

Central Eastern Europe

GRIP

ANNEX A: INFRASTRUCTURE PROJECTS

ANNEX A2: PROJECTS DETAILS

Projects in the CEE region –
extract from the TYNDP 2017
Annex A2



Bidirectional Austrian-Czech Interconnector (BACI, formerly LBL project)

TRA-N-021	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The Bidirectional Austrian Czech Interconnection (BACI) will be a new infrastructure directly connecting the Austrian and Czech market. It will be connected to the existing Czech transmission system via CS Břeclav (NET4GAS s.r.o.) and to the Austrian transmission system via Baumgarten (GAS CONNECT AUSTRIA GmbH). The project BACI will enable capacity transmission for the first time between these two EU member states and it will facilitate better market integration between Austria and the Czech Republic. The project BACI will also increase the overall flexibility of the Czech, Austrian and also Polish system by diversification of gas supply routes and by connecting UGSs in the Czech Republic and Austria.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poštorná / Reintal	Gas Connect Austria GmbH	2020	AT	CZ	201.4 GWh/d
	Comment: New bidirectional IP connecting the Czech and the Austrian Virtual Trading Point . Maximum capacity will be between 750,000Nm³/h and 1,480,000Nm³/h; conversion from Nm³/h to kwh/h with a GCV of 11.19.				
	Gas Connect Austria GmbH	2020	CZ	AT	201.4 GWh/d
	Comment: New bidirectional IP connecting the Czech and the Austrian Virtual Trading Point . Maximum capacity will be between 750,000Nm³/h and 1,480,000Nm³/h; conversion from Nm³/h to kwh/h with a GCV of 11.19.				

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Pipeline on Austrian territory	GAS CONNECT AUSTRIA			
GAS CONNECT AUSTRIA GmbH	Promoter	GmbH		
Pipeline on Czech territory	Gas Connect Austria GmbH			
NET4GAS, s.r.o	Operator			
	Host Country	Austria		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	GCA 2015/01a	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.4)	Market Test		06/2016	Exemption Granted	Not Relevant
		Permitting	10/2015			
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction		10/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Austrian Side	The technical load factor of the pipeline is confidential and must not be published in the TYNDP.			
	Czech Side		800	12	0
	Total			12	0

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Others
Main Driver Explanation	Market Integration

Benefit Description

The project BACI will ensure transmission capacity between the two member states and will facilitate better market integration and security of gas supply also for adjacent countries. It contributes to the diversification of gas supply and the increased transportation opportunities to and from countries like Hungary, Poland, Germany, Italy, France, Slovenia, Croatia and Slovakia and access to new and existing trading markets. The project BACI will enhance the market development due to access to underground gas storages both on the Austrian and Czech side and therefore will enhance the market development by providing peak regulation and the flexibility of gas flow. The project BACI is a key element in creating a well-functioning internal market in the CEE region due to access to existing and new import infrastructures such as a new LNG terminal in Poland and Croatia, Nord Stream and unconventional gas sources. With the project BACI the CEE region would become less vulnerable to a supply

GCA 2015/08: Entry/Exit Murfeld

TRA-N-361	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The Project enables incremental capacity at the IP Murfeld in both directions (AT->SI, SI->AT). Moreover, physical RF capacity at the Entry Point Murfeld is achieved.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Murfeld (AT) / Ceršak (SI)	Gas Connect Austria GmbH	2019	AT	SI	53.7 GWh/d
	Comment: conversion from Nm³/h to kwh/h with a GCV of 11.19				
	Gas Connect Austria GmbH	2019	SI	AT	166.5 GWh/d
	Comment: conversion from Nm³/h to kwh/h with a GCV of 11.19				

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	GAS CONNECT AUSTRIA GmbH		
	Operator	Gas Connect Austria GmbH		
	Host Country	Austria		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016 - 2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	GCA 2015/08	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.26.4)	Market Test			Exemption Granted	No
		Permitting	10/2015	07/2017		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction		11/2019		
		Commissioning	2019	2019		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Murfeld	The technical load factor of the pipeline is confidential and must not be published in the TYNDP.				
Total					

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

GCA Mosonmagyaróvár

TRA-N-423	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	Current planning based on market indications. Potential connection to projects for the potential establishment of a Southern Corridor.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyarovar	Gas Connect Austria GmbH	2020	HU	AT	153.1 GWh/d
Comment: 5 bcma. Further upgrade potential up to development of market demand. Conversion from Nm³/h to kwh/h with a GCV of 11.19					

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	GAS CONNECT AUSTRIA GmbH	
	Operator	Gas Connect Austria GmbH	
	Host Country	Austria	
	Status	Planned	
	Website		
	Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016 - 2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	GCA 2015/05	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	Yes
Currently PCI	Yes (6.24.3)	Market Test			Exemption Granted	Yes
		Permitting	10/2015	07/2017		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction		10/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment			Diameter (mm)	Length (km)
Mosonmagyarovar	The technical load factor of the pipeline is confidential and must not be published in the TYNDP.				
Total					

PCI Details	
PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Pipeline projects are planned according to market demand. Current planning is based on market indications.
Benefit Description	Strengthening the establishment of a potential Southern Corridor and contribution to a diversification of sources e.g. Black Sea Gas.

Břeclav-Baumgarten Interconnection (BBI) AT

TRA-N-801	Project	Pipeline including CS	Non-FID
Update Date	04/05/2016		Advanced
Description	The project will be a new infrastructure directly connecting the Austrian and Czech market and is connected to the project C4G of N4G at the AT/CZ border.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poštorná / Reintal	Gas Connect Austria GmbH	2020	CZ	AT	1,118.1 GWh/d
Comment: The incremental capacity represents an entry capacity extension above planned exit capacity at CZ/AT border. GCV:11.19					

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	GAS CONNECT AUSTRIA GmbH	
	Operator	Gas Connect Austria GmbH	
	Host Country	Austria	
	Status	Planned	
	Website		
	Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-021	Bidirectional Austrian-Czech Interconnector (BACI, formerly LBL project)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (The BBI project is a new project and will be part of the NDP 2017-2026.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>GCA2015/01</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting	<i>03/2016</i>	<i>04/2016</i>	Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID		<i>10/2020</i>	Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning				
			<i>2020</i>	<i>2020</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Břeclav-Baumgarten Interconnection (BBI) AT		The incremental capacity represents an entry capacity extension between the market areas of CZ and AT	1,400	49	10
Total				49	10

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

TAG Reverse Flow

TRA-N-954	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	The objective of the planning project "TAG Reverse Flow" is to create a reverse flow on the TAG GmbH pipeline system with three project variations: 1a Reverse Flow by upgrading existing entry DZK capacity to entry FZK capacity at the IP Arnoldstein/Tarvisio and additionally by allowing potential entry FZK capacity at the IP Ceršak/Murfeld. Physical interconnection capacity via an exit from the TAG GmbH pipeline system to the Gas Connect Austria GmbH subsystem PVS-AZ1. 1b Reverse Flow by upgrading existing entry DZK capacity to entry FZK capacity at the IP Arnoldstein/Tarvisio. Physical interconnection between the TAG pipeline system to the Gas Connect Austria subsystem PVS-AZ1. Further, the project shall also enable a physical connection at the IP Baumgarten at the Austrian/Slovakian boarder by upgrading existing backhaul capacity "Exit Baumgarten" to FZK capacity "Exit Baumgarten" of TAG GmbH. 1c This variation of the project is a combination of project variation 1a and 1b.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Baumgarten	TAG GmbH	2018	AT	SK	268.6 GWh/d
	Comment: The project enable a physical connection at the IP Baumgarten (TAG GmbH/eustream a.s.) at the Austrian/Slovakian boarder by upgrading existing backhaul capacity "Exit Baumgarten" to FZK capacity "Exit Baumgarten" of TAG GmbH				
Tarvisio (IT) / Arnoldstein (AT)	TAG GmbH	2018	IB-ITe	AT	0.0 GWh/d
	Comment: Reverse Flow by upgrading existing entry DZK capacity to entry FZK capacity at the IP Arnoldstein/Tarvisio and additionally by allowing potential entry FZK capacity at the IP Ceršak/Murfeld.				

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Trans Austria Gasleitung GmbH	100%	Promoter	Trans Austria Gasleitung GmbH	
		Operator	TAG GmbH	
		Host Country	Austria	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Coordinated Network Development Plan 2017-2026)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>TAG 2016/03</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey		Construction				
	<i>Not Relevant (no CBCA decision)</i>	Commissioning	<i>2018</i>	<i>2018</i>		

PCI Details

PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Benefits

Main Driver	Others
Main Driver Explanation	The planning project was triggered by an obligation arising out of the decree of the Austrian regulatory authority, E-Control related to the Coordinated Network Development Plan 2016-2025, whereas a reverse flow of the TAG pipeline system shall be assessed by also taking into consideration potential entry FZK capacity at the IP Ceršak/Murfeld. As a consequence, TAG GmbH also assesses an upgrade of existing entry DZK capacity to entry FZK capacity at the IP Arnoldstein/Tarvisio and, correspondingly, an upgrade of existing backhaul capacity "Exit Baumgarten" to FZK capacity "Exit Baumgarten" of TAG GmbH in its projects variations.
Benefit Description	

Interconnection Bulgaria - Serbia

TRA-F-137	Project	Pipeline including CS	FID
Update Date	27/05/2016		Advanced
Description	IBS aims at connecting the national gas transmission networks of Bulgaria and Serbia. It will be implemented in 3 stages. 1st: a pipe will be built from Novi Iskar to Kalotina, BG (62.2 km) and from Nis to Dimitrovgrad, SR (108 km), with capacity from BG to SRB - 1,0 bcm/year, and from SRB to BG - 0.15 bcm/year. 2nd: the capacity will be increased from BG to SRB to 2,4 bcm/year, and from SRB to BG to 0,95 bcm/year, and later to 1,5 bcm/year, by construction of 2 CSs (20 MW each) and 2 new gas pipeline sections (from G Bogrov CS to N Iskar – 19 km and from V. Orašje to Nis – 161 km). 3rd: by construction of the looping VS Batulsi - G Bogrov CS (62 km) the capacity from BG to SRB will be increased to 3,2 bcm/year. In the direction from SRB to BG the construction of the pipeline Batajnica - V Orašje (116 km) will ensure transmission of 2 bcm/ year, and the construction of CS Batočina (20 MW) will increase the capacity from 2.0 bcm/year to up to 2.5 bcm/y.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector BG RS	IBS Future Operator	2018	BGn	RS	51.0 GWh/d
			Comment: Opeartor to be defined		
	IBS Future Operator	2018	RS	BGn	51.0 GWh/d
			Comment: Operator to be defined		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgarian section	Promoter	Ministry of Energy		
Ministry of Energy of Bulgaria	Operator	IBS Future Operator		
Serbian section	Host Country	Bulgaria		
Serbijagas	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility		02/2011	Considered TPA Regime	<i>Regulated</i>
		Feasibility	12/2011	12/2012	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Sectin 5.2 (5.2.3)</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test		05/2017	Exemption Granted	<i>No</i>
Currently PCI	<i>Yes (6.10.)</i>	Permitting		08/2016		
		Supply Contracts		04/2017	Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID		12/2012	Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction	05/2017	12/2018		
		Commissioning	2018	2018		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Bulgarian territory	1.8 bcm/y maximum capacity	700	62	
	Serbian territory	1.8 bcm/y maximum capacity	700	108	
	Total			170	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project concerns investment in reverse flow capacity, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Caspian Region, LNG (GR)

Benefits

Main Driver	Others
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Main Driver Explanation

Benefit Description The project should enhance the system flexibility and contribute to the security of supply within the region (increased interconnection between Bulgaria and Serbia)

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Joint statement by Bulgaria and Serbia	Joint statement signed in Brussels by Bulgaria and Serbia in 2010	Yes	05/03/2010
Memorandum of Understanding between Bulgaria and Serbia	Memorandum of Understanding signed in Sofia between Bulgaria and Serbia in 2005	Yes	08/04/2005

UGS Chiren Expansion

UGS-N-138	Project	Storage Facility	Non-FID
Update Date	26/05/2016		Non-Advanced
Description	Capacity increase of the only gas storage facility on the territory of Bulgaria in order to achieve larger gas volumes stored, increased gas reservoir pressures and higher daily average injection and withdrawal flowrates. The project provides for the increase in the working gas volume up to 1 bcm and increase in the injection and withdrawal rate up to 8 – 10 mcm/day.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
GMS Chiren	Bulgartransgaz EAD	2022	STcBGn	BGn	61.5 GWh/d
	Bulgartransgaz EAD	2022	BGn	STcBGn	61.5 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility		<i>06/2011</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility	<i>01/2015</i>	<i>01/2017</i>	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Section 5.3 (5.3.1)</i>	FEED	<i>01/2017</i>	<i>12/2017</i>	Applied for Exemption	<i>Not Relevant</i>
		Market Test		<i>05/2017</i>	Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.20.2.)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID		<i>01/2019</i>	Exemption in exit direction	<i>0.00%</i>
Market Survey		Construction	<i>01/2020</i>	<i>12/2021</i>		
	<i>Not Relevant (no CBCA decision)</i>	Commissioning	<i>2022</i>	<i>2022</i>		

Technical Information (UGS)

Storage Facility	<i>UGS Chiren</i>	
Storage Facility Type	<i>Aquifer</i>	
Multiple-Cycle	<i>No</i>	
Working Volume (mcm)	<i>450.00</i>	<i>450</i>

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States	
General Criteria Fulfilled	No	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply	
Specific Criteria Fulfilled Comments	The project for its expansion aims on one hand at creating conditions to ensure security of supplies to Bulgarian users and users in the countries from the region, and on the other - UGS Chiren development as commercial gas storage in an interconnected regional and Europe-wide market, as UGS Chiren is an integral part of the plans for development of the regional gas system consisting of interconnections, LNG terminals, storage facilities. In the medium term UGS Chiren promises to become a commercial facility with a significant role in competition development in the regional gas market and in provision of additional flexibility of the gas transmission systems at regional level, with a significant contribution to congestion management and seasonal optimization of use of the gas transmission systems.	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	<i>yes</i>

Delay Explanation

Comissioning: 2022 Delays due to postponement of some tender procedures for selection of contractors for the studies.

Expected Gas Sourcing

Caspian Region, Russia, LNG (), Southern gas corridor gas sources; European gas hubs;

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	UGS Chiren has been the only gas storage on the territory of Bulgaria for 40 years. It is a key instrument for the functioning of the gas market in Bulgaria, covering seasonal fluctuations in natural gas consumption in the country by securing the necessary flexibility caused by the differences between the supplies and consumption and ensures emergency reserve. UGS Chiren is a crucial instrument ensuring the security of gas supplies. In the medium term UGS Chiren promises to become a commercial facility with a significant role in competition development in the regional gas market and in provision of additional flexibility of the gas transmission systems at regional level, with a significant contribution to congestion management and seasonal optimization of use of the gas transmission systems.
Benefit Description	The project for its expansion aims on one hand at creating conditions to ensure security of supplies to Bulgarian users and users in the countries from the region, and on the other - UGS Chiren development as commercial gas storage in an interconnected regional and Europe-wide market, as UGS Chiren is an integral part of the plans for development of the regional gas system consisting of interconnections, LNG terminals, storage facilities.

Interconnection Turkey-Bulgaria

TRA-N-140	Project	Pipeline including CS	Non-FID
Update Date	29/06/2016		Non-Advanced
Description	Construction of new onshore gas pipeline in the section between the village of Losenets and the Bulgarian-Turkish border in the region of the village of Strandja in parallel to the existing transit gas pipeline of about 76 km length on Bulgarian territory, diameter of the pipe 700 mm and capacity of about 3 bcm/y at operating pressure 64 bar. A compressor station Losenets – 2 near the existing compressor station in the region of the village of Losenets is also envisaged to be built. The project, as part of the priority Southern Gas Corridor is crucial in terms of security and diversification of the sources and routes of natural gas supply to/through Bulgaria and the region. Its implementation is directly related to achievement of the conditions required for creation of a competitive gas market, increase of systems' flexibility and market integration.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector ITB (Turkey - Bulgaria) (BG>TR)	Bulgartransgaz EAD	2020	BGn	BG/ITB	97.0 GWh/d
Interconnector ITB (Turkey - Bulgaria) (TR>BG)	Bulgartransgaz EAD	2020	BG/ITB	BGn	97.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD for the gas pipeline section on the territory of Bulgaria	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2016-2025 Ten-year network development plan of BTG)	Pre-Feasibility	08/2015	02/2016	Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	ITB	FEED			Applied for Exemption	No
		Market Test			05/2017	Exemption Granted
Currently PCI	Yes (7.4.2.)	Permitting	08/2017	11/2017		
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID			Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction	12/2018	07/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
ITB Bulgarian Section			700	76	13
ITB Turkish Section				130	
Total				206	13

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	ITB is a pivotal part of a larger gas markets integration strategy that includes interconnection projects Bulgaria-Romania, Bulgaria-Serbia, Romania-Hungary. The implementation of the project and the addition of alternative sources of gas in the region will promote the market integration of the region and the development of more infrastructures in the area and specifically in the countries mentioned above. The project will allow to alleviate to a great extent the dependency of countries in the area in a single import source/counterpart. ITB will definitely provide additional capacity in relation to national and regional N-1, considering that it will supply additional quantities of gas from an alternative route for alternative sources and counterparts to an area in urgent need of diversification. Considering that Bulgaria and the region are heavily dependent on gas imports from a single source, the diversification that ITB provides in all three (route, source and counterparts) will p

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	yes
Delay Explanation	As a result of the Feasibility Study conducted in 2015 the preliminary project data such as route, length, diameter, capacity, pressure, above ground equipment, investment costs and time schedule have been precised.

Expected Gas Sourcing

Caspian Region, LNG (), SGC, Azerbaijan, LNG, Iran, Turkmenistan and other entering Turkish system which has 6 entry points.

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	The implementation of the project will considerably contribute for the achievement of the broad EU energy objectives and priorities such as: • Diversification of gas supply • Enhancing security of supply (by reducing the dependency on one source of gas supply) • Promoting further integration of the EU internal energy market • Encouraging and increasing market competitiveness • Contributing to the gas market liberalization

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Joint Declaration of the Minister of Energy and Natural Resources of the Republic of Turkey and the Minister of Economy, Energy and Tourism of the Republic of Bulgaria on Energy Cooperation	Declarationon Energy Cooperation	Yes	20/03/2012
Memorandum of Understanding	a Memorandum of Understanding between the Ministry of Economy and Energy of the Republic of Bulgaria and the Ministry of Energy and Natural Resources of the Republic of Turkey, concerning ITB project	Yes	28/03/2014
Memorandum of Understanding between the Ministry of Economy, Energy and Tourism of the Republic of Bulgaria and the Ministry of Energy and Natural Resources of the Republic of Turkey on Comprehensive Cooperation in the Field of Energy	Memorandum of Understandingon Comprehensive Cooperation in the Field of Energy	Yes	29/01/2010

Construction of new gas storage facility on the territory of Bulgaria

UGS-N-141	Project	Storage Facility	Non-FID
Update Date	04/05/2016		Non-Advanced
Description	The construction of a new (second) gas storage is envisaged on the territory of Bulgaria. It could be constructed in suitable geological structure –depleted gas fields (onshore or offshore), salt caverns or aquifer. It must however be kept in mind that the construction of a new underground gas storage from the start of the geological and research activities to its commissioning could take not less than 7-8 years.		
Regulatory Decisions and similar material conditions			

Sponsors		General Information		No Barriers Defined		Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD			
		Operator	Bulgartransgaz EAD			
		Host Country	Bulgaria			
		Status	Planned			
		Website				
		Publication Approval Status	Approved			
NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2016-2025 Ten-year network development plan of BTG) section 5.3.2.	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number		Feasibility			Considered Tariff Regime	Not Applicable
		FEED			Applied for Exemption	Not Relevant
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning				

Technical Information (UGS)

Storage Facility	Not defined yet
Storage Facility Type	Aquifer
Multiple-Cycle	No
Working Volume (mcm)	0.00

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	n/a
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	<p>The construction of a new gas storage on the territory of Bulgaria is one of the stages of the concept for expansion of storage capacity in our region (PCI Cluster 6.20 Increase storage capacity in South-East Europe) - the Balkans, East and South-East Europe, aimed to increase storage capacity, ensure gas transmission systems' flexibility, enhance market integration and guarantee the security of supply to the Bulgarian and regional natural gas market. Ensuring additional storage capacity is important in terms of the expected additional natural gas quantities in the context of the gas infrastructure development in the country and the region. The new gas storage would serve not only the national, but also the regional gas market after the planned construction of the new interconnections with the neighbouring countries and will serve as a tool to enhance security of gas supply.</p>
Benefit Description	<p>The construction of a new gas storage on the territory of Bulgaria is one of the stages of the concept for expansion of storage capacity in our region (Cluster 6.20 Increase storage capacity in South-East Europe), aimed to increase storage capacity, ensure gas transmission systems' flexibility, enhance market integration and guarantee the security of supply to the Bulgarian, Greek, Turkish, Macedonian and Romanian as well as the rest of the regional natural gas market - the Balkan peninsula and Central-East Europe and South-East Europe.</p>

Rehabilitation, Modernization and Expansion of the NTS

TRA-N-298	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	A multicomponent project which consists of different actions for rehabilitation, modernization and expansion of the existing gas transmission infrastructure in Bulgaria and includes activities on: CSs modernization, inspections, repair and replacement of pipeline sections, expansion of the existing network and implementation of systems for optimization of the management process of the network technical condition. Taking into account the complex nature of the project, a 3 phases implementation is envisaged: Phase 1: Unifies the actions undertaken in the period 2013-2015, planned to be finalized in a short term and funded with BTG own resources. Phase 2: Includes actions planned to be initiated in 2016. They represent logic continuation of the overall realization of the project following the implementation of Phase 1. Phase 3: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector BG RS	IBS Future Operator	2020	BGn	RS	19.4 GWh/d
	Comment: infrastructure necessary for stage 2 of the Interconnection Bulgaria – Serbia.				
	IBS Future Operator	2020	RS	BGn	19.4 GWh/d
	Comment: infrastructure necessary for stage 2 of the Interconnection Bulgaria – Serbia.				
Kulata (BG) / Sidirokastron (GR)	Bulgartransgaz EAD	2020	BGg/BGT	GR	13.8 GWh/d
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2020	BGg/BGT	TRe	58.1 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility		12/2016	Considered TPA Regime	<i>Not Applicable</i>
		Feasibility		08/2017	Considered Tariff Regime	<i>Not Applicable</i>
NDP Number	<i>Section 5.5.</i>	FEED			Applied for Exemption	<i>Not Relevant</i>
		Market Test		05/2017	Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.8.2.)</i>	Permitting		11/2018		
		Supply Contracts		11/2018	Exemption in entry direction	0.00%
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	0.00%
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction		11/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Gorni Bogrov - Novi Iskar	Conditional infrastructure required after the final investment decision on the realization of IBS Stage 2 related to a capacity increase of 1.8 to 3.2 bcm/y.	700	19	20
	Lozenets-Nedyalsko		1,000	20	
	PF Beglej - VA Dermantsi - VA Batultsi - VA Kalugerovo		700	58	
	Valchi Dol - Preselka		700	23	
		Total		120	20

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The modernization, rehabilitation and expansion of the existing gas transmission infrastructure will guarantee secure and reliable natural gas transmission, enhance the efficiency, reliability and flexibility of the transmission system and provide the required capacities and pressures. The implementation of the activities planned will secure the technical capabilities for transmission of additional natural gas quantities through the territory of the country, coming in through the existing and new entry and exit points, and opportunities for diversification of the directions of transmission depending on the market interest.

Time Schedule

Grant Obtention Date
Delay Since Last TYNDP yes
Delay Explanation Change in the projects scope.

Expected Gas Sourcing

Algeria, Caspian Region, Russia, LNG (), Southern gas corridor gas sources; European gas hubs;

Benefits

Main Driver	Others
Main Driver Explanation	With the implementation of the project improvement of the transmission system’s efficiency, reliability and flexibility will be achieved, ensuring the necessary capacities and pressures including pressure recovery, bottlenecks removal, providing technical capabilities for transmission of additional natural gas quantities through the territory of the country, in relation to the planned new entry and exit points and opportunities for diversification of the transmission directions depending on the market interest and last but not least management optimization of the gas flows and setting the facilities meeting the ecologic requirements. Thus the technical and economic parameters of the existing gas infrastructure which has been in operation for forty years now will be improved.
Benefit Description	The project implementation will contribute to increasing the degree of market integration, creating a competitive gas market, encouraging the trade development, ensuring greater systems’ flexibility, risk management optimization. It is directly related to the planned new interconnections with Greece (IGB), Romania (IBR), Turkey (ITB) and Serbia (IBS) and with the use of the UGS Chiren’s capacity in relation to the project for its expansion, most of them labeled as PCIs, and with the development of the significant cross-border gas projects in the region. Their efficient use is related to the technical capacities of the existing gas transmission infrastructure on the territory of Bulgaria to ensure sufficient capacity and adequate technical conditions for the transport of the planned new natural gas quantities. The project was supported at the highest political level, as well as at regional level – it is a priority CESEC project.

Interconnector Greece-Bulgaria (IGB Project)

TRA-F-378	Project	Pipeline including CS	FID
Update Date	06/05/2016		Advanced
Description	Construction of a bi-directional gas interconnector between the high pressure natural gas systems of Greece and Bulgaria with a technical forward capacity of 3bcm/y, capable to be increased to 5 bcm/y with the installation of a Compressor Station		
Regulatory Decisions and similar material conditions	The current market test is conducted under guidelines and notice approved and issued by the National Regulatory Authorities in accordance to art. 36 of the 2009/73/EC gas directive: RAE decision No.438/23.11.2015 , EWRC decision No.y-2/27.11.2015 : "Updated Guidelines for management and allocation of capacity on the IGB INTERCONNECTOR according to paragraph 6 of article 36 of Directive 2009/73/EC – PHASE I: Invitation of interested parties to express their interest in reserving capacity). RAE decision No.472/1.12.2015, EWRC decision No.y-3/10.12.2015): "EoI Notice"		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Komotini - TAP / IGB	ICGB a.d.	2018	GR/TAP	BG/IGB	90.0 GWh/d
			Comment: Initial capacity of 3 bcm/y		
	ICGB a.d.	2021	GR/TAP	BG/IGB	60.5 GWh/d
			Comment: Added by ENTSOG to match the exit at Stara Zagora		
Komotini (DESFA) - GR / IGB	ICGB a.d.	2018	IB-GRk	BG/IGB	90.0 GWh/d
			Comment: Increment could also be done in correlation with DESFA		
	ICGB a.d.	2021	IB-GRk	BG/IGB	60.5 GWh/d
			Comment: With relevant committmens from the market and necessary upgrades in the TSOs to be interconnected with IGB, the IGB transportation capacity could be increased from up to 3bcm/y to up to 5 bcm/y forward capacity by installing a Compressor Station.		
Stara Zagora - IGB / BG	ICGB a.d.	2018	BG/IGB	BGn	90.0 GWh/d
			Comment: Initial capacity of 3 bcm/y		
	ICGB a.d.	2021	BG/IGB	BGn	60.5 GWh/d
			Comment: With relevant committmens from the market and necessary upgrades in the TSOs to be interconnected with IGB, the IGB transportation capacity could be increased from up to 3bcm/y to up to 5 bcm/y forward capacity by installing a Compressor Station.		

Sponsors		General Information			
BEH EAD	50%	Promoter	ICGB a.d.	Regulatory	1
IGI Poseidon	50%	Operator	ICGB a.d.	Political	1
		Host Country	Bulgaria	Permit Granting	1
		Status	Planned	Market	1
		Website	Project's URL		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Included in both the TYNDPs of Greece and Bulgaria)	Pre-Feasibility		12/2009	Considered TPA Regime	Not Applicable
		Feasibility	05/2009	07/2009	Considered Tariff Regime	Not Applicable
NDP Number	not applicable	FEED	08/2008	03/2016	Applied for Exemption	Yes
		Market Test		09/2016	Exemption Granted	Not Yet
Currently PCI	Yes (6.8.1)	Permitting	08/2010	11/2016		
		Supply Contracts		12/2016	Exemption in entry direction	0.00%
CBCA Decision	No	FID		12/2015	Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction	03/2017	12/2018		
		Commissioning	2018	2021		

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	As regional gas interconnector, IGB will bring benefits on all criteria, an in particular will secure new gas sources and market integration in a SEE region, suffering from a high level of dependency on single source of imports and lack of regional cross-border gas interconnections.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	2 years

Delay Explanation

Extension in permitting procedures for authorization of construction and of regulatory TPA procedure for new gas infrastructure

Expected Gas Sourcing

Algeria, Caspian Region, LNG (QA,US)

Benefits

Main Driver	Market Demand
Main Driver Explanation	Schedule towards commissioning will be affected by binding requests from shippers
Benefit Description	IGB development is not associated with a specific supply source. The pipeline can interact with alternative supply sources - such as, Southern Corridor pipeline gas, LNG through Greece/ Turkey.

Barriers

Barrier Type	Description
Regulatory	The regulatory framework has to provide more streamlined process for decisions on TPA regime and licencing, and ensure a viable rate of financial return from the investment.
Permit Granting	Affected by delays
Political	Government support expected on issues such as streamlined permitting and regulatory decisions on commercial development, availability of financial incentives
Market	Development of the networks of neighboring gas TSOs to be interconnected with IGB should be incentivised to ensure proper technical conditions for expected additional flows. Better integration of the gas transmission networks in the overall region affected by IGB must also be achieved in order to supply gas from IGB to the wider SEE region.

A project for the construction of a gas pipeline BG-RO

TRA-N-379	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	The project is part of the concept for coordinated development of gas transmission networks of Bulgaria, Romania and Hungary (transport corridor Bulgaria-Romania-Hungary-Austria), designed for the bi-lateral natural gas transport between the countries. The project on the territory of Bulgaria includes the construction of a new infrastructure and modernization and expansion of the existing network in order to increase the capacity of interconnectivity of the northern semi-ring of the national gas transmission network of Bulgartransgaz EAD and the gas transmission network of Transgaz S.A., Romania. The implementation of the Bulgarian section together with the existing gas transmission infrastructure is expected to ensure the technical possibilities for supply of natural gas between 3 - 5 bcm/y between the planned entry points on Bulgaria's southern border and between Romania and Hungary, with an opportunity for access to the Central European gas market.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
New IP Bulgaria (BG) / Romania (RO) (3)	Bulgartransgaz EAD	2018	BGn	RO	85.0 GWh/d
	Bulgartransgaz EAD	2018	RO	BGn	85.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility		<i>01/2017</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Section 5 (5.1.3.)</i>	FEED			Applied for Exemption	<i>Not Relevant</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.8.4.)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning	<i>2018</i>	<i>2018</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
A project for the construction of a gas pipeline (pipelines) aiming at exp					
Total					

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	<i>yes</i>
Delay Explanation	<i>The project is under consideration.</i>

Expected Gas Sourcing	
<i>Algeria, Caspian Region, LNG (?), Southern gas corridor gas sources</i>	

Benefits	
Main Driver	Others
Main Driver Explanation	Market integration; Security of supply, Competition.
Benefit Description	<p>The project is part of the concept for coordinated development of the gas transmission networks of Bulgaria, Romania and Hungary (transmission corridor Bulgaria-Romania-Hungary-Austria) designed for a bi-direction natural gas transport. The realization of the Bulgarian section together with the existing gas transmission system is expected to secure the technical possibility for natural gas supplies between 3-5 bcm/y between the planned entry points on the Bulgarian southern border and Romania and Hungary providing an opportunity to access the Central European Gas market. The project wil enhance market integration and competition and gurantee the SoS at regional level.</p>

Looping CS Valchi Dol - Line valve Novi Iskar

TRA-N-592	Project	Pipeline including CS	Non-FID
Update Date	27/05/2016		Non-Advanced
Description	Looping to CS Valchi dol – line valve Novi Iskar: Modernisation of the national gas transmission network norther semi-ring with the construction of 383 km looping with a diameter of Dn 700 from CS Valchi dol to line valve Novi Iskar. The realization of the project will ensure new exit capacity of 4 bcm/y (128,3 GWh/d) in the direction to Romania (through IBR) and Chiren UGS (for transmission during injection and withdrawal amounting to 500 mcm/y). In the context of the European objectives to build an interconnected and single pan-European marker, the realization of the presented projects, forming the gas hub concept, is in line with the projects for the development of the Southern gas corridor and in full compliance with the plans for development of gas infrastructure in Europe to enhance the security of supply and the diversification of natural gas supply sources.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
UGS-N-138	UGS Chiren Expansion
TRA-F-057	Interconnection Bulgaria–Romania
TRA-N-593	Varna-Oryahovo gas pipeline
TRA-N-594	Construction of a Looping CS Provadia – Rupcha village

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Section 5.1. (5.1.1)</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>No</i>
Currently PCI	<i>Yes (6.25.4)</i>	Permitting		<i>05/2017</i>	Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID		<i>06/2022</i>	Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning				

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
<i>Looping CS Valchi Dol - Line valve Novi Iskar</i>		<i>a new looping</i>	<i>700</i>	<i>383</i>	
Total				383	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The concept for the creation of gas hub on the territory of Bulgaria is based on the idea significant quantities of natural gas from different sources to enter into a given real physical point in the region of Varna for their further transport and a venue for gas trade is organized at the same time at this point – a hub where every market participant could trade in gas. The idea of building the gas hub is supported by the strategic geographic location of Bulgaria, the well-developed existing gas infrastructure for transmission and storage and the projects for the construction of interconnections with Romania, Turkey, Greece and Serbia.

