.7

0) / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
0000159I	21Z000000002798	21Z00000000474A	21Z00000000473C
az / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / -A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
/ RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
	p.13, Art.9.5;	IA Art.6.1.2 p.17	IA Art.6.1.1
	p.13, Art.8.2;	IA Art.6.1.1 p.17	IA Art.6.1.2
	p.15, Art.9.1;	IA Art.6.1.2 p.17	IA Art.6
	p.15, Art.9.2;	IA Art.6 p.16 – 20	Proportional allocation rule IA Art.6.2
8.4 (in certain condi- on procedure is to be	p.14, Art.8.3 – 8.4 (in certain conditions pro-rata allocation procedure is to be applied)	Proportional allocation rule IA Art.6.2 – Pag 17–18	Proportional allocation rule IA Art.13
	pp.19–20, Art.14;	IA Art.14 p.26	IA Art.16
	p.21, Art.18;	IA Art.17 p.29 – 30	IA Art.16
	p.21, Art.18;	IA Art.17 p.29 – 30	IA Art.14
	p.10, Art.4;	IA Art.15 p.28	Art.7 and Anx.2 IA
ity, Gas quantity units (kWh), Gross alue (GCV(25/0) at nditions, Normal (), Normal reference	pp.5–8, Art.1 (Capacity, Cubic meter V(0), Gas quantity expressed in energy units (kWh) at normal reference conditions, Gross (Superior) Calorific Value (GCV(25/0) at Normal Reference Conditions, Normal reference conditions); Anx.7A (TOC GMS Giurgiu) p.52–53 Reference Conditions used by Transgaz and Bulgartransgaz (Anx.7.6); Anx.7B (TOC GMS Ruse) p.37, Conditions (Anx.6);	IA Art.8 p.22	

IP NAME/LOCATION	Zevenaar (NL) / Elten (DE)	Kulata (BG) / Sidirokastron (GR)	Negru Voda I (RO)
EIC or identifier for IP	21Z000000000072U	21Z000000000020C	21Z0000000000000
TSO	Thyssengas / Open Grid Europe / Gasunie Transport Services	DESFA / Bulgartransgaz	Bulgartransgaz
EIC or identifier for TSO	21X-DE-G-A0A0A-U / 21X-DE-C-A0A0A-T / 21X-NL-A-A0A0A-Z	21X-GR-A-A0A0A-G / 21X-BG-A-A0A0A-C	21X-BG-A-A0A0A-A / 21X-RO-A-A0A0A-A
Country	DE / NL	GR / BG	BG / RO
Question	Evidence	Evidence	Evidence
14. Has an additional set of units been defined?		Art.1 and 6 IA.	p.8, Art.1 (standard c (V(20)/m³);
15. Is there any cross-border trade restriction due to gas quality that cannot be avoided by the standard operations of the TSOs and that has been recognised by NRAs?		Quality specifications in both DESFA and BULGARTRANSGAZ networks are very close.	
16. Are WI and GCV published on your website for each IP that acts as an entry point and once per hour?	Thyssengas: Link	Desfa.gr: Link	Bulgartransgaz: Link
19. Is there any cross-border trade restriction due to differences in odourisation practices that cannot be avoided by the concerned TSOs and that has been recognised by NRAs?		Both DESFA and BULGARTRANSGAZ networks are non-odourised.	
Comments to any of the previous questions			

0) / Kardam (BG)	Ruse (BG) – Giurgiu (RO)	MELENDUGNO	NEA MESIMVRIA
00000159I	21Z0000000002798	21Z000000000474A	21Z000000000473C
az / Transgaz	Bulgartransgaz / Transgaz	Snam Rete Gas / TAP	DESFA / TAP
A0A0A-C / -A0A0A-S	21X-BG-A-A0A0A-C / 21X-RO-A-A0A0A-S	21X-IT-A-A0A0A-7 / 21X000000001376X	21X-GR-A-A0A0A-G / 21X000000001376X
/ RO	BG / RO	IT/(TAP)	GR/(TAP)
Evidence	Evidence	Evidence	Evidence
Cubic meter	pp.5–8, Art.1 (Cubic meter V(15), Cubic meter V(20), Gas quantity expressed in energy units (kWh(15/15)) at Romanian reference conditions, Gas quantity expressed in energy units (kWh(25/20)) at Bulgarian reference conditions, Gross (Superior) Calorific Value (GCV(15/15) at Romanian Reference Conditions, Gross (Superior) Calorific Value (GCV(25/20) at Bulgarian Reference Conditions); Anx.7A (TOC GMS Giurgiu) p.52–53 Reference Conditions used by Transgaz and Bulgartransgaz (Anx.7.6); Anx.7B (TOC GMS Ruse) p.37, Conditions (Anx.6);	IA Art.8 p.22	
			TAP publishes the values GCV on an hourly and daily basis on its public Electronic Data Platform at the following link: Link DESFA publishes on the website the GCV and WI for each IP, once per hour: Link
	Bulgartransgaz: Link For the publication of such data (only for gas flow direction BG to RO), Transgaz needs to resume bilaterally discussion for inclusion hourly GCV and WI in Anx.8B IA (Data to be received from the GMS Ruse).	SNAM: The value GCV is published on SRG website on hourly basis: Link TAP publishes the values GCV on an hourly and daily basis on its public Electronic Data Platform: Link	

ADDITIONAL NOTE

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Publisher: ENTSOG AISBL
Avenue de Cortenbergh 100
1000 Brussels, Belgium

Cover picture: Courtesy of GAZ-SYSTEM

Design: Drei Dreizehn GmbH, Berlin | www.313.de



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