Albania - Kosovo Gas Pipeline

TRA-F-1028	Project	Pipeline including CS	FID
Update Date	10/05/2016		Advanced
Description	The AlbaniaKosovo Gas Pipeline (ALKOGAP) project is to interconnect the existing and planned gas transmission system of the Republic of Albania including TAP & IAP project) with the future projected gas transmission system of the Republic of Kosovo, and the transmission interconnectors which are part of eastern brunch of Energy Community Gas Ring (ECGR), as well. This transmission pipeline would create the preconditions for the further development of the natural gas markets of Albania, and the creation and development of the natural gas markets of Kosovo in the estimated annual level of 2 bcm (1-1.3 bcm for Albania and 0.5 - 0.7 bcm for Kosovo). It would be possible to increase its capacity (double or triple), in the case that ALKOGAP will be used to supply Serbia and other countries with Caspian or Middle East gas.		
Regulatory Decisions and similar material conditions	This project is in line with the aims of the Energy Community Treaty –establishing the regional gas market, integrated with EU energy market. The Albania-Kosovo gas pipeline is considered part of the Energy Community Gas Ring, which is the concept of gasification for entire region, proposed by the WB Study and accepted by the Gas Fora of the Energy Community. The proposed project is in line with the: -Albanian Government priorities in the gasification of the country. -In the gasification of the EU countries and Contracting Parties of the Energy Community.		

Sponsors

Fier – Lezha (ALbania) – Prishtina (Kosovo)	
Ministry of Energy and Industry of AL & Min. of Economic Development of KO	100%
Lezha (Albania) - Pristina (Kosovo)	
Ministry of Energy and Industry of AL & Min. of Economic Development of KO	100%

General Information

Promoter	*Min. of Energy and Industry of AL & Min. of Economic Development of KO*
Operator	*Albanian Ministry of Energy and Industry*
Host Country	*Albania*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (NDP of AL is in final stage for approval.)*
NDP Number	*Energy chapter*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*

CBCA Decision	*No*	Supply Contracts		% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID			
		Construction			
		Commissioning	*2022*	*2022*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Fier – Lezha (AL) – Prishtina (KO)	This routing scenario shall be considered in case of not much progress is encountered with the implementation of IAP.	610	260	
Lezha (AL) - Pristina (KO)	This routing scenario assumes that IAP moves forward to the implementation stage;	610	175	
Total			**435**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	Ministry of Energy and Industry of Albania is working in the cooperation with WBIF to prepare the Study of "Gas Master Plan for Albania" and "Project of Identifican Plan". As soon as this study will be completed by the Consultant COWI-IPF, the final route will be defined. Also, the Ministries of Albania and Kosovo have applied to WBIF for a grant to prepare a Feasibility Study for this project that will identify the preliminary and main routes for this project.

Expected Gas Sourcing

Caspian Region

Benefits

Main Driver	Market Demand
Main Driver Explanation	The AlbaniaKosovoGas Pipeline (ALKOGAP) project is to interconnect the existing and planned gastransmission system of the Republic of Albania (including TAP & IAP project) with the future projected gastransmission system of the Republic of Kosovo, and the transmission interconnectors which are part of easternbrunch of Energy Community Gas Ring (ECGR), as well. The project aims to establish a new supply route fornatural gas from the Middle East and Caspian Region transported by Trans Adriatic Pipeline, northeastwardsof the Western Balkan area towards Serbia. The ALKOGAP project however shall be planned as bidirectional pipeline, so the possible supply direction could also be north – south, from the ECGR, or other sources.

Benefit Description	The benefits will include: introducing an environmentally more 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) facilitating the gasification of considerable eastern parts of Albania and entire territory of Kosovo increasing energy security to both Albania and Kosovo providing diversified gas supply to the region providing the access to Albanian storage capacities providing significant transit capacity and income to Albania and Kosovo, creating the preconditions for supporting the regional concept of South European Gas Ring. Reducing CO2 emissions in the region and facilitating economic development.

Barriers

Barriers Type	Barrier

Eagle LNG and Pipeline

LNG-N-328	Project	LNG Terminal	Non-FID
Update Date	26/05/2016		Non-Advanced
Description	Eagle LNG is a gas infrastructure project expected to be operational by 2020. The project consists in a 8 bcma floating LNG import terminal (FSRU vessel) located 6 km offshore the Albania coast, integrated with a 10 bcma, 110 km subsea gas pipeline to be built across the Adriatic between Albania and Italy to transmit the gas from the FSRU to Italy (Puglia region, 18 km south of Brindisi in the town of Torchiarolo) and to Albania (5km N-NE from the Vjosë river estuary).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Variant : Connection Eagle LNG - IAP — Default variant for use in modeling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Ionic-Adriatic Pipeline - IAP Entry	Trans-European Energy B.V., Sh.A.	2020	AL/EPH	IB-HRi/IAP	150.0 GWh/d

Capacity Increments For Modelling

Variant : Connection Eagle LNG - Snam Rete Gas (IT) — Default variant for use in modeling

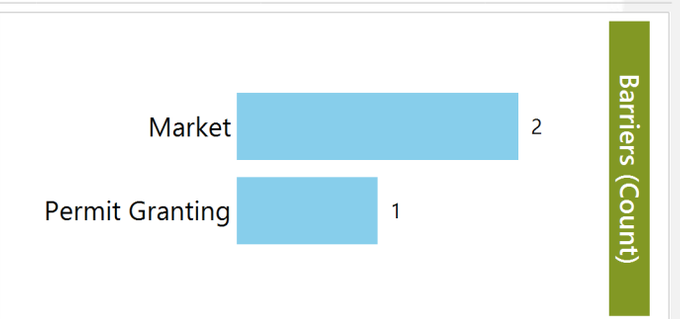
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eagle LNG / Snam Rete Gas (IT)	Trans-European Energy B.V., Sh.A.	2020	AL/EPI	IB-ITs	300.0 GWh/d