Expected Gas Sourcing	
Caspian Region, Russia, LNG (), Southern gas corridor gas sources; European gas hubs; Black sea shelf gas; Domestic production;	

Benefits	
Main Driver	<i>Regulation SoS</i>

Main Driver Explanation

The concept for the creation of gas hub on the territory of Bulgaria is based on the idea significant quantities of natural gas from different sources to enter into a given real physical point in the region of Varna for their further transport and a venue for gas trade is organized at the same time at this point – a hub where every market participant could trade in gas. The idea of building the gas hub is supported by the strategic geographic location of Bulgaria, the well-developed existing gas infrastructure for transmission and storage and the projects for the construction of interconnections with Romania, Turkey, Greece and Serbia.

Benefit Description

The creation of a gas hub aims at building the gas transmission infrastructure required to link the natural gas markets for the EU members states in the region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia and through them to the members states from Central and Western Europe and to the countries from the Energy Community - Serbia, Macedonia, Bosna and Herzegovina and others, thus contributing to achieving the main priorities of the European energy policy. In the context of the European objectives to build an interconnected and single pan-European marker, the realization of the projects, forming the gas hub concept, is in line with the projects for the development of the Southern gas corridor and in full compliance with the plans for development of gas infrastructure in Europe to enhance the security of supply and the diversification of natural gas supply sources.

Varna-Oryahovo gas pipeline

TRA-N-593	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Construction of new infrastructure, consisting of 844 km of gas pipeline with prevailing diameter Dn 1200 from Varna to Oryahovo (starting at a new IP at Varna to a new IP at Bulgaria/Romanian border near Oryahovo city), ensuring an additional capacity of 42,6 bcm/y (1366 GWh/d) and two new compressor stations with a total installed capacity of 265 MW securing the pressure required for transmission.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Oryahovo	Bulgartransgaz EAD	2022	BG/VAR	RO	1,366.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	
		Operator	Bulgartransgaz EAD	
		Host Country	Bulgaria	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Section 5.1. (5.1.1)</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test		<i>05/2017</i>	Exemption Granted	<i>No</i>
Currently PCI	<i>Yes (6.25.4)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction		<i>06/2022</i>		
		Commissioning	<i>2022</i>	<i>2022</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Varna-Oryahovo gas pipeline		a new pipeline incl. 2 CS	1,200	844	265
Total				844	265

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The concept for the creation of gas hub on the territory of Bulgaria is based on the idea significant quantities of natural gas from different sources to enter into a given real physical point in the region of Varna for their further transport and a venue for gas trade is organized at the same time at this point – a hub where every market participant could trade in gas. The idea of building the gas hub is supported by the strategic geographic location of Bulgaria, the well-developed existing gas infrastructure for transmission and storage and the projects for the construction of interconnections with Romania, Turkey, Greece and Serbia.

Expected Gas Sourcing	
Caspian Region, Russia, LNG (), Southern gas corridor gas sources; European gas hubs; Black sea shelf gas; Domestic production;	

Benefits	
Main Driver	Regulation SoS

Main Driver Explanation

The concept for the creation of gas hub on the territory of Bulgaria is based on the idea significant quantities of natural gas from different sources to enter into a given real physical point in the region of Varna for their further transport and a venue for gas trade is organized at the same time at this point – a hub where every market participant could trade in gas. The idea of building the gas hub is supported by the strategic geographic location of Bulgaria, the well-developed existing gas infrastructure for transmission and storage and the projects for the construction of interconnections with Romania, Turkey, Greece and Serbia.

Benefit Description

The creation of a gas hub aims at building the gas transmission infrastructure required to link the natural gas markets for the EU members states in the region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia and through them to the members states from Central and Western Europe and to the countries from the Energy Community - Serbia, Macedonia, Bosna and Herzegovina and others, thus contributing to achieving the main priorities of the European energy policy. In the context of the European objectives to build an interconnected and single pan-European marker, the realization of the projects, forming the gas hub concept, is in line with the projects for the development of the Southern gas corridor and in full compliance with the plans for development of gas infrastructure in Europe to enhance the security of supply and the diversification of natural gas supply sources.

Construction of a Looping CS Provadia – Rupcha village

TRA-N-594	Project	Pipeline including CS	Non-FID
Update Date	27/05/2016		Non-Advanced
Description	Modernisation of the existing network for transit transmission with the construction of 50 km looping with prevailing diameter Dn 1200 from Provadia to the village of Rupcha, replacement of 20 km (2x10 km) 12 of existing gas pipelines with diameter of Dn 1000 from CS Strandja to the border with Turkey and increase in the capacity of CS Strandja with 10 MW. The realization of the project will ensure new capacity of 6 bcm/y (192,5 GWh/d) to Turkey.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2022	BGg/BGT	TRe	192.5 GWh/d
Comment: a new looping					

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Provadia - Rupcha		Promoter	Bulgartransgaz EAD		
Bulgartrasngaz EAD	100%	Operator	Bulgartransgaz EAD		
Strandja-IP BG/TR		Host Country	Bulgaria		
Bulgartrasngaz EAD	100%	Status	Planned		
		Website	<u>Project's URL</u>		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (2016-2025 Ten-year network development plan of BTG)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>Section 5.1. (5.1.1)</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test		<i>05/2017</i>	Exemption Granted	<i>No</i>
Currently PCI	<i>Yes (6.25.4)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction		<i>06/2022</i>		
		Commissioning	<i>2022</i>	<i>2022</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Strandja – a new IP with Turkey.		Replacement of 20 km of gas pipelines (2x10km), DN 1000 in the section CS Strandja – a new IP with Turkey.	1,000	20	
Looping CS Provadia – Rupcha village		new looping and additional power to existing compressor station	1,200	50	10
Total				70	10

PCI Details	
PCI Benefits	
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	<i>Competition, Market Integration, Security of Supply, Sustainability</i>
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
<i>Caspian Region, Russia, LNG (), Southern gas corridor gas sources; European gas hubs; Black sea shelf gas; Domestic production;</i>	

Benefits	
Main Driver	<i>Others</i>

Main Driver Explanation

The concept for the creation of gas hub on the territory of Bulgaria is based on the idea significant quantities of natural gas from different sources to enter into a given real physical point in the region of Varna for their further transport and a venue for gas trade is organized at the same time at this point – a hub where every market participant could trade in gas. The idea of building the gas hub is supported by the strategic geographic location of Bulgaria, the well-developed existing gas infrastructure for transmission and storage and the projects for the construction of interconnections with Romania, Turkey, Greece and Serbia.

Benefit Description

The creation of a gas hub aims at building the gas transmission infrastructure required to link the natural gas markets for the EU members states in the region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia and through them to the members states from Central and Western Europe and to the countries from the Energy Community - Serbia, Macedonia, Bosna and Herzegovina and others, thus contributing to achieving the main priorities of the European energy policy. In the context of the European objectives to build an interconnected and single pan-European marker, the realization of the projects, forming the gas hub concept, is in line with the projects for the development of the Southern gas corridor and in full compliance with the plans for development of gas infrastructure in Europe to enhance the security of supply and the diversification of natural gas supply sources.

Eastring - Bulgaria

TRA-N-654	Project	Pipeline including CS	Non-FID
Update Date	31/05/2016		Non-Advanced
Description	Project Description: Eastring-SK is subproject located in Slovakia/Ukraine and is essential part of the Eastring project, which connects IP Veľké Kapušany at the SK-UA border, with a new entry IP at an external border of the EU on the territory of Bulgaria in the following routing options: – from SK to RO – via UA, (exist. pipeline) – via HU, (new pipeline). – from RO to TR – Option A – new pipeline passing production & storage area and continuing to IP Isaccea and to BG/TR border by utilizing existing RO-BG transit assets – Option B – new pipeline, passing 2 production & storage areas and continuing to an external border of the EU on the territory of Bulgaria. The project would (i) secure supplies in case of RU disruption and therefore it will increase gas SoS in the broader Central-South-East EU region, (ii) allow access to alternative gas sources for Central, Western & Southern Europe and (iii) mean step towards EU single gas market.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Variant : Eastring - BG-2		High capacity scenario, starting at new IP at RO-BG border, passing through BG using new pipeline to a new IP at BG-TR border			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring BG Domestic Point	Bulgartransgaz EAD	2021	BGn	BG/EAR	200.0 GWh/d
	Comment: Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
Eastring Cross-Border BG/EAR <> RO/EAR	Bulgartransgaz EAD	2021	BG/EAR	BGn	200.0 GWh/d
	Comment: Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
Eastring Cross-Border BG/EAR <> RO/EAR	Bulgartransgaz EAD	2021	BG/EAR	RO/EAR	570.0 GWh/d
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2021	RO/EAR	BG/EAR	570.0 GWh/d
Eastring Cross-Border BG/EAR <> RO/EAR	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2025	BG/EAR	RO/EAR	570.0 GWh/d

Eastring Cross-Border BG/EAR <> RO/EAR

Bulgartransgaz EAD	2025	RO/EAR	BG/EAR	570.0 GWh/d
Bulgartransgaz EAD	2021	BG/EAR	TRe	570.0 GWh/d

Comment: Transmission between Eastring - Bulgaria and Turkey via a new IP at BG/TR border,
New capacity increment from 4Q 2023 to the level of 1140 GWh/d.

Bulgartransgaz EAD	2025	BG/EAR	TRe	570.0 GWh/d
Bulgartransgaz EAD	2021	TRr	BG/EAR	570.0 GWh/d

Comment: Transmission between Eastring - Bulgaria and Turkey via a new IP at BG/TR border
New capacity increment from 4Q 2025 to the level of 1140 GWh/d.

Bulgartransgaz EAD	2025	TRr	BG/EAR	570.0 GWh/d
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Capacity Increments Variant(s) For Information Only

Variant : Eastring - BG-4

Low capacity scenario (low in direction N->S), starting at new IP at RO-BG border, passing through BG using new pipeline to new IP at BG-TR border

Point	Operator	Year	From Gas System	To Gas System	Capacity
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Bulgartransgaz EAD	2021	BGn	BG/EAR	200.0 GWh/d
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Comment: Entry/Exit capacity at domestic points may go up to the level of 200GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.

Eastring BG Domestic Point

Bulgartransgaz EAD	2021	BG/EAR	BGn	200.0 GWh/d
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Comment: Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.

Bulgartransgaz EAD	2021	BG/EAR	RO/EAR	342.0 GWh/d
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Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction RO->BG.

Eastring Cross-Border BG/EAR <> RO/EAR

Bulgartransgaz EAD	2021	RO/EAR	BG/EAR	570.0 GWh/d
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Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.

Bulgartransgaz EAD	2025	BG/EAR	RO/EAR	712.0 GWh/d
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Bulgartransgaz EAD	2025	RO/EAR	BG/EAR	570.0 GWh/d
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Bulgartransgaz EAD	2021	BG/EAR	TRe	342.0 GWh/d
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Eastring Cross-Border BG/EAR>TR

Comment: Transmission between Eastring - Bulgaria and Turkey via a new IP at BG/TR border;
New capacity increment from 4Q 2023 to the level of 712 GWh/d. Exit means direction BG->TR.

Eastring Cross-Border BG/EAR>TR	Bulgartransgaz EAD	2025	BG/EAR	TRe	712.0 GWh/d
	Comment: Exit means direction BG->TR.				
Eastring Cross-Border TR>BG/EAR	Bulgartransgaz EAD	2021	TRr	BG/EAR	570.0 GWh/d
	Comment: Transmission between Eastring - Bulgaria and Turkey via a new IP at BG/TR border, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2025	TRr	BG/EAR	570.0 GWh/d
Capacity Increments Variant(s) For Information Only					
Variant : Eastring - BG-1		High capacity scenario, starting at Negru-Voda IP at RO-BG border, passing through BG using upgraded existing pipelines to Malkoclar IP at BG-TR border			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring BG Domestic Point	Bulgartransgaz EAD	2021	BGn	BG/EAR	200.0 GWh/d
	Comment: Connection of Eastring at Negru-Voda IP, with domestic market, Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
	Bulgartransgaz EAD	2021	BG/EAR	BGn	200.0 GWh/d
	Comment: Connection of Eastring at Negru-Voda IP, with domestic market, Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
Malkoclar (TR) > Strandzha (BG)	Bulgartransgaz EAD	2021	TRi	BGg/BGT	570.0 GWh/d
	Comment: Transmission between Bulgaria and Turkey via existing transmission system at IP Malkoclar, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
Negru Voda II, III (RO) / Kardam (BG)	Bulgartransgaz EAD	2025	TRi	BGg/BGT	570.0 GWh/d
	Bulgartransgaz EAD	2021	BGg/BGT	RO/TBP	570.0 GWh/d
	Comment: Transmission via existing IP Negru-Voda with increase of capacity at level of 570 GWh/d, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2021	RO/TBP	BGg/BGT	570.0 GWh/d
	Comment: Transmission via existing IP Negru-Voda with increase of capacity at level of 570 GWh/d, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2025	BGg/BGT	RO/TBP	570.0 GWh/d
	Bulgartransgaz EAD	2025	RO/TBP	BGg/BGT	570.0 GWh/d
	Bulgartransgaz EAD	2021	BGg/BGT	TRe	570.0 GWh/d

Strandzha (BG) / Malkoclar (TR)

Comment: Transmission between Bulgaria and Turkey via existing transmission system at IP Malkoclar, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.

	Bulgartransgaz EAD	2025	BGg/BGT	TRe	570.0 GWh/d
Capacity Increments Variant(s) For Information Only					
Variant : Eastring - BG-3		Low capacity scenario (low in direction N->S), starting at Negru-Voda IP at RO-BG border, passing through BG using upgraded existing pipelines to Malkoclar IP at BG-TR border			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring BG Domestic Point	Bulgartransgaz EAD	2021	BGn	BG/EAR	200.0 GWh/d
	Comment: Connection of Eastring at Negru-Voda IP, with domestic market, Entry/Exit capacity at domestic points may go up to the level of 200GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
	Bulgartransgaz EAD	2021	BG/EAR	BGn	200.0 GWh/d
	Comment: Connection of Eastring at Negru-Voda IP, with domestic market, Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
Malkoclar (TR) > Strandzha (BG)	Bulgartransgaz EAD	2021	TRi	BGg/BGT	570.0 GWh/d
	Comment: Transmission between Eastring - Bulgaria and Turkey via existing IP Malkoclar, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
Negru Voda II, III (RO) / Kardam (BG)	Bulgartransgaz EAD	2025	TRi	BGg/BGT	570.0 GWh/d
	Bulgartransgaz EAD	2021	BGg/BGT	RO/TBP	342.0 GWh/d
	Comment: Transmission via existing IP Negru-Voda with increase of capacity at level of 342 GWh/d, New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction RO->BG.				
	Bulgartransgaz EAD	2021	RO/TBP	BGg/BGT	570.0 GWh/d
	Comment: Transmission via existing IP Negru-Voda with increase of capacity at level of 570 GWh/d, New capacity increment from 4Q 2023 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2025	BGg/BGT	RO/TBP	712.0 GWh/d
Strandzha (BG) / Malkoclar (TR)	Comment: Exit means direction RO->BG.				
	Bulgartransgaz EAD	2025	RO/TBP	BGg/BGT	570.0 GWh/d
	Bulgartransgaz EAD	2021	BGg/BGT	TRe	342.0 GWh/d
Comment: Transmission between Eastring - Bulgaria and Turkey via existing IP Malkoclar, New capacity increment from 4Q 2023 to the level of 712 GWh/d. Exit means direction BG->TR.					

Strandzha (BG) / Malkoclar (TR)		Bulgartransgaz EAD		2025	BGg/BGT	TRe	712.0 GWh/d
Sponsors		General Information			No Barriers Defined		
Bulgartransgaz EAD		100%	Promoter	Bulgartransgaz EAD			
			Operator	Bulgartransgaz EAD			
			Host Country	Bulgaria			
			Status	Planned			
			Website	Project's URL			
			Publication Approval Status	Approved			
NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime		
Part of NDP	Yes (2016-2025 Ten-year network development plan of BTG)	Pre-Feasibility			Considered TPA Regime		
NDP Number		Feasibility	05/2016	04/2017	Considered Tariff Regime		
	Section 5.1(5.1,2)	FEED			Applied for Exemption		
		Market Test			Exemption Granted		
Currently PCI	Yes (6.25.1)	Permitting					
		Supply Contracts			Exemption in entry direction		
CBCA Decision	No	FID			Exemption in exit direction		
Market Survey	Not Relevant (no CBCA decision)	Construction					
		Commissioning	2021	2025			
Pipelines and Compressor Stations							
Eastring - BG-2		High capacity scenario, starting at new IP at RO-BG border, passing through BG using new pipeline to a new IP at BG-TR border					
Pipeline Section		Pipeline Comment			Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-BG-2		Data refers to the first stage - capacity 570 GWh/d, in case of increase of capacity up to 1140 GWh/d in 2025, compressor power at level of 374 MW will be needed			1,400	257	88
Total						257	88

Pipelines and Compressor Stations - Alternative Variant				
Eastring - BG-1		High capacity scenario, starting at Negru-Voda IP at RO-BG border, passing through BG using upgraded existing pipelines to Malkoclar IP at BG-TR border		
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-BG-1	Length of used existing pipeline - 259 km	1,200	0	0
Total			0	0

Pipelines and Compressor Stations - Alternative Variant				
Eastring - BG-3		Low capacity scenario (low in direction N->S), starting at Negru-Voda IP at RO-BG border, passing through BG using upgraded existing pipelines to Malkoclar IP at BG-TR border		
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-BG-3	Length of used existing pipeline - 259 km	1,200	0	0
Total			0	0

Pipelines and Compressor Stations - Alternative Variant				
Eastring - BG-4		Low capacity scenario (low in direction N->S), starting at new IP at RO-BG border, passing through BG using new pipeline to new IP at BG-TR border		
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-BG-4	Data refers to the first stage - capacity 570 GWh/d, in case of increase of capacity up to 1140 GWh/d in 2025, compressor power at level of 374 MW will be needed	1,400	257	90
Total			257	90

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Caspian Region, Norway, Russia, LNG (), Iraq, Iran, Egypt, Israel, Turkmenistan, Kazakhstan, Cyprus, Azerbaijan, Any gas available at Turkish/European HUBs. For dire	

Benefits	
Main Driver	Others
Main Driver Explanation	The project brings significant benefits to the SoS of Europe bringing the increasing new sources of gas supply in South Eastern Europe to the markets of Central and Western Europe, while further enhancing the market integration of the affected countries.
Benefit Description	Comments Benefits: - Physical alternative for providing 100% of all Balkan countries' consumption; - Providing security of supply for 100% of all Balkan countries' consumption; - Additional utilization for CZ, SK, PL, UA, RO, BG transit and storage assets; - Providing Western shippers with possibility to supply Balkan countries and even Turkey from NCG/Gaspool/Baumgarten; - Corridor ready for future gas imports to Europe from alternative sources – AGRI, TANAP, Caspian, Iran, Iraq, Egypt, Israel, Cyprus, Turkey etc.

Bidirectional Austrian Czech Interconnection (BACI)

TRA-N-133	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The Bidirectional Austrian Czech Interconnection (BACI) will be a new infrastructure directly connecting the Austrian and Czech market. It will be connected to the existing Czech transmission system via CS Břeclav (NET4GAS s.r.o.) and to the Austrian transmission system via Baumgarten (GAS CONNECT AUSTRIA GmbH). The project BACI will enable capacity transmission for the first time between these two EU member states and it will facilitate better market integration between Austria and the Czech Republic. The project BACI will also increase the overall flexibility of the Czech, Austrian and also Polish system by diversification of gas supply routes and by connecting UGSs in the Czech Republic and Austria.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Poštorná / Reintal	NET4GAS, s.r.o.	2020	AT	CZ	201.4 GWh/d
			Comment: entry from AT to CZ		
	NET4GAS, s.r.o.	2020	CZ	AT	201.4 GWh/d
			Comment: exit from CZ to AT		

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Austria		Promoter	NET4GAS, s.r.o.		
GAS CONNECT AUSTRIA GmbH	100%	Operator	NET4GAS, s.r.o.		
Czech Republic		Host Country	Czechia		
NET4GAS, s.r.o.	100%	Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-133	Feasibility			Considered Tariff Regime	Regulated
		FEED	03/2012	06/2018	Applied for Exemption	No
Currently PCI	Yes (6.4)	Market Test		06/2015	Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Břeclav (CZ) - Poštorná/Reintal (CZ/AT)		The pipeline length at CZ side is approx. 12 km and at AT side is approx. 49 km; no compressor station is considered at CZ side.	800	12	
Total				12	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	01/10/2014
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	Market Integration
Benefit Description	<p>The BACI will ensure transmission capacity between the two member states and will facilitate better market integration and security of gas supply also for adjacent countries. It contributes to the diversification of gas supply and the increased transportation opportunities to and from other countries in CEE region and access to new and existing trading markets. The BACI will enhance the market development due to access to UGSs both on the Austrian and Czech side and therefore will enhance the market development by providing peak regulation and the flexibility of gas flow. The BACI is a key element in creating a well-functioning internal market in the CEE region due to access to existing and new import infrastructures such as a new LNG terminal in Poland and Croatia, Nord Stream and unconventional gas sources. With the BACI the CEE region would become less vulnerable to a supply disruption through Ukraine and Belarus and therefore the region will have an increase of security of supply.</p>

Connection to Oberkappel

TRA-N-135	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	The Project aims to interconnect the existing transmission systems in the Czech Republic (South Bohemia Region) and Austria (Oberösterreich Region). The realization of this Project will connect the southern branch of the Czech transmission system close to the Záboří town with the Penta-West pipeline as well as with the West Austria Gasleitung (WAG) pipeline close to the IP Oberkappel.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
CZ/AT Border	NET4GAS, s.r.o.	2022	AT	CZ	55.0 GWh/d
	Comment: entry from AT to CZ; capacity planned between 55-111 GWh/d				
	NET4GAS, s.r.o.	2022	CZ	AT	55.0 GWh/d
Comment: exit from CZ to AT; capacity planned between 55-111 GWh/d					

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Pipeline on Austrian territory		Promoter	NET4GAS, s.r.o.		
potential partner in Austria - in discussion	100%	Operator	NET4GAS, s.r.o.		
Pipeline on Czech territory		Host Country	Czechia		
NET4GAS, s.r.o.	100%	Status	Planned		
		Website			
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-135	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2022	2022		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Záboří (CZ) - CZ/AT Border	Technical specifications of the pipe are depending on the final route design (pipeline length at CZ side is approx. 75 km (at AT approx. 35 km); diameter is DN800-1200; compressor power ranges is 2-5 MW; initial capacity ranges is 55-111 GWh/d	800	75	2
Total			75	2

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits

Main Driver	Others
Main Driver Explanation	Market Integration

Benefit Description

The main benefits of the project are: (a) to interconnect CZ and AT grids for further market integration and to provide more capacity between these markets; (b) implementation of the project could remove possible physical congestions on WAG and MEGAL-South; (c) increase of security of supply by enhancing the rate of interconnection of the existing transmission grids and connecting large UGS in Austria and Germany.

Poland-Czech Republic Interconnection (CZ)

TRA-N-136	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	The Project will be a part of the Czech and Polish transmission system and will increase a cross-border capacity between these two countries by establishing a large transportation corridor that will allow a flexible bidirectional transport of gas in the Central Europe in direction North-South. The development of the physical interconnection between Poland and the Czech Republic will contribute to reinforcement of the effective operation of the gas transmission systems, efficient gas exchange between the markets, it will increase security of supply not only in Poland and the Czech Republic, but also in the whole CEE region by enabling the supply link with the European gas market and global LNG market via the Terminal in Świnoujście and furthermore it will increase competition in the region. In the Czech Republic the Project is consisted of the following sub-projects: 1) Poland-Czech Republic Interconnector (STORK II) and 2) Tvrdonice-Libhošť pipeline (including upgrade of CS Břeclav).		
Regulatory Decisions and similar material conditions	CBCA ERO Decision from 17/10/2014, CBCA URE Decision from 24/06/2014.		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Hat'	NET4GAS, s.r.o.	2019	CZ	PL	219.1 GWh/d
			Comment: exit from CZ to PL		
	NET4GAS, s.r.o.	2019	PL	CZ	153.2 GWh/d
			Comment: entry from PL to CZ		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Czech Republic	Promoter	NET4GAS, s.r.o.		
NET4GAS, s.r.o. 100%	Operator	NET4GAS, s.r.o.		
Poland	Host Country	Czechia		
GAZ-SYSTEM S.A. 100%	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-136	Feasibility			Considered Tariff Regime	Regulated
		FEED	06/2014	02/2017	Applied for Exemption	No
Currently PCI	Yes (6.1.1, 6.1.12)	Market Test		05/2012	Exemption Granted	Not Relevant
		Permitting	09/2010	11/2017		
CBCA Decision	Yes (2014-10-17)	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Other(2012-05-17)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2019	2019		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Tvrdonice (CZ) - Hat' (CZ/PL)		The pipeline length at CZ side is approx. 207.4 km (Tvrdonice-Hat'). Upgrade of the existing compressor station Břeclav (CZ) is needed.	1,000	207	24
Total				207	24

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	29/04/2015
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	Regulation SoS, Route Diversification as well as Market Integration
Benefit Description	<p>The Project benefits are: (a) The Project aims to increase the cross-border capacity between Poland and the Czech Republic by establishing a large transportation corridor that will allow for flexible transport of gas in Central Europe in direction North-South; (b) Implementation of the Project will increase the security of gas supply and provide the overall flexibility for the CEE region and diversify the supply routes for the CEE region; (c) Improve European gas grid interconnection; (d) Increase the security and reliability of the cross-border gas transmission between the Czech Republic and Poland (fulfilment of N-1 rule in Poland); (e) Create a robust, well-functioning internal market in the Czech Republic and Poland and promote the competition; (f) Contribute to the creation of the integrated and competitive gas market in CEE region.</p>

Capacity4Gas (C4G) – DE/CZ

TRA-N-752	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	The project Capacity4Gas (C4G) represents 3 specific projects, which deal with increase of cross-market capacities at 3 different borders and were developed in the context of a non-binding market survey performed at the beginning of 2016. The market survey was focused on an assessment of the need for new transmission capacity between the Czech Republic and adjacent market areas. The 3 projects are (1) C4G – DE/CZ, i.e. entry capacity increase between DE (Gaspool) and CZ, (2a) C4G – CZ/SK, i.e. exit capacity increase between CZ and SK, (2b) C4G – CZ/AT, i.e. exit capacity increase between CZ and AT. The projects (2a) and (2b) are alternatives.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	NET4GAS, s.r.o.	2019	DEg	CZ	508.6 GWh/d
				Comment: 1st stage	
HSK-EUGAL (CZ) / Deutschneudorf 2 (DE)	NET4GAS, s.r.o.	2020	DEg	CZ	855.4 GWh/d
				Comment: 2nd stage; the incremental capacity represents approx. entry capacity extension between the market areas of DE (Gaspool) and CZ.	

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Czech Republic		Promoter	NET4GAS, s.r.o.		
NET4GAS, s.r.o.	100%	Operator	NET4GAS, s.r.o.		
Germany		Host Country	Czechia		
GASCADE Gastransport GmbH	100%	Status	Planned		
		Website			
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2017-2026 (new project))	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-752	Feasibility			Considered Tariff Regime	Regulated
		FEED	10/2015	06/2018	Applied for Exemption	No
Currently PCI	No	Market Test		02/2016	Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2019	2020		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	
C4G - DE/CZ	The project comprises several technical measures, which leads factually to entry capacity increase between DE (Gaspool) and CZ. The incremental capacity represents approx. entry capacity extension between the market areas of DE (Gaspool) and CZ.				
Total					

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Capacity4Gas (C4G) – CZ/SK

TRA-N-918	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	The project Capacity4Gas (C4G) represents 3 specific projects, which deal with increase of cross-market capacities at 3 different borders and were developed in the context of a non-binding market survey performed at the beginning of 2016. The market survey was focused on an assessment of the need for new transmission capacity between the Czech Republic and adjacent market areas. The 3 projects are (1) C4G – DE/CZ, i.e. entry capacity increase between DE (Gaspool) and CZ, (2a) C4G – CZ/SK, i.e. exit capacity increase between CZ and SK, (2b) C4G – CZ/AT, i.e. exit capacity increase between CZ and AT. The projects (2a) and (2b) are alternatives.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	NET4GAS, s.r.o.	2019	CZ	SK	650.0 GWh/d
Comment: The incremental capacity represents approx. X capacity extension at CZ/SK border (the project C4G-CZ/SK is alternative to X capacity extension at CZ/AT border,C4G-CZ/AT). Commissioning date is set 2019 for the availability of the capacity 2020					

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Czech Republic		Promoter	NET4GAS, s.r.o.		
NET4GAS, s.r.o.	100%	Operator	NET4GAS, s.r.o.		
Slovakia		Host Country	Czechia		
eustream, a.s.	100%	Status	Planned		
		Website			
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2017-2026 (new project))	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-918	Feasibility			Considered Tariff Regime	Regulated
		FEED	12/2015	06/2018	Applied for Exemption	No
Currently PCI	No	Market Test		02/2016	Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2019	2019		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
C4G – CZ/SK	The incremental capacity represents approx. X capacity extension at CZ/SK border (the project C4G-CZ/SK is alternative to X capacity extension at CZ/AT border,C4G-CZ/AT). Commissioning date is set of 2019 for the availability of the capacity in 2020			
Total				

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Capacity4Gas (C4G) – CZ/AT

TRA-N-919	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The project Capacity4Gas (C4G) represents 3 specific projects, which deal with increase of cross-market capacities at 3 different borders and were developed in the context of a non-binding market survey performed at the beginning of 2016. The market survey was focused on an assessment of the need for new transmission capacity between the Czech Republic and adjacent market areas. The 3 projects are (1) C4G – DE/CZ, i.e. entry capacity increase between DE (Gaspool) and CZ, (2a) C4G – CZ/SK, i.e. exit capacity increase between CZ and SK, (2b) C4G – CZ/AT, i.e. exit capacity increase between CZ and AT. The projects (2a) and (2b) are alternatives.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	NET4GAS, s.r.o.	2020	CZ	AT	1,000.0 GWh/d
Pořtovná / Reintal	Comment: The incremental capacity represents approx. exit capacity extension above planned exit capacity of the project BACI at CZ/AT border (the project C4G – CZ/AT is an alternative to exit capacity extension at CZ/SK border, the project C4G – CZ/SK).				

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Austria		Promoter	NET4GAS, s.r.o.		
GAS CONNECT AUSTRIA GmbH	100%	Operator	NET4GAS, s.r.o.		
Czech Republic		Host Country	Czechia		
NET4GAS, s.r.o.	100%	Status	Planned		
		Website			
		Publication Approval Status	Approved		

Enabled Projects	
Project Code	Project Name
TRA-N-133	Bidirectional Austrian Czech Interconnection (BACI)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NDP 2017-2026 (new project))	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	TRA-N-919	Feasibility			Considered Tariff Regime	Regulated
		FEED	12/2015	06/2018	Applied for Exemption	No
Currently PCI	No	Market Test		02/2016	Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2020	2020		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Břeclav (CZ) - Poštorná/Reintal (CZ/AT)	The incremental capacity represents approx. exit capacity extension above planned exit capacity of the project BACI at CZ/AT border (the project C4G – CZ/AT (BBI) is an alternative to exit capacity extension at CZ/SK border, the project C4G – CZ/SK).	1,400	12	
Total			12	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Reverse Flow TENP Germany

TRA-F-208	Project	Pipeline including CS	FID
Update Date	24/05/2016		Advanced
Description	The project includes reversing of CS Hgelheim as well as the construction of a deodorisation plant near the German-Swiss border, to allow gas coming from south Europe to be transported through the CBP Wallbach. Additionally, an upgrading of the flow patterns of the CS Mittelbrunn and modifications to all necessary installations to ensure the by-directionality of the TENP-pipeline will be necessary. Fluxys TENP & Open Grid Europe will both take part in the commercial operation after completion of the project.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Wallbach	Fluxys TENP GmbH	2018	CH	DEn	240.0 GWh/d
	Comment: Commissioning foreseen 09/2018				
	Fluxys TENP GmbH	2025	CH	DEn	79.2 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Fluxys TENP GmbH	64%	Promoter	Fluxys TENP GmbH & Open Grid Europe GmbH	
Open Grid Europe GmbH	35%	Operator	Fluxys TENP GmbH	
		Host Country	Germany	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan 2015)	Pre-Feasibility		01/2015	Considered TPA Regime	Regulated
NDP Number	305-01	Feasibility	10/2012	01/2015	Considered Tariff Regime	Regulated
		FEED	07/2016	12/2016	Applied for Exemption	No
Currently PCI	Yes (5.10)	Market Test		05/2014	Exemption Granted	Not Relevant
		Permitting	12/2016	01/2018		
CBCA Decision	Yes (2014-05-12)	Supply Contracts		04/2018	Exemption in entry direction	0.00%
Market Survey	Other(2014-05-30)	FID		01/2015	Exemption in exit direction	0.00%
		Construction	06/2017	06/2018		
		Commissioning	2018	2025		

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	23/11/2015
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Algeria, Caspian Region, Libya, Russia, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	Contribution to the covering of the H-Gas Demand for Germany and to the switch from L- to H-gas.