Sponsors

Burns srl	100%

General Information

Promoter	*Burns Srl*
Operator	*Trans-European Energy B.V., Sh.A.*
Host Country	*Albania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		*01/2006*

Third-Party Access Regime

Considered TPA Regime	*Negotiated*

NDP and PCI Information	
Part of NDP ?	*Yes (Italy - Gas Grid NDP - Ministerial Decree 20.10.15)*
NDP Number	*Eagle LNG*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Feasibility	*01/2007*	*01/2016*
FEED	*03/2017*	*03/2018*
Market Test		*12/2017*
Permitting	*06/2017*	*01/2018*
Supply Contracts		*01/2018*
FID		*01/2018*
Construction	*03/2018*	*01/2020*
Commissioning	*2020*	*2020*

Considered Tariff Regime	*Negotiated*
Applied for Exemption	*Not Yet*
Exemption Granted	*Not Yet*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Eagle LNG*
Expected Volume (bcm/y)	*8*
Storage Capacity (m3)	*230,000*
Ship Size (m3)	*230,000*
Reloading Ability	*No*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eagle LNG: Pipeline Albania - Italy	The unit for Lenght is km and the unit for Diameter is mm. The compressor power is left empty as the LNG will be used to generate sufficient gas send-out pressure from the FSRU.			
Total				

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	The strategic objective is to introduce directly a new gas source and import route to Albania, Italy and South East Europe. The project will gasify SEE countries and will increase security of supply and competition. Through the Ionian Adriatic Pipeline (IAP), the project will supply Montenegro, Bosnia and Herzegovina and Croatia. From Croatia it will extend its impact to towards Slovenia and Hungary. Thanks to the reverse flow in the north of Italy it will extend its impact to Western Europe. The Albanian government is also planning to export gas from Eagle LNG to Kosovo (1 bcma) and FYR of Macedonia (0.7 bcma). According to the results of the CBA performed in 2015 by ENTSOG to evaluate new gas infrastructures against the EU's priority criteria of market integration, competition, security of supply and sustainability, Eagle LNG was deemed to have a positive effect on no fewer than a dozen EU member states, making it a top of the list project in terms of its regional impact.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	- Availability of funds and associated conditions - Gas price volatility - Securing gas demand contractual volumes

Expected Gas Sourcing

LNG ()

Comments about the Third-Party Access Regime

TPA Exemption on the regas terminal capacity and on the pipeline capacity is sought only for a portion of the total capacity. The non-exempted portion of medium and long-term project capacity will be awarded on a transparent and competitive basis trough an open season tender process.

Benefits

Main Driver	Market Demand
Main Driver Explanation	Gas demand in southeast Europe is expected to reach 11 Bcm/year by 2020 and 13 Bcm/year by 2025, mostly driven by the need to replace coal and lignite in power generation with gas. This requires building new gas supply and transmission infrastructure. With respect to Albania, natural gas and the development of the gas- linked industry and gas-fired power generation is set as a national priority in the country's endeavours to diversify its energy resources. The country depends 99% on renewable sources (hydro) for power generation, which results in high exposure to the variability of weather conditions and in expensive power imports to cover the unbalances.
Benefit Description	For the Balkans, LNG is the best option to deliver a quick and economic and secure source of gas. In the EU-funded Gas Master Plan study for Albania, comparing different sources of gas, Eagle LNG was shown in 2016 to be the most economical source for the region.

Barriers

Barriers Type	Barrier
Permit Granting	The local (regional and communal) approvals in Italy for the onshore pipeline infrastructures represent a possible source of concern as a potential cause of delays.

Market	In Albania the legislation on gas market and gas infrastructure is not yet complete as the gas sector is under development. It is not yet clear the demand size and its build up timing in Albania, initially driven by new investments on gas-fired power plants. Likewise it is still uncertain the gas purchase price level that these anchor points can guarantee.
Market	Lack of market maturity

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Italy-Albania	Agreement on gas and power infrastructure integration	Yes	26/05/2016

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 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**
	New bidirectional IP connceting 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**
	New bidirectional IP connceting 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

Pipeline on Austrian territory

GAS CONNECT AUSTRIA GmbH	100%

Pipeline on Czech territory

NET4GAS, s.r.o	100%

General Information

Promoter	*GAS CONNECT AUSTRIA GmbH*
Operator	*Gas Connect Austria GmbH*
Host Country	*Austria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

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, 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	
Delay Explanation	

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

Barriers

Barriers Type	Barrier

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 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
	The incremental capacity represents an entry capacity extension above planned exit capacity at CZ/AT border. GCV:11.19				

Sponsors

General Information

Promoter	*GAS CONNECT AUSTRIA GmbH*
Operator	*Gas Connect Austria GmbH*
Host Country	*Austria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*No (The BBI project is a new project and will be part of the NDP 2017-2026.)*
NDP Number	*GCA2015/01*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*04/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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	*10/2020*		
		Commissioning	*2020*	*2020*	

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**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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**
	conversion from Nm^3/h to kwh/h with a GCV of 11.19				
	Gas Connect Austria GmbH	2019	SI	AT	**166.5 GWh/d**
	conversion from Nm^3/h to kwh/h with a GCV of 11.19				

Sponsors

General Information

Promoter	*GAS CONNECT AUSTRIA GmbH*
Operator	*Gas Connect Austria GmbH*
Host Country	*Austria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2016 - 2025)*
NDP Number	*GCA 2015/08*
Currently PCI	*Yes (6.26.4)*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*10/2015*	*07/2017*
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% 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, 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	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyarovar	Gas Connect Austria GmbH	2020	HU	AT	153.1 GWh/d
	5 bcma. Further upgrade potential up to development of market demand. Conversion from Nm^3/h to kwh/h with a GCV of 11.19				

Sponsors

General Information

Promoter	*GAS CONNECT AUSTRIA GmbH*
Operator	*Gas Connect Austria GmbH*
Host Country	*Austria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2016 - 2025)*
NDP Number	*GCA 2015/05*
Currently PCI	*Yes (6.24.3)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*10/2015*	*07/2017*
Supply Contracts		
FID		
Construction		*10/2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Commissioning	*2020*	*2020*	

Pipelines and Compressor Stations				
Pipeline Section	**Pipeline Comment**	**Diameter (mm)**	**Length (km)**	**Compressor Power (MW)**
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	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	Strenthening the establishment of a potential Southern Corridor and contribution to a diversification of sources e.g. Black Sea Gas.

Barriers	
Barriers Type	**Barrier**

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 For Modelling

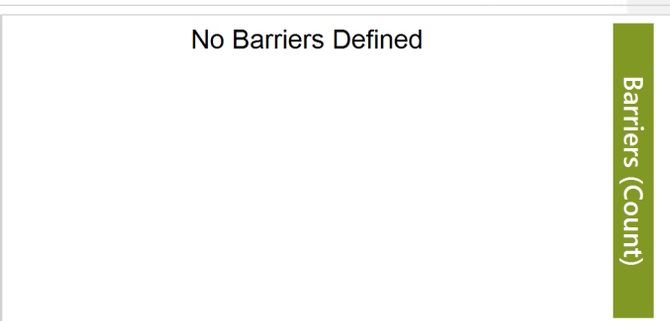
Point	Operator	Year	From Gas System	To Gas System	Capacity
Baumgarten	TAG GmbH	2018	AT	SK	268.6 GWh/d
	The project enable a physical connection at the IP Baumgarten (TAG GmbH/eustream a.s.) at the Austrian/Slovakian boarder by upgrading existing backhaul capacity "Exit Baumgarten" to FZK capacity "Exit Baumgarten" of TAG GmbH				
Tarvisio (IT) / Arnoldstein (AT)	TAG GmbH	2018	IB-ITe	AT	0.0 GWh/d
	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

Trans Austria Gasleitung GmbH	100%

General Information

Promoter	*Trans Austria Gasleitung GmbH*
Operator	*TAG GmbH*
Host Country	*Austria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (Coordinated Network Development Plan 2017-2026)*
NDP Number	*TAG 2017-01*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	

Barriers

Barriers Type	Barrier

South Caucasus Pipeline Future Expansion - SCPFX

TRA-N-1138	Project	Pipeline including CS	Non-FID
Update Date	12/07/2016		Non-Advanced
Description	South Caucasus Pipeline Future Expansion - SCPFX project is a further expansion of existing South Caucasus Pipeline which runs from Sangachal Terminal through Azerbaijan and Georgia to Georgia/Turkey border. SCPFX project currently envisage the construction of new compressor station in Azerbaijan and installation of additional pipeline looping in Georgia.		
Regulatory Decisions and similar material conditions	Project should obtain all regulatory approvals in accordance with applicable Host Government Agreements between SCPC company and Government of Azerbaijan and Government of Georgia.		
ENTSOG Remarks	The project does not lie in the geographical perimeter of the TYNDP retained for modeling.		

Capacity Increments For Modelling

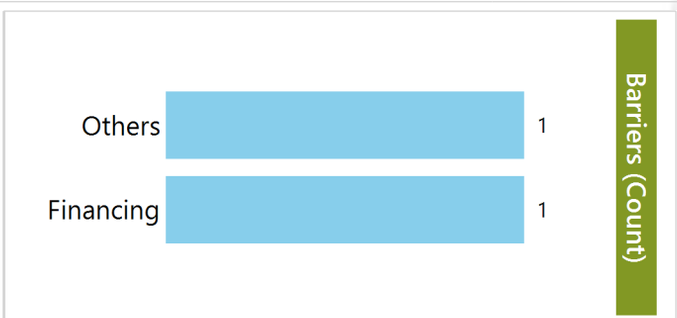
Point	Operator	Year	From Gas System	To Gas System	Capacity
Türkgözü	SOCAR Midstream Operations	2021	AZ/SCP	TR/TNP	150.0 GWh/d
	Up to additional 5 bcma capacity assumed for transportation				

Sponsors

SOCAR	100%

General Information

Promoter	*SOCAR Midstream Operations LLC*
Operator	*SOCAR Midstream Operations*
Host Country	*Azerbaijan*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-F-221	TANAP - Trans Anatolian Natural Gas Pipeline Project

Schedule	Start Date	End Date
Pre-Feasibility		*06/2017*
Feasibility	*07/2017*	*12/2017*

Third-Party Access Regime

Considered TPA Regime	*Negotiated*
Considered Tariff Regime	*Negotiated*

NDP and PCI Information

Part of NDP ?	*No (South Caucasus Pipeline Future Expansion project to be developed based on investment decision of consortium consisting from international companies and after approval of Azerbaijan Government, which consider energy infrastructure projects as an investment in projects containing strategic interest.)*
NDP Number	
Currently PCI	*Yes (7.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FEED	*01/2018*	*12/2018*	Applied for Exemption	*Not Relevant*
Market Test		*09/2018*	Exemption Granted	*Not Relevant*
Permitting	*01/2018*	*12/2018*		
Supply Contracts		*10/2018*	% Exemption in entry direction	*0.00%*
FID		*12/2018*	% Exemption in exit direction	*0.00%*
Construction	*01/2019*	*12/2021*		
Commissioning	*2021*	*2021*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
South-Caucasus Pipeline		1,219	93	80
Total			**93**	**80**

PCI Details

PCI Benefits	
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	6 months
Delay Explanation	Market uncertainty

Expected Gas Sourcing

Caspian Region

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier
Others	Market uncertainty and volume commitment by producers
Financing	Availability of funds and associated conditions

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Intergovernmental Agreement between Azerbaijan and Georgia		Yes	17/04/2002

Gaspipeline Brod - Zenica

TRA-N-224	Project	Pipeline including CS	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	The starting point of Brod - Zenica gas pipeline is in close vicinity of Brod where it should be connected to the high-pressure gas pipeline Slobodnica - Brod (TSO – Plinacro) in the Republic of Croatia. Point of interconnection between Croatian and BiH natural gas transmission network is Brod/Slavonski Brod. The gas pipeline is planned to be bi-directional, and together with Southern Interconnection BiH/CRO creates a part of EC Gas Ring.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