MONACO section phase I (Burghausen-Finsing)

TRA-F-241	Project	Pipeline including CS	FID
Update Date	15/06/2016		Advanced
Description	MONACO 1 is a new pipeline project with a length of 86,7 km and a daily capacity of 52.8 MCM/day, including two steering and metering stations. The pipeline has a nominal diameter of DN 1200 and a nominal pressure of MOP 100. Off-take points are located in Haiming and Finsing.		
Regulatory Decisions and similar material conditions	- NRA: Inclusion in NDP 2012, NDP 2013, NDP 2014, NDP 2015, NDP 2016 - NRA: CBCA decision, 10.4.2014, Az. BK4-13-1699 - NRA: Regulatory decision about investment costs on the basis of planned costs ("Investitionsmaßnahmengenehmigung gem. § 23 ARegV), 30.5.2014, Az. BK4-13-288 - Administration of Upper Bavaria: Building permission granted 15.02.2016, http://www.regierung.oberbayern.bayern.de/imperia/md/content/regob/internet/dokumente/bereich2/luftamt/pfb_monaco_1.pdf		

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Haidach (AT) / Haidach USP (DE)	bayernets GmbH	2017	STcAT	DEn	293.8 GWh/d
	bayernets GmbH	2017	DEn	STcAT	267.1 GWh/d
Haiming 2 7F	bayernets GmbH	2017	STcAT	DEn	241.2 GWh/d
	bayernets GmbH	2017	DEn	STcAT	160.8 GWh/d
Haiming 2-RAGES/bn	bayernets GmbH	2017	STcAT	DEn	16.3 GWh/d
	bayernets GmbH	2017	DEn	STcAT	16.3 GWh/d
Überackern ABG (AT) / Überackern (DE)	bayernets GmbH	2017	AT	DEn	36.3 GWh/d
Überackern SUDAL (AT) / Überackern 2 (DE)	bayernets GmbH	2017	DEn	AT	143.4 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
bayernets GmbH	100%	Promoter	bayernets GmbH	
		Operator	bayernets GmbH	
		Host Country	Germany	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan (NEP))	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	030-02	Feasibility	03/2009	05/2009	Considered Tariff Regime	Regulated
		FEED	08/2009	12/2009	Applied for Exemption	No
Currently PCI	No	Market Test		10/2011	Exemption Granted	No
		Permitting	11/2013	02/2016		
CBCA Decision	Yes (2014-04-10)	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	0	FID		04/2015	Exemption in exit direction	0.00%
		Construction	10/2016	12/2017		
		Commissioning	2017	2017		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Burghausen-Finsing			1,200	87	
Total				87	

Time Schedule		
Grant Obtention Date		
Delay Since Last TYNDP	Non existent	
Delay Explanation	Non existent	

Expected Gas Sourcing	
Caspian Region, Russia, Gas storage 7Fields and gas storage Haidach	

Comments about the Third-Party Access Regime	
Not yet submitted	

Benefits	
Main Driver	Others
Main Driver Explanation	SoS and market demand to the same extent.

Benefit Description

The purpose of the pipeline is to link areas of high demand in Germany and further westwards with liquid gas sources in and through Austria (IP Überackern/Burghausen, Penta-West, WAG, MEGAL, Hub CEGH Baumgarten. It increases the flow capacity between NCG and the Austrian market area and therefore contributes to market integration and more competition by diversifying sources and routes. Moreover the pipeline will provide better access of large storages located in Austria (Haidach and 7Fields) to Germany. This connection will contribute to structure and substitute gas supply resulting from the decreasing L-Gas supply in Germany. The project therefore also contributes to Security of Supply. Finally the project serves capacity demands of existing and planned gas fired power plants in Bavaria functioning as a base load capable back up for renewables contributing to the goal of Sustainability in Europe.

NOWAL - Nord West Anbindungsleitung

TRA-F-291	Project	Pipeline including CS	FID
Update Date	10/05/2016		Advanced
Description	It is necessary to increase the capacity of the pipeline between the OGE Infrastructure (market area of NCG) and GASCADE (Market area of GASPOOL).This connection will increase the capacity by 6 GW to ensure the supply in south-west Germany.		
Regulatory Decisions and similar material conditions	Part of the Nation Development Plan 2016: 083-07, 409-01, 410-01, 411-01		

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Drohne GASCADE / OGE	GASCADE Gastransport GmbH	2017	DEg	DEn	216.0 GWh/d
			Comment: Level 1 - Exit Drohne		
	GASCADE Gastransport GmbH	2020	DEg	DEn	124.8 GWh/d
			Comment: Level 2 includes Level 1 in total 340.8 GWh/d -Exit Drohne		
	GASCADE Gastransport GmbH	2025	DEg	DEn	194.4 GWh/d
			Comment: Level 3 includes Level 1+2 in total 535.2 GWh/d -Exit Drohne		

Sponsors		General Information		No Barriers Defined	Barriers (Count)	
GASCADE Gastransport GmbH		100%	Promoter	GASCADE Gastransport GmbH		
			Operator	GASCADE Gastransport GmbH		
			Host Country	Germany		
			Status	Planned		
			Website			
			Publication Approval Status	Approved		

Enabled Projects

Project Code Project Name
TRA-F-768 Extension Receiving Terminal Greifswald

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (NOWAL)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	083-07, 409-01, ...	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting	01/2016	08/2016		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		03/2016	Exemption in exit direction	0.00%
		Construction	01/2017	01/2018		
		Commissioning	2017	2025		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Rehden-Drohne		1,000	26	16
Total			26	16

Expected Gas Sourcing

VHP GASPOOL

Benefits

Main Driver	Market Demand
Main Driver Explanation	Part of the Nation Development Plan 2016: 083-07, 409-01, 410-01, 411-01
Benefit Description	Part of the Nation Development Plan 2016: 083-07, 409-01, 410-01, 411-01

ZEELINK

TRA-N-329	Project	Pipeline including CS	Non-FID
Update Date	11/05/2016		Non-Advanced
Description	Pipeline and compressor station project to support the changeover from low-calorific gas to high-calorific gas in Germany		
Regulatory Decisions and similar material conditions	The project is part of the final German NDP 2015 and the draft German NDP 2016		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
CS ZEELINK	Promoter	Open Grid Europe GmbH		
Open Grid Europe GmbH, Germany	75%	Operator	Open Grid Europe GmbH	
Thyssengas GmbH, Germany	25%	Host Country	Germany	
		Status	Planned	
ZEELINK 1	Website	Project's URL		
Open Grid Europe GmbH, Germany	75%	Publication Approval Status	Approved	
Thyssengas GmbH, Germany	25%			
ZEELINK 2				
Open Grid Europe GmbH, Germany	75%			
Thyssengas GmbH, Germany	25%			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Netzentwicklungsplan 2015 (German NDP 2015))</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>204-02a, 205-02a, ..</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting				
		Supply Contracts				
CBCA Decision	<i>No</i>	FID		<i>03/2020</i>	Exemption in entry direction	<i>0.00%</i>
					Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction	<i>04/2020</i>	<i>03/2021</i>		
		Commissioning	<i>2021</i>	<i>2021</i>		

Expected Gas Sourcing

Norway, LNG (BE,FR,NL,UK)

Benefits

Main Driver	Market Demand
Main Driver Explanation	Changeover of regions currently supplied by low-calorific gas to high-calorific gas due to declining availability of low-calorific gas
Benefit Description	Availability of low-calorific gas is declining in Germany. The regions currently supplied by low-calorific gas will need to switch supply from low-calorific gas to high-calorific gas. The project is needed to transport high-calorific gas to the regions currently supplied by low-calorific gas.

CS Rothenstadt

TRA-F-337	Project	Pipeline including CS	FID
Update Date	26/04/2016		Advanced
Description	New compressor station at existing site on the MEGAL system. Part of measures that increase possible gas flows from Open Grid Europe to bayernets and allow gas flows from and to storages 7fields and Haidach in Austria.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
GRTgaz Deutschland GmbH	55%	Promoter	GRTgaz Deutschland GmbH	
Open Grid Europe GmbH	44%	Operator	GRTgaz Deutschland GmbH	
		Host Country	Germany	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan Gas 2015)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	026-06	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	Not Relevant
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2018	2018		

Pipelines and Compressor Stations - Alternative Variant

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
MEGAL near Weiden in der Oberpfalz	New compressor station at existing site. Commissioning date 2018/2019.	0	0	45
Total			0	45

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

VDS Wertingen

TRA-N-340	Project	Pipeline including CS	Non-FID
Update Date	13/05/2016		Non-Advanced
Description	VDS Wertingen is a new compressor station project including 3 compressor units of 11 MW each. One of the compressor units will serve as a redundancy unit.		
Regulatory Decisions and similar material conditions	- NRA: Inclusion in NDP 2012, NDP 2013, NDP 2014, NDP 2015, NDP 2016 (until 2015 named VDS Amerdingen or VDS Amerdingen/Wertingen) - NRA: Regulatory decision about investment costs on the basis of planned costs ("Investitionsmaßnahmengenehmigung gem. § 23 ARegV), 18.3.2016, Az. BK4-14-024		

Sponsors		General Information		No Barriers Defined	Barriers (Count)
bayernets GmbH	55%	Promoter	bayernets GmbH		
OGE	45%	Operator	bayernets GmbH		
		Host Country	Germany		
		Status	Planned		
		Website			
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-F-241	MONACO section phase I (Burghausen-Finsing)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (<i>Netzentwicklungsplan</i>)	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	036-04	Feasibility	07/2015	11/2015	Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	No	Market Test			Exemption Granted	<i>Not Relevant</i>
		Permitting	04/2016	04/2017		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction	04/2017	12/2019		
		Commissioning	2019	2019		

Benefits

Main Driver	Others
Main Driver Explanation	<u>The project results from the modelling of National Development Plan (so called 'Netzentwicklungsplan' NEP) 2012, 2013, 2014, 2015 and 2016 in Germany.</u>
Benefit Description	

Pipeline project "Schwandorf-Finsing"

TRA-F-343	Project	Pipeline including CS	FID
Update Date	15/06/2016		Advanced
Description	Construction of a new pipeline in Bavaria from Schwandorf to Finsing (loop) according to the German Network Development Plan		
Regulatory Decisions and similar material conditions	The project is part of the final German NDP 2015 and the draft German NDP 2016		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Pipeline "Forchheim-Finsing"	Promoter	Open Grid Europe GmbH		
Open Grid Europe GmbH100%	Operator	Open Grid Europe GmbH		
Pipeline "Schwandorf-Forchheim"	Host Country	Germany		
Open Grid Europe GmbH100%	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan 2015 (German NDP 2015))	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	024-04a and 028-04a	FEED			Applied for Exemption	No
		Market Test			Exemption Granted	Not Relevant
Currently PCI	No	Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID		01/2016	Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction	03/2017	12/2018		
		Commissioning	2018	2018		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Pipeline "Forchheim-Finsing"		1,000	79	
Pipeline "Schwandorf-Forchheim"		1,000	62	
Total			141	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Increase of the transmission capacity from the Open Grid Europe grid to the bayernets grid and the underground gas storages 7Fields and Haidach in Austria

Compressor station "Herbstein"

TRA-F-344	Project	Pipeline including CS	FID
Update Date	15/06/2016		Advanced
Description	Construction of the new compressor station Herbstein in Hesse according to the German Network Development Plan		
Regulatory Decisions and similar material conditions	The project is part of the final German NDP 2015 and the draft German NDP 2016		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
A	Promoter	Open Grid Europe GmbH		
SNTGN Transgaz S.A. 100%	Operator	Open Grid Europe GmbH		
Compressor station "Herbstein"	Host Country	Germany		
Open Grid Europe GmbH, Germany 100%	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan 2015 (German NDP 2015))	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	049-07	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2016	Exemption in exit direction	0.00%
		Construction	03/2016	12/2018		
		Commissioning	2018	2018		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Compressor station "Herbstein"				39

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Increase of the transmission capacity from the Open Grid Europe grid to the bayernets grid, the terranets bw grid, the Thyssengas grid and the underground gas storages Etzel in Germany as well as the underground gas storages 7Fields and Haidach in Austria. Support of the transmission of high-calorific gas to regions which are currently supplied by declining low-calorific gas. Increase of the transmission capacity from the Open Grid Europe grid to Denmark at the cross-border point Ellund.

Compressor station "Werne"

TRA-F-345	Project	Pipeline including CS	FID
Update Date	15/06/2016		Advanced
Description	Construction of a new compressor station at Werne in North Rhine-Westphalia according to the German Network Development Plan		
Regulatory Decisions and similar material conditions	The project is part of the final German NDP 2015 and the draft German NDP 2016		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Open Grid Europe GmbH, Germany	100%	Promoter	Open Grid Europe GmbH	
		Operator	Open Grid Europe GmbH	
		Host Country	Germany	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan 2015 (German NDP 2015))	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	040-05	FEED			Applied for Exemption	No
		Market Test			Exemption Granted	Not Relevant
Currently PCI	No	Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID		01/2016	Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction	03/2016	12/2018		
		Commissioning	2018	2018		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Compressor station "Werne"				49
Total				49

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Increase of the transmission capacity from the Open Grid Europe grid to the bayernets grid, the terranets bw grid, the Thyssengas grid and the underground gas storages Etzel in Germany as well as the underground gas storages 7Fields and Haidach in Austria. Support of the transmission of high-calorific gas to regions which are currently supplied by declining low-calorific gas.

West to East operation of the IP Waidhaus

TRA-F-753	Project	Pipeline including CS	FID
Update Date	26/04/2016		Advanced
Description	Extension of the existing compressor and metering station at the interconnection point Waidhaus allowing gas flows from Germany to the Czech Republic (max. 2,000,000 Nm3/h). Interruptible capacity will be created.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	GRTgaz Deutschland GmbH		
	Operator	GRTgaz Deutschland GmbH		
	Host Country	Germany		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan Gas 2015)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	304-01	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2018	2018		

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CS Rimpär

TRA-N-755	Project	Pipeline including CS	Non-FID
Update Date	27/04/2016		Non-Advanced
Description	New construction of a compressor station at the existing site of Rimpär on the MEGAL gas transport system allowing the necessary H-gas flows to the North of Germany replacing disappearing L-gas quantities.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
GRTgaz Deutschland GmbH	55%	Promoter	GRTgaz Deutschland GmbH	
Open Grid Europe GmbH	44%	Operator	GRTgaz Deutschland GmbH	
		Host Country	Germany	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Netzentwicklungsplan Gas 2016)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	312-01	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	Not Relevant
Currently PCI	No	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2023	2023		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Rimpär / MEGAL				39
Total				39

Benefits

Main Driver	Others
Main Driver Explanation	Replacement of disappearing L-gas quantities by H-gas
Benefit Description	

EUGAL - Europaeische Gasanbindungsleitung (European Gaslink)

TRA-N-763	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Advanced
Description	It connects NOS2 with PL, NL, CZ, GP and NCG and increases the security of supply based on the market survey MORE CAPACITY (www.more-capacity.eu/en)		
Regulatory Decisions and similar material conditions	on basis of the unit investment costs according to ACER and when not available internal cost estimations - these are preliminary costs representing the current cost esimations (04/2016) -(http://www.acer.europa.eu/official_documents/acts_of_the_agency/publication/uic%20report%20-%20gas%20infrastructure.pdf).		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
HSK-EUGAL (CZ) / Deutschneudorf 2 (DE)	GASCADE Gastransport GmbH	2019	DEg	CZ	661.2 GWh/d
	Comment: Level 1 - Exit Deutschneudorf2				
	GASCADE Gastransport GmbH	2020	DEg	CZ	535.2 GWh/d
	Comment: Level 2 includes Level 1 in total 1,196.4 GWh/d - Exit Deutschneudorf2				
	GASCADE Gastransport GmbH	2021	DEg	CZ	214.8 GWh/d
	Comment: Level 3 includes Level 1+2 in total 1,411.2 GWh/d - Exit Deutschneudorf2				
Mallnow	GASCADE Gastransport GmbH	2019	DEg	PL/YAM	138.6 GWh/d
	Comment: Level 1 - Exit Mallnow				
	GASCADE Gastransport GmbH	2020	DEg	PL/YAM	112.1 GWh/d
	Comment: Level 2 includes Level 1 in total 250.7 GWh/d - Exit Mallnow				
Vierow	GASCADE Gastransport GmbH	2021	DEg	PL/YAM	85.8 GWh/d
	Comment: Level 3 includes Level 1+2 in total 336.5 GWh/d - Exit Mallnow				
	GASCADE Gastransport GmbH	2019	RU/NO2	DEg	946.8 GWh/d
	Comment: Level 1 - Entry Vierow				
Vierow	GASCADE Gastransport GmbH	2020	RU/NO2	DEg	612.0 GWh/d
	Comment: Level 2 includes Level 1 in total 1,558.8 GWh/d - Entry Vierow				
	GASCADE Gastransport GmbH	2021	RU/NO2	DEg	343.1 GWh/d
Comment: Level 3 includes Level 1+2 in total 1,901.9 GWh/d - Entry Vierow					

Sponsors		General Information			No Barriers Defined	
		Promoter	GASCADE Gastransport GmbH		Barriers (Count)	
		Operator	GASCADE Gastransport GmbH			
		Host Country	Germany			
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			
NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	No (Capacities for this project will ultimately be allocated by auctioning in 2017. At the moment, it is assumed that these auction results will be included as an identified capacity requirement in the process for the NDP 2018. - Parts are included (Vierow 412-01) (www.more-capacity.eu/en))	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
		FEED	01/2016	01/2021	Applied for Exemption	No
		Market Test			Exemption Granted	Not Relevant
		Permitting	05/2016	06/2018		
		Supply Contracts			Exemption in entry direction	0.00%
		FID			Exemption in exit direction	0.00%
NDP Number		Construction	12/2020			
		Commissioning	2019	2021		
Currently PCI	No					
CBCA Decision	No					
Market Survey	Not Relevant (no CBCA decision)					

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
EUGAL			1,400	484	75
Total				484	75

Expected Gas Sourcing

Russia, VHP GASPOOL

Benefits

Main Driver	Market Demand
Main Driver Explanation	<p>This project EUGAL (www.eugal.de) is based on the market survey MORE CAPACITY (www.more-capacity.eu/en) to determine the need for new transport capacities for H gas at the boundaries of the GASPOOL market area. This project connects several existing and new interconnection points.</p>
Benefit Description	<p>Europe needs additional capacities for transporting natural gas. A Europe-wide survey in the summer of 2015 identified that there is a long-term need for the European gas pipeline link EUGAL. In particular the Czech Republic and Poland, but Austria as well, will need more natural gas in future from Western European pipeline systems. The demand for natural gas that is to be supplied from east to west will increase sharply by 2040. We need new transport routes and higher capacities to satisfy the wishes of consumers in these countries. The EUGAL is therefore an economically sensible outcome of various scenarios for expanding the German and European natural gas pipeline network. (https://www.eugal.de/en/eugal-pipeline/why-a-new-pipeline/)</p>

Extension Receiving Terminal Greifswald

TRA-F-768	Project	Pipeline including CS	FID
Update Date	24/05/2016		Advanced
Description	Project increases the existing capacity of the Receiving Terminal Greifswald. Common project of Fluxys Deutschland GmbH, Gasunie Deutschland GmbH & Co. KG, NEL Gastransport GmbH, Lubmin-Brandov Gastransport GmbH and OPAL Gastransport GmbH & Co. KG		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Greifswald	NEL Gastransport GmbH	2017	Y-RUg/NOS	DEg	90.6 GWh/d
				Comment: Level 1 - Entry Greifswald	
	NEL Gastransport GmbH	2019	Y-RUg/NOS	DEg	65.4 GWh/d
				Comment: Level 2 includes Level 1 in total 156 GWh/d - Entry Greifswald	

Sponsors		General Information		No Barriers Defined	Barriers (Count)
NEL Gastransport GmbH	51%	Promoter	NEL Gastransport, Fluxys Deutschland, Gasunie Deutschland Transport Services GmbH		
Gasunie Deutschland GmbH & Co. KG	25%				
Fluxys Deutschland GmbH	23%	Operator	NEL Gastransport GmbH		
		Host Country	Germany		
		Status	Planned		
		Website			
		Publication Approval Status	Approved		

Enabled Projects

Project Code Project Name
TRA-F-291 NOWAL - Nord West Anbindungsleitung

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (<i>Entwurf Netzentwicklungsplan 2016</i>)	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	408-01	Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	No	Market Test			Exemption Granted	<i>Not Relevant</i>
		Permitting	01/2016	12/2016		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID		03/2016	Exemption in exit direction	0.00%
		Construction	01/2017	01/2018		
		Commissioning	2017	2019		

Expected Gas Sourcing

Russia

Benefits

Main Driver	Market Demand
Main Driver Explanation	See National Development Plan of Germany 2016 - project number: 408-01 Erweiterung Anlandestation Lubmin European gas demand, e.g. due to necessity of changeover from low-calorific to high-calorific gas.
Benefit Description	See National Development Plan of Germany 2016 - project number: 408-01 Erweiterung Anlandestation Lubmin This project would be required to cover the growing European demand for high-calorific gas, caused among others by necessity of changeover from low-calorific gas to high-calorific gas.

Expansion NEL

TRA-N-807	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	New Compressor Station in the south of Hamburg for the evacuation of gas volumes from Russia via Nord Stream to Germany (GASPOOL). The project does not create increases in capacity on an IP by itself, but is a prerequisite for the transport of new capacities into the market area regarding a planned project within the scope of "more capacity", which includes e.g. the extension of the Receiving Terminal Greifswald. Common project of Gasunie Deutschland Transport Services GmbH, Fluxys Deutschland GmbH and NEL Gastransport GmbH.		
Regulatory Decisions and similar material conditions			

Sponsors		General Information	
NEL Gastransport GmbH	51%	Promoter	Gasunie Deutschland Transportservices GmbH NEL Gastransport, Fluxys Deutschland
Gasunie Deutschland Transport Services GmbH	25%		
Fluxys Deutschland GmbH	23%	Operator	Gasunie Deutschland Transport Services GmbH
		Host Country	Germany
		Status	Planned
		Website	Project's URL
		Publication Approval Status	Approved

No Barriers Defined

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Draft Netzentwicklungsplan Gas 2016)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	110-08	FEED	03/2016		Applied for Exemption	No
		Market Test			Exemption Granted	Not Relevant
Currently PCI	No	Permitting	03/2016			
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID			Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)					
		Construction				
		Commissioning	2020	2020		

Expected Gas Sourcing

Russia

Benefits

Main Driver	Market Demand
Main Driver Explanation	European gas demand, e.g. due to necessity of changeover from low-calorific to high-calorific gas.
Benefit Description	This project would be required for compression and further transport of additional gas from Russia via Nord Stream pipelines to Germany. In combination with other infrastructure projects (e.g. Extension Receiving Terminal Greifswald) the project is required to cover the growing German demand for high-calorific gas, caused among others by necessity of changeover from low-calorific gas to high-calorific gas.

Transport of gas volumes to the Netherlands

TRA-N-808	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	Evacuation of gas volumes from Russia via Nord Stream and Germany to the Netherlands, based on a market survey (more capacity).		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2021	DEg	IB-NLg	223.2 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	Gasunie Deutschland Transport Services GmbH		
	Operator	Gasunie Deutschland Transport Services GmbH		
	Host Country	Germany		
	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (Decision of BNetzA (Tenor 3d) regarding the NEP 2016: The H-Gas balance related to variant Q2 of the NEP 2016 shows an add. demand of 42% in the region "North-East". Any other add. demands which are not covered by binding bookings are not taken into account on IPs (neither entry nor exit).)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
		Market Test		<i>10/2015</i>	Exemption Granted	<i>Not Relevant</i>
		Permitting	<i>03/2016</i>			
NDP Number		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
		FID			Exemption in exit direction	<i>0.00%</i>
Currently PCI	<i>No</i>	Construction				
		Commissioning	<i>2021</i>	<i>2021</i>		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Expected Gas Sourcing

Russia

Benefits

Main Driver	<u>Market Demand</u>
Main Driver Explanation	<u>http://www.more-capacity.eu</u>
Benefit Description	

Additional East-West transport NL

TRA-N-809	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Additional East-West transport of gas volumes to the Netherlands. The project has the status of a project idea and is until now not considered in the NDP.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2023	DEg	IB-NLg	276.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	Gasunie Deutschland Transport Services GmbH		
	Operator	Gasunie Deutschland Transport Services GmbH		
	Host Country	Germany		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (Project idea. The inclusion in the NDP is planned at a later time.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number		FEED	<i>01/2018</i>		Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting	<i>01/2018</i>		Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning	<i>2023</i>	<i>2023</i>		

Expected Gas Sourcing

Russia

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Upgrade IP Deutschneudorf and Lasow

TRA-N-814	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	The gas pressure reduction and metering stations at Groß Körös and Kienbaum will be upgraded to Vn 2 Mio. m³/h and Vn 1,7 m³/h respectively. The transmission pipeline Sayda - Deutschneudorf will be upgraded to DN 800, DP84. The compressor station Sayda will be upgraded to an inlet pressure pmin = 41 bar, outlet pressure pmax = 84 bar and throughput Vn 700 Tm³/h. The pressure transfer to/from FGL 218 (DN 600, DP 84) will be upgraded to MOPu 84 bar and MOPd 55 bar. These investments will create additional exit capacity to Czechia (at Deutschneudorf IP) and Poland (Lasow IP) for transit/transmission of natural gas arriving in Germany via Nord Stream 2.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
GCP GAZ-SYSTEM/ONTRAS	ONTRAS Gastransport GmbH	2016	PL	DEg	26.6 GWh/d
	ONTRAS Gastransport GmbH	2019	DEg	PL	14.4 GWh/d
	Comment: Enabled by EUGAL project submitted by GASCADE				
	ONTRAS Gastransport GmbH	2019	PL	DEg	45.4 GWh/d
Hora Svaté Kateřiny (CZ) / Deutschneudorf (Sayda) (DE)	Comment: Entry pressure of 63 bar required by GAZ-System				
	ONTRAS Gastransport GmbH	2019	DEg	CZ	55.2 GWh/d
Comment: Enabled by EUGAL project submitted by GASCADE					

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Compressor station Sayda		Promoter	ONTRAS Gastransport GmbH		
ONTRAS Gastransport GmbH	100%				
Pressure reduction and metering stations at Groß Körös and Kienbaum		Operator	ONTRAS Gastransport GmbH		
ONTRAS Gastransport GmbH	100%	Host Country	Germany		
		Status	Planned		
Transmission pipeline Sayda - Deutschneudorf		Website			
ONTRAS Gastransport GmbH	100%	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (The project is not yet part of the recent German NDP 2016. The German NRA by decree of 11th December 2015 had ordered the German TSOs to only modell a 42 % coverage of the expected additional national demand from North East in the scenario Q2 including Nord Stream 2, but no further flows at IPs.)</i>	Pre-Feasibility		03/2016	Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
		FEED	03/2016		Applied for Exemption	Not Relevant
		Market Test		10/2015	Exemption Granted	No
		Permitting				
NDP Number		Supply Contracts			Exemption in entry direction	0.00%
		FID			Exemption in exit direction	0.00%
Currently PCI	No	Construction				
		Commissioning	2016	2019		
CBCA Decision	No					
Market Survey	Not Relevant (no CBCA decision)					

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Sayda - Deutschneudorf			800	14	14
Total				14	14

Expected Gas Sourcing	
Russia	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	see Market Survey "More Capacity" (see https://www.more-capacity.eu)
Benefit Description	

Compressor station "Legden"

TRA-N-825	Project	Pipeline including CS	Non-FID
Update Date	11/05/2016		Non-Advanced
Description	Construction of a new compressor station at Legden in North Rhine-Westphalia according to the German Network Development Plan		
Regulatory Decisions and similar material conditions	Draft German NDP 2016		

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Open Grid Europe GmbH	75%	Promoter	Open Grid Europe GmbH	
Thyssengas GmbH	25%	Operator	Open Grid Europe GmbH	
		Host Country	Germany	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Entwurf Netzentwicklungsplan Gas 2016)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	416-01	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
		Market Test			Exemption Granted	No
Currently PCI	No	Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID		12/2022	Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction	01/2023	12/2023		
		Commissioning	2023	2023		

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Additional import requirement in line with the NDP 2016 gas source distribution Q.2.