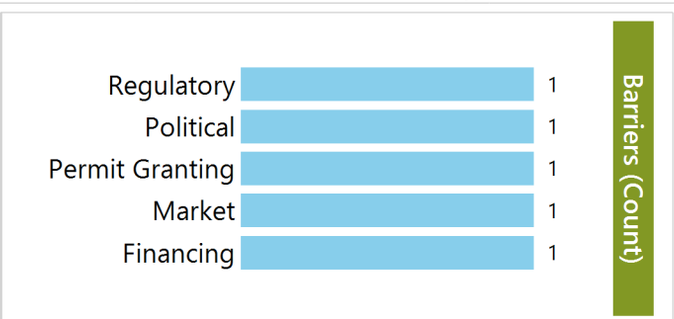
Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica- Bosanski Brod-Zenica	BH Gas d.o.o.	2023	HR	BA	35.0 GWh/d
		Technical exit capacity from Croatia is 44 GWh/day.			

Sponsors

BH-Gas d.o.o.	100%

General Information

Promoter	*BH-Gas d.o.o.*
Operator	*BH Gas d.o.o.*
Host Country	*Bosnia Herzegovina*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (SPP-Strategic plan and programme of FBiH)*
NDP Number	*PTG1*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*02/2006*
Feasibility	*11/2017*	*04/2019*
FEED	*12/2019*	*04/2021*
Market Test		*04/2019*
Permitting	*01/2020*	*05/2021*
Supply Contracts		*05/2022*
FID		*11/2019*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction	*06/2022*	*09/2023*
		Commissioning	*2023*	*2023*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Brod-Zenica (section through FBiH and RS)		500	140	0
Total			**140**	**0**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	YES
Delay Explanation	Regarding the fact that the part of this project runs through Republic of Srpska Entity, the main obstacle is lack of political support of the RS official representatives, as well as lack of primary gas legislation at the state level in accordance with the Third Energy Package. Also,existing natural gas market is not able to cover assessed project cost related to preliminary activities.

Expected Gas Sourcing

Algeria, Caspian Region, Norway, Russia, LNG (HR)

Comments about the Third-Party Access Regime

It is expected that TPA regime and Tariff methodology will be covered by gas primary legislation, all in accordance with Third Package at least up to the end 2016.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Project will directly increase N-1 for Bosnia and Herzegovina and enable flexibility of the natural gas system in BiH in case of disruptions, having in mind that currentlly BiH gas system is isolated and depending of one supply route.
Benefit Description	Project will improve import route diversification and supply source price diversification. Project will enable development of natural gas market in BiH. Lower usage of firewood in the energy consumption sector (residential and industrial) means significant protection on forestry in BiH. Project will decrease CO2 emissions. Project will not cause any demaging environmental impact.

Barriers

Barriers Type	Barrier
Permit Granting	Projects runs through the two BiH entities and procedures of providing neccessary consent have to be conducted in accordance with positive legilsation of both entities, and permits have to be issued by relevant bodies of Federation of BiH and Republic of Srpska. Provision of permits will be accordingly long lasting and expensive. The same is related to the land acquisition.

Political	Lack of primary gas legislation in accordance with Third Energy Package, as well as energy policy at the state level.
Regulatory	Lack of proper transposition of EU regulation
Financing	Availability of funds and associated conditions
Market	Lack of market support

Southern Interconnection pipeline BiH/CRO

TRA-N-851	Project	Pipeline including CS	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	Southern Interconnection pipeline BIH/CRO (Zagvozd-Posusje-Travnik with main branch to Mostar) - Project will integrate BiH with new supply route receiving gas from Croatian gas transmission system which will enable it to get gas supply from other markets (LNG, Caspian and Middle East sources). Project will be bi-directional and together with gaspipeline Zenica-Brod creates a part of EC Gas Ring.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

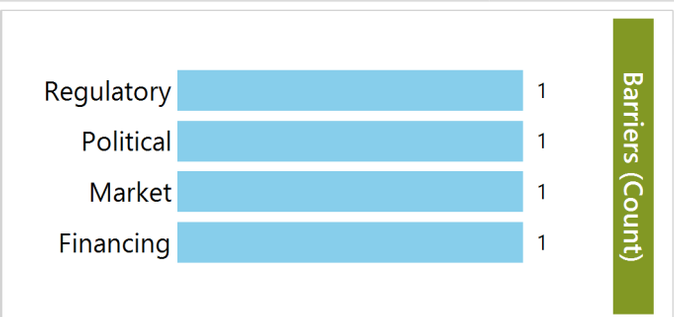
Point	Operator	Year	From Gas System	To Gas System	Capacity
Posušje	BH Gas d.o.o.	2021	HR/IAP	BA	38.0 GWh/d
		Technical exit capacity from Croatia is 73 GWh/day.			

Sponsors

BH-Gas d.o.o.	100%

General Information

Promoter	*BH-GAS d.o.o.*
Operator	*BH Gas d.o.o.*
Host Country	*Bosnia Herzegovina*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (SPP-Strategic plan and programme of FBiH)*
NDP Number	*PTG2*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*10/2013*
Feasibility	*01/2017*	*12/2017*
FEED	*04/2018*	*06/2019*
Market Test		*12/2017*
Permitting	*04/2018*	*06/2019*
Supply Contracts		*05/2020*
FID		*03/2018*
Construction	*06/2020*	*09/2021*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

	Commissioning	*2021*	*2021*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Posusje-Travnik with branch to Mostar		500	165	0
Total			**165**	**0**

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Algeria, Caspian Region, Norway, Russia, LNG (HR)

Comments about the Third-Party Access Regime

It is expected that TPA regime and Tariff methodology will be covered by gas primary legislation in accordance with Third Package at least up to the end of 2016.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Project will increase N-1 for Bosnia and Herzegovina and enable flexibility of natural gas system in BiH in case of disruptions, having in mind that currently BiH gas system is isolated and depending of one supply route.
Benefit Description	Project will improve import route and supply source price diversification. Project will enable development of the natural gas market in BiH. Lower usage of fire wood in the energy consumption sector (residential and industrial) means seignificant protection of BiH forestry. Project will decrease CO2 emissions. Project will not cause any damaging environmental impact.

Barriers

Barriers Type	Barrier
Political	Lack of primary gas legislation in accordance with Third Energy Package, as well as energy policy at the state level.
Regulatory	Lack of proper transposition of EU regulation
Financing	Availability of funds and associated conditions
Market	Lack of market support

Western interconnection BiH/CRO

TRA-N-910	Project	Pipeline including CS	Non-FID
Update Date	23/06/2016		Non-Advanced
Description	Western interconnection BiH/CRO (Licka Jesenica - Trzac-Bos. Krupa with branches to Bihac and Velika Kladusa) - Project will connect BiH with Croatian gas transmission system and enable gasification of part of Una-Sana Canton in the west side of BiH. Project is located in Federation of BiH Entity.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

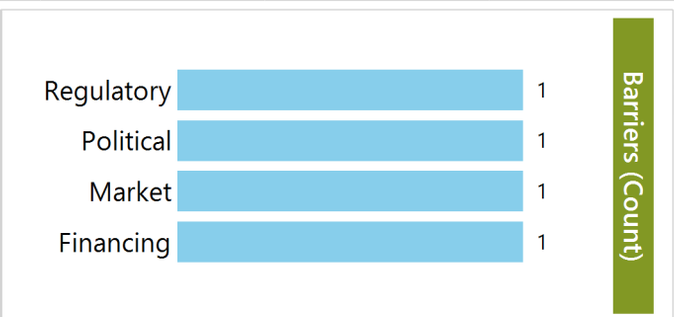
Point	Operator	Year	From Gas System	To Gas System	Capacity
Rakovica (HR) / Trzac (BA)	BH Gas d.o.o.	2023	HR	BA	**27.0 GWh/d**

Sponsors

BH-Gas d.o.o.	100%

General Information

Promoter	*BH-Gas d.o.o.*
Operator	*BH Gas d.o.o.*
Host Country	*Bosnia Herzegovina*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (SPP-Strategic plan and programme of FBiH)*
NDP Number	*PTG4*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2008*
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Licka Jesenica - Trzac - Bos.Krupa	Additionally, branches to Bihac and Velika Kladusa are 45 km length both, diameter 250 mm.	500	35	0
Total			**35**	**0**

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Algeria, Caspian Region, Norway, Russia, LNG (HR)

Comments about the Third-Party Access Regime

It is expected that TPA regime and Tariff methodology will be covered by gas primary legislation in accordance with Third Package at least up to the end of 2016.

Benefits

Main Driver	Market Demand
Main Driver Explanation	Project will enable development of natural gas market in the western part of BiH.
Benefit Description	Project will enable development of the natural gas market in BiH. Lower usage of firewood in the energy consumption sector (residential and industrial) means significant protection of BiH forestry. Project will decrease CO2 emissions. Project will not cause any damaging environmental impact.

Barriers

Barriers Type	Barrier
Political	Lack of primary gas legislation in accordance with Third Energy Package, as well as energy policy at the state level.
Regulatory	Lack of proper transposition of EU regulation
Financing	Availability of funds and associated conditions
Market	Lack of market support

L/H Conversion

TRA-N-500	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Advanced
Description	The timetable for reducing L-gas exports from the Netherlands to Belgium, France and Germany was announced by the Dutch authorities at the end of 2012: the gradual reduction of L-gas exports to Belgium (and therefore to France as L gas is also exported to France), will begin in October 2024 and end in 2030. The reason behind this announcement is the forecasted decline of the L-gas Groningen gas field (10%/year production decline expected as from 2020). Most of the L-gas used in France transits through Belgium meaning that L-gas transit capacity need to be ensured until conversion is done in France. For the Fluxys Belgium grid, infrastructure modifications will be required to transport H gas to the newly converted L zones in Belgium and in NW Europe.		
Regulatory Decisions and similar material conditions			

Sponsors

Fluxys Belgium	100%

General Information

Promoter	*Fluxys Belgium*
Operator	*Fluxys Belgium*
Host Country	*Belgium*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Fluxys Belgium NDP 2016)*
NDP Number	*L/H Conversion*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*09/2015*	
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	
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	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Zeebrugge LNG Terminal - 3rd Jetty

LNG-N-742	Project	LNG Terminal	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Given the contracted capacities on the Terminal for the current installations on the one hand, and on the other hand the growing small scale LNG market, with amongst others the LNG bunker vessel from Engie/Mitsubishi/NYK/Fluxys which will be operational from end 2016, and will be operating from Zeebrugge Port, LNG feedering contracts for supply to Scandinavia, more and more commercial vessels converting to LNG, the Clean Power for Transport directive imposing to make LNG available in all seaports, etc, Fluxys LNG is evaluating in all domains (commercial and technical) the need and the possibilities to construct a 3rd Jetty, dedicated for small scale LNG ships as to support the realization of the directive. The purpose of this 3rd Jetty would be to serve LNG ships from the smallest size of about 2.000 m^3 up to about 30.000 m^3.		
Regulatory Decisions and similar material conditions			

Sponsors

Fluxys LNG	100%

General Information

Promoter	*Fluxys LNG*
Operator	*Fluxys LNG*
Host Country	*Belgium*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Fluxys Belgium NDP 2016)*
NDP Number	*3rd Jetty*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Zeebrugge LNG Terminal*	
Expected Volume (bcm/y)	*1*	
Storage Capacity (m3)	*0*	
Ship Size (m3)	*30,000*	*about 2.000 m³ up to about 30.000 m³*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Zeebrugge LNG Terminal - 5th Tank & 2nd Jetty