Nord Stream 2

TRA-F-937	Project	Pipeline including CS	FID
Update Date	12/07/2016		Advanced
Description	Transport of natural gas from Russia through the Baltic Sea to the EU network on the German shore. Nord Stream 2 will enhance the EU's security of supply of natural gas, strengthen the internal market and support EU climate goals.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Vierow	Nord Stream 2 AG	2019	RU/NO2	DEg	1,900.0 GWh/d
Comment: expected initial maximum flow-rate					

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	Nord Stream 2 AG		
	Operator	Nord Stream 2 AG		
	Host Country	Germany		
	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (Nord Stream 2 is to be included in the German Net Development Plan 2016 (currently under discussion).)</i>	Pre-Feasibility			Considered TPA Regime	<i>Not Applicable</i>
		Feasibility	01/2012	10/2012	Considered Tariff Regime	<i>Not Applicable</i>
NDP Number		FEED			Applied for Exemption	<i>Not Relevant</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting	04/2013	01/2018		
		Supply Contracts		12/2016	Exemption in entry direction	0.00%
CBCA Decision	<i>No</i>	FID		09/2015	Exemption in exit direction	0.00%
		Construction	02/2018	10/2019		
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Commissioning	2019	2019		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Nord Stream 2			1,153	1,200	
Total				1,200	

Expected Gas Sourcing	
Russia	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Oude(NL)-Bunde(DE) GTG H-Gas

TRA-N-949	Project	Pipeline including CS	Non-FID
Update Date	26/05/2016		Non-Advanced
Description	This projects creates a new interconnection point for H-Gas between the Netherlands and Germany. The new H-Gas-capacities helps for the L-H-Gas conversion in Germany		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GTG Nord)	Gastransport Nord GmbH	2020	IB-NLg	DEg	48.0 GWh/d
	Gastransport Nord GmbH	2022	IB-NLg	DEg	60.0 GWh/d
	Gastransport Nord GmbH	2024	IB-NLg	DEg	72.0 GWh/d
	Gastransport Nord GmbH	2026	IB-NLg	DEg	96.0 GWh/d
	Gastransport Nord GmbH	2027	IB-NLg	DEg	120.0 GWh/d

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	Gastransport Nord GmbH	
	Operator	Gastransport Nord GmbH	
	Host Country	Germany	
	Status	Planned	
	Website		
	Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (<i>Netzentwicklungsplan Entwurf 2016</i>)	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	432-01	Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>Yes</i>
Currently PCI	No	Market Test			Exemption Granted	<i>Yes</i>
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
		Commissioning	2020	2027		

Benefits	
Main Driver	<i>Market Demand</i>
Main Driver Explanation	
Benefit Description	

Embedding CS Folmhusen in H-Gas

TRA-N-951	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Embedding of the Compressor Station Folmhusen in H-Gas. This project is linked to the L- to H-Gas conversion in Germany. The project is linked to the GTS project "TRA-N-882".		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2020	IB-NLg	DEg	72.4 GWh/d
Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2020	IB-NLg	DEg	-54.9 GWh/d

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	Gasunie Deutschland Transport Services GmbH	
	Operator	Gasunie Deutschland Transport Services GmbH	
	Host Country	Germany	
	Status	Planned	
	Website		
	Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Draft Netzentwicklungsplan Gas 2016)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	300-02	FEED			Applied for Exemption	Not Relevant
		Market Test			Exemption Granted	Not Relevant
Currently PCI	No	Permitting			Exemption in entry direction	0.00%
		Supply Contracts				
CBCA Decision	No	FID			Exemption in exit direction	0.00%
		Construction				
Market Survey	Not Relevant (no CBCA decision)	Commissioning	2020	2020		

Benefits	
Main Driver	Others
Main Driver Explanation	
Benefit Description	

GUD: Complete conversion to H-gas

TRA-N-955	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Complete conversion of the grid from L- to H-gas in the year 2030. Use of the existing infrastructure for H-Gas. The project is linked to the GTS project "H-Gas conversion of L-Gas export boarder point (TRA-N-882)". On the German side are no investements required, the already existing infrastructure will be used.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2030	IB-NLg	DEg	137.5 GWh/d
Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2030	IB-NLg	DEg	-137.5 GWh/d

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	Gasunie Deutschland Transport Services GmbH	
	Operator	Gasunie Deutschland Transport Services GmbH	
	Host Country	Germany	
	Status	Planned	
	Website		
	Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime				
Part of NDP	No (The project is only a Capacity Modification, which does not require actual investment or construction works.)	Pre-Feasibility			Considered TPA Regime	Regulated			
		Feasibility			Considered Tariff Regime	Regulated			
NDP Number		FEED			Applied for Exemption	Not Relevant			
		Market Test			Exemption Granted	Not Relevant			
Currently PCI		No			Permitting				
					Supply Contracts				Exemption in entry direction
CBCA Decision		No			FID			Exemption in exit direction	0.00%
Market Survey					Construction				
	Not Relevant (no CBCA decision)	Commissioning	2030	2030					

Benefits	
Main Driver	<i>Others</i>
Main Driver Explanation	
Benefit Description	

Interconnection Croatia -Bosnia and Herzegovina (Slobodnica- Bosanski Brod)

TRA-N-066	Project	Pipeline including CS	Non-FID
Update Date	14/07/2016		Advanced
Description	The pipeline covers the countries Croatia and Bosnia and Herzegovina and it will be the part of Energy Community Ring. The pipeline goes from Slavonski Brod (Slobodnica) in Croatia, it will cross the Sava river to Bosanski Brod in Bosnia and Herzegovina with furter extension to Zenica.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica- Bosanski Brod-Zenica	Plinacro Ltd	2019	BA	HR	162.0 GWh/d
	Plinacro Ltd	2019	HR	BA	162.0 GWh/d

Sponsors		General Information		Political	Barriers (Count)
B&H, Bosanski Brod - Zenica		Promoter	Plinacro Ltd		
BH Gas	100%	Operator	Plinacro Ltd		
Croatia, Slobodnica-Bosanski Brod (border)		Host Country	Croatia		
Plinacro	100%	Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		1

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.13	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test		08/2016	Exemption Granted	No
		Permitting	01/2011	01/2019		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		12/2017	Exemption in exit direction	30.00%
		Construction	01/2018	01/2019		
		Commissioning	2019	2019		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Slobodnica - Bosanski Brod		4 million m3 daily	700	6	
Total				6	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project is fullfilling and the folloving criteria: Lifting isolation for Bosnia and Herzegovina, reducing bottlenecks, will improve remaining flexibility, will enable source and route diversification

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	The start of the construction has been postponed until 2020.
Delay Explanation	It depends on the agreement with Republika Srpska (B&H)

Expected Gas Sourcing	
LNG (HR), It will be gas from Croatia transport system, Croatian UGS and Croatian planned LNG terminaland Baumgarten via Slovenia	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	<p>This project is of great interest for the development of the natural gas sector in B&H, as its implementation would provide new route of supply B&H with gas, with a possibility of diversification of supply sources and increase in security of supply of the existing transportation system of B&H, and especially in the circumstances of the natural gas supply of the refineries Brod and Modrica and planned power plant (PP) Zenica and CCGT Kakanj, as well as the expansion of the market and increase in the competitiveness of natural gas. The construction of this gas pipeline would enable the B&H gas transmission system to connect with the Croatian gas transmission system through the pipeline from Slavonski Brod to Donji Miholjac, and then with the Hungarian pipeline. It will connect BH market to the new LNG in Croatia and Baumgarten via Slovenia.</p>
Benefit Description	<p>It will be new interconnection, new entry point and transmission route for the needs of BH; it will be SoS and diversification of supply route for Bosnia and Herzegovina. It will enable BH access to Croatian UGS. This project is an interconnection of the gas systems of Croatia and Bosnia and Herzegovina on the route Slobodnica-Brod-Zenica. The most important impacts and benefits of this project: 1. It provides viability and security of supply of Bosnia and Herzegovina; 2. It provides diversification of supply routes and sources for the market of Bosnia and Herzegovina; 3. It provides development of the gas market in Bosnia and Herzegovina; 4. Introducing an environmentally more acceptable energy source (replacement for firewood, coal, fuel oil and complementary generation to renewable energy, and the potential for new CCGT and PP); 5. Reducing CO2 and SO2 emissions in the B&H and region and facilitating economic development.</p>

Barriers	
Barrier Type	Description
Political	<p>This project is politically very sensitive and depends on the agreement with Republika Srpska and agreements within B&H and its TSOs (BH Gas and GasRES)</p>

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Letter of Intent	between Plinacro and BH Gas for all projects of interconnection	Yes	06/04/2011
Memorandum of understanding	signed between Plinacro and BH Gas	Yes	26/06/2006

Ionian Adriatic Pipeline

TRA-N-068	Project	Pipeline including CS	Non-FID
Update Date	14/07/2016		Advanced
Description	The pipeline will cross the territory along the Adriatic coast from Fieri in Albania via Montenegro to Split in Croatia and will be linked to the existing Croatian gas transmission system (main direction Bosiljevo – Split). The Ionian-Adriatic Pipeline is considered a part of the Energy Community Gas Ring, which is the concept of gasification for the entire region. IAP is the most important gas project in the Southeastern Europe supported by the Energy Community. The IAP project is based on the idea of connecting the existing Croatian gas transmission system, via Montenegro and Albania, with the TAP gas pipeline system (Trans Adriatic Pipeline) an exit Bosnia and Herzegovina is planned. Plinacro is the project promoter for submitting the project to TYNDP. In addition, Montenegrin and Albanian counterparts sent their approval.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Ionic-Adriatic Pipeline - IAP / AB	Plinacro Ltd	2023	HR/IAP	AL	33.3 GWh/d
Ionic-Adriatic Pipeline - IAP / ME	Plinacro Ltd	2023	HR/IAP	ME	16.6 GWh/d
Ionic-Adriatic Pipeline - IAP / Split - HR	Plinacro Ltd	2022	HR	HR/IAP	83.2 GWh/d
	Plinacro Ltd	2023	HR/IAP	HR	83.2 GWh/d
Comment: IT is Exit Croatia					
Ionic-Adriatic Pipeline - IAP Entry	Plinacro Ltd	2023	IB-HRi/IAP	HR/IAP	166.5 GWh/d
Comment: The Entry point is from TAP in Fieri					

Sponsors			General Information		
Bosnia and Herzegovina			Promoter	Plinacro Ltd	
BH Gas (Bosnia and Herzegovina); Ministry of Foreign Trade and Economic Relations (BiH)			Operator	Plinacro Ltd	
100%			Host Country	Croatia	
Croatia (From Split to Montenegro border)			Status	Planned	
Plinacro Ltd; Ministry of Economy (Croatia)			Website	Project's URL	
100%			Publication Approval Status	Approved	
Fieri to Montenegro border					
Ministry of Economy , Trade and Energy (Albania), Albpetrol					
100%					
Montenegro					
Ministry of Economy (Montenegro), Montenegro Bonus Ltd					
100%					



Barriers (Count)

NDP and PCI Information			Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)		Pre-Feasibility		01/2008	Considered TPA Regime	Regulated
NDP Number	1.1, 1.2,1.4,1.5,5.4		Feasibility	05/2012	02/2014	Considered Tariff Regime	Regulated
			FEED			Applied for Exemption	No
Currently PCI	No		Market Test			Exemption Granted	No
			Permitting	07/2009	01/2023		
CBCA Decision	No		Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)		FID		01/2019	Exemption in exit direction	0.00%
			Construction	01/2020	01/2023		
			Commissioning	2022	2023		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
IAP - Croatian part	2.5 billion m3 yearly		800	250	1
IAP- Albanian part	1 billion m3 yearly		800	180	

IAP- Montenegro part		0.5 billion m3 yearly	800	110	
Total				540	1
PCI Details					
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity				
General Criteria Fulfilled	Yes				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	Expected Benefits: - gasification of southern part of Croatia; Bosnia and Herzegovina, Montenegro, Albania - Reverse flow capacity - introducing an environmentally acceptable energy source in the region (replacement for firewood, coal, fuel oil and complementary generation to renewable energy, and the potential for increased cogeneration and CHP) - providing diversified gas supply to the region - providing the access to Croatian and Albanian storage capacities - providing significant transit capacity and income to Albania, Montenegro and Croatia. - Reducing CO2 emissions in the region - Security of Supply, Reverse flow, Integration of market areas (market integration benefits for Croatia and region (Albania, Montenegro, Bosnia and Herzegovina and neighbouring countries), diversification of sources, diversification of routes, N-1 criteria completion on national and regional level, support back-up to renewables				
Time Schedule					
Grant Obtention Date					
Delay Since Last TYNDP	2 years delay				
Delay Explanation	Dynamics of project implementation depends on the dynamics of TAP project implementation.				
Expected Gas Sourcing					
Caspian Region, LNG (HR)					
Comments about the Third-Party Access Regime					
TPA regime is not defined yet					
Benefits					
Main Driver	Others				
Main Driver Explanation	Gasification of Albania and Montenegro and southern part of Croatia and Bosnia and Herzegovina. Diversification of supply, Security of Supply				
Benefit Description	Security of Supply, Rewerse flow, Integration of market areas (market integration benefits for Croatia and region (Albania, Montenegro, Bosnia and Herzegovina and neighbouring countries), diversification of sources, diversification of routes, N-1 criteria completion on national and regional level, support back-up to renewables				

Barriers	
Barrier Type	Description
Regulatory	Tarrifs which depends on the Business Model
Political	The pipeline passes by EU country and Non EU countries.
Financing	Availability of funds and associated conditions

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Agreement to extend the Memorandum of Understanding	Signed between Plinacro and TAP	Yes	25/02/2014
Memorandum of Understanding	Signed between Plinacro and TAP	Yes	05/02/2011
Ministerial declaration	signed by the Ministries of enegy of Albania, Montenegro and Croatia, from dezember 2008, Bosnia and Herzegovina signed as well	Yes	27/09/2007

Interconnection Croatia/Serbia (Slobdnica-Sotin-Bačko Novo Selo)

TRA-N-070	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Non-Advanced
Description	Covering Croatia and Serbia, connecting the Croatian gas transmission system to the Serbian gas transmission system Slobodnica - Sotin (Croatia) - Bačko Novo Selo (Serbia). It will be new interconnection, new entry point and transmission route for the needs of Serbia; it will be SoS and diversification of supply route for Serbia. It will enable Serbia access to Croatian UGS and enable supply of gas from Austria, Slovenia and Italy by the Croatian gas transmission system.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica - Sotin (HR) / Bačko Novo Selo (RS)	Plinacro Ltd	2023	HR	RS	227.5 GWh/d
	Plinacro Ltd	2023	RS	HR	227.5 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Croatian section	Promoter	Plinacro Ltd		
Plinacro 100%	Operator	Plinacro Ltd		
Serbian section	Host Country	Croatia		
Srbijagas 100%	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.11, 1.12	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test		08/2016	Exemption Granted	No
		Permitting	01/2010	10/2023		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		10/2021	Exemption in exit direction	30.00%
		Construction	01/2022	10/2023		
		Commissioning	2023	2023		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Slobodnica - Sotin		16 mcm daily-total capacity	800	97	
Sotin- Bačko Novo Selo		I section	800	5	
Total				102	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	This project is an interconnection of the gas systems of Croatia and Serbia on the route Slobodnica-Sotin-Bačko Novo Selo and it is primarily intended for transport of LNG from the terminal on the island of Krk as well as from other possible routes and directions towards SEE countries. The most important impacts and benefits of the project: 1) It provides viable and secure supply of SEE countries, which are heavily dependent on the Russian gas and jeopardized by the Russian giving up on the South Stream project and the announcement regarding termination of gas transmission via Ukraine after 2019 2) It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower prices for users 3) It facilitates market integration

Expected Gas Sourcing	
Caspian Region, LNG (HR), it will be gas from Croatian transport system, Croatian UGS	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	<p>will integrate Serbia with the new supply route receiving gas from Croatia gas transmission system which will enable it to be supplied from all other neighbouring markets (Hungary, Austria, Italy). This project is an interconnection of the gas systems of Croatia and Serbia on the route Slobodnica-Sotin-Bačko Novo Selo and it is primarily intended for transport of LNG from the terminal on the island of Krk as well as from other possible routes and directions towards SEE countries. The most important impacts and benefits of the project: 1) It provides viable and secure supply of SEE countries, which are heavily dependent on the Russian gas and jeopardized by the Russian giving up on the South Stream project and the announcement regarding termination of gas transmission via Ukraine after 2019 2) It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower prices for users 3) It facilitates market integration</p>
Benefit Description	It will be new entry point and transmission route for the needs of Serbia

LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

TRA-N-075	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Advanced
Description	Gas pipeline Zlobin - Bosiljevo - Sisak – Kozarac jointly with gas pipeline Omišalj-Zlobin and gas pipeline Kozarac-Slobodnica makes LNG Main Evacuation Pipeline connecting LNG from the LNG solution on the island of Krk with Central Eastern European counties. The pipeline is a continuation of the existing Hungary – Croatia interconnection (gas pipeline Varosföld-Dravaszerdahely-Donji Miholjac-Slobodnica) will be connected to the future Ionian Adriatic Pipeline (IAP) will be connected to the future LNG solution in Omišalj It will be the "backbone" of the Croatian gas system.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2020	LNG_Tk_HR	HR	50.0 GWh/d
Dravaszerdahely	Plinacro Ltd	2020	HR	HU	50.0 GWh/d

Sponsors	General Information				Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd		
		Operator	Plinacro Ltd	Others	
		Host Country	Croatia		
		Status	Planned	Financing	
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-1058	LNG Evacuation Pipeline Kozarac-Slobodnica
TRA-N-90	LNG evacuation pipeline Omišalj - Zlobin (Croatia)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.18, 1.19, 1.20	Feasibility	09/2015	10/2016	Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.5.2.)	Market Test		08/2016	Exemption Granted	No
		Permitting	07/2009	01/2020		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2017	Exemption in exit direction	30.00%
		Construction	01/2017	01/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Bosiljevo - Sisak		1,000	102	
	Kozarac - Sisak		1,000	20	
	Zlobin - Bosiljevo		1,000	58	
	Total			180	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Project will connect several, in the future exceptionally important, points of the Croatian gas transmission system. It is the future strategic gas transmission connector of great significance and is an integral part of the North – South European Corridor named as the North-South (Baltic – Adriatic) Gas Connection. Its purpose is linking the Polish and the Croatian LNG (Liquefied Natural Gas) solutions. This gas pipeline (as well as all the pipelines to which it connects and the associated gas nodes) will provide gas transmission in all directions, i.e. it will satisfy all transmission requirements and will maximise the value of the IAP and LNG projects in Croatia and the region. In addition, it will increase the use of the existing system and the new interconnection with Hungary.

Time Schedule	
Grant Obtention Date	24/11/2015

Delay Since Last TYNDP

Delay Explanation The preparatory work will be performed in phases, depending on the development of the LNG project,

Expected Gas Sourcing

Caspian Region, LNG (HR,QA), it will be gas from Croatia transport system, Croatian UGS and all import routes (LNG and IAP)

Comments about the Third-Party Access Regime

TPA regime is not defined yet, Exemption Regime possibly

Benefits

Main Driver	Market Demand
Main Driver Explanation	This gas pipeline passes only through the territory of the Republic of Croatia. However, it has regional significance since it is the main evacuation gas pipeline from the LNG solution on the island of Krk towards Hungary and it is its main role. This gas pipeline increases utilisation of the interconnection with Hungary so it has influence on Hungary but also further on Slovakia and Ukraine. The gas pipeline shall be also significant for third countries; Serbia, Bosnia and Herzegovina by constructing interconnection with these countries.
Benefit Description	The project is the main gas pipeline for transport of LNG from the terminal on the island of Krk as well as from other possible sources, such as gas from the Ionian-Adriatic Pipeline , towards CEE and SEE countries. At the same time, in addition to already constructed interconnection gas pipeline with Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the Croatian part of the strategic transregional gas pipeline connection Adriatic-Baltic the aim of which is to connect the Polish and Croatian LNG terminal. The most important impacts and benefits of this project: 1. It provides viable and secure supply of CEE and SEE countries, which are heavily dependent on the Russian gas and jeopardized by the Russian giving up on the South Stream project and the announcement regarding termination of gas transmission via Ukraine after 2019. 2. It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower pr

Barriers

Barrier Type	Description
Others	Directly connected and depening on the LNG project on the island of Krk
Financing	Availability of funds and associated conditions

LNG terminal Krk

LNG-N-082	Project	LNG Terminal	Non-FID
Update Date	23/05/2016		Advanced
Description	The import terminal for the liquefied natural gas (LNG) will be situated in Omišalj on the Island of Krk, Republic of Croatia. The project is planned as a stage development: with: 1st stage - FSRU with annual send-out capacity of 1- 4 bcm/y (according to FSRU ship and pipeline availability), 2nd stage - LNG onshore terminal with annual send-out capacity of 3.5 bcm/y, 3rd stage - LNG onshore terminal with annual send-out capacity of 5 bcm/y and 4th stage - LNG onshore terminal with annual send-out capacity of 8.75 bcm/y. Construction and the size of the onshore terminal will depend on the market need. Future LNG Terminal will be an important part for the security of supply for Central and South-Eastern European countries. Gas supply in the region is heavily dependent on one supply source and therefore LNG terminal in Croatia would represent a major diversification gas supply route in the region.		
Regulatory Decisions and similar material conditions	Croatian Energy Regulatory Agency has given to LNG Croatia LLC on 03.02.2016, a permit for performing energy activities which enables LNG Croatia LLC to operate the terminal.		

Capacity Increments Variant For Modelling

Variant : 1. - FSRU		1st phase - FSRU with annual send-out capacity of 1- 4 bcm/y (according to FSRU ship and pipeline availability)			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	LNG Hrvatska d.o.o.	2018	LNG_Tk_HR	HR	107.0 GWh/d
	Comment: Short-term rented FSRU (min 3, max 5 years)				
	Commissioning (COD) year - 2018 (Challenging pipeline availability)				
	Send-out - 1-4 bcm/y (According to FSRU ship and pipeline availability)				

Capacity Increments Variant(s) For Information Only

Variant : 2. - Onshore LNG terminal		2nd phase - LNG onshore terminal with annual send-out capacity of 3.5 bcm/y			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	LNG Hrvatska d.o.o.	2021	LNG_Tk_HR	HR	-13.0 GWh/d

Croatia LNG

Comment: Minimum on-shore LNG terminal size based on the most appropriate capacity booked through the Open Season
1×150.000m3storagetank
Utilization of jetty used also for the FSRU terminal

COD - 2021-2023
(depending on duration of FSRU charter contract)

Capacity Increments Variant(s) For Information Only					
Variant : 4. - Onshore LNG terminal		4th phase - LNG onshore terminal with annual send-out capacity of 8.75 bcm/y			
Point	Operator	Year	From Gas System	To Gas System	Capacity
	LNG Hrvatska d.o.o.	2024	LNG_Tk_HR	HR	100.0 GWh/d
Comment: If market demands, expand (with minimum investment in re-gasifiers) the LNG terminal send-out					

Croatia LNG

COD - 2024+

Capacity Increments Variant(s) For Information Only					
Variant : 3. - Onshore LNG terminal		3rd phase - LNG onshore terminal with annual send-out capacity of 5 bcm/y			
Point	Operator	Year	From Gas System	To Gas System	Capacity
	LNG Hrvatska d.o.o.	2023	LNG_Tk_HR	HR	40.0 GWh/d
Comment: In case that the limited volume risk condition is reached, expansion					

Croatia LNG

Introduction of the second tank to allow peak management

COD - 2021/2023
(depending on duration of FSRU charter contract)

Sponsors		General Information				
HEP d.d.	50%	Promoter	LNG Hrvatska d.o.o. za poslovanje ukapljenim prirodnim plinom		Regulatory	1
Plinacro d.o.o.	50%		LNG Hrvatska d.o.o.		Political	1
			Croatia		Permit Granting	1
			Planned		Others	1
			Project's URL		Market	1
			Approved			
NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Desetogodišnji plan razvoja plinskog...)	Pre-Feasibility		01/2013	Considered TPA Regime	Not Applicable
		Feasibility	07/2012	01/2014	Considered Tariff Regime	Not Applicable
NDP Number	6.5.1.	FEED	06/2015	12/2015	Applied for Exemption	No
		Market Test		10/2015	Exemption Granted	No
Currently PCI	Yes (6.5.1.)	Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID			Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction				
		Commissioning	2018	2018		
Technical Information (LNG)						
LNG Facility	The import terminal for the liquefied natural gas (LNG) on the Island of Krk					
Expected Volume (bcm/y)	4	1st stage - 1-4 bcm/y (According to FSRU ship and pipeline availability), 2nd stage - 3,5 bcm/y, 3rd stage - 5bcm/y, 4th stage - 8.75 bcm/y				
Storage Capacity (m3)	300,000	1st stage depending on FSRU storage capacity availability, 2nd stage 1 x 150,000.00, 3rd stage 2 x 150,000.00, 4th stage 2 x 150,000.00				
Ship Size (m3)	265,000	75,000.00 – 265,000.00 (Jetty construction and sea depth will enable Q Max LNG carriers to berth at the site. The size of the carriers that are going to berth alongside to the FSRU will depend on the storage and regasification capabilities of the FSRU)				

Reloading Ability Yes

PCI Details	
PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	All specific criteria are fulfilled by this project

Time Schedule	
Grant Obtention Date	20/11/2015
Delay Since Last TYNDP	None
Delay Explanation	In comparison with last TYNDP, there is no delay because the FSRU solution represents a fast track solution enabling the gas to flow from the Island of Krk from Q1/2018. This represents a one year acceleration of the project comparing to the last TYNDP.

Expected Gas Sourcing	
Gas sourcing will be decided by LNG terminal capacity users, who will have the freedom to arrange gas supplies and gas origin	

Comments about the Third-Party Access Regime	
TPA regime will be defined after market survey procedure (in our case Open Season)	

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	Importance of LNG terminal in Croatia is in possibility of providing natural gas to multiple countries in the region. Countries included: Hungary, Slovenia, Austria, Italy, Germany, Czech Republic, Slovak Republic, former Yugoslav Republic of Macedonia, Albania, Kosovo, Serbia, Montenegro, Bosnia and Herzegovina, Ukraine, Romania, and Bulgaria. Gas supply in the region is heavily dependent on one supply source and therefore LNG terminal in Croatia represents a major diversification gas supply route in the region.
Benefit Description	Project benefits include: providing diversity of supply of natural gas, providing security of supply of natural gas, introducing the ecologically sound energy source in the region, reducing CO ₂ emissions in the region, facilitating economic development, etc.

Barriers	
Barrier Type	Description
Regulatory	National Regulatory Agency needs to approve missing regulatory framework for liquefied natural gas i.e. methodology for determination of tariff for receiving LNG and gas send-out. In order for the project to be implemented on time, when the CBA/CBCA request is submitted to the Croatian NRA all of the relevant NRA's (six identified countries) need to come to a fast decision.

Permit Granting	Permit granting process for the project has started in 10/2013 by requesting the EIA which was approved in 04/2014. Location permit was approved in 09/2015. Accordingly to the specific phase of the projects permits will be modified/ obtained.
Political	Project named LNG terminal on the Island of Krk was declared on Government of Republic of Croatia session from 16th of July 2015 a project of strategic importance for the Republic of Croatia. The Act on strategic investments enables this kind of projects to have the highest priority with faster and simplified procedure in obtaining necessary documents and permits for the project implementation.
Others	Potential barrier of enough pipeline capacity availability. The pipelines need to be build but FID has not yet been reached, which is a precondition for LNG terminal realization in forseen deadlines.
Market	Market Background Analysis was carried out and it indicated that the market has commercial potential. Open Season procedure will serve as an official confirmation of that analysis. The binding phase of Open Season has been carried out. Signing of the contract is expected to be upon NRA's approval of missing regulatory framework for liquefied natural gas i.e. methodology for determination of tariff for receiving LNG and gas send-out.

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
CESEC MoU	Memorandum of Understanding	Yes	10/07/2015

Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)

TRA-F-86	Project	Pipeline including CS	FID
Update Date	13/07/2016		Advanced
Description	New pipeline which will upgrade the existing interconnection Croatia/Slovenia. Along with the existing interconnection Karlovac-Lučko-Zabok-Rogatec, a new gas pipeline system has been planned which would significantly increase the capacity of the interconnection of the Croatian and the Slovenian gas transmission systems in this direction. Considering almost all existing and new supply directions in the surrounding region and the Croatian storage potentials this opens significant transit potentials in both directions. Along this transit route, it is planned to upgrade the capacity to 5 bcm/y.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rogatec	Plinacro Ltd	2019	HR	SI	162.0 GWh/d
	Plinacro Ltd	2019	SI	HR	162.0 GWh/d

Sponsors	General Information		Financing	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd	
		Operator	Plinacro Ltd	
		Host Country	Croatia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-1057	Compressor stations 2 and 3 at the Croatian gas transmission system

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.24, 1.25	Feasibility	09/2014	12/2014	Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.26.1)	Market Test		06/2015	Exemption Granted	No
		Permitting	10/2015	01/2019		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2016	Exemption in exit direction	30.00%
		Construction	01/2017	01/2019		
		Commissioning	2019	2019		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Lučko-Zabok			700	33	
Zabok-Rogatec			700	36	
Total				69	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project increases the integration of the Croatian gas market with the European gas market, the current interconnection capacity is limited to 1.5 bcm/y. The pipeline will have the reverse flow, so gas can flow from LNG Krk or IAP to Slovenia and further to Central Europe expected to result in reduced end-user energy prices providing the security of supply increasing the capacity along the route providing enhanced access to Baumgarten and the Italian gas market providing an additional import of gas achievement of benefits of the open gas market This project is expected to contribute to the provision of gas supply to potential customers in the Central Europe countries

Time Schedule	
Grant Obtention Date	25/04/2016
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG (HR,QA), IAP project, Baumgarten

Comments about the Third-Party Access Regime

TPA regime is not defined yet

Benefits

Main Driver	Market Demand
Main Driver Explanation	The current capacity is limited;the section from Lučko to Rogatec up to 1.5 bcm/y.Increasing capacity by 5 bcm opens the possibility for importing more gas from the Baumgarten. In addition, the source of the gas, in the near future) is going to be the gas from the LNG solution on the island of Krk as well as from the Ionian – Adriatic Pipeline toward Slovenia and the neighbouring countries. In this case the current pipeline capacity would not be sufficient; therefore it is envisaged to be increased. By doubling the pipeline, it is possible to use both the existing and future Croatian UGSs. The construction of this interconnection is vital for the security of supply of both the Croatian market and other markets in the SE region.
Benefit Description	It will be significantly increase the capacity of the interconnection of the Croatian and Slovenian gas transmission systems in both directions. It will increase the capacity along the route, provide enhanced access to Baumgarten and Italien gas market. The most important impacts and benefits of this project: 1. It provides security of supply for Croatia (N-1 criterion has not been met!) and a reverse flow (from Croatia to Slovenia) 2. It provides access to the gas markets of Austria and Italy via the Slovenian system 3. It provides import and significant transit of gas from the direction of Italy and Austria to CEE and SEE countries (Hungary, Bosnia and Herzegovina, Serbia...) 4. It provides significant transit of gas from LNG terminal, Ionian-Adriatic Pipeline or other sources towards Slovenia, Austria and Italy as well as the countries in their surrounding 5. It facilitates market integration

Barriers

Barrier Type	Description
Financing	Availability of funds and associated conditions

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Letter of Intent	Signed between Plinacro and Plinovodi	Yes	22/05/2014
Memorandum of Understanding	Signed among Plinacro, Plinovodi and Gas Connect Austria	Yes	28/12/2014

LNG evacuation pipeline Omišalj - Zlobin (Croatia)

TRA-N-90	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Advanced
Description	The pipeline is the connection of the LNG on the Krk island with the Croatian gas transmission system. Gas pipeline Omišalj-Zlobin jointly with gas pipeline system Zlobin - Bosiljevo - Sisak-Kozarac and with gas pipeline Kozarac-Slobodnica makes LNG Main Evacuation Pipeline connecting LNG from the LNG solution on the island of Krk with Central Eastern European counties. The pipeline is a continuation of the existing Hungary – Croatia interconnection (gas pipeline Varosföld-Dravaszerdahely-Donji Miholjac-Slobodnica) will be connected to the future Ionian Adriatic Pipeline (IAP) will be connected to the future LNG solution in Omišalj It will be the "backbone" of the Croatian gas system.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2018	LNG_Tk_HR	HR	52.2 GWh/d
Dravaszerdahely	Plinacro Ltd	2018	HR	HU	52.2 GWh/d
Comment: It is necessary to use and CS1					

Sponsors		General Information		Others	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd		
		Operator	Plinacro Ltd		
		Host Country	Croatia		
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects	
Project Code	Project Name
TRA-N-1058	LNG Evacuation Pipeline Kozarac-Slobodnica
TRA-N-075	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.17	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test		08/2016	Exemption Granted	No
		Permitting	07/2009	01/2018		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2017	Exemption in exit direction	30.00%
		Construction	01/2017	05/2018		
		Commissioning	2018	2018		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Omišalj-Zlobin			1,000	18	
Total				18	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Project will connect several, in the future exceptionally important, points of the Croatian gas transmission system. It is the future strategic gas transmission connector of great significance and is an integral part of the North – South European Corridor named as the North-South (Baltic – Adriatic) Gas Connection. Its purpose is linking the Polish and the Croatian LNG (Liquefied Natural Gas) solutions. This gas pipeline (as well as all the pipelines to which it connects and the associated gas nodes) will provide gas transmission in all directions, i.e. it will satisfy all transmission requirements and will maximise the value of the IAP and LNG projects in Croatia and the region. In addition, it will increase the use of the existing system and the new interconnection with Hungary.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	

Delay Explanation This project completely depends on LNG terminal project on island of Krk

Expected Gas Sourcing

LNG (?), it will be gas from Croatia transport system, Croatian UGS and all import routes (LNG and IAP)

Benefits

Main Driver	Market Demand
Main Driver Explanation	This gas pipeline passes only through the territory of the Republic of Croatia. However, it has regional significance since it is the main evacuation gas pipeline from the LNG solution on the island of Krk towards Hungary and it is its main role. This gas pipeline increases utilisation of the interconnection with Hungary so it has influence on Hungary but also further on Slovakia and Ukraine. The gas pipeline shall be also significant for third countries; Serbia, Bosnia and Herzegovina by constructing interconnection with these countries.
Benefit Description	The project is the main gas pipeline for transport of LNG from the terminal on the island of Krk as well as from other possible sources, such as gas from the Ionian-Adriatic Pipeline , towards CEE and SEE countries. At the same time, in addition to already constructed interconnection gas pipeline with Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the Croatian part of the strategic transregional gas pipeline connection Adriatic-Baltic the aim of which is to connect the Polish and Croatian LNG terminal. The most important impacts and benefits of this project: 1. It provides viable and secure supply of CEE and SEE countries, which are heavily dependent on the Russian gas and jeopardized by the Russian giving up on the South Stream project and the announcement regarding termination of gas transmission via Ukraine after 2019. 2. It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower price

Barriers

Barrier Type	Description
Others	The project completely depends on the realisation of the Krk LNG project

Interconnection Croatia-Bosnia and Herzegovina (South)

TRA-N-302	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Advanced
Description	South Interconnection of Croatia and B&H - the pipeline is a new supply route for Bosnia and Herzegovina that will enable the reliable and diversified natural gas supply. The pipeline will enable the flow of IAP to Bosnia and Herzegovina		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Posušje	Plinacro Ltd	2021	BA	HR/IAP	81.0 GWh/d
	Plinacro Ltd	2021	HR/IAP	BA	81.0 GWh/d

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Croatian part of both options		Promoter	Plinacro Ltd		
Plinacro d.o.o.	100%	Operator	Plinacro Ltd		
parts in B&H		Host Country	Croatia		
BH Gas	100%	Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-068	Ionian Adriatic Pipeline

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility		09/2013	Considered TPA Regime	Regulated
NDP Number	1.3	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting	08/2014	01/2021		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2019	Exemption in exit direction	30.00%
		Construction	01/2020	01/2021		
		Commissioning	2021	2021		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Zagvozd-Imotski-Posušje			500	22	
Total				22	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Caspian Region, LNG (), Baumgarten via Slovenia and Croatia	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Market Demand and SoS for the Southern part of Bosnia and Herzegovina
Benefit Description	The aim of the project is to establish a new supply route for B&H providing a diversified and reliable natural gas supply.

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Letter of Intent	between Plinacro and BH Gas for all projects of interconnection	Yes	06/04/2011

Interconnection Croatia-Bosnia and Herzegovina (west)

TRA-N-303	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Non-Advanced
Description	Interconnection Croatia-Bosnia and Herzegovina on route Licka Jesenica-Rakovica in Croatia to border with Bosnia and Herzegovina. Bosnian part is from Trzac to Bosanska Krupa with branches to Bihać and Velika Kladusa.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Rakovica (HR) / Trzac (BA)	Plinacro Ltd	2026	BA	HR	81.0 GWh/d
	Plinacro Ltd	2026	HR	BA	81.0 GWh/d

Sponsors	General Information		Market	Barriers (Count)
Croatian part	Promoter	Plinacro Ltd		
Plinacro d.o.o. 100%	Operator	Plinacro Ltd		
part in B&H	Host Country	Croatia		
BH Gas 100%	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.32 and 1.33	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting	12/2012	09/2026		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		12/2024	Exemption in exit direction	30.00%
		Construction	04/2025	11/2026		
		Commissioning	2026	2026		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Lička Jesenica-Rakovica			500	20	
Rakovica-Bihać			500	10	
Total				30	

Expected Gas Sourcing	
Caspian Region, LNG (HR,QA), it can be gas from Croatian transport system, Croatian UGS and all import routes	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	For the western part of Bosnia and Herzegovina
Benefit Description	The aim of the project is to assess the feasibility of providing gas supply to the Una-Sana Canton in BiH from the Croatian gas transmission system. It will be from the Lička Jesenica gas transmission node in Croatia via Lika to the HR/BiH border and from there to Bosanska Krupa with brances to Bihać and velika Kladuša in Una-Sana Canton. The extension of the gas transmission in Croatia to the border with BiH will allow additional gasification in the part of Croatia along the pipeline route.

Barriers	
Barrier Type	Description
Market	Lack of market support

Market Lack of market maturity

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Letter of Intent	between Plinacro and BH Gas for all projects of interconnection	Yes	06/04/2011

Compressor station 1 at the Croatian gas transmission system

TRA-F-334	Project	Pipeline including CS	FID
Update Date	25/05/2016		Advanced
Description	Construction of such facilities is necessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries. Compressor stations will significantly increase efficiency of the Croatian gas transmission system. Compressor stations are integral part of the transmission system, integrated in the system, primarily in a manner to increase the flexibility of managing the existing transmission capacities of the system, and to provide rational increase of transmission capacities according to user needs, that is, the requirements of the market and to satisfy market conditions arising from the application of new legal regulation.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd	
		Operator	Plinacro Ltd	
		Host Country	Croatia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects	
Project Code	Project Name
TRA-N-066	Interconnection Croatia -Bosnia and Herzegovina (Slobodnica- Bosanski Brod)
TRA-N-075	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac
TRA-N-070	Interconnection Croatia/Serbia (Slobdnica-Sotin-Bačko Novo Selo)
TRA-F-86	Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)
TRA-N-1058	LNG Evacuation Pipeline Kozarac-Slobodnica
TRA-N-90	LNG evacuation pipeline Omišalj - Zlobin (Croatia)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Not Applicable
NDP Number	5.1,	Feasibility	11/2014	03/2015	Considered Tariff Regime	Not Applicable
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.26.3)	Market Test		08/2016	Exemption Granted	No
		Permitting	06/2015	12/2017		
CBCA Decision	No	Supply Contracts		01/2017	Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		04/2015	Exemption in exit direction	0.00%
		Construction	01/2017	12/2017		
		Commissioning	2017	2017		

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	Project will enable the reverse flow in all interconnection points.
Benefit Description	Construction of such facilities is necessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries. Compressor stations will significantly increase efficiency of the Croatian gas transmission system.

Interconnection Croatia/Slovenia (Umag-Koper)

TRA-N-336	Project	Pipeline including CS	Non-FID
Update Date	14/07/2016		Non-Advanced
Description	This pipeline is a regional link to Croatian and Slovenian system. Relevant gas pipeline is significant for the regional security of supply, especially in the light of the fact that these parts of Croatian and Slovenian markets are allocated at the ends of the associated gas transportation systems. It is also important for the competitiveness and market competition.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sečovlje (SI) / Plovanija (HR)	Plinacro Ltd	2026	HR	SI	16.2 GWh/d
	Plinacro Ltd	2026	SI	HR	16.2 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd	
		Operator	Plinacro Ltd	
		Host Country	Croatia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.34	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	30.00%
		Construction	04/2026	11/2026		
		Commissioning	2026	2026		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Umag - Plovanija (HR)- Koper (SI)		Croatian part is 8 km	300	8	
Total				8	

Expected Gas Sourcing	
LNG (HR), Croatian gas transmission system	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Compressor stations 2 and 3 at the Croatian gas transmission system

TRA-N-1057	Project	Pipeline including CS	Non-FID
Update Date	14/07/2016		Non-Advanced
Description	Construction of such facilities is necessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries. Compressor stations will significantly increase efficiency of the Croatian gas transmission system. Compressor stations are integral part of the transmission system, integrated in the system, primarily in a manner to increase the flexibility of managing the existing transmission capacities of the system, and to provide rational increase of transmission capacities according to user needs, that is, the requirements of the market and to satisfy market conditions arising from the application of new legal regulation.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2020	LNG_Tk_HR	HR	43.3 GWh/d
Dravaszerdahely	Plinacro Ltd	2020	HR	HU	43.3 GWh/d
	Plinacro Ltd	2020	HU	HR	62.5 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd	
		Operator	Plinacro Ltd	
		Host Country	Croatia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-066	Interconnection Croatia -Bosnia and Herzegovina (Slobodnica- Bosanski Brod)
TRA-N-070	Interconnection Croatia/Serbia (Slobdnica-Sotin-Bačko Novo Selo)
TRA-N-075	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

TRA-F-86 Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)
TRA-F-334 Compressor station 1 at the Croatian gas transmission system

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Not Applicable
NDP Number	5.2 and 5.3	Feasibility			Considered Tariff Regime	Not Applicable
		FEED			Applied for Exemption	Not Relevant
Currently PCI	Yes (6.26.3)	Market Test			Exemption Granted	Not Relevant
		Permitting	01/2017	01/2020		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2018	Exemption in exit direction	0.00%
		Construction	01/2018	01/2020		
		Commissioning	2020	2020		

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	25/04/2016
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Projects will enable the reverse flow in all interconnection point

Benefit Description

Construction of such facilities is necessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries. Compressor stations will significantly increase efficiency of the Croatian gas transmission system.

LNG Evacuation Pipeline Kozarac-Slobodnica

TRA-N-1058	Project	Pipeline including CS	Non-FID
Update Date	13/07/2016		Non-Advanced
Description	Gas pipeline Kozarac - Slobodnica jointly with gas pipeline sytem Zlobin - Bosiljevo - Sisak-Kozarac and with gas pipeline Omišalj-Zlobin makes LNG Main Evacuation Pipeline connecting LNG from the LNG solution on the island of Krk with Central Eastern European counties. The pipeline system is a continuation of the existing Hungary – Croatia interconnection (gas pipeline Varosföld-Dravaszerdahely-Donji Miholjac-Slobodnica) will be connected to the future Ionian Adriatic Pipeline (IAP) will be connected to the future LNG solution in Omišalj It will be the "backbone" of the Croatian gas system.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2023	LNG_Tk_HR	HR	109.9 GWh/d
Dravaszerdahely	Plinacro Ltd	2023	HR	HU	58.8 GWh/d
	Plinacro Ltd	2023	HU	HR	56.6 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinacro	100%	Promoter	Plinacro Ltd	
		Operator	Plinacro Ltd	
		Host Country	Croatia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects	
Project Code	Project Name
TRA-N-075	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac
TRA-N-90	LNG evacuation pipeline Omišalj - Zlobin (Croatia)
TRA-N-1057	Compressor stations 2 and 3 at the Croatian gas tranmission system

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (2017-2026)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	1.21	Feasibility	12/2015	10/2016	Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	Yes (6.5.2)	Market Test		08/2016	Exemption Granted	No
		Permitting	09/2014	01/2023		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	70.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2020	Exemption in exit direction	30.00%
		Construction	01/2021	01/2023		
		Commissioning	2023	2023		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Kozarac-Slobodnica			800	128	
Total				128	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Project will connect several, in the future exceptionally important, points of the Croatian gas transmission system. It is the future strategic gas transmission connector of great significance and is an integral part of the North – South European Corridor named as the North-South (Baltic – Adriatic) Gas Connection. Its purpose is linking the Polish and the Croatian LNG (Liquefied Natural Gas) solutions. This gas pipeline (as well as all the pipelines to which it connects and the associated gas nodes) will provide gas transmission in all directions, i.e. it will satisfy all transmission requirements and will maximise the value of the IAP and LNG projects in Croatia and the region. In addition, it will increase the use of the existing system and the new interconnection with Hungary.

Time Schedule	
Grant Obtention Date	24/11/2015
Delay Since Last TYNDP	
Delay Explanation	Project depend on LNG project

Expected Gas Sourcing

LNG (), it will be gas from Croatia transport system, Croatian UGS and all import routes (LNG and IAP)

Benefits

Main Driver	Market Demand
Main Driver Explanation	<p>This gas pipeline passes only through the territory of the Republic of Croatia. However, it has regional significance since it is the main evacuation gas pipeline from the LNG solution on the island of Krk towards Hungary and it is its main role. This gas pipeline increases utilisation of the interconnection with Hungary so it has influence on Hungary but also further on Slovakia and Ukraine. The gas pipeline shall be also significant for third countries; Serbia, Bosnia and Herzegovina by constructing interconnection with these countries.</p>
Benefit Description	<p>The project is the main gas pipeline for transport of LNG from the terminal on the island of Krk as well as from other possible sources, such as gas from the Ionian-Adriatic Pipeline , towards CEE and SEE countries. At the same time, in addition to already constructed interconnection gas pipeline with Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the Croatian part of the strategic transregional gas pipeline connection Adriatic-Baltic the aim of which is to connect the Polish and Croatian LNG terminal. The most important impacts and benefits of this project: 1. It provides viable and secure supply of CEE and SEE countries, which are heavily dependent on the Russian gas and jeopardized by the Russian giving up on the South Stream project and the announcement regarding termination of gas transmission via Ukraine after 2019 2. It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower price</p>

Városföld-Ercsi-Győr

TRA-N-018	Project	Pipeline including CS	Non-FID
Update Date	08/05/2016		Non-Advanced
Description	Pipeline between Városföld-Ercsi and Győr nodes, DN1000, PN100, 210 km.This project will enable the Mosonmagyaróvár interconnection point to reach its full capacity of 153 GWh/d from Austria to Hungary.It will also enable the Mosonmagyaróvár interconnection point to realize reverse flow capacity up to 153 GWh/d from Hungary to Austria as well.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyaróvár	FGSZ Ltd.	2022	AT	HU	25.0 GWh/d
	FGSZ Ltd.	2022	HU	AT	153.0 GWh/d

Sponsors		General Information				Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Market		
		Operator	FGSZ Ltd.			
		Host Country	Hungary	Regulatory		
		Status	Planned			
		Website				
		Publication Approval Status	Approved			
				2		
				1		

Enabled Projects

Project Code	Project Name
TRA-N-377	Romanian-Hungarian reverse flow Hungarian section 2nd stage
TRA-N-286	Romanian-Hungarian reverse flow Hungarian section 1st stage
TRA-N-123	Városföld CS

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
NDP Number	12.7.	Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
		FEED	11/2018	04/2020	Applied for Exemption	No
Currently PCI	Yes (6.24.4.)	Market Test		12/2016	Exemption Granted	No
		Permitting	05/2017	09/2018		
CBCA Decision	Yes (2016-10-06)	Supply Contracts		04/2017	Exemption in entry direction	0.00%
Market Survey	Open Season(2016-12-31)	FID		10/2018	Exemption in exit direction	0.00%
		Construction	03/2021	12/2022		
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Városfold-Ercsi-Gyor			1,000	210	
Total				210	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	3 year
Delay Explanation	New Power Plants demands delay minimum 3 years and harmonization with RO/HU/AT planned capacity booking.

Expected Gas Sourcing	
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Black Sea

Benefits	
Main Driver	Market Demand
Main Driver Explanation	RO>HU>AT transmission corridor (Black Sea or other gas source)
Benefit Description	oBlack Sea gas or other gas source transmission to the European Gas Market The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

Barriers	
Barrier Type	Description
Market	Lack of market support
Market	Lack of market maturity
Regulatory	Low rate of return

Ercsi-Szazhalombatta

TRA-N-061	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	New pipeline between Ercsi and Szazhalombatta nodes, DN800 PN63, 11 km. The 11 km long pipeline connecting the Városföld-Ercsi-Győr pipeline at Ercsi to the Budapest ring at Százhalombatta (Central Hungary) – it increases the capacity of the HU-SK interconnector up to 152 GWh/d; 600 000 m3/h (at 15 °C) in both directions in the FGSZ system.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Vecsés MGT / FGSZ	FGSZ Ltd.	2022	HUi	HU	25.5 GWh/d

Sponsors	General Information		No Barriers Defined	
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Barriers (Count)
		Operator	FGSZ Ltd.	
		Host Country	Hungary	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	

Enabled Projects	
Project Code	Project Name
TRA-N-123	Városföld CS
TRA-N-018	Városföld-Ercsi-Győr

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
NDP Number	12.9.	Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
		FEED	11/2018	04/2020	Applied for Exemption	No
Currently PCI	Yes (6.24.5)	Market Test		12/2016	Exemption Granted	No
		Permitting	05/2017	09/2018		
CBCA Decision	Yes (2016-12-31)	Supply Contracts		04/2017	Exemption in entry direction	0.00%
Market Survey	Open Season(2016-12-31)	FID		10/2018	Exemption in exit direction	0.00%
		Construction	03/2021	12/2022		
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Ercsi-Szazhalombatta			800	11	
Total				11	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	3 year
Delay Explanation	New power plants' demands delay minimum 3 year, which related to the TYNDP.

Expected Gas Sourcing

which available from Slovakia direction

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	<p>o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.</p>

Hajduszoboszlo CS

TRA-N-065	Project	Pipeline including CS	Non-FID
Update Date	08/05/2016		Non-Advanced
Description	An additional compressor unit put into operation at Hajdúszoboszló. This is a new unit, for replacement an earlier unit, which was relocated an other compressor station.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
FGSZ Ltd. 100%	Promoter	FGSZ Natural Gas transmission Company limited by Shares.		
	Operator	FGSZ Ltd.		
	Host Country	Hungary		
	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	12-11	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning				

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
hajdúszoboszló CS				6
Hajdusoboszlo node	No cross-border (interconnection point) relevance.			0
Total				6

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	Yes, 1 year.
Delay Explanation	Due to decreasing transmission volume the project was rescheduled.

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	<p>o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration. In particular, this project helps the reverse flow from Varösföld to Beregdaroc.</p>

Városföld CS

TRA-N-123	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	An additional compressor unit (5.7 MW) at the existing compressor station at Városföld, necessary to ensure adequate pressure for the transportation along the HU section of the Corridor.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyaróvár	FGSZ Ltd.	2022	AT	HU	25.0 GWh/d

Sponsors		General Information			
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Regulatory	1
		Operator	FGSZ Ltd.		
		Host Country	Hungary	Market	1
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-018	Városföld-Ercsi-Győr
TRA-N-286	Romanian-Hungarian reverse flow Hungarian section 1st stage

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
NDP Number	12.10.	Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
		FEED	11/2018	04/2020	Applied for Exemption	No
Currently PCI	Yes (6.24.6.)	Market Test		12/2016	Exemption Granted	No
		Permitting	05/2017	09/2018		
CBCA Decision	No	Supply Contracts		04/2017	Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		10/2018	Exemption in exit direction	0.00%
		Construction	03/2021	12/2022		
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Városföld CS					6
Total					6

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	Yes, 3 year.
Delay Explanation	New power plants' demands delay minimum 3 year, which related to the TYNDP.

Benefits	
Main Driver	Market Demand
Main Driver Explanation	

Benefit Description

o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.

Barriers	
Barrier Type	Description
Regulatory	Low rate of return
Market	Lack of market support

Romanian-Hungarian reverse flow Hungarian section 1st stage

TRA-N-286	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	A new compressor station at Csanádpalota with 2 units (4.5 MW each) - necessary to create pressure conditions for the transportation capacity of 1.75 bcm/a from and towards Romania.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	FGSZ Ltd.	2020	RO	HU	48.9 GWh/d

Sponsors		General Information		Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	
		Operator	FGSZ Ltd.	
		Host Country	Hungary	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	
			Regulatory	1
			Market	1

Enabled Projects	
Project Code	Project Name
TRA-N-377	Romanian-Hungarian reverse flow Hungarian section 2nd stage

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
NDP Number	12.6.1.	Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
		FEED	07/2018	10/2018	Applied for Exemption	No
Currently PCI	Yes (6.24.1)	Market Test		12/2016	Exemption Granted	No
		Permitting	07/2018			
CBCA Decision	Yes (2016-10-06)	Supply Contracts		06/2017	Exemption in entry direction	0.00%
Market Survey	Open Season(2016-12-31)	FID		05/2017	Exemption in exit direction	0.00%
		Construction	10/2018			
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Csanadpalota				9
	Total				9

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	1 year
Delay Explanation	Open Season is delayed.

Expected Gas Sourcing	
Caspian Region, Romanian, sources available from Bulgaria direction	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Regulatory	Low rate of return
Market	Lack of market support

Slovenian-Hungarian interconnector

TRA-N-325	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	Hungary – Slovenia interconnection will establish a bidirectional interconnection between Slovenian and Hungarian gas transmission systems and with that a connection of national gas markets.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Pince (SI) / Tornyszentmiklos (HU)	FGSZ Ltd.	2020	HU	SI	38.2 GWh/d
	Comment: 1/3 is firm capacity+2/3 is interruptible capacity				
	FGSZ Ltd.	2020	SI	HU	38.2 GWh/d
	Comment: 1/3 is firm capacity + 2/3 is interruptible capacity				

Sponsors	General Information		No Barriers Defined	Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	
		Operator	FGSZ Ltd.	
		Host Country	Hungary	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects	
Project Code	Project Name
TRA-N-123	Városföld CS
TRA-N-018	Városföld-Ercsi-Győr

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarién TYNDP 2015)	Pre-Feasibility		12/2015	Considered TPA Regime	Regulated
NDP Number	12.12.1.-12.12.2	Feasibility	05/2016	12/2017	Considered Tariff Regime	Regulated
		FEED	06/2017	11/2019	Applied for Exemption	No
Currently PCI	Yes (6.23)	Market Test			Exemption Granted	No
		Permitting	11/2016	10/2017		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		02/2018	Exemption in exit direction	0.00%
		Construction	09/2019	12/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Nagykanizsa-Tornyiszentmiklós			500	41	9
Total				41	9

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
LNG ()	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	

Benefit Description

o The Hungarian projects taken as a whole main aim, is to enhance the flexibility of the Hungarian transmission system by connecting to neighbouring systems, ensuring reserves flow availability, and guaranteeing flow deliverability which will enhance the transmission systems security of supply position along with helping with further market integration.



Romanian-Hungarian reverse flow Hungarian section 2nd stage

TRA-N-377	Project	Pipeline including CS	Non-FID
Update Date	08/05/2016		Non-Advanced
Description	A third unit (4.5 MW) at Csanádpalota to reach the increased 4.4 bcm/a capacity of the corridor at the RO/HU border.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	FGSZ Ltd.	2022	HU	RO	76.5 GWh/d
	FGSZ Ltd.	2022	RO	HU	76.5 GWh/d

Sponsors		General Information			
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Regulatory	1
		Operator	FGSZ Ltd.		
		Host Country	Hungary	Market	1
		Status	Planned		
		Website			
		Publication Approval Status	Approved		

Enabled Projects	
Project Code	Project Name
TRA-N-286	Romanian-Hungarian reverse flow Hungarian section 1st stage
TRA-N-123	Városföld CS
TRA-N-018	Városföld-Ercsi-Győr

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
NDP Number	12.6.1.	Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
		FEED	11/2018	04/2020	Applied for Exemption	No
Currently PCI	Yes (6.24.9.)	Market Test		12/2016	Exemption Granted	No
		Permitting	05/2017	09/2018		
CBCA Decision	Yes (2016-10-06)	Supply Contracts		04/2017	Exemption in entry direction	0.00%
Market Survey	Open Season(2016-12-31)	FID		10/2018	Exemption in exit direction	0.00%
		Construction	03/2021	12/2022		
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Csanádpalota	+ 1 Comressor unit 4.5MW			4
	Total				4

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	3 year
Delay Explanation	Black Sea project delay

Expected Gas Sourcing

Black Sea

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barrier Type	Description
Market	Lack of market support
Regulatory	Low rate of return

BG-RO-HU-AT transmission corridor

TRA-N-380	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	It is able to transport gas from Bulgaria (12 Bcm/a) to Austria (Baumgarten) (10 Bcm/a) via Romania and Hungary.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota 2	FGSZ Ltd.	2024	HU	RO	145.5 GWh/d
	FGSZ Ltd.	2024	RO	HU	145.5 GWh/d
Mosonmagyaróvár 2	FGSZ Ltd.	2024	AT	HU	145.5 GWh/d
	FGSZ Ltd.	2024	HU	AT	145.5 GWh/d

Sponsors		General Information		Barriers (Count)			
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.			Market	2
		Operator	FGSZ Ltd.				
		Host Country	Hungary			Regulatory	1
		Status	Planned				
		Website					
		Publication Approval Status	Approved				

Enabled Projects	
Project Code	Project Name
TRA-N-377	Romanian-Hungarian reverse flow Hungarian section 2nd stage
TRA-N-286	Romanian-Hungarian reverse flow Hungarian section 1st stage
TRA-N-123	Városhöld CS
TRA-N-061	Ercsi-Szazhalombatta
TRA-N-018	Városhöld-Ercsi-Győr

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		12/2015	Considered TPA Regime	Regulated
NDP Number	12.13.1.-12.14.7	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction		12/2023		
		Commissioning	2024	2024		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Csanádpalota-Városföld			1,000	115	54
Győr-HU/AT border Mosonmagyaróvár			1,000	71	0
Total				186	54

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Market	Lack of market support
Market	Lack of market maturity
Regulatory	Low rate of return

Enhancement of Transmission Capacity of Slovak-Hungarian interconnector

TRA-N-524	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Enhancement of Exit transmission capacity with 102 GWh/day in HU>SK direction and enhancement of Entry transmission capacity with 26 GWh/day in SK>HU direction at Balassagyarmat with new compressors on Szada Compressor station. The available bi-directional transmission capacities will be the same in both direction at the Slovak-Hungarian interconnector.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Balassagyarmat (HU) / Velké Zlievce (SK)	MGT Hungarian Gas Transit Ltd.	2017	HUi	SK	102.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2017	SK	HUi	26.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2017	HU	HUi	102.0 GWh/d
Vecsés MGT / FGSZ				Comment: .	
	MGT Hungarian Gas Transit Ltd.	2017	HUi	HU	26.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	Magyar Gáz Tranzit Zrt.		
	Operator	MGT Hungarian Gas Transit Ltd.		
	Host Country	Hungary		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

Enabled Projects	
Project Code	Project Name
TRA-F-148	Slovak-Hungarian interconnector (Vecsés-Szada-Balassagyarmat)
TRA-N-636	Development of Transmission Capacity at Slovak-Hungarian interconnector

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (MGT submitted this project to FGSZ and proposed to forward for approval to Hungarian Energy Office (MEKH). FGSZ is responsible for setup the Hungarian TYNDP and for submit it to MEKH. FGSZ put this project to the documentation of Development Plan 2015 but doesn't propose it for approval.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>Yes</i>
		Market Test			Exemption Granted	<i>No</i>
		Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
NDP Number		FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
Currently PCI	<i>Yes (TRN-A-524)</i>	Commissioning	<i>2017</i>	<i>2017</i>		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Hungarian section			800	92	
Slovak			800	18	
Total				110	

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Norway, Russia, LNG (HR,PL)	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Hungarian section of Tesla project

TRA-N-585	Project	Pipeline including CS	Non-FID
Update Date	27/05/2016		Non-Advanced
Description	The main aim of the Tesla project is to transport natural gas from the planned Turkish Stream (RU-TR) to Central and Eastern Europe via Greece, Macedonia, Serbia, Hungary and Austria. The Hungarian section is part of the TR-GR-FYROM-SRB-HU-AT corridor. The main flow direction is from Turkey to Austria, but according to EU rules we intend to ensure the reverse flow (from Austria to Turkey) with the same capacity as the main flow direction.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
TESLA / HU Offtake	FGSZ Ltd.	2020	HU/TLA	HU	175.0 GWh/d
TESLA / RS>HU	FGSZ Ltd.	2020	RS/TLA	HU/TLA	582.0 GWh/d

Sponsors		General Information				Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Others	1	
		Operator	FGSZ Ltd.			
		Host Country	Hungary			
		Status	Planned			
		Website				
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility		12/2015	Considered TPA Regime	Regulated
NDP Number	12.15.1. - 12.15.2.	Feasibility	01/2017	12/2017	Considered Tariff Regime	Regulated
		FEED	10/2016	03/2018	Applied for Exemption	No
Currently PCI	Yes (6.25.2.)	Market Test		10/2016	Exemption Granted	No
		Permitting	10/2016	03/2018		
CBCA Decision	No	Supply Contracts		08/2018	Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		03/2018	Exemption in exit direction	0.00%
		Construction	09/2018	05/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Hungarian section		+30 MW compressor station, in order to put natural gas from the Hungarian national system (gas storage, other sources) to Tesla pipeline.	1,200	361	50
Total				361	50

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	1 year
Delay Explanation	Russian/Turkey conflict.

Expected Gas Sourcing	
Caspian Region, Russia	

Benefits	
Main Driver	Others
Main Driver Explanation	The main project driver is to ensure the supply of countries in the Balkan region and Central and Eastern Europe in case the Russian supply will terminate via Ukraine in the future.
Benefit Description	

Barriers	
Barrier Type	Description
Others	Financing difficulties.

HU-UA reverse flow

TRA-N-586	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	The main aim of the project is to ensure firm capacity at IP Beregdaróc in the Hungary-Ukraine direction.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Beregdaróc 800 (HU) - Beregovo (UA) (HU>UA)	FGSZ Ltd.	2020	HU	UAe	180.0 GWh/d

Sponsors		General Information				Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Others	1	
		Operator	FGSZ Ltd.			
		Host Country	Hungary			
		Status	Planned			
		Website				
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Hungarian TYNDP 2015)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	12.17.	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2020	2020		

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Hungarian section	Piping installation at Városföld, Hajdúszoboszló, Beregdaróc nodes and compressor stations and aftercoolers, which enables the reverse flow. Measuring station is also necessary at Beregdaróc node.		0	
Total			0	

Expected Gas Sourcing	
Algeria, Norway, Russia, LNG (HR)	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	At the moment FGSZ is able to ensure only interruptible capacity at IP Beregdaróc (HU>UA direction). Ukrainian party always requests firm capacity, and this new entry point is very important for Ukraine.
Benefit Description	

Barriers	
Barrier Type	Description
Others	Financing difficulties.

Development of Transmission Capacity at Slovak-Hungarian interconnector

TRA-N-636	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Reducing the flow direction switch operation time. Developing the transmission capacity in HU>SK and SK>HU direction from interruptible capacity to non-interruptible (firm) capacity.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
	Promoter	Magyar Gáz Tranzit Zrt.		
	Operator	MGT Hungarian Gas Transit Ltd.		
	Host Country	Hungary		
	Status	Planned		
	Website			
	Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-F-148	Slovak-Hungarian interconnector (Vecsés-Szada-Balassagyarmat)
TRA-N-524	Enhancement of Transmission Capacity of Slovak-Hungarian interconnector

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (MGT submitted this project to FGSZ and proposed to forward for approval to Hungarian Energy Office (MEKH). FGSZ is responsible for setup the Hungarian TYNDP and for submit it to MEKH. FGSZ put this project to the documentation of Development Plan 2015 but doesn't propose it for approval.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>Yes</i>
		Market Test			Exemption Granted	<i>Yes</i>
		Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
NDP Number		FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
Currently PCI	<i>Yes (TRA-N-636)</i>	Commissioning	<i>2017</i>	<i>2017</i>		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Hungarian section			800	92	
Slovak section			800	18	
Total				110	

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Norway, Russia, LNG ()	

Benefits

Main Driver	Market Demand
Main Driver Explanation	The transmission capacity in HU>SK direction is changed from interruptible capacity to non-interruptible (firm) capacity.
Benefit Description	Reducing the flow direction switch operation time.

Eastring - Hungary

TRA-N-656	Project	Pipeline including CS	Non-FID
Update Date	27/05/2016		Non-Advanced
Description	Eastring-HU is subproject located in Hungary and is essential part of the Eastring project, which connects IP Veľké Kapušany at the SK-UA border, with IP at the BG/TR border in the following routing options: – from SK to RO – via HU, (new pipeline). – from RO to TR – Option A – new pipeline passing production & storage area and continuing to IP Isaccea and then to BG/TR border by utilizing existing RO-BG transit assets – Option B – new pipeline, passing 2 production & storage areas and continuing to BG/TR border. The project would (i) secure supplies in case of RU disruption and therefore it will increase gas SoS in the broader Central-South-East EU region, (ii) allow access to alternative gas sources for Central, Western & Southern Europe and (iii) mean step towards EU single gas market.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border HU/EAR <> SK/EAR	FGSZ Ltd.	2021	HU/EAR	SK/EAR	570.0 GWh/d
	FGSZ Ltd.	2021	SK/EAR	HU/EAR	570.0 GWh/d
	FGSZ Ltd.	2025	HU/EAR	SK/EAR	570.0 GWh/d
	FGSZ Ltd.	2025	SK/EAR	HU/EAR	570.0 GWh/d
Eastring Cross-Border RO/EAR <> HU/EAR	FGSZ Ltd.	2021	HU/EAR	RO/EAR	570.0 GWh/d
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	FGSZ Ltd.	2021	RO/EAR	HU/EAR	570.0 GWh/d
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
Eastring HU Domestic Point	FGSZ Ltd.	2025	HU/EAR	RO/EAR	570.0 GWh/d
	FGSZ Ltd.	2025	RO/EAR	HU/EAR	570.0 GWh/d
	FGSZ Ltd.	2021	HU	HU/EAR	570.0 GWh/d
	FGSZ Ltd.	2021	HU/EAR	HU	570.0 GWh/d

Sponsors		General Information		No Barriers Defined	Barriers (Count)
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.		
		Operator	FGSZ Ltd.		
		Host Country	Hungary		
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-018	Városföld-Ercsi-Győr

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Eastring pipeline)	Pre-Feasibility			Considered TPA Regime	Not Applicable
NDP Number	12.16	Feasibility	05/2016	04/2017	Considered Tariff Regime	Not Applicable
		FEED			Applied for Exemption	Not Relevant
Currently PCI	Yes (Not Defined yet)	Market Test			Exemption Granted	Not Relevant
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2021	2025		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-HU-1/2		1,400	112	0
Total			112	0

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
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General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Caspian Region, Norway, Russia, LNG (TR), Iraq, Iran, Egypt, Israel, Turkmenistan, Kazakhstan, Cyprus, Azerbaijan, Any gas available at Turkish/European HUBs. For dire

Benefits

Main Driver	Others
Main Driver Explanation	The project brings significant benefits to the SoS of Europe bringing the increasing new sources of gas supply in South Eastern Europe to the markets of Central and Western Europe, while further enhancing the market integration of the affected countries.
Benefit Description	- Physical alternative for providing 100% of all Balkan countries' consumption; - Providing security of supply for 100% of all Balkan countries' consumption; - Additional utilization for CZ, SK, PL, UA, RO, BG transit and storage assets; - Providing Western shippers with possibility to supply Balkan countries and even Turkey from NCG/Gaspool/Baumgarten; - Corridor ready for future gas imports to Europe from alternative sources – AGRI, TANAP, Caspian, Iran, Iraq, Egypt, Israel, Cyprus. Most of them from perspective Turkish natural gas hub/border Turkey/BG;

Vecsés-Városföld gas transit pipeline

TRA-N-831	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	The aim of the project is to build a new bidirectional high pressure transit pipeline between Vecsés and Városföld to extend the Slovak-Hungarian Interconnector into south direction. The project contributes to develop the North-South gas corridor and to increase the European energy security and to diversificate the gas supply sources and transmission routes.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information	No Barriers Defined	Barriers (Count)
	Promoter	Magyar Gáz Tranzit Zrt.	
	Operator	MGT Hungarian Gas Transit Ltd.	
	Host Country	Hungary	
	Status	Planned	
	Website	Project's URL	
	Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-F-148	Slovak-Hungarian interconnector (Vecsés-Szada-Balassagyarmat)
TRA-N-524	Enhancement of Transmission Capacity of Slovak-Hungarian interconnector

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	No (This is a new project wich will be submitted to Hungarian Enegy Office (MEKH) for approval by MGT via FGSZ. (FGSZ is responsible for setup the Hungarian TYNDP) till end of 2016. MEKH's decision on National Development Plan 2016 will take effect in 2017 Q1 expectedly.)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	Yes
		Market Test			Exemption Granted	Yes
NDP Number		Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
		FID			Exemption in exit direction	0.00%
Currently PCI		Construction				
		Commissioning	2021	2021		
CBCA Decision		No				
Market Survey	Not Relevant (no CBCA decision)					

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Vecsés-Városföld	Pressure regulator at Vecsés node, hub and metering station at Városföld.,	800	80	
	Total			80	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Norway, Russia, LNG ()	

Benefits

Main Driver	Market Demand
Main Driver Explanation	Security of Gas Supply New gas transit routes New gas sources Diversification of gas sources and routes
Benefit Description	

Gas Interconnection Poland-Lithuania (GIPL) - PL section

TRA-N-212	Project	Pipeline including CS	Non-FID
Update Date	19/05/2016		Advanced
Description	GIPL aims to connect the gas transmission systems in Poland and Lithuania and, consequently, enable the integration of the isolated gas markets in the Baltic States (and Finland) with the Polish and EU gas markets. This will contribute to the creation of a regional gas market, enhancement of competition and the security of gas supply. The project will also provide an access to the global LNG market for the Baltic States via the LNG terminal in Świnoujście. The construction of GIPL, except the above benefits for security and diversification of gas supplies in the Baltic region, will also allow to connect the Baltic States with the CEE countries, thus providing strategic link between the BEMIP and North-South East priority corridors. As part of the project implementation on the Polish side, it is foreseen to construct the pipeline between Holowczyce and PL-LT border and constrct CS Gustorzyn. The commissioning year of the project has been moved to 2021.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-LT	GAZ-SYSTEM S.A.	2019	LT	PL	51.1 GWh/d
	GAZ-SYSTEM S.A.	2019	PL	LT	73.9 GWh/d

Sponsors	General Information				Barriers (Count)
Lithuanian section	Promoter	GAZ-SYSTEM S.A.	Political	1	
AB Amber Grid	Operator	GAZ-SYSTEM S.A.	Permit Granting	1	
Polish section	Host Country	Poland	Others	1	
Gas Transmission Operator GAZ-SYSTEM S.A.	Status	Planned	Market	1	
	Website	Project's URL			
	Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED	<i>01/2014</i>	<i>01/2017</i>	Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (8.5)</i>	Permitting		<i>01/2017</i>		
		Supply Contracts				
CBCA Decision	<i>Yes (2014-08-11)</i>	FID		<i>01/2017</i>	Exemption in entry direction	<i>0.00%</i>
					Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Open Season(2013-09-21)</i>	Construction	<i>01/2017</i>	<i>01/2019</i>		
		Commissioning				

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	CS Gustorzyn	Redundancy not included			16
	GIPL - Polish section	The pipeline will connect to existing CS in Holowczyce. Routing and length subject to studies.	700	357	
	Total			357	16

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	N/A
Delay Explanation	GAZ-SYSTEM encountered a number of problems mainly regarding the extension of CS Rembelszczyna. These issues concern permitting and environmental aspects. They significantly undermine the implementation of the project according to the previous time schedule. Due to the significance of the project GAZ-SYSTEM proposed a new routing of the pipeline in Poland. The reason for changing the routing is to strenghten the engineering and technical aspects of the project and to commission the project with a shortest possible delay when compared to the implementation of GIPL in the base scenario.