LNG-F-229	Project	LNG Terminal	FID
			Advanced

Update Date	13/06/2016
Description	Construction of a second jetty for berthing of LNG ships with a capacity from approximately 3500 m^3 LNG up to 217000 m^3 LNG (FID, commissioning foreseen 2016). Construction of an additional storage tank with a capacity of 180000 m^3 LNG (FID, commissioning foreseen 2019). Potential construction of additional send-out capacity of 450000 m^3(n)/h (non-FID).
Regulatory Decisions and similar material conditions	

Capacity Increments For Modelling

Variant : FID — FID

Point	Operator	Year	From Gas System	To Gas System	Capacity
Zeebrugge LNG	Fluxys LNG	2019	LNG_Tk_BEh	IB-BEhz	**0.0 GWh/d**

Capacity Increments For Information Only

Variant : non-FID — non-FID

Point	Operator	Year	From Gas System	To Gas System	Capacity
Zeebrugge LNG	Fluxys Belgium	2019	LNG_Tk_BEh	IB-BEhz	**122.0 GWh/d**
	Fluxys LNG	2019	LNG_Tk_BEh	IB-BEhz	**122.0 GWh/d**

Sponsors

Fluxys LNG	100%

General Information

Promoter	*Fluxys LNG*
Operator	*Fluxys LNG*
Host Country	*Belgium*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Fluxys Belgium NDP 2016)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*

NDP Number	*5th Tank & 2nd Jetty*	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	*2019* *2019*		

Technical Information (LNG)

LNG Facility	*Zeebrugge LNG Terminal*	
Expected Volume (bcm/y)	*3*	
Storage Capacity (m3)	*180,000*	
Ship Size (m3)	*0*	*3500 to 217 000 m^3LNG*
Reloading Ability	*Yes*	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG (BE)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5 (5.1.3.)*
Currently PCI	*Yes (6.8.4.)*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2017*
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*

		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*	

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, 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	yes
Delay Explanation	The project is under consideration.

Expected Gas Sourcing

Algeria, Caspian Region, LNG (?), Southern gas corridor gas sources

Benefits

Main Driver	Others
Main Driver Explanation	Market integration; Security of supply, Competiotion.
Benefit Description	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.

Barriers	
Barriers Type	Barrier

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 For Modelling

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

Sponsors

Provadia - Rupcha	
Bulgartrasngaz EAD	100%
Strandja-IP BG/TR	
Bulgartrasngaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.1. (5.1.1)*
Currently PCI	*Yes (6.25.4)*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*05/2017*
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction		*06/2022*
		Commissioning	*2022*	*2022*

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 compressior station	1,200	50	10
Total			**70**	**10**

PCI Details

PCI Benefits	
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	
Delay Explanation	

Expected Gas Sourcing

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

Benefits

Main Driver	Others
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.

Barriers

Barriers Type	Barrier

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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*section 5.3.2.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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	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.
Benefit Description	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.

Barriers

Barriers Type	**Barrier**

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 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**
	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**
	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**
	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**
	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**
	Bulgartransgaz EAD	2025	RO/EAR	BG/EAR	**570.0 GWh/d**

Eastring Cross-Border BG/EAR>TR	Bulgartransgaz EAD	2021	BG/EAR	TRe	**570.0 GWh/d**
	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**
Eastring Cross-Border TR>BG/EAR	Bulgartransgaz EAD	2021	TRr	BG/EAR	**570.0 GWh/d**
	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 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
Eastring BG Domestic Point	Bulgartransgaz EAD	2021	BGn	BG/EAR	**200.0 GWh/d**
	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**
	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	**342.0 GWh/d**
	New interconnection point, New capacity increment from 4Q 2025 to the level of 712 GWh/d. Exit means direction RO->BG.				
	Bulgartransgaz EAD	2021	RO/EAR	BG/EAR	**570.0 GWh/d**
	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**
	Bulgartransgaz EAD	2025	RO/EAR	BG/EAR	**570.0 GWh/d**
Eastring Cross-Border BG/EAR>TR	Bulgartransgaz EAD	2021	BG/EAR	TRe	**342.0 GWh/d**
	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.				
	Bulgartransgaz EAD	2025	BG/EAR	TRe	**712.0 GWh/d**
	Exit means direction BG->TR.				

Eastring Cross-Border TR>BG/EAR	Bulgartransgaz EAD	2021	TRr	BG/EAR	570.0 GWh/d
	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 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
	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
	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
	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	TRi	BGg/BGT	570.0 GWh/d
Negru Voda II, III (RO) / Kardam (BG)	Bulgartransgaz EAD	2021	BGg/BGT	RO/TBP	570.0 GWh/d
	Transmission via existing IP Negru-Voda with increase of capacity at lewel 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
	Transmission via existing IP Negru-Voda with increase of capacity at lewel of 570 GWh/d, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2025	BGg/BGT	RO/TBP	570.0 GWh/d
	Bulgartransgaz EAD	2025	RO/TBP	BGg/BGT	570.0 GWh/d
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2021	BGg/BGT	TRe	570.0 GWh/d
	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 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**
	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**
	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**
	Transmission between Eastring - Bulgaria and Turkey via existing IP Malkoclar, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Bulgartransgaz EAD	2025	TRi	BGg/BGT	**570.0 GWh/d**
Negru Voda II, III (RO) / Kardam (BG)	Bulgartransgaz EAD	2021	BGg/BGT	RO/TBP	**342.0 GWh/d**
	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**
	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**
	Exit means direction RO->BG.				
	Bulgartransgaz EAD	2025	RO/TBP	BGg/BGT	**570.0 GWh/d**
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2021	BGg/BGT	TRe	**342.0 GWh/d**
	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.				
	Bulgartransgaz EAD	2025	BGg/BGT	TRe	**712.0 GWh/d**

Sponsors	
Bulgartransgaz EAD	100%

General Information	
Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.1(5.1,2)*
Currently PCI	*Yes (6.25.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*05/2016*	*04/2017*
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2021*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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	
Delay Explanation	

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.