Expected Gas Sourcing

Norway, Russia, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Regulation SoS, market integration
Benefit Description	The very aim of GIPL is the integration of the isolated gas markets of the Baltic States into the EU gas grid by introducing an alternative gas supply route to the Baltic States. This interconnection will diversify the gas supply sources, increase the security of supply and enhance competition on the gas market in the Baltic States. For the Baltic States, GIPL will provide the access both to EU gas spot market and to the global LNG market via LNG terminal in Świnoujście. For the Polish market players, GIPL will provide the opportunity of using Latvian Incukalna UGS. Also through GIPL, gas could be supplied to currently non-gasified areas in Poland and Lithuania.

Barriers

Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Political	Lack of guarantees of covering entire project costs when the project is not commercially viable in all market scenarios (SoS project).
Others	Lack of guarantees of covering entire project costs when the project is not commercially viable in all market scenarios (SoS project). Risk of the lack of interest in capacity booking in the first period of operation due to immaturity of the gas markets in the Baltic States.
Market	Lack of market maturity

North - South Gas Corridor in Eastern Poland

TRA-N-245	Project	Pipeline including CS	Non-FID
Update Date	21/06/2016		Non-Advanced
Description	The investment tasks within the project constitute essential elements of the planned North-South gas interconnections in Central Eastern and South Eastern Europe. The corridor covers Eastern Poland and is planned to be connected to two interconnectors, i.e. Poland – Lithuania (GIPL) and Poland – Slovakia interconnections. Implementation of the project will allow for significant volumes of gas to be transported via the corridor in Eastern Poland towards PL-SK interconnection and the GIPL project. This investment plays a key role in the integration of Baltic States (via GIPL) with the CEE region along the North-South axis. It will also enhance the access to the USG Strachocina that have large expansion potential and may serve as essential security of supply infrastructure in the CEE region. The investment tasks are planned to be commissioned in 2023.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
	GAZ-SYSTEM S.A.	2023	DScPL	PL	0.0 GWh/d
Aggregated Distribution (PL)	Comment: Increment not assessed by ENTSG: Distribution points are not in the scope of the TYNDP				

Sponsors	General Information				Barriers (Count)
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Permit Granting	
		Operator	GAZ-SYSTEM S.A.	Others	
		Host Country	Poland	Financing	
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-212	Gas Interconnection Poland-Lithuania (GIPL) - PL section
TRA-N-275	Poland - Slovakia interconnection (PL section)
TRA-N-621	Poland - Ukraine Gas interconnection (PL section)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Network Development Plan 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	N/A	FEED			Applied for Exemption	No
		Market Test			Exemption Granted	Not Relevant
Currently PCI	Yes (6.2.2)	Permitting				
		Supply Contracts				
CBCA Decision	No	FID			Exemption in entry direction	0.00%
					Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Construction				
		Commissioning				
			2023	2023		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
CS Pomorze					35
Gustorzyn-Wronow pipeline			1,200	410	
Hermanowice-Jaroslaw pipeline			700	39	
Hermanowice-Strachocina pipeline			700	72	
Jaroslaw-Rozwadow pipeline			700	60	
Kolnik-Gustorzyn pipeline			1,200	230	
Pierscien Trojmiejski			1,000	100	
Rembelszczyzna compressor station					23
Rembelszczyzna-Wronow pipeline			1,000	135	
Rozwadow-Konskowola-Wronow pipeline			700	103	
Total				1,149	58

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability

Specific Criteria Fulfilled Comments

Expected Gas Sourcing

Caspian Region, Norway, Russia, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Regulation SoS, market demand
Benefit Description	The project will allow to transport significant volumes of gas via PL-SK and PL-UA interconnections. It will also enhance the access to the USG Strachocina that have large expansion potential and may serve as essential security of supply infrastructure in the CEE region. Construction of the pipelines within this project, together with completion of the PL-SK interconnection and GIPL, will have a positive impact on the competition in the CEE and Baltic regions, as the project will provide a possibility to open the market for more gas suppliers. This would in turn mean ending the state of major dependency on one single gas supplier for the countries in the respective regions thanks to the potential access to gas deliveries from new sources. The projects in Eastern Poland are located in the area which offers the possibility to extract unconventional gas. If reserves are confirmed, the transmission infrastructure in Eastern Poland might be used to transport gas to adjacent systems.

Barriers

Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.
Financing	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.

North - South Gas Corridor in Western Poland

TRA-N-247	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The investment tasks within the project constitute essential elements of the planned North-South gas interconnections in Central-Eastern Europe. The corridor covers Western Poland and it is planned to be connected to PL-CZ interconnection. Implementation of the investment tasks within this project will allow for exploiting full potential of gas transmission from LNG terminal Świnoujście and Baltic Pipe through the North-South gas corridor to other CEE countries. This infrastructure will be used for purposes of PL-CZ and PL-SK interconnections. It will also enable the possibility of gas transmission to Ukraine. The investment tasks are planned to be commissioned in 2018.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Aggregated Distribution (PL)	GAZ-SYSTEM S.A.	2019	DScPL	PL	0.0 GWh/d

Sponsors		General Information	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.
		Operator	GAZ-SYSTEM S.A.
		Host Country	Poland
		Status	Planned
		Website	Project's URL
		Publication Approval Status	Approved

Permit Granting

Others

1

1

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-275	Poland - Slovakia interconnection (PL section)
TRA-N-273	Poland - Czech Republic interconnection (PL section)

NDP and PCI Information			Schedule	Start Date	End Date	Third-Party Access Regime			
Part of NDP	Yes (Network Development Plan 2016-2025)	Pre-Feasibility				Considered TPA Regime	Regulated		
		Feasibility				Considered Tariff Regime	Regulated		
NDP Number	N/A	FEED				01/2013	01/2017	Applied for Exemption	No
		Market Test						Exemption Granted	Not Relevant
Currently PCI	Yes (6.1.2)	Permitting		01/2017					
			Supply Contracts			Exemption in entry direction	0.00%		
CBCA Decision	No	FID				Exemption in exit direction	0.00%		
Market Survey	Not Relevant (no CBCA decision)	Construction	01/2017	01/2019					
			Commissioning	2019	2019				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Lwówek-Odolanów pipeline			1,000	162	
Odolanów compressor station					20
Tworóg-Kędzierzyn Koźle pipeline			1,000	43	
Total				205	20

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Caspian Region, Norway, Russia, LNG ()	

Benefits	
Main Driver	Others
Main Driver Explanation	The project is driven by SoS and market demand considerations

Benefit Description Implementation of the investment tasks within this project will allow for ensuring full functionality of PL-CZ and PL-SK interconnections. This project will have an impact on: enhancing functionality of transmission system in Central and Southern Poland in order to facilitate better operational functioning of the upgraded PL-CZ interconnection and to initiate gas flow on the planned PL-SK interconnection; increasing the security of supply sources, routes and counterparts, as well as on providing an overall flexibility for the CEE region; improving European gas grid interconnections; creating a well-functioning internal market in the CEE region by ensuring high reliability of the cross-border transmission between Poland, the Czech Republic and Slovakia.

Barriers	
Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the Project.
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.

Poland - Denmark interconnection (Baltic Pipe) - PL section

TRA-N-271	Project	Pipeline including CS	Non-FID
Update Date	21/06/2016		Non-Advanced
Description	Baltic Pipe aims to connect the gas transmission systems in Poland and Denmark. The project consists of an offshore pipeline between Poland and Denmark and relevant onshore infrastructure reinforcements in both countries. Baltic Pipe will enable the transmission of Norwegian gas to the CEE region to cover the gas demand in Poland and possible leverage for market coupling potential in the Baltic States and Central-Eastern Europe, including Ukraine. The project may also bring the opportunity for the Danish and Swedish markets to diversify its supply potential in the context of declining production in the Danish part of the North Sea. The Baltic Pipe is intended to contribute to diversification of gas supply and increase competition, integration and security of supply in the CEE region (including Ukraine) and the Baltic States.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-DK	GAZ-SYSTEM S.A.	2022	DK	PL	306.8 GWh/d
	GAZ-SYSTEM S.A.	2022	PL	DK	91.1 GWh/d

Sponsors		General Information				Barriers (Count)
Danish section		Promoter	GAZ-SYSTEM S.A.	Permit Granting	<div></div> 1	
Energinet.dk	100%	Operator	GAZ-SYSTEM S.A.			
Polish section		Host Country	Poland	Others	<div></div> 1	
GAZ-SYSTEM S.A.	100%	Status	Planned			
		Website	<u>Project's URL</u>			
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility	<i>03/2016</i>	<i>01/2017</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (8.3)</i>	Permitting			Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning	<i>2022</i>	<i>2022</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Baltic Pipe (offshore section)		Power of the compressor station to be determined at a later stage	900	280	
Goleniow - Lwowek pipeline			100	188	
Goleniow, Gustorzyn, Odolanow CS		Goleniow CS : 12 MW, Gustorzyn CS : 15 MW, Odolanow CS : 14 MW			41
Niechorze - Ploty pipeline			1,000	40	
Onshore terminal - Niechorze					
Total				508	41

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Norway, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Regulation SoS and market integration
Benefit Description	<p>Baltic Pipe will have a significant impact on: increasing security of supply in the CEE and Baltic Sea region by diversifying supply routes, sources and counterparts; creating well-interconnected gas infrastructure in the Baltic Sea region; enhancing competition on the regional markets (CEE and the Baltic region); promoting natural gas as a reliable, competitive and environmentally-friendly source of energy e.g. in the power generation and transport sectors. The Baltic Pipe project also contributes to the NSI EAST and BEMIP priority corridors, as the project will allow to transport gas from North Sea deposits to the CEE countries, namely to the CZ, SK and UA (via the North-South corridor in Poland, PL-CZ, PL-SK and PL-UA interconnections) and to the Baltic region (via GIPL to the Baltic States, and further to FI via Baltconnector). Since the project is bidirectional it will also provide the security of supply benefits for DK and SE (access to LNG).</p>

Barriers

Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Others	<p>There is a lack of confidence and risk-taking in the private gas sector to the Baltic Pipe project, as it requires coordinated long term business cases, fundamental change in current business models/susbsidies and involves many parties from at least three countries (PL, DK, NO). Granting the EU priority for the project and a grant to the Polish and Danish TSOs may well accelerate the implementation of the project.</p>

Upgrade of LNG terminal in Świnoujście

LNG-N-272	Project	LNG Terminal	Non-FID
Update Date	09/05/2016		Non-Advanced
Description	The main objective of the project is to upgrade the capacity of the LNG terminal in Swinoujście from 5 up to 10 bcm/y. The project will enable to benefit from the economies of scale, as relatively low investment costs (no need to construct the facility from scratch, the majority of costs will be related to the construction of the 3rd storage tank) may bring further benefits to gas consumers in the Baltic Sea area and the CEE region (increase of SoS, competition and liquidity, decrease of gas prices).		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Swinoujście	GAZ-SYSTEM S.A.	2020	LNG_Tk_PL	PL	158.0 GWh/d
	Polskie LNG S.A.	2020	LNG_Tk_PL	PL	158.0 GWh/d

Sponsors		General Information				Barriers (Count)
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Permit Granting	1	
		Operator	Polskie LNG S.A.			
		Host Country	Poland	Others	1	
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility		<i>11/2015</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (8.7)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning	<i>2020</i>	<i>2020</i>		

Technical Information (LNG)

LNG Facility	<i>LNG terminal in Świnoujście</i>
Expected Volume (bcm/y)	<i>5</i>
Storage Capacity (m3)	<i>200,000</i>
Ship Size (m3)	<i>216,000</i>
Reloading Ability	<i>Yes</i>

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

LNG (), LNG exporting countries

Benefits

Main Driver	<i>Others</i>
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Main Driver Explanation	Implementation of the project is driven by SoS and market demand considerations
Benefit Description	The extension of the LNG terminal in Swinoujscie will have an impact on: increasing security of supply in the Baltic Sea and CEE regions by diversifying supply routes, sources (new physical source of supply for both regions) and counterparts (access to global LNG market); enhancing competition on regional markets; promoting natural gas as a reliable, competitive and environmentally-friendly source of energy e.g. in the transport sector (maritime transport); creating a physical hub in Swinoujscie and/or a virtual hub in Poland; establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland and possible leverage for market coupling potential in the Baltic Sea region and in Central-Eastern Europe. The LNG terminal in Świnoujście contributes to the NSI EAST corridor, as the supplies from Świnoujście may be directed through upgraded transmission system in Poland, PL-CZ PL-SK and PL-UA interconnections towards the CEE region.

Barriers	
Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Others	Possible lack of risk-taking in the private gas sector which would result in insufficient long term commitments to enable the investment decision for the infrastructure operator. It could be mitigated by external subsidies (EU) to cover positive externalities such as SoS, positive environmental impact (reduction of emissions due to fuel change in maritime transport) and supply diversification in the Baltic area and the CEE region (including Ukraine).

Poland - Czech Republic interconnection (PL section)

TRA-N-273	Project	Pipeline including CS	Non-FID
Update Date	09/05/2016		Advanced
Description	The project aims to increase the cross-border capacity between Poland and the Czech Republic by establishing a large transportation corridor that will allow for flexible transport of gas in Central-Eastern Europe within the North-South corridor. The development of the physical interconnection between Poland and the Czech Republic will contribute to reinforcement of the effective operation of the gas transmission systems, efficient gas exchange between the markets, as well as increase of the security of supply not only for Poland and the Czech Republic, but also for the CEE region by enabling the supply link with other European gas market and global LNG market via the terminal in Świnoujście. The project consists of Poland-Czech Republic Interconnector (STORK II) and internal transmission projects in Poland and in the Czech Republic. Detailed information on these projects is provided in subsequent sections in the project questionnaire.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Hať	GAZ-SYSTEM S.A.	2019	CZ	PL	219.1 GWh/d
	GAZ-SYSTEM S.A.	2019	PL	CZ	153.2 GWh/d

Sponsors		General Information			
Czech section		Promoter	GAZ-SYSTEM S.A.	Political	1
NET4GAS, s.r.o.	100%	Operator	GAZ-SYSTEM S.A.		
Polish section		Host Country	Poland	Permit Granting	1
Gas Transmission Operator	GAZ-SYSTEM S.A. 100%	Status	Planned		
		Website	Project's URL	Others	1
		Publication Approval Status	Approved		

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-247	North - South Gas Corridor in Western Poland

NDP and PCI Information			Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>		Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
			Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>		FEED	<i>01/2012</i>	<i>01/2017</i>	Applied for Exemption	<i>No</i>
			Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.1.1, 6.1.2)</i>		Permitting		<i>01/2017</i>		
			Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>Yes (2014-06-24)</i>		FID		<i>01/2017</i>	Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Other(2012-04-24)</i>		Construction	<i>01/2017</i>	<i>01/2019</i>		
			Commissioning				

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	CS Kedzierzyn				30
	Czeszow-Kielczow pipeline		1,000	32	
	Czeszow-Wierzchowice pipeline		1,000	14	
	Kedzierzyn node				
	PL-CZ interconnection - Polish section		1,000	54	
	Zdzieszowice-Kędzierzyn pipeline		1,000	19	
	Zdzieszowice-Wrocław pipeline		1,000	130	
	Total			249	30

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Caspian Region, Norway, Russia, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Regulation SoS and market integration
Benefit Description	Implementation of PL-CZ interconnection will have an impact on: increasing the security of gas supply, providing overall flexibility for the CEE region and diversifying the supply routes for the CEE region; improving European gas grid interconnection; increasing the security and reliability of the cross-border gas transmission between the Czech Republic and Poland (fulfilment of N-1 rule in Poland); creating a robust, well-functioning internal market in the Czech Republic and Poland and promoting the competition; contributing to the creation of an integrated and competitive gas market in the CEE region; establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in Central-Eastern Europe.

Barriers

Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Political	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.

Poland - Slovakia interconnection (PL section)

TRA-N-275	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The main goal of the project is to create an important part of the North-South gas interconnections in Central-Eastern Europe by implementing a missing interconnection between the transmission systems in Poland and Slovakia and, thus, increase the security of gas supplies in Central-Eastern Europe through the diversification of supply sources and routes, as well as integration of Sub-Carpathian Market Area and enhancing market functionality. The project consists of Poland-Slovakia interconnector and relevant internal transmission investments in Poland and in Slovakia to ensure full functionality of the interconnection. Detailed information on these projects is provided in subsequent section in the project questionnaire.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL - SK	GAZ-SYSTEM S.A.	2019	PL	SK	143.9 GWh/d
	GAZ-SYSTEM S.A.	2019	SK	PL	174.5 GWh/d

Sponsors	General Information			
Polish section	Promoter	GAZ-SYSTEM S.A.	Political	Barriers (Count)
Gas Transmission Operator GAZ-SYSTEM S.A. 100%	Operator	GAZ-SYSTEM S.A.		
Slovak section	Host Country	Poland		
eustream, a.s. 100%	Status	Planned	Permit Granting	
	Website	Project's URL	Others	
	Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-245	North - South Gas Corridor in Eastern Poland
TRA-N-247	North - South Gas Corridor in Western Poland

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED	<i>01/2014</i>	<i>01/2017</i>	Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.2.1, 6.2.3)</i>	Permitting		<i>01/2017</i>		
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>Yes (2014-11-28)</i>	FID		<i>01/2017</i>	Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Open Season(2016-07-01)</i>	Construction	<i>01/2017</i>	<i>12/2019</i>		
		Commissioning				

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
PL-SK interconnection - Polish section			1,000	58	19
Pogórska Wola - Tworzeń pipeline			1,000	160	
Strachocina - Pogórska Wola			1,000	98	
Tworóg - Tworzeń			1,000	56	
Total				372	19

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	29/10/2014
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, Russia, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Increase of SoS in the CEE region. Integration of gas infrastructure in the CEE region by constructing a cross-border interconnection between PL and SK that is currently missing.
Benefit Description	Implementation of PL-SK interconnection will have an impact on: creating the cross-border capacity between Poland and Slovakia by establishing a large transportation corridor that will allow for flexible transport of gas in Central Europe within the North-South axis; increasing the security of gas supply and diversification of supply routes for the CEE region; improving European gas grid interconnection; increasing the security and reliability of the cross-border gas transmission between Slovakia and Poland (contribution to N-1 standard in Poland and Slovakia); creating a robust, well-functioning internal market in Slovakia and Poland and promote the competition; establishing adequate technical conditions necessary to cover the forecasted growth of the gas demand in Poland based on the development of the power generation sector and possible leverage for market coupling potential in Central-Eastern Europe.

Barriers

Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the Project.
Political	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Agreement between the Government of the Republic of Poland and the Government of the Slovak Republic for cooperation on the implementation of the project of a gas pipeline connecting the Polish transmission system and Slovak transmission system.	In Comments	Yes	11/06/2014

Poland - Ukraine Gas interconnection (PL section)

TRA-N-621	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	The objective of the project is to create a large transportation corridor between Poland and Ukraine. Scope of the Project: 1. Pipeline DN1000 Hermanowice-PL/UA border -1,5 km 2. Metering station in Poland 3. Extension of CS Strachocina Necessary additional transmission system development in Poland 1. Pipeline DN700 Hermanowice-Strachocina, 72 km 2. Pipeline DN1000 Strachocina-Pogórska Wola, 98 km 3. Pipeline DN1000 Pogórska Wola-Tworzeń, 160 km 4. Pipeline DN1000 Tworóg-Tworzeń, 56 km The Project will contribute towards: • establishment of a well-integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MD) • diversification of gas routes and sources for Ukraine • enhancement of security of gas supply for Ukraine • reducing dependency on single gas supplier for Ukraine • strengthening energy solidarity between EU Energy Community and EU contracting countries • access to the gas storages in Ukraine for Poland and EU countries		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
PL>UA Interconnector	GAZ-SYSTEM S.A.	2020	PL	UAe	245.0 GWh/d
Comment: 245,28 GWh/d					
UA>PL Interconnector	GAZ-SYSTEM S.A.	2020	UA	PL	215.0 GWh/d
Comment: 215,04 GWh/d					

Sponsors		General Information		No Barriers Defined	
PL section		Promoter	GAZ-SYSTEM S.A.		
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Operator	GAZ-SYSTEM S.A.		
UA section		Host Country	Poland		
Ukrtransgaz	100%	Status	Planned		
		Website			
		Publication Approval Status	Approved		

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility	<i>01/2016</i>	<i>01/2016</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting				
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in entry direction	<i>0.00%</i>
					Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning				
			<i>2020</i>	<i>2020</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Hermanowice-Strachocina		Second DN700 pipeline at this route.	700	72	
Pipeline Hermanowice -PL/UA border		Exact pipeline length is 1.5 km	1,000	2	
Strachocina CS					30
Total				74	30

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Norway, Russia, LNG ()	

Benefits	
Main Driver	Others

Main Driver Explanation	The objective of the project is to create a large transportation corridor between Poland and Ukraine which will contribute towards: • establishment of a well-integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MDA) • diversification of gas routes and sources for Ukraine • enhancement of security of gas supply for Ukraine • reducing dependency on single gas supplier for Ukraine • strengthening energy solidarity between EU Energy Community and EU contracting countries • access to the gas storages in Ukraine for Poland and EU
Benefit Description	Establishment of a well-integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MD)

UGS Damasławek

UGS-N-914	Project	Storage Facility	Non-FID
Update Date	28/06/2016		Non-Advanced
Description	The purpose of the project is to construct a UGS facility in salt carerns in Damasławek in central Poland. The initial working gas volume will amount for 450 mcm. UGS Damasławek will play an important role from SoS and competition perspective. It will also be instrumental in terms of ensuring proper functioning of the transmission system in Poland.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Damasławek (PL)	GAZ-SYSTEM S.A.	2026	STcPL	PL	200.0 GWh/d
	GAZ-SYSTEM S.A.	2026	PL	STcPL	100.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	
		Operator	GAZ-SYSTEM S.A.	
		Host Country	Poland	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Network Development Plan 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>N/A</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting			Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey		Construction				
			Commissioning	<i>2026</i>	<i>2026</i>	

Technical Information (UGS)	
Storage Facility	<i>UGS Damastawek</i>
Storage Facility Type	<i>Salt Cavern</i>
Multiple-Cycle	<i>Yes</i>
Working Volume (mcm)	<i>450.00</i>

PCI Details	
PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	<i>Others</i>
Main Driver Explanation	<i>Project drivers: SoS, market demand</i>
Benefit Description	

FSRU Polish Baltic Sea Coast

LNG-N-947	Project	LNG Terminal	Non-FID
Update Date	07/06/2016		Non-Advanced
Description	The FSRU Polish Baltic Sea Coast project is planned as the first floating terminal in Poland . It will come on stream in 2020 with annual re-gasification capacity of 4.5-9 bcm/y. The FSRU terminal will consist of one/two storage tank(s) with the capacity of 170 tcm. The project will offer its regasification capacities to gas consumers in Poland and other countries in the Baltic Sea region (supplies to be directed via Gas Interconnection Poland-Lithuania and/or LNG ships) and in Central-Eastern Europe (supplies within the North-South Gas Corridor via PL-CZ, PL-SK and PL-UA interconnections). The scope of the project is currently under assessment.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
FSRU Polish Baltic Sea Coast	GAZ-SYSTEM S.A.	2020	LNG_Tk_PL	PL	275.0 GWh/d

Sponsors	General Information		No Barriers Defined		Barriers (Count)
	Promoter	GAZ-SYSTEM S.A.			
	Operator	GAZ-SYSTEM S.A.			
	Host Country	Poland			
	Status	Planned			
	Website				
	Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (N/A. This is a new project)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	<i>No</i>	Market Test			Exemption Granted	<i>Not Relevant</i>
		Permitting				
CBCA Decision	<i>No</i>	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
		Commissioning	<i>2020</i>	<i>2020</i>		

Technical Information (LNG)

LNG Facility	<i>FSRU Polish Baltic Sea Coast</i>				
Expected Volume (bcm/y)	<i>9</i>	<i>The project under assessment (considered capacity ranges from 4.5 bcm/y up to 9 bcm/y)</i>			
Storage Capacity (m3)	<i>170,000</i>				
Ship Size (m3)	<i>170,000</i>				
Reloading Ability	<i>No</i>				

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States				
General Criteria Fulfilled	<i>No</i>				
Specific Criteria Fulfilled	Competition, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments					

Expected Gas Sourcing

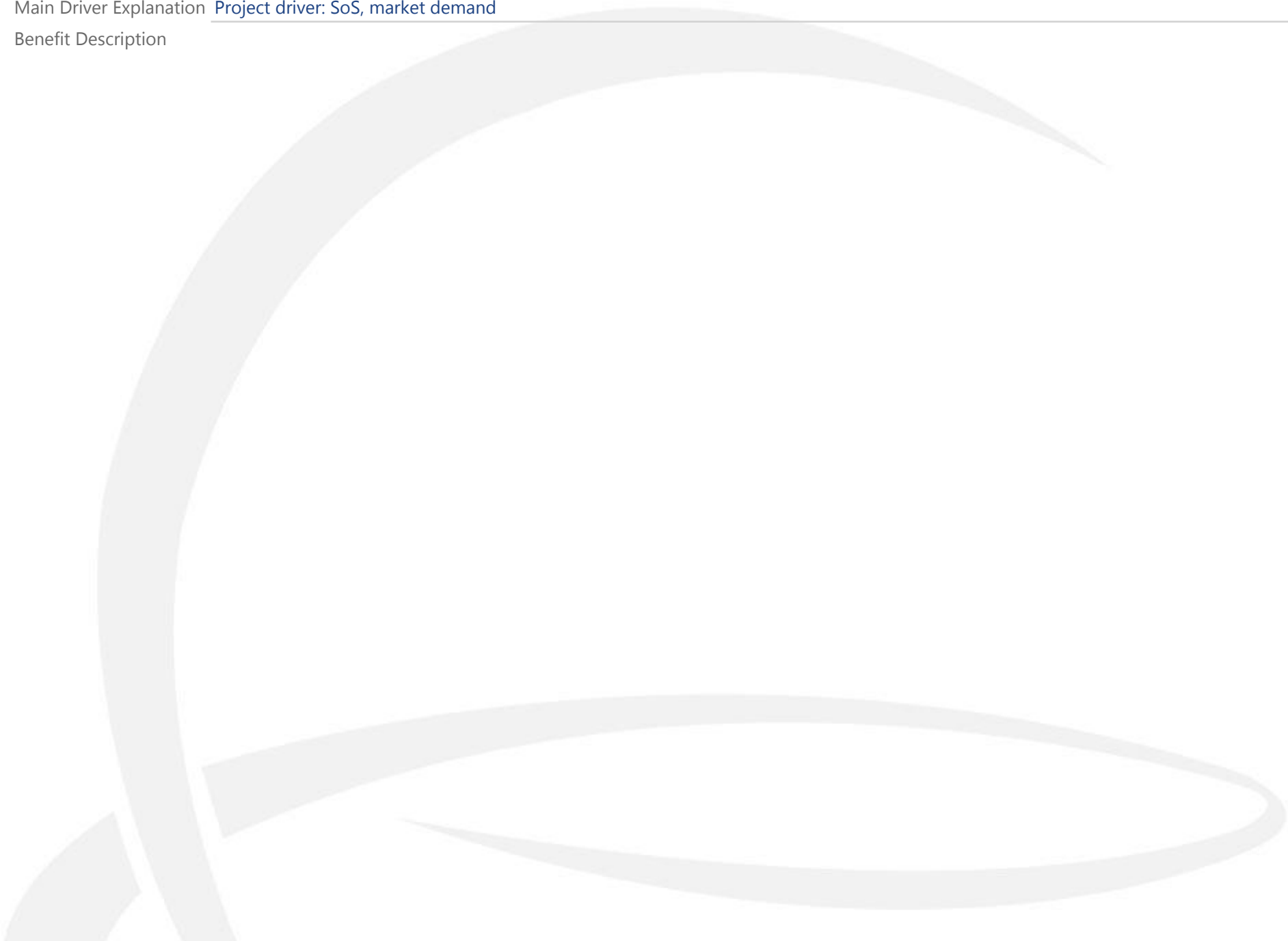
LNG ()	
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Benefits

Main Driver	<i>Others</i>
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Main Driver Explanation [Project driver: SoS, market demand](#)

Benefit Description



Romania-Bulgaria Interconnection (EEPR-2009-INTg-RO-BG)

TRA-F-029	Project	Pipeline including CS	FID
Update Date	24/05/2016		Advanced
Description	The interconnection project includes the following objectives: • land section (DN 500, PN 40 bar, L= 5,1 km) on the Romanian territory between the metering station Giurgiu and the Danube undercrossing point on the Romanian shore and the gas metering station in the vicinity of Giurgiu - SNTGN Transgaz SA is responsible for its implementation; • land section (DN 500, PN 40 bar, L = 15,4 km) on the Bulgarian territory, between the gas metering station Ruse and the Danube undercrossing point on the Bulgarian shore and the gas metering station in the vicinity of Ruse - Bulgartransgaz EAD is responsible for its implementation; • Danube undercrossing by two pipelines (DN 500, PN 50 bar), each pipeline is 2.1 km long (one main pipeline and one back-up pipeline) the responsibility of their implementation is joint.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Ruse (BG) / Giurgiu (RO)	SNTGN Transgaz S.A.	2016	BGn	RO	14.4 GWh/d
	SNTGN Transgaz S.A.	2016	RO	BGn	14.4 GWh/d

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Bulgartransgaz	54%	Promoter	SNTGN Transgaz SA		
Transgaz	46%	Operator	SNTGN Transgaz S.A.		
		Host Country	Romania		
		Status	Planned		
		Website			
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (The project is in the final stage of the construction works and will be comissioned during 2016.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number		FEED		Applied for Exemption	<i>No</i>	
		Market Test		Exemption Granted	<i>Not Relevant</i>	
Currently PCI		<i>No</i>	Permitting			
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction		<i>01/2016</i>		
		Commissioning	<i>2016</i>	<i>2016</i>		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Giurgiu-Ruse			500	25	
Total				25	

Time Schedule	
Grant Obtention Date	06/09/2010
Delay Since Last TYNDP	12 months
Delay Explanation	Problems during the construction phase. The complicated geological structure, under the bottom section of the Danube river had to be crossed by Horizontal Directional Drilling, produced significant delays as a result of unpredictable factors.

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Diversification of sources of energy, routes and supplies; increasing the degree of interconnectivity between the gas transmission systems of the two countries; safety, reliability and interoperability of interconnected energy networks, including enabling bidirectional gas flows; contribution to the establishment of the South-Eastern European regional gas market.

White Stream

TRA-N-053	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The WS pipeline will transport gas produced in the Caspian area from Georgia to the EU. It will branch off an existing pipeline from Azerbaijan to Georgian-Turkish border (the SCP) and will include an onshore pipeline from the SCP connection point to Georgian Black Sea coast where a major compressor station will provide the high pressure required to transmit gas to Constanta Romania, across the Black Sea. An alternative destination to Varna, Bulgaria and connection to Trans-Balkan pipeline is currently being considered.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Constanta (White Stream)	White Stream	2022	AZ/SCP	RO	505.0 GWh/d
				Comment: .	
South Caucasus Pipeline / White Stream	White Stream	2022	AZ	AZ/SCP	505.0 GWh/d
				Comment: .	