Barriers	
Barriers Type	**Barrier**

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 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**
	Opeartor to be defined				
	IBS Future Operator	2018	RS	BGn	**51.0 GWh/d**
	Operator to be defined				

Sponsors

Bulgarian section	
Ministry of Energy of Bulgaria	100%
Serbian section	
Serbijagas	100%

General Information

Promoter	*Ministry of Energy*
Operator	*IBS Future Operator*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Sectin 5.2 (5.2.3)*

Schedule	Start Date	End Date
Pre-Feasibility		*02/2011*
Feasibility	*12/2011*	*12/2012*
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

		Market Test	05/2017	Exemption Granted	No
Currently PCI	Yes (6.10.)	Permitting	08/2016		
		Supply Contracts	04/2017	% Exemption in entry direction	0.00%
CBCA Decision	No	FID	12/2012	% Exemption in exit direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	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, Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG (GR)

Benefits

Main Driver	Others
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)

Barriers

Barriers Type	Barrier

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

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 For Modelling

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

Sponsors

Bulgartransgaz EAD for the gas pipeline section on the territory of Bulgaria	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*ITB*
Currently PCI	*Yes (7.4.2.)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*08/2015*	*02/2016*
FEED		
Market Test		*05/2017*
Permitting	*08/2017*	*11/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

CBCA Decision	*No*	Supply Contracts		% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID			
		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, 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

Barriers

Barriers Type	Barrier

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

Interconnector Greece-Bulgaria (IGB Project)

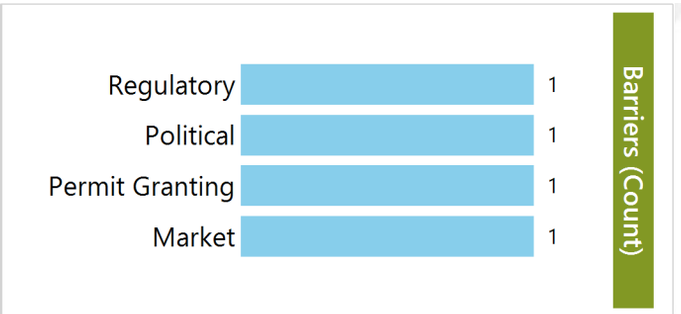
TRA-F-378	Project	Pipeline including CS	FID
Update Date	06/05/2016		Advanced
Description	Construction of a bi-directional gas interconnector between the high pressure natural gas systems of Greece and Bulgaria with a technical forward capacity of 3bcm/y, capable to be increased to 5 bcm/y with the installation 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 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
	Initial capacity of 3 bcm/y				
	ICGB a.d.	2021	GR/TAP	BG/IGB	60.5 GWh/d
	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
	Increment could also be done in correlation with DESFA				
	ICGB a.d.	2021	IB-GRk	BG/IGB	60.5 GWh/d
	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
	Initial capacity of 3 bcm/y				
	ICGB a.d.	2021	BG/IGB	BGn	60.5 GWh/d
	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	
BEH EAD	50%
IGI Poseidon	50%

General Information	
Promoter	*ICGB a.d.*
Operator	*ICGB a.d.*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (Included in both the TYNDPs of Greece and Bulgaria)*
NDP Number	*not applicable*
Currently PCI	*Yes (6.8.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2009*
Feasibility	*05/2009*	*07/2009*
FEED	*08/2008*	*03/2016*
Market Test		*09/2016*
Permitting	*08/2010*	*11/2016*
Supply Contracts		*12/2016*
FID		*12/2015*
Construction	*03/2017*	*12/2018*
Commissioning	*2018*	*2021*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Yes*
Exemption Granted	*Not Yet*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 dependcy 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	
Barriers Type	**Barrier**
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.

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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

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

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.1. (5.1.1)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

Currently PCI	*Yes (6.25.4)*	Market Test		*05/2017*	
		Permitting			% Exemption in entry direction *0.00%*
CBCA Decision	*No*	Supply Contracts			% Exemption in exit direction *0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID			
		Construction		*06/2022*	
		Commissioning	*2022*	*2022*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Looping CS Valchi Dol - Line valve Novi Iskar	a new looping	700	383	
Total			**383**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	Barrier

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 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
	infrastructure necessary for stage 2 of the Interconnection Bulgaria – Serbia.				
	IBS Future Operator	2020	RS	BGn	19.4 GWh/d
	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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

Schedule	Start Date	End Date
Pre-Feasibility		*12/2016*

Third-Party Access Regime

Considered TPA Regime: *Not Applicable*

NDP and PCI Information	
Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.5.*
Currently PCI	*Yes (6.8.2.)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Feasibility		*08/2017*
FEED		
Market Test		*05/2017*
Permitting		*11/2018*
Supply Contracts		*11/2018*
FID		
Construction		*11/2020*
Commissioning	*2020*	*2020*

Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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.

Barriers

Barriers Type	Barrier

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 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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.3 (5.3.1)*
Currently PCI	*Yes (6.20.2.)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2011*
Feasibility	*01/2015*	*01/2017*
FEED	*01/2017*	*12/2017*
Market Test		*05/2017*
Permitting		
Supply Contracts		
FID		*01/2019*
Construction	*01/2020*	*12/2021*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

	Commissioning	*2022*	*2022*

Technical Information (UGS)

Storage Facility	*UGS Chiren*	
Storage Facility Type	*Aquifer*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*450.00*	*450*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	yes
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.