Sponsors		General Information		No Barriers Defined	Barriers (Count)
w-stream-pipeline Ltd	90%	Promoter	White Stream Ltd		
M Bryza	10%	Operator	White Stream		
		Host Country	Romania		
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects	
Project Code	Project Name
TRA-N-339	Trans-Caspian

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (Countries outside EU do not have established practices similar to EU MSs for the NDPs. As for EU MSs, Germany has included the White Stream project, a continuation of the TCP project: http://www.fnb-gas.de/files/2015_07_27_nep_gas_2016_szenariorahmen.pdf)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Negotiated</i>
		FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
		Permitting				
NDP Number		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
		FID			Exemption in exit direction	<i>0.00%</i>
Currently PCI	<i>No</i>	Construction				
		Commissioning	<i>2022</i>	<i>2022</i>		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Supsa to Constanta		Offshore (for first stage / 16 bcma)	726	1,115	375
Vale to Supsa		Onshore	1,039	135	
Total				1,250	375

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Caspian Region	

Benefits

Main Driver	Others
Main Driver Explanation	risk reduction for sizable supply via commercially comparable (with Turkish route) diversification of route within the Southern Corridor
Benefit Description	Security of Supply

Interconnection of the NTS with the DTS and reverse flow at Isaccea

TRA-N-139	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	The project consists of: □ the modernisation and extension of the Siliştea compressor station; □ the modernisation and extension of the Oneşti compressor station; □ changes within the Isaccea metering station; □ rehabilitation of the Cosmeşti – Oneşti (66.2 km) and Siliştea - Şendreni (11.3 km) pipeline sections.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information				Barriers (Count)
Transgaz	100%	Promoter	SNTGN Transgaz SA	Regulatory	
		Operator	SNTGN Transgaz S.A.	Permit Granting	
		Host Country	Romania	Financing	
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-959	Further enlargement of the BG—RO—HU—AT transmission corridor (BRUA) phase 3

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Development Plan for the National GTS 2016 - 2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>7.3</i>	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.15)</i>	Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction				
		Commissioning	<i>2019</i>	<i>2019</i>		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Onesti-Isaccea	The route from Onesti to Isaccea is approximately 200-km long, but rehabilitation works are foreseen only for 77.5 km.	813	77	22
	Total			77	22

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	30/07/2010
Delay Since Last TYNDP	12 months
Delay Explanation	

Benefits	
Main Driver	Regulation-Interoperability
Main Driver Explanation	

Benefit Description

Barriers	
Barrier Type	Description
Regulatory	The Competent Authority to coordinate all permit granting processes is not yet functional in Romania.
Permit Granting	The permitting process is long and complicated
Financing	Availability of funds and associated conditions

Depomures

UGS-N-233	Project	Storage Facility	Non-FID
Update Date	23/05/2016		Advanced
Description	The project consists in the revamping and expansion of an existing gas storage facility of 300 mcm situated in Targu Mures, Central Romania. The rationale of the project is three fold (i) increase operational independence by building its own compression unit as currently compression services are rented from another party (ii) gradually expand the storage capacity (from 300 mcm to 400 mcm in a first stage and to 600 mcm in a second stage) and (iii) increase flexibility of the storage by increasing injection and withdrawing capacity from the existing average 1.7 mcm/ day to approx. 5.0 mcm/day after implementation of the second stage. The implementation of the first stage has already been initiated with a partial investment to be finalized in 2016, while the FID for the entire phase I of the development project is expected in 2016.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Targu Mures	Depomures	2019	STcRO	RO	15.8 GWh/d
	Comment: To be considered for modeling purposes.				
	Depomures	2019	RO	STcRO	15.8 GWh/d
	Comment: To be considered for modeling purposes.				
	Depomures	2022	STcRO	RO	18.9 GWh/d
	Comment: To be considered for modeling purposes.				
	Depomures	2022	RO	STcRO	18.9 GWh/d
	Comment: To be considered for modeling purposes.				

Sponsors	General Information				Barriers (Count)
GDF International	59%	Promoter	Engie Romania SA	Regulatory	
		Operator	Depomures	Permit Granting	
		Host Country	Romania	Financing	
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (As far as we are aware, currently there is no comprehensive system wide national development plan, only one regarding the gas transmission infrastructure put together by the TSO. Nevertheless, the operator submitted a 5-year investment plan to Romanian NRA in 2015, which is updated annually.)</i>	Pre-Feasibility		06/2004	Considered TPA Regime	<i>Regulated</i>
		Feasibility	06/2008	06/2009	Considered Tariff Regime	<i>Regulated</i>
		FEED	06/2011	06/2012	Applied for Exemption	<i>No</i>
		Market Test		06/2016	Exemption Granted	<i>Not Relevant</i>
		Permitting	06/2012	06/2016		
NDP Number		Supply Contracts			Exemption in entry direction	0.00%
		FID		11/2016	Exemption in exit direction	0.00%
Currently PCI	<i>Yes (6.20.4)</i>	Construction	07/2015	01/2022		
		Commissioning	2019	2022		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Technical Information (UGS)			
Storage Facility	<i>Depomures</i>		
Storage Facility Type	<i>Depleted Field</i>		
Multiple-Cycle	<i>No</i>		
Working Volume (mcm)	<i>300.00</i>	<i>The capacity increment is planned to be implemented in 2 phases: 100 mcm in 2019 and 200 mcm with COD in 2022</i>	

PCI Details	
PCI Benefits	<i>Project aims at supplying directly or indirectly at least two Member States</i>
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	<i>Competition, Market Integration, Security of Supply, Sustainability</i>

Specific Criteria Fulfilled Comments	Although the project meets all the criteria, the most significant contribution it brings is to the EU's security of supply. - The project is even more important in a low infrastructure scenario, in which the N-1 indicator is below 100% and in which the additional storage capacity of Depomures would partially compensate a malfunction at Mediesu-Aurit/ Isaccea gas entry point from Ukraine to Romania. - The remaining flexibility indicator shows that the project successfully contributes to increasing resilience in case of additional demand in almost all scenarios with impact on Romania, Bulgaria, Hungary, Italy, Greece and Croatia. The impact is most visible in extreme scenarios such as Ukraine disruption with 2 week cold spell. - The project contributes to a decrease of the disrupted demand in two Members States, namely Romania and Bulgaria, and also in the FYR of Macedonia (although not a Member State) in most scenarios.
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Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	3 years for Phase 2
Delay Explanation	The main delay encountered is related to permit granting for part of the investment (i.e. the last sector of the main gathering pipeline). The construction of the main gathering pipeline is essential for the entire project and a pre-requisite for implementing the rest of the project (dehydration and compression station and subsequent expansion to 600 mcm of the capacity). We are currently in the process of finding a solution for the remaining permit and have communicated the problem to the Competent Authority as well as to the European Commission.

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	In addition to those mentioned in the additional comments to the specific criteria, the project is even more important in the current rather potentially unstable geo-political context in the far Eastern Europe in which having sufficient capacities of the gas storage facilities may become critical for ensuring security of supply.
Benefit Description	Market Integration The Project successfully contributes to increasing resilience in case of additional demand in almost all disruption scenarios with positive impact on Romania, Bulgaria, Hungary, Italy, Greece and Croatia. Thus, indirectly it contributes to a more integrated gas market. Sustainability It replaces existing rather obsolete gas compression facilities with modern and high-efficiency technology (new electro-compressors etc.) which will reduce emissions currently generated by the compression services supplied by the third party. Competition The implementation of this project would also increase the competition on the Romanian storage market considering that currently there are only 2 players: Depomures, the private operator with ~10% market share and Romgaz, state owned, with ~90% market share. After project COD, the market share of the private sector would increase proportionally.

Barriers	
Barrier Type	Description
Permit Granting	The permit granting process has been delayed due to difficulties in obtaining the building permit from local administration for the last section of the main collector pipeline, which may impact the implementation of the entire project.
Financing	Availability of funds and associated conditions
Regulatory	Low or zero-priced short-term capacity
Regulatory	Low rate of return

NTS developments in North-East Romania

TRA-N-357	Project	Pipeline including CS	Non-FID
Update Date	01/09/2016		Advanced
Description	Development of the Romanian gas transmission system in order to improve the gas supply in the North –East region of Romania and to increase transmission capacities so as to improve gas supply in the area as well as to ensure transmission capacities in the perspective offered by the new pipeline for the interconnection of Romania and the Republic of Moldova. The scope of the project is the achievement of the following objectives: □ The construction of a new gas transmission pipeline Dn 700, Pn 55 bar, in the direction Onești-Gherăiești, 104 km long; □ The construction of a new gas transmission pipeline Dn 700, Pn 55 bar, in the direction Gherăiești-Lețcani, 61 km long; □ The construction of a gas compressor station at Onești, with an installed power of 6 MW, with 2 compressors of 3 MW each; □ The construction of a gas compressor station at Gherăiești with an installed power of 4 MW, with 2 compressors of 2 MW each.		
Regulatory Decisions and similar material conditions			

Sponsors		General Information				Barriers (Count)
SNTGN Transgaz S.A.	100%	Promoter	SNTGN Transgaz SA	Political	1	
		Operator	SNTGN Transgaz S.A.	Permit Granting	1	
		Host Country	Romania	Financing	1	
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Development Plan for the National GTS 2016 - 2025)</i>	Pre-Feasibility		<i>12/2014</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility	<i>01/2015</i>	<i>12/2015</i>	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>7.4</i>	FEED	<i>01/2016</i>	<i>05/2017</i>	Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>No</i>	Permitting	<i>01/2015</i>	<i>05/2017</i>		
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction	<i>06/2017</i>	<i>10/2018</i>		
		Commissioning	<i>2018</i>	<i>2018</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Onesti - Letcani			711	165	10
Total				165	10

Expected Gas Sourcing	
European gas market	

Benefits	
Main Driver	Regulation-Interoperability
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	The permitting process is long and complicated
Political	Area with potential conflicts Requires the conclusion of an Intergovernmental Agreement
Financing	Availability of funds and associated conditions

Development on the Romanian territory of the NTS (BG–RO–HU–AT Corridor)

TRA-N-358	Project	Pipeline including CS	Non-FID
Update Date	15/09/2016		Advanced
Description	The scope of the project is the construction of a new gas transmission pipeline to enable the connection between the Technological Hub Podisor and GMS Horia and the construction of compressor stations along the route (CS Jupa, CS Bibesti and CS Podisor). Transgaz considers the development of the BRHA Project in stages, as follows: Stage I □ Gas transmission pipeline Podișor-Recaș 32" x 63 bar, approximately 478 km long; □ Three gas compressor stations (CS Podisor, CS Bibesti, CS Jupa) each station is equipped with two compressor units which may enable bidirectional gas flows. Upon the completion of Stage I the following transmission capacities will be ensured: □ towards Hungary: 1,75 billion m3/year; □ towards Bulgaria: 1,5 billion m3/year. Stage II □ gas transmission pipeline Recaș–Horia 32" x 63 bar, approximately 50 km long; □ expansion of the three gas compressor stations (CS Podisor, CS Bibesti and CS Jupa) by mounting an additional compressor unit in each station); □ Expan		
Regulatory Decisions and similar material conditions	Cross Border Cost Allocation Decision (CBCA)		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	SNTGN Transgaz S.A.	2020	HU	RO	76.5 GWh/d
	SNTGN Transgaz S.A.	2020	RO	HU	126.1 GWh/d
Ruse (BG) / Giurgiu (RO)	SNTGN Transgaz S.A.	2020	RO	BGn	29.3 GWh/d

Sponsors		General Information			
SNTGN Transgaz S.A.	100%	Promoter	SNTGN Transgaz S.A.	Regulatory	1
		Operator	SNTGN Transgaz S.A.	Permit Granting	1
		Host Country	Romania		
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Development Plan for the National GTS 2016-2025)</i>	Pre-Feasibility		<i>12/2013</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility	<i>01/2014</i>	<i>12/2014</i>	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>7.1</i>	FEED	<i>01/2016</i>	<i>02/2017</i>	Applied for Exemption	<i>No</i>
		Market Test		<i>10/2017</i>	Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (Stage I: 6.24.2 Stage II: 6.24.7)</i>	Permitting	<i>01/2014</i>	<i>02/2017</i>		
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>Yes (2015-10-06)</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Open Season(2017-10-02)</i>	Construction	<i>08/2017</i>	<i>09/2020</i>		
		Commissioning	<i>2020</i>	<i>2020</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Podisor - Horia			813	528	50
Total				528	50

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	18/05/2015
Delay Since Last TYNDP	Stage 1- 9 months delay in commissioning Stage 2 – 21 months in commissioning
Delay Explanation	Stage 1 – delay in the tender for teh FEED services related to the compresor stations Stage 2 – uncertainties related to the execution of the infrastructure which enables the connection with the production at the Black Sea

Expected Gas Sourcing	
Caspian Region, LNG (), Black Sea	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Beside Market Demand driver, other important drivers are Security of Supply and Interoperability
Benefit Description	

Barriers	
Barrier Type	Description
Regulatory	The Competent Authority to coordinate all permit granting processes is not yet functional in Romania.
Permit Granting	Long and complicated process implying the need to receive the right of access on the field

Development on the Romanian territory of the Southern Transmission Corridor

TRA-N-362	Project	Pipeline including CS	Non-FID
Update Date	01/09/2016		Advanced
Description	The project consists in the building of a transmission pipeline from the Black Sea shore to the Podișor technological node (Giurgiu county) to connect the gas source which will be available at the Black Sea shore with the BULGARIA – ROMANIA – HUNGARY – AUSTRIA corridor.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information				Barriers (Count)
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA	Regulatory	
		Operator	SNTGN Transgaz S.A.	Permit Granting	
		Host Country	Romania	Financing	
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-358	Development on the Romanian territory of the NTS (BG–RO–HU–AT Corridor)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Development Plan for the National GTS 2016-2025)</i>	Pre-Feasibility		<i>05/2014</i>	Considered TPA Regime	<i>Regulated</i>
		Feasibility	<i>09/2014</i>	<i>02/2016</i>	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>7.2</i>	FEED	<i>06/2016</i>	<i>03/2017</i>	Applied for Exemption	<i>No</i>
		Market Test		<i>05/2017</i>	Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.24.8)</i>	Permitting	<i>01/2015</i>	<i>03/2017</i>		
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction	<i>01/2018</i>	<i>10/2020</i>		
		Commissioning	<i>2020</i>	<i>2020</i>		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Black Sea - Podișor	The pipeline is telescopic, the diameter is reduced to 1,000 mm	1,200	307	
	Total			307	

PCI Details	
PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Black Sea	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	
- Increase of competition through the diversification of gas sources and transmission routes, and the emerging of new players on the regional gas market, with positive effects on the gas price, decreasing thus market concentration for each impacted country; - Increase of sustainability through diminishing CO2 emissions, as a result of replacing gas with liquid (oil) or solid fossil fuels (coal) with higher CO2 emissions.	

Barriers	
Barrier Type	Description
Regulatory	Changes in national/EU legislation whcih may impact the implementation of the project.
Permit Granting	Long and complicated process requiring also the obtaining of the right of way
Financing	Availability of funds and associated conditions

New underground gas storage in Romania

UGS-N-366	Project	Storage Facility	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	Several options for the construction of a new gas storage facility in depleted gas field (onshore) to be considered. The project to be located in the Eastern part of Romania (Moldova region), near Falticeni. The location of the depleted reservoirs to be converted into UGS was determined according to the following criteria: - the envisaged reservoirs allow the construction of a small-medium sized UGS of 200 million m3/cycle, with future development possibilities; - the location is next to areas with consumption deficit and very low temperatures during winter season; - the UGS is to be located near important industrial gas consumers and households - it may be used for increasing the security of supply in Romania and for facilitating possible gas exports to Republic of Moldova - existing projects to develop gas resources in the Black Sea and the possibility to create interconnections to projects part of the southern European transmission corridor - main pipeline close to the area		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
New Gas Storage Facility in Romania	SNTGN Romgaz S.A.	2023	STcRO	RO	21.0 GWh/d
	SNTGN Romgaz S.A.	2023	RO	STcRO	15.0 GWh/d

Sponsors	General Information				
SNGN ROMGAZ S.A.	100%	Promoter	Societatea Națională de Gaze Naturale ROMGAZ S.A.	Regulatory	3
		Operator	SNTGN Romgaz S.A.	Market	2
		Host Country	Romania	Financing	1
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (S.N.G.N. ROMGAZ, the project promoter, is not a TSO, it is only storage operator, therefore it is not mandatory to have a TYNDP, as Transgaz has. There is no NDP country level.)</i>	Pre-Feasibility		06/2016	Considered TPA Regime	<i>Regulated</i>
		Feasibility	10/2016	10/2017	Considered Tariff Regime	<i>Regulated</i>
		FEED	11/2017	11/2018	Applied for Exemption	<i>No</i>
		Market Test		10/2017	Exemption Granted	<i>No</i>
NDP Number		Permitting	03/2017	11/2018		
Currently PCI	<i>Yes (6.20.5)</i>	Supply Contracts		07/2021	Exemption in entry direction	<i>0.00%</i>
		FID		12/2018	Exemption in exit direction	<i>0.00%</i>
		Construction	07/2019	05/2023		
CBCA Decision	<i>No</i>	Commissioning	2023	2023		
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Technical Information (UGS)	
Storage Facility	<i>UGS Moldova</i>
Storage Facility Type	<i>Depleted Field</i>
Multiple-Cycle	<i>No</i>
Working Volume (mcm)	<i>200.00</i>

PCI Details	
PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Increase of security of supply by adding new storage capacity in the Eastern part of Romania. This part of Romania includes major cities and industry and has the coldest climate in Romania. Possible increase of security of supply in the Republic of Moldova by connection to the Romanian - Moldavian Interconnection. Market integration: Some impact on GPI in RO under various price scenarios. Increase of security of supply by adding new storage capacity in the Eastern part of Romania. This part of Romania includes some major cities and industry and has the coldest climate in Romania. Possible increase of security of supply in the Republic of Moldova by connection to the Romanian - Moldavian Interconnection. Sustainability: Positive project impact higher in 2030 and 2035 on the total EU bill, Gas Bill ex. NP ex. CO2, and Disrupted Demand Cost under most price scenarios under FID. Highest impact on the total Disrupted Demand Cost for various price sources, FID, in 2035.

Time Schedule

Grant Obtention Date	01/11/2016
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Romania

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	The project shall contribute to the enhancement of the energy security in Romania and South-East Europe by creating the UGS connection to internal consumption areas with current gas supply deficit, making thus available gas volumes for use in other consumption directions. The project shall also have a contribution in terms of supply of regional market in Republic of Moldova, a country associated to EU via Iasi-Ungheni interconnector.
Benefit Description	We wish to highlight the fact that any present or future pipeline project aiming to improve Romania's interconnection to the gas systems in the region does need Underground Storage Facilities as a support to ensure base-load supply as well as flexibility of supply, both to and from Romania. Considering the interconnection pipelines included in the TYNDP to neighbouring MS (Hungary reverse flow, Bulgaria) as well as interconnections to Non-member States which are Associate States to the EU (Ukraine, Moldova), UGS facilities are indispensable assets for the proper operation of such interconnections. Another reason for our proposal to extend UGS capacities in Romania (including the construction of a completely new facility in the NE part of Romania) are the new discoveries in the Romanian sector of the Black Sea (e.g. Domino1),

Barriers

Barrier Type	Description
Regulatory	- no negotiated tariffs - no daily/weekly balance reports
Market	Lack of market support
Regulatory	Low or zero-priced short-term capacity
Market	Lack of market maturity
Financing	Amortization rates
Regulatory	Low rate of return

Sarmasel underground gas storage in Romania

UGS-N-371	Project	Storage Facility	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	Improvement of the injection capacity of the seasonal storage facility and installation of compressors at UGS Sarmasel. Project may greatly contribute to increasing the overall UGS capacity in South-East Europe by connecting Sarmasel UGS to “Bulgaria-Romania-Hungary-Austria Corridor”, a project developed by SNTGN Transgaz S.A. Medias, consisting of gradual construction of a new gas transmission line between Podisor Technological Node and Horia gas metering station. The project consists of: 1 increasing the working capacity of Sarmasel UGS by 650 million m3, up to a total of 1,550 million m3/cycle with a cushion gas of 1,130 million m3; 2 increasing the security and efficiency of Sarmasel UGS 3 increasing the energy security by ensuring a higher volume of stored gas (increase of approximately 18%). 4 increasing the daily delivery capacity by 3 million m3/day. 5 lowering the dependence on import gas during winter time by approximately 40% on a daily basis.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Sarmasel	SNTGN Romgaz S.A.	2022	STcRO	RO	34.0 GWh/d
	SNTGN Romgaz S.A.	2022	RO	STcRO	42.0 GWh/d
VIP Romgaz UGS (RO)	SNTGN Romgaz S.A.	2022	STcRO	RO	34.0 GWh/d
	SNTGN Romgaz S.A.	2022	RO	STcRO	42.0 GWh/d

Sponsors	General Information			Barriers (Count)	
SNGN ROMGAZ S.A.	100%	Promoter	Societatea Națională de Gaze Naturale ROMGAZ S.A.	Regulatory	3
		Operator	SNTGN Romgaz S.A.	Market	2
		Host Country	Romania	Financing	1
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (S.N.G.N. ROMGAZ S.A., the project promotor, is not a TSO, therefore it is not mandatory to have a TYNDP, as Transgaz does. There is no NDP at country level.)</i>	Pre-Feasibility		06/2016	Considered TPA Regime	<i>Regulated</i>
		Feasibility	10/2016	10/2017	Considered Tariff Regime	<i>Regulated</i>
		FEED	11/2017	08/2018	Applied for Exemption	<i>No</i>
NDP Number		Market Test		10/2017	Exemption Granted	<i>No</i>
		Permitting	03/2017	09/2018		
Currently PCI	<i>Yes (6.20.6)</i>	Supply Contracts		03/2021	Exemption in entry direction	<i>0.00%</i>
		FID		09/2018	Exemption in exit direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	Construction	04/2019	05/2022		
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Commissioning	2022	2022		

Technical Information (UGS)

Storage Facility	<i>UGS SARMASEL</i>
Storage Facility Type	<i>Depleted Field</i>
Multiple-Cycle	<i>No</i>
Working Volume (mcm)	<i>650.00</i>

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project may contribute to SoS in Romania and neighbouring countries in SE Europe and lead to decrease of dependency on imports during the cold season. Market Integration. Some impact of the project on GPI in various countries, especially in RO and BG under various price scenarios, Some impact on Remaining Flexibility for BG in 2035 for Ukraine disruption for 2 weeks. Correlated impact on disrupted rate and disrupted demand. Security of Supply. Impact of the project under Ukraine disruption only in Romania, after 2030 both in DC and 2W . N-1 impact under low and high infrastructure scenario. Minor impact on on supply price diversification and supply price dependence . Sustainability. Positive project impact on the total EU bill, NP Bill ex. CO2, CO2 bill in 2025 and 2030 under most price scenarios under FID. Positive impact on disrupted . Reducing bottlenecks. Significant impact on Marginal Price in Price in RO in 2025 and 2030

Time Schedule

Grant Obtention Date 01/11/2016

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Romania

Benefits

Main Driver Regulation SoS

Main Driver Explanation The project is able to have a major contribution to SoS on the N-S corridor Bulgaria - Romania - Hungary, which is currently included in the plans of Transgaz S.A. envisaging the construction of a new pipeline between Podisor and Horia.

Benefit Description Increasing safety of gas supply in Romania and South-East Europe by securing higher gas volumes to be stored; - Increasing the daily capacity and the natural gas delivery flexibility; - Reducing gas imports during winter time; - Contributing to sustainability and market integration in the region We wish to highlight the fact that any present or future pipeline project aiming to improve Romania’s interconnection to the gas systems in the region does need underground storage facilities as a support to ensure base-load supply as well as flexibility of supply, both to and from Romania. Considering the interconnection pipelines included in the TYNDP to neighbouring MS (Hungary reverse flow, Bulgaria) UGS facilities are indispensable assets for the proper operation of such interconnections. Another reasons are the new discoveries in the Romanian sector of the Black Sea (e.g Domino1).

Barriers

Barrier Type	Description
Regulatory	- no negotiated tariffs - no daily/weekly balance reports
Regulatory	Low or zero-priced short-term capacity
Market	Lack of market support
Market	Lack of market maturity
Financing	Amortization rates
Regulatory	Low rate of return

Azerbaijan, Georgia, Romania Interconnector - AGRI

TRA-N-376	Project	Pipeline including CS	Non-FID
Update Date	07/05/2016		Non-Advanced
Description	The solution for the transmission of natural gas from Caspian region through the territory of Azerbaijan and Georgia, its liquefaction and transportation via Black Sea to Romania and Hungary and potentially to other European markets; As a "standby LNG project", AGRI will implement and operate the LNG portion: - the "natural gas the liquefaction Facilities") on Georgian Shore; - transport of LNG from Georgian shore to Romanian shore; - the "natural Re-gasification terminal" on Romanian Shore. The project is pure LNG project and has no possibility to include technical details so please see below: ===== For LNG Project: Maximum Annual Capacity: 8.0 bcm/y; Maximum sendout capacity: 22.0 milion cm/d; Storage capacity: 160,000.0 cm of LNG; Maximum ship cargo size: 2 x 140,000.0 mc of LNG; =====		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
AGRI / Constanta (RO)	AGRI	2026	GEa	RO	240.0 GWh/d
Comment: Regazification terminal					
AGRI / Poti (GE)	AGRI	2026	GE?	GEa	240.0 GWh/d
Comment: Liquefaction terminal					

Sponsors		General Information				Barriers (Count)
GOGC (GE)	25%	Promoter	AGRI LNG Project Company SRL (RO)	Market	2	
MVM (HU)	25%	Operator	AGRI	Permit Granting	1	
ROMGAZ (RO)	25%	Host Country	Romania	Financing	1	
SOCAR (AZ)	25%	Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (AGRI is not a Transmission System Operator, so it is not necessary for its project to be part of a National Development Plan.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Not Applicable</i>
		Feasibility	06/2012	04/2015	Considered Tariff Regime	<i>Not Applicable</i>
		FEED	01/2019	04/2020	Applied for Exemption	<i>Not Relevant</i>
NDP Number		Market Test		06/2021	Exemption Granted	<i>Not Relevant</i>
		Permitting	01/2018	09/2019		
Currently PCI	<i>No</i>	Supply Contracts		10/2022	Exemption in entry direction	0.00%
		FID		11/2020	Exemption in exit direction	0.00%
CBCA Decision	<i>No</i>	Construction	06/2022	08/2026		
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Commissioning	2026	2026		

PCI Details	
PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule at regional level in accordance with Article 6(3) of Regulation EU, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

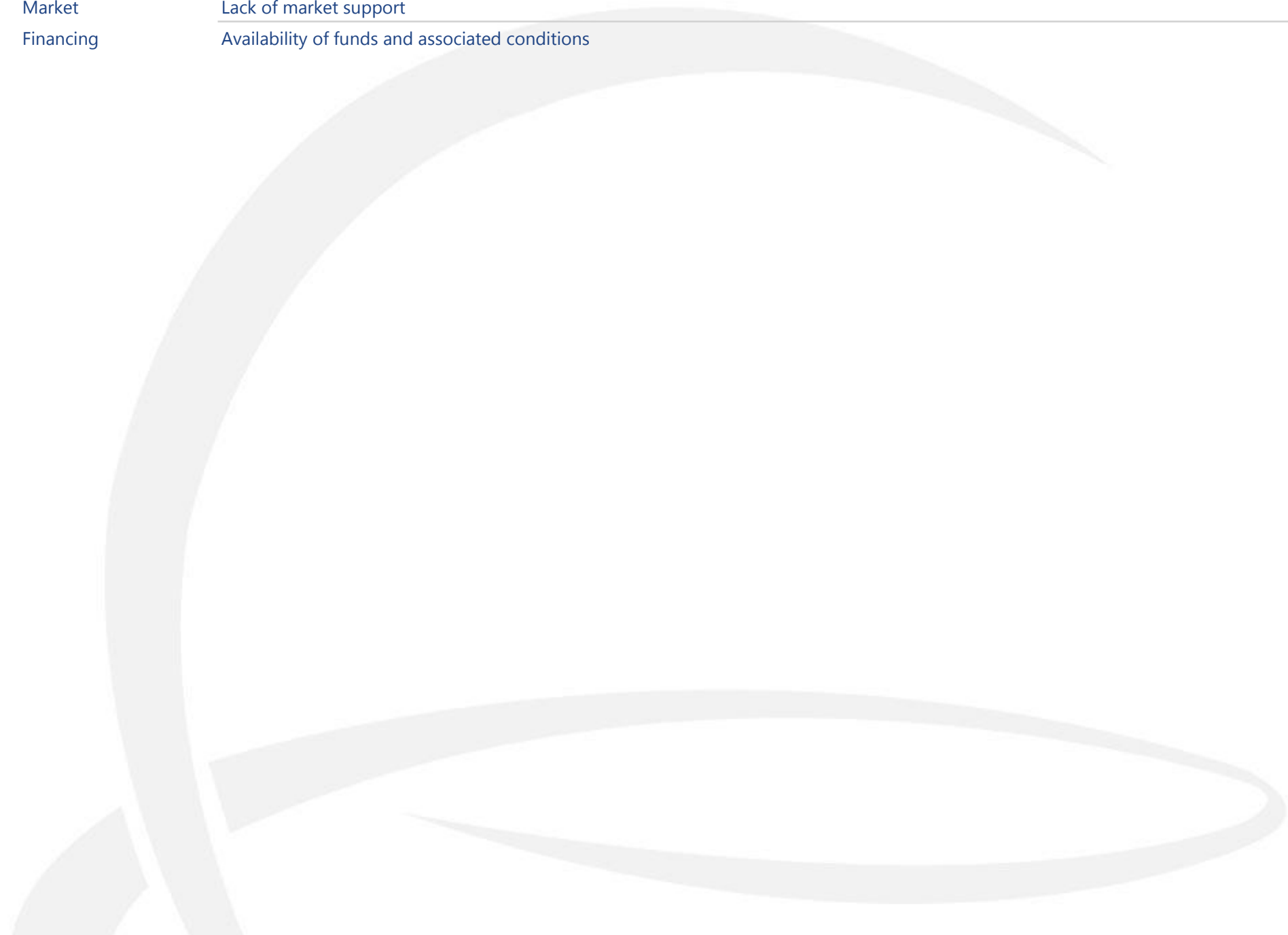
Expected Gas Sourcing

Caspian Region

Benefits	
Main Driver	Others
Main Driver Explanation	Diversification of supply sources; New Markets competition; Market demand
Benefit Description	Links EU market with Azerbaijan (Caspian) gas source by the most direct route wich avoids sole reliance on pipelines. .

Barriers	
Barrier Type	Description
Permit Granting	long duration for obtaining permits
Market	market further integration with the local Project is required

Market	Lack of market support
Financing	Availability of funds and associated conditions



Eastring - Romania

TRA-N-655	Project	Pipeline including CS	Non-FID
Update Date	03/06/2016		Non-Advanced
Description	Eastring-RO, located in Romania is an essential part of the Eastring project, which connects IP Veľké Kapušany / Veľké Zlievce at the SK-UA border, with IP at the BG/TR border. Eastring is a natural gas pipeline project. It will not own or sell any natural gas and once available, all its capacity will be offered to any shipper on non-discriminatory basis respecting all EU rules and laws (Directives and Regulations). Eastring will connect the existing gas infrastructure between Slovakia, Hungary, Romania and Bulgaria in a bidirectional conjunction bringing a new transit potential and improving gas market situation in each of the respective countries. Maximum daily bi-directional capacity will be of 20 bcm/year (Stage I) and 40 bcm/year (Stage II). The project would secure supplies in case of RU disruption and therefore it will increase gas SoS in the broader Central-South-East EU region, as well as will allow access to alternative gas sources for Central, Western & Southern Europe		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border BG/EAR <> RO/EAR	SNTGN Transgaz S.A.	2021	BG/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2021	RO/EAR	BG/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2025	BG/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2025	RO/EAR	BG/EAR	570.0 GWh/d
Eastring Cross-Border RO/EAR <> HU/EAR	SNTGN Transgaz S.A.	2021	HU/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2021	RO/EAR	HU/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2025	HU/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2025	RO/EAR	HU/EAR	570.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Transgaz S.A.	100%	Promoter	SNTGN Transgaz SA	
		Operator	SNTGN Transgaz S.A.	
		Host Country	Romania	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (For the moment, the project lacks sufficient descriptive elements in order for it to be included in the National Gas Transmission System Development Plan.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
NDP Number		Market Test			Exemption Granted	<i>Not Relevant</i>
		Permitting				
Currently PCI	<i>Yes (6.25.1)</i>	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
		FID			Exemption in exit direction	<i>0.00%</i>
CBCA Decision	<i>No</i>	Construction				
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Commissioning	<i>2021</i>	<i>2025</i>		

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	<i>Yes</i>
Specific Criteria Fulfilled	<i>Competition, Market Integration, Security of Supply, Sustainability</i>
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
<i>Caspian Region, Norway, Russia, LNG (TR), Iraq, Iran, Egypt, Israel, Turkmenistan, Kazakhstan, Cyprus, Azerbaijan, Any gas available at Turkish/European HUBs. For dire</i>	

Benefits	
Main Driver	<i>Regulation SoS</i>
Main Driver Explanation	<i>The project brings benefits to the SoS, bringing the new sources of gas supply and South-Eastern Europe countries, towards the Central and Western Europe markets, while further enhancing the market integration of the affected countries.</i>
Benefit Description	<i>- Physical alternative for providing gas from other sources, for all Balkan countries' consumption; - Providing security of supply for the Balkan countries' consumption; - Additional utilization for transit and storage assets; - Providing Western shippers with possibility to supply to Balkan countries and even Turkey from different other gas surces located in Europe; - Corridor ready for future gas imports to Europe from the Southern Corridor and other alternative sources.</i>

Further enlargement of the BG—RO—HU—AT transmission corridor (BRUA) phase 3

TRA-N-959	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	Development of gas transmission capacity on the Onești – Coroi – Hațeg – Nădlac corridor depending on the available gas quantities at the Black Sea shore or from other on-shore blocks. The development of this gas transmission corridor requires: □ the rehabilitation of some of the NTS existing pipelines; □ replacement of some of the NTS existing pipelines with new pipelines or the building of new pipelines installed in parallel with the existing ones; □ development of 4 or 5 new compressor stations having a total installed power of approximately 66- 82.5MW.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota 2	SNTGN Transgaz S.A.	2023	HU	RO	128.7 GWh/d
	SNTGN Transgaz S.A.	2023	RO	HU	128.7 GWh/d

Sponsors		General Information				Barriers (Count)
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA			
		Operator	SNTGN Transgaz S.A.	Permit Granting		
		Host Country	Romania			
		Status	Planned	Market		
		Website				
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (Development Plan for the National GTS 2016 - 2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
NDP Number	7.5	FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.25.3)</i>	Permitting			Exemption in entry direction	<i>0.00%</i>
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey		Construction				
	<i>Not Relevant (no CBCA decision)</i>		Commissioning	2023	2023	

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Onesti - Nadlac	existing pipelines + rehabilitation + new pipelines	813	843	82
	Total			843	82

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Black Sea or other on-shore blocks	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	The permitting procesc is long and complicated
Market	Lack of market support

New NTS developments for taking over gas from the Black Sea shore

TRA-N-964		Project		Pipeline including CS		Non-FID		
Update Date		07/05/2016					Non-Advanced	
Description		The project consists of the NTS extension for creating an additional overtaking point for the offshore Black Sea blocks gas. In this respect it is considered the building of a transmission pipeline approximately 25 – 30-km long, from the Black Sea shore to the existing T1 international transmission pipeline.						
Regulatory Decisions and similar material conditions								
Sponsors		General Information						
SNTGN Transgaz SA		100%	Promoter	SNTGN Transgaz SA		Financing	<div></div> 1	Barriers (Count)
			Operator	SNTGN Transgaz S.A.				
			Host Country	Romania				
			Status	Planned				
			Website					
			Publication Approval Status	Approved				
NDP and PCI Information			Schedule	Start Date	End Date	Third-Party Access Regime		
Part of NDP	Yes (Development Plan for the National GTS 2016 - 2025)		Pre-Feasibility			Considered TPA Regime	Regulated	
NDP Number	7.6		Feasibility			Considered Tariff Regime	Regulated	
			FEED			Applied for Exemption	No	
			Market Test		12/2016	Exemption Granted	Not Relevant	
Currently PCI	No		Permitting					
			Supply Contracts			Exemption in entry direction	0.00%	
CBCA Decision	No		FID			Exemption in exit direction	0.00%	
Market Survey	Not Relevant (no CBCA decision)		Construction					
			Commissioning	2019	2019			

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Black Sea Shore - T1	Several pipeline diameter variants under analysis		30	
Total			30	

PCI Details

PCI Benefits				
General Criteria Fulfilled	No			
Specific Criteria Fulfilled	Competition, Security of Supply, Sustainability			
Specific Criteria Fulfilled Comments				

Expected Gas Sourcing

Black Sea

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Positive impact for security of supply with gas for Romania and Bulgaria through the diversification of the gas transmission routes and enabling access to new sources (the Black Sea zone); - Increase of security of supply with gas for Romania. Since this pipeline enables access to new supply sources over the long term, the probability to interrupt gas supply will be reduced, and in case of an interruption, the consequences will be less serious. This increase of security of supply has benefits also for Bulgaria through a larger gas delivery availability, ensuring thus the cross-border externalities;
Benefit Description	- Increase of competition through the diversification of the gas supply sources and transmission routes, and the the emerging of new players on the regional gas market, with positive effects on the gas price, thus decreasing market concentration for each impacted country; - Increase of sustainability through diminishing CO2 emissions, as a result of replacing gas with liquid (oil) or solid fossil fuels (coal) with higher CO2 emissions.

Barriers

Barrier Type	Description
Financing	Availability of funds and associated conditions

CS Ajdovščina, 1st phase of upgrade

TRA-N-092	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Adjustment to the operating parameters of the transmission system of the Italian TSO and increasing the transmission capacity.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name					
TRA-N-108	M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia					
NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number		C1	Feasibility		Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey		Not Relevant (no CBCA decision)	FID			Exemption in exit direction
		Construction				
		Commissioning	2021	2021		

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Ajdovščina, 1st phase of upgrade	Power up to 5 MW.			5
Total				5

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CS Ajdovščina, 2nd phase of upgrade

TRA-N-093	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	LNG North Adriatic, cross-border transmission. The project is connected to projects M8, M3/1a, M3/1b and M3/1c.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-262	M3/1b Ajdovščina - Kalce
TRA-N-261	M3/1c Kalce - Vodice
TRA-N-101	M8 Kalce - Jelšane
TRA-N-099	M3/1a Šempeter - Ajdovščina

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (TYNDP for the period 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	<i>C1</i>	Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	<i>No</i>	Market Test			Exemption Granted	<i>No</i>
		Permitting				
CBCA Decision	<i>No</i>	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
		Commissioning	<i>2022</i>	<i>2022</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
<i>CS Ajdovščina, 2nd phase of upgrade</i>		<i>Two compressor units with total power of up to 20 MW.</i>			<i>20</i>
Total					20

Benefits	
Main Driver	<i>Market Demand</i>
Main Driver Explanation	
Benefit Description	

CS Kidričevo, 2nd phase of upgrade

TRA-N-094	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Upgrade of CS for higher operational pressure in existing M1/1 and M2/1 pipelines, higher flow and bidirectional operation. The project aims to assure additional necessary compressor power for the PCI 6.26 Cluster Croatia - Slovenia - Austria at Rogatec.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-390	Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)
TRA-N-389	Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C5	Feasibility			Considered Tariff Regime	Regulated
		FEED	01/2018	11/2019	Applied for Exemption	No
Currently PCI	Yes (6.26.2)	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2018	Exemption in exit direction	0.00%
		Construction	01/2019	12/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Kidričevo, 2nd phase of upgrade		Up to three compressor units with total power of up to 30 MW.			30
Total					30

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Also essential contribution to Security of supply.
Benefit Description	

M3/1a Šempeter - Ajdovščina

TRA-N-099	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO, LNG North Adriatic, cross-border transmission. The project is connected to M3/1b Ajdovščina - Kalce, M3/1c Kalce - Vodice, M8 Kalce - Jelšane and CS Ajdovščina, 2nd phase of upgrade.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI) (Planned)	Plinovodi d.o.o.	2022	IB-ITn	SI	340.0 GWh/d
	Comment: Incremental capacity would be up to 340 GWh/d.				
	Plinovodi d.o.o.	2022	SI	IB-ITn	340.0 GWh/d
	Comment: Incremental capacity would be up to 340 GWh/d.				

Sponsors		General Information				Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	Permit Granting	1	
		Operator	Plinovodi d.o.o.			
		Host Country	Slovenia			
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			

Enabled Projects

Project Code	Project Name
TRA-N-261	M3/1c Kalce - Vodice
TRA-N-101	M8 Kalce - Jelšane
TRA-N-093	CS Ajdovščina, 2nd phase of upgrade
TRA-N-262	M3/1b Ajdovščina - Kalce

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C7	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M3/1a Šempeter - Ajdovščina			1,100	30	
Total				30	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)

M8 Kalce - Jelšane

TRA-N-101	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the transmission system of the Croatian TSO, LNG North Adriatic, as well as connection of new municipalities. Cross-border transmission.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rupa (HR) / Jelšane (SI)	Plinovodi d.o.o.	2022	HR	SI	414.0 GWh/d
	Plinovodi d.o.o.	2022	SI	HR	414.0 GWh/d

Sponsors		General Information				Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	Permit Granting		
		Operator	Plinovodi d.o.o.			
		Host Country	Slovenia			
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			
				1		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C10	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M8 Kalce - Jelšane			1,200	60	
Total				60	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)

M6 Interconnection Osp

TRA-N-107	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	New IP Osp with the transmission system of the Italian TSO. Previously as M6 Ajdovščina-Lucija, 1st phase.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
San Dorligo della Valle (IT) /Osp (SI)	Plinovodi d.o.o.	2022	IT	SI	6.1 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website		
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>No (The project is not included in the currently valid and confirmed NDP (2016-2025), but it was included in the previous one (2015-2024) and it will also be included in the new one, which is in preparation (TYNDP 2017-2026) and will be confirmed by our regulator expectedly in the next months.)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
		Market Test			Exemption Granted	<i>No</i>
		Permitting				
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
NDP Number		FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
Currently PCI	<i>No</i>	Commissioning	<i>2022</i>	<i>2022</i>		
CBCA Decision	<i>No</i>					
Market Survey	<i>Not Relevant (no CBCA decision)</i>					

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M6 Interconnection Osp		The length is approximately 1.2 km.	250	1	
Total				1	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

TRA-N-108	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO. Adjustment to operating parameters of the transmission system of the Italian TSO.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI)	Plinovodi d.o.o.	2020	IT	SI	35.5 GWh/d
	Plinovodi d.o.o.	2020	SI	IT	38.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (TYNDP for the period 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	<i>C2</i>	Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	<i>No</i>	Market Test			Exemption Granted	<i>No</i>
		Permitting				
CBCA Decision	<i>No</i>	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
		Commissioning	<i>2020</i>	<i>2020</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia			500	31	
Total				31	

Benefits	
Main Driver	<i>Others</i>
Main Driver Explanation	<i>Adjustment of IP boundary conditions (pressure).</i>
Benefit Description	

R15/1 Pince - Lendava - Kidričevo

TRA-N-112	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the transmission system of the Hungarian TSO. Cross-border transmission, enabling access to underground storages in Hungary for Slovenian gas suppliers, enabling access to LNG terminals in northern Adriatic and other gas sources for Hungarian gas suppliers. PCI 6.23. Hungary – Slovenia interconnection (Nagykanizsa - Tornyiszentmiklós (HU) - Lendava (SI) - Kidričevo)		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Pince (SI) / Tornyszentmiklos (HU)	Plinovodi d.o.o.	2020	HU	SI	38.1 GWh/d
	Plinovodi d.o.o.	2020	SI	HU	38.1 GWh/d

Sponsors		General Information				Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	Permit Granting		
		Operator	Plinovodi d.o.o.			
		Host Country	Slovenia			
		Status	Planned			
		Website	Project's URL			
		Publication Approval Status	Approved			
				1		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C3	Feasibility			Considered Tariff Regime	Regulated
		FEED	01/2018	11/2019	Applied for Exemption	No
Currently PCI	Yes (6.23)	Market Test		09/2017	Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2018	Exemption in exit direction	0.00%
		Construction	06/2019	12/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
R15/1 Pince - Lendava - Kidričevo			500	73	4
Total				73	4

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Algeria, Caspian Region, Russia, Qatar, Egypt, Nigeria, Cyprus, Israel, Austria, UGS in Hungary	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Also essential contribution to Security of supply.
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding (MOU)		Yes	27/11/2009

R61 Dragonja - Izola

TRA-N-114	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	Interconnector with the transmission system of the Croatian TSO. New IP Sečovlje (SI) / Plovanija (HR).		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Sečovlje (SI) / Plovanija (HR)	Plinovodi d.o.o.	2024	HR	SI	5.1 GWh/d
	Plinovodi d.o.o.	2024	SI	HR	5.1 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C11	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2024	2024		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
R61 Dragonja - Izola			300	10	
	Total			10	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

M3/1c Kalce - Vodice

TRA-N-261	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO, LNG North Adriatic, cross-border transmission. The project is connected to M3/1a Šempeter - Ajdovščina, M3/1b Ajdovščina - Kalce, M8 Kalce - Jelšane and CS Ajdovščina, 2nd phase of upgrad		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		Permit Granting	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	
			1	

Enabled Projects

Project Code	Project Name
TRA-N-099	M3/1a Šempeter - Ajdovščina
TRA-N-101	M8 Kalce - Jelšane
TRA-N-093	CS Ajdovščina, 2nd phase of upgrade
TRA-N-262	M3/1b Ajdovščina - Kalce

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C9	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M3/1c Kalce - Vodice			1,100	47	
Total				47	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)

M3/1b Ajdovščina - Kalce

TRA-N-262	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO, LNG North Adriatic, cross-border transmission. The project is connected to M3/1a Šempeter - Ajdovščina, M3/1c Kalce - Vodice, M8 Kalce - Jelšane and CS Ajdovščina, 2nd phase of upgrad		
Regulatory Decisions and similar material conditions			

Sponsors	General Information		Permit Granting	Barriers (Count)
Plinovodi100%	Promoter	Plinovodi d.o.o.		
	Operator	Plinovodi d.o.o.		
	Host Country	Slovenia		
	Status	Planned		
	Website	Project's URL		
	Publication Approval Status	Approved		

Enabled Projects

Project Code	Project Name
TRA-N-099	M3/1a Šempeter - Ajdovščina
TRA-N-101	M8 Kalce - Jelšane
TRA-N-093	CS Ajdovščina, 2nd phase of upgrade
TRA-N-261	M3/1c Kalce - Vodice

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C8	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2022	2022		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M3/1b Ajdovščina - Kalce			1,100	24	
Total				24	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barrier Type	Description
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)

M6 Ajdovščina – Lucija

TRA-N-365	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Connecting the DSO in the municipalities of Izola, Piran, Sežana, Divača and Herpelje-Kozina. Connection to the M3 pipeline and R61 pipeline.		
Regulatory Decisions and similar material conditions			

Sponsors	General Information	No Barriers Defined	Barriers (Count)
Plinovodi d.o.o. 100%	Promoter <i>Plinovodi d.o.o.</i>		
	Operator <i>Plinovodi d.o.o.</i>		
	Host Country <i>Slovenia</i>		
	Status <i>Planned</i>		
	Website <i>Project's URL</i>		
	Publication Approval Status <i>Approved</i>		

Enabled Projects

Project Code	Project Name
TRA-N-107	M6 Interconnection Osp
TRA-N-114	R61 Dragonja - Izola

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (TYNDP for the period 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
NDP Number	<i>A15</i>	Feasibility			Considered Tariff Regime	<i>Regulated</i>
		FEED			Applied for Exemption	<i>No</i>
Currently PCI	<i>No</i>	Market Test			Exemption Granted	<i>No</i>
		Permitting				
CBCA Decision	<i>No</i>	Supply Contracts			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	FID			Exemption in exit direction	<i>0.00%</i>
		Construction				
		Commissioning	<i>2019</i>	<i>2019</i>		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
<i>M6 Ajdovščina - Lucija</i>			<i>250</i>	<i>69</i>	
Total				69	

Benefits	
Main Driver	<i>Market Demand</i>
Main Driver Explanation	
Benefit Description	

Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)

TRA-N-389	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Adjustment to operating parameters of the transmission system of the Austrian TSO, increasing the transmission capacity and enabling bidirectional operation. The project is a part of the PCI 6.26 Cluster Croatia - Slovenia - Austria at Rogatec.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Murfeld (AT) / Ceršak (SI)	Plinovodi d.o.o.	2020	AT	SI	78.7 GWh/d
	Plinovodi d.o.o.	2020	SI	AT	165.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects	
Project Code	Project Name
TRA-N-094	CS Kidričevo, 2nd phase of upgrade
TRA-N-390	Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C4	Feasibility			Considered Tariff Regime	Regulated
		FEED	01/2018	11/2019	Applied for Exemption	No
Currently PCI	Yes (6.26.5)	Market Test		09/2017	Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2018	Exemption in exit direction	0.00%
		Construction	01/2019	12/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Upgrade of Murfeld/Ceršak interconnection		Pipeline length: 160m.	800	0	
Total				0	

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Also essential contribution to Security of supply.
Benefit Description	

Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)

TRA-N-390	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Advanced
Description	Adjustment to operating parameters of the transmission system of the Croatian TSO, increasing the transmission capacity and enabling bidirectional operation. The project is a part of the PCI 6.26 Cluster Croatia - Slovenia - Austria at Rogatec.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rogatec	Plinovodi d.o.o.	2020	HR	SI	165.0 GWh/d
	Plinovodi d.o.o.	2020	SI	HR	165.0 GWh/d

Sponsors	General Information		No Barriers Defined	Barriers (Count)
Plinovodi	100%	Promoter	Plinovodi d.o.o.	
		Operator	Plinovodi d.o.o.	
		Host Country	Slovenia	
		Status	Planned	
		Website	Project's URL	
		Publication Approval Status	Approved	

Enabled Projects

Project Code	Project Name
TRA-N-389	Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)
TRA-N-094	CS Kidričevo, 2nd phase of upgrade

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (TYNDP for the period 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	C12	Feasibility			Considered Tariff Regime	Regulated
		FEED	01/2018	11/2019	Applied for Exemption	No
Currently PCI	Yes (6.26.6)	Market Test			Exemption Granted	No
		Permitting	12/2015	10/2019		
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID		01/2018	Exemption in exit direction	0.00%
		Construction	01/2019	12/2020		
		Commissioning	2020	2020		

Pipelines and Compressor Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Upgrade of Rogatec interconnection		The length is 3.8 km.	800	4	
Total				4	

PCI Details	
PCI Benefits	Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Also essential contribution to Security of supply.
Benefit Description	

System Enhancements - Eustream

TRA-F-017	Project	Pipeline including CS	FID
Update Date	25/05/2016		Advanced
Description	Modernization and Upgrade of the Network and Replacement of Technologies due to new Environmental Norms		
Regulatory Decisions and similar material conditions			

Sponsors	General Information	No Barriers Defined	Barriers (Count)
eustream, a.s. 100%	Promoter eustream, a.s.		
	Operator eustream, a.s.		
	Host Country Slovakia		
	Status Planned		
	Website Project's URL		
	Publication Approval Status Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (National Development Plan 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
NDP Number	10.3.	Feasibility			Considered Tariff Regime	Regulated
		FEED			Applied for Exemption	No
Currently PCI	No	Market Test			Exemption Granted	No
		Permitting				
CBCA Decision	No	Supply Contracts			Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	FID			Exemption in exit direction	0.00%
		Construction				
		Commissioning	2026	2026		

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Modernization and upgrade of the network and replacement of technologies due to new environmental norms.

Poland - Slovakia interconnection

TRA-N-190	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	To build interconnection between Slovak and Polish transmission system and thus increase the Security of Supply in CEE region, and contribute to establishing a well-functioning internal gas market		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL - SK	eustream, a.s.	2019	PL	SK	144.0 GWh/d
	eustream, a.s.	2019	SK	PL	174.6 GWh/d

Sponsors	General Information				
eustream, a.s.	100%	Promoter	eustream, a.s.	Regulatory	1
		Operator	eustream, a.s.	Market	1
		Host Country	Slovakia	Financing	1
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (National Development Plan 2016-2025)</i>	Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
		Feasibility	<i>05/2011</i>	<i>07/2013</i>	Considered Tariff Regime	<i>Regulated</i>
NDP Number	<i>10.1.2.-PL-SK</i>	FEED	<i>10/2015</i>	<i>04/2018</i>	Applied for Exemption	<i>No</i>
		Market Test		<i>06/2016</i>	Exemption Granted	<i>No</i>
Currently PCI	<i>Yes (6.2.1.)</i>	Permitting	<i>08/2015</i>	<i>09/2017</i>		
		Supply Contracts			Exemption in entry direction	<i>0.00%</i>
CBCA Decision	<i>Yes (2014-11-28)</i>	FID			Exemption in exit direction	<i>0.00%</i>
Market Survey	<i>Open Season(2016-06-01)</i>	Construction		<i>12/2019</i>		
		Commissioning	<i>2019</i>	<i>2019</i>		

Pipelines and Compressor Stations					
	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Slovak section	Achieving additional compressor power by upgrade of compressor station in Veľké Kapušany	1,000	100	16
	Total			100	16

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	19/08/2014
Delay Since Last TYNDP	Yes
Delay Explanation	Waiting for regulatory approvals

Expected Gas Sourcing	
Spot	

Benefits	
Main Driver	Others
Main Driver Explanation	Incease of SoS in the CEE region Integration of gas infrastructure in the CEE region by constructing a cross-border interconnection between PL and SK that is currently missing.
Benefit Description	List of countries as defined by the 2013/2014 PS-CBA analysis. Even though Ukraine is not a member state of the EU, the Project has important impact to the country due to adoption of reverse flow capacity from Slovakia towards Ukraine. Furthermore, Ukraine has adopted the Association Agreement with the European Union already.

Barriers	
Barrier Type	Description
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market support

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Agreement between the Government of the Slovak Republic and the Government of the Republic of Poland for cooperation on the implementation of the project of a gas pipeline connecting the Slovak transmission system and Polish transmission system	Intergovernmental agreement	Yes	22/11/2013

Eastring - Slovakia

TRA-N-628	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Eastring-SK is subproject located in Slovakia/Ukraine and is essential part of the Eastring project, which connects IP Veľké Kapušany at the SK-UA border, with a new entry IP at an external border of the EU on the territory of Bulgaria in the following routing options: – from SK to RO – via UA, (exist. pipeline) – via HU, (new pipeline). – from RO to TR – Option A – new pipeline passing production & storage area and continuing to IP Isaccea and to BG/TR border by utilizing existing RO-BG transit assets – Option B – new pipeline, passing 2 production & storage areas and continuing to an external border of the EU on the territory of Bulgaria. The project would (i) secure supplies in case of RU disruption and therefore it will increase gas SoS in the broader Central-South-East EU region, (ii) allow access to alternative gas sources for Central, Western & Southern Europe and (iii) mean step towards EU single gas market.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Variant : Eastring - SK-2		High capacity scenario, starting at Veľké Kapušany IP and passing through SK using new pipeline to new IP at SK-HU border			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border HU/EAR <-> SK/EAR	Eastring B.V.	2021	HU/EAR	SK/EAR	570.0 GWh/d
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Eastring B.V.	2021	SK/EAR	HU/EAR	570.0 GWh/d
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Eastring B.V.	2025	HU/EAR	SK/EAR	570.0 GWh/d
	Eastring B.V.	2025	SK/EAR	HU/EAR	570.0 GWh/d
Eastring SK/EAR <-> Veľké Kapušany	Eastring B.V.	2021	SK	SK/EAR	570.0 GWh/d
	Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Eastring B.V.	2021	SK/EAR	SK	570.0 GWh/d
	Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Eastring B.V.	2025	SK	SK/EAR	570.0 GWh/d

Eastring SK/EAR <-> Veľké Kapušany		Eastring B.V.	2025	SK/EAR	SK	570.0 GWh/d
Capacity Increments Variant(s) For Information Only						
Variant : Eastring – SK-1		High capacity scenario, starting at Veľké Kapušany IP and passing through SK using new pipeline to new IP at SK-HU border with following continuance to RO and BG existing system				
Point	Operator	Year	From Gas System	To Gas System	Capacity	
Eastring Cross-Border HU/EAR <> SK/EAR	Eastring B.V.	2021	HU/EAR	SK/EAR	570.0 GWh/d	
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.					
	Eastring B.V.	2021	SK/EAR	HU/EAR	570.0 GWh/d	
	Comment: New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.					
	Eastring B.V.	2025	HU/EAR	SK/EAR	570.0 GWh/d	
	Eastring B.V.	2025	SK/EAR	HU/EAR	570.0 GWh/d	
Eastring SK/EAR <-> Veľké Kapušany	Eastring B.V.	2021	SK	SK/EAR	570.0 GWh/d	
	Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 1140 GWh/d.					
	Eastring B.V.	2021	SK/EAR	SK	570.0 GWh/d	
	Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 1140 GWh/d.					
	Eastring B.V.	2025	SK	SK/EAR	570.0 GWh/d	
	Eastring B.V.	2025	SK/EAR	SK	570.0 GWh/d	
Capacity Increments Variant(s) For Information Only						
Variant : Eastring – SK-3/4		Low capacity scenario, starting at Veľké Kapušany IP at SK-UA border, passing through UA to new IP at UA-RO border				
Point	Operator	Year	From Gas System	To Gas System	Capacity	
Eastring Cross-Border RO/EAR <> UA/EAR	Eastring B.V.	2021	RO/EAR	UA/EAR	570.0 GWh/d	
	Comment: New interconnection point at UA/RO border, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.					
	Eastring B.V.	2021	UA/EAR	RO/EAR	342.0 GWh/d	
Comment: New interconnection point at UA/RO border, New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction UA->RO.						

Eastring Cross-Border RO/EAR <> UA/EAR

Eastring B.V.	2025	RO/EAR	UA/EAR	570.0 GWh/d
Eastring B.V.	2025	UA/EAR	RO/EAR	370.0 GWh/d

Comment: Exit means direction UA->RO.

Eastring Cross-Border UA/EAR <> SK/EAR

Eastring B.V.	2021	SK/EAR	UA/EAR	342.0 GWh/d
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Comment: New interconnection point at SK-UA border, New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction SK->UA.

Eastring B.V.	2021	UA/EAR	SK/EAR	570.0 GWh/d
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Comment: New interconnection point at SK-UA border, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.

Eastring B.V.	2025	SK/EAR	UA/EAR	370.0 GWh/d
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Comment: Exit means direction SK->UA.

Eastring B.V.	2025	UA/EAR	SK/EAR	570.0 GWh/d
Eastring B.V.	2021	SK	SK/EAR	570.0 GWh/d

Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 1140 GWh/d.

Eastring B.V.	2021	SK/EAR	SK	342.0 GWh/d
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Comment: Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK), New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction EUS->Eastring.

Eastring B.V.	2025	SK	SK/EAR	570.0 GWh/d
Eastring B.V.	2025	SK/EAR	SK	370.0 GWh/d

Comment: Exit means direction EUS->Eastring.

Eastring SK/EAR <-> Veľké Kapušany

Sponsors		General Information		No Barriers Defined	Barriers (Count)
Eastring B.V.	100%	Promoter	Eastring B.V.		
		Operator	Eastring B.V.		
		Host Country	Slovakia		
		Status	Planned		
		Website	Project's URL		
		Publication Approval Status	Approved		

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	<i>Yes (National Development Plan 2016-2025)</i>	Pre-Feasibility	<i>05/2016</i>	<i>04/2017</i>	Considered TPA Regime	<i>Not Applicable</i>
		Feasibility			Considered Tariff Regime	<i>Not Applicable</i>
NDP Number	<i>10.1.2. Eastring</i>	FEED			Applied for Exemption	<i>Not Relevant</i>
		Market Test			Exemption Granted	<i>Not Relevant</i>
Currently PCI	<i>Yes (6.25.1)</i>	Permitting				
		Supply Contracts				
CBCA Decision	<i>No</i>	FID			Exemption in entry direction	<i>0.00%</i>
Market Survey	<i>Not Relevant (no CBCA decision)</i>	Construction			Exemption in exit direction	<i>0.00%</i>
		Commissioning	<i>2021</i>	<i>2025</i>		

Pipelines and Compressor Stations

Eastring - SK-2		High capacity scenario, starting at Veľké Kapušany IP and passing through SK using new pipeline to new IP at SK-HU border			
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-SK-2	Data refers to the first stage - capacity 570 GWh/d for new route via SK,HU,RO,BG, in case of increase of capacity up to 1140 GWh/d in 2023, compressor power at level of 93 MW will be needed		1,400	19	52
Total				19	52

Pipelines and Compressor Stations - Alternative Variant

Eastring – SK-1		High capacity scenario, starting at Veľké Kapušany IP and passing through SK using new pipeline to new IP at SK-HU border with following continuance to RO and BG existing system			
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Eastring-SK-1	Data refers to the first stage - capacity 570 GWh/d for new route via SK, HU and partly RO and existing route via RO & BG, in case of increase of capacity up to 1140 GWh/d in 2023, compressor power at level of 90 MW will be needed		1,400	19	42
Total				19	42

Pipelines and Compressor Stations - Alternative Variant					
Eastring – SK-3/4		Low capacity scenario, starting at Veľké Kapušany IP at SK-UA border, passing through UA to new IP at UA-RO border			
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	
Eastring-SK-3/4	Total length of used pipeline - 113 km	1,400	0	0	
Total			0	0	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing	
Caspian Region, Norway, Russia, LNG (TR), Iraq, Iran, Egypt, Israel, Turkmenistan, Kazakhstan, Cyprus, Azerbaijan, Any gas available at Turkish/European HUBs including	

Benefits	
Main Driver	Others
Main Driver Explanation	The project brings significant benefits to the SoS of Europe, bringing the increasing new sources of gas supply in South Eastern Europe to the markets of Central and Western Europe, while further enhancing the market integration of the affected countries.
Benefit Description	- Physical alternative for providing 100% of all Balkan countries' consumption; - Providing security of supply for 100% of all Balkan countries' consumption; - Additional utilization for CZ, SK, PL, UA, RO, BG transit and storage assets; - Providing Western shippers with possibility to supply Balkan countries and even Turkey from NCG/Gaspool/Baumgarten; - Corridor ready for future gas imports to Europe from alternative sources – AGRI, TANAP, Caspian, Iran, Iraq, Egypt, Israel, Cyprus, Turkey, etc.

Capacity increase at IP Lanžhot entry

TRA-N-902	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	The goal of the project Capacity increase at IP Lanžhot (Entry - Eustream) is the upgrade of cross-border capacity at the entry IP Lanžhot. Project is among others developed in the context of Eastring project, the aim is to provide sufficient future transit capacity for delivery of gas for the region of CEE/SEE Europe, namely Balkan countries, as well as ensuring security supplies to Ukraine as well as integration of CEE/SEE region to the developed spot markets.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling					
Variant : 1		Increment at level of 780 GWh/d			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	eustream, a.s.	2019	CZ	SK	780.0 GWh/d
Capacity Increments Variant(s) For Information Only					
Variant : 2		Increment at level of 988GWh/d			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	eustream, a.s.	2020	CZ	SK	988.0 GWh/d

Sponsors		General Information	
eustream, a.s.	100%	Promoter	eustream, a.s.
		Operator	eustream, a.s.
		Host Country	Slovakia
		Status	Planned
		Website	
		Publication Approval Status	Approved

Regulatory

Market

2

1

Barriers (Count)

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (National Development Plan 2016-2025)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	10.1.2. Lanžhot	FEED	09/2015	08/2017	Applied for Exemption	No
		Market Test			Exemption Granted	No
Currently PCI	No	Permitting			Exemption in entry direction	0.00%
		Supply Contracts				
CBCA Decision	No	FID			Exemption in exit direction	0.00%
Market Survey		Construction				
	Not Relevant (no CBCA decision)	Commissioning	2019	2019		

Pipelines and Compressor Stations					
1		Increment at level of 780 GWh/d			

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Capacity increase at IP Lanžhot Entry	Capacity increase to 780 GWh/d			
Total				

Pipelines and Compressor Stations - Alternative Variant					
2		Increment at level of 988GWh/d			

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Capacity increase at IP Lanžhot Entry	Capacity increase to 988 GWh/d			
Total				

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders of the member states concerned by at least 10%, compared to the situation prior to the commissioning of the project, Project concerns investment in reverse flow capacity
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Spot

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Project is among others developed in the context of Eastring project, the aim is to provide sufficient future transit capacity for delivery of gas for the region of CEE/SEE Europe, namely Balkan countries, as well as ensuring security supplies to Ukraine as well as integration of CEE/SEE region to the developed spot markets.

Barriers

Barrier Type	Description
Market	Lack of market maturity
Regulatory	Low rate of return
Regulatory	Capacity quotas

Exit Capacity Budince

TRA-F-1047	Project	Pipeline including CS	FID
Update Date	23/06/2016		Advanced
Description	Project covers exit capacity at IP Budince at the Slovak/Ukrainian border. Capacity is already offered for the shippers and customers.		
Regulatory Decisions and similar material conditions			

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Budince	eustream, a.s.	2016	SK	UAe	135.2 GWh/d

Sponsors		General Information		No Barriers Defined		Barriers (Count)
eustream, a.s.	100%	Promoter	eustream, a.s.			
		Operator	eustream, a.s.			
		Host Country	Slovakia			
		Status	Planned			
		Website				
		Publication Approval Status	Approved			

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP	Yes (Slovak national development plan 2015-2024)	Pre-Feasibility			Considered TPA Regime	Regulated
		Feasibility			Considered Tariff Regime	Regulated
NDP Number	11.a.i	FEED			Applied for Exemption	No
		Market Test			Exemption Granted	No
Currently PCI	No	Permitting				
		Supply Contracts			Exemption in entry direction	0.00%
CBCA Decision	No	FID			Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)					
		Construction				
		Commissioning	2016	2016		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Exit Budince					
Total					

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	



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