Barriers

Barriers Type	Barrier

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 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

Bulgartransgaz EAD	100%

General Information

Promoter	*Bulgartransgaz EAD*
Operator	*Bulgartransgaz EAD*
Host Country	*Bulgaria*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2016-2025 Ten-year network development plan of BTG)*
NDP Number	*Section 5.1. (5.1.1)*
Currently PCI	*Yes (6.25.4)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*05/2017*
Permitting		
Supply Contracts		
FID		
Construction		*06/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	Barrier

Reverse Flow Transitgas Switzerland

TRA-F-230	Project	Pipeline including CS	FID
			Advanced

Update Date	19/05/2016
Description	Modification of the compressor station at Ruswil, the valve station at Lostorf and the metering station at Wallbach to allow the reversal of the border interconnection points at Gries Pass, Wallbach and Oltingue and a south-north use of the Transitgas pipeline.
Regulatory Decisions and similar material conditions	

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Griespass (CH) / Passo Gries (IT)	FluxSwiss	2018	IB-ITe	CH	428.0 GWh/d
Oltingue (FR) / Rodersdorf (CH)	FluxSwiss	2018	CH	FRn	100.0 GWh/d
Wallbach	FluxSwiss	2018	CH	DEn	240.0 GWh/d

Sponsors

FluxSwiss	100%

General Information

Promoter	*FluxSwiss*
Operator	*FluxSwiss*
Host Country	*Switzerland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (No public NDP.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Commissioning	*2018*	*2018*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

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

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poštorná / Reintal	NET4GAS, s.r.o.	2020	AT	CZ enty from AT to CZ	201.4 GWh/d
	NET4GAS, s.r.o.	2020	CZ	AT exit from CZ to AT	201.4 GWh/d

Sponsors

Austria	
GAS CONNECT AUSTRIA GmbH	100%
Czech Republic	
NET4GAS, s.r.o.	100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2016-2025)*
NDP Number	*TRA-N-133*
Currently PCI	*Yes (6.4)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*03/2012*	*06/2018*
Market Test		*06/2015*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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, 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	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.

Barriers

Barriers Type	Barrier

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poštorná / Reintal	NET4GAS, s.r.o.	2020	CZ	AT	1,000.0 GWh/d
	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

Austria	
GAS CONNECT AUSTRIA GmbH	100%
Czech Republic	
NET4GAS, s.r.o.	100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2017-2026 (new project))*
NDP Number	*TRA-N-919*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
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**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	NET4GAS, s.r.o.	2019	CZ	SK	650.0 GWh/d
	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

Czech Republic	
NET4GAS, s.r.o.	100%
Slovakia	
eustream, a.s.	100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2017-2026 (new project))*
NDP Number	*TRA-N-918*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*12/2015*	*06/2018*
Market Test		*02/2016*
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

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				

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 For Modelling

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

Sponsors

Czech Republic	
NET4GAS, s.r.o.	100%
Germany	
GASCADE Gastransport GmbH	100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2017-2026 (new project))*
NDP Number	*TRA-N-752*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*10/2015*	*06/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

		Market Test	02/2016		
CBCA Decision	No	Permitting		% Exemption in entry direction	0.00%
Market Survey	Not Relevant (no CBCA decision)	Supply Contracts		% Exemption in exit direction	0.00%
		FID			
		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				

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

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 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**
	entry from AT to CZ; capacity planned between 55-111 GWh/d				
	NET4GAS, s.r.o.	2022	CZ	AT	**55.0 GWh/d**
	exit from CZ to AT; capacity planned between 55-111 GWh/d				

Sponsors

Pipeline on Austrian territory

potential partner in Austria - in discussion 100%

Pipeline on Czech territory

NET4GAS, s.r.o. 100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2016-2025)*
NDP Number	*TRA-N-135*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% 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, 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	
Delay Explanation	

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.

Barriers	
Barriers Type	**Barrier**

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Hať	NET4GAS, s.r.o.	2019	CZ	PL	**219.1 GWh/d**
				exit from CZ to PL	
	NET4GAS, s.r.o.	2019	PL	CZ	**153.2 GWh/d**
				entry from PL to CZ	

Sponsors

Czech Republic	
NET4GAS, s.r.o.	100%
Poland	
GAZ-SYSTEM S.A.	100%

General Information

Promoter	*NET4GAS, s.r.o.*
Operator	*NET4GAS, s.r.o.*
Host Country	*Czechia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

NDP and PCI Information

Part of NDP ?	*Yes (NDP 2016-2025)*
NDP Number	*TRA-N-136*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*06/2014*	*02/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
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) - Hať (CZ/PL)	The pipeline length at CZ side is approx. 207.4 km (Tvrdonice-Hať). 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, 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	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.

Barriers

Barriers Type	Barrier

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 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

Promoter	*Gasunie Deutschland Transport Services GmbH*
Operator	*Gasunie Deutschland Transport Services GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (Project idea. The inclusion in the NDP is planned at a later time.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2018*	
Market Test		
Permitting	*01/2018*	
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2023*	*2023*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Russia

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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

Open Grid Europe GmbH, Germany	100%

General Information

Promoter	*Open Grid Europe GmbH*
Operator	*Open Grid Europe GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan 2015 (German NDP 2015))*
NDP Number	*049-07*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*01/2016*
Construction	*03/2016*	*12/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Compressor station "Herbstein"				39
Total				**39**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	**Barrier**

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

Open Grid Europe GmbH	75%
Thyssengas GmbH	25%

General Information

Promoter	*Open Grid Europe GmbH*
Operator	*Open Grid Europe GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Entwurf Netzentwicklungsplan Gas 2016)*
NDP Number	*416-01*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*12/2022*
Construction	*01/2023*	*12/2023*
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	

Delay Explanation	

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

Barriers	
Barriers Type	**Barrier**

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

Open Grid Europe GmbH, Germany	100%

General Information

Promoter	*Open Grid Europe GmbH*
Operator	*Open Grid Europe GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan 2015 (German NDP 2015))*
NDP Number	*040-05*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*01/2016*
Construction	*03/2016*	*12/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers	
Barriers Type	**Barrier**

CS Rimpar

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 Rimpar on the MEGAL gas transport system allowing the neccessary H-gas flows to the North of Germany replacing disappearing L-gas quantities.		
Regulatory Decisions and similar material conditions			

Sponsors

GRTgaz Deutschland GmbH	55%
Open Grid Europe GmbH	44%

General Information

Promoter	*GRTgaz Deutschland GmbH*
Operator	*GRTgaz Deutschland GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan Gas 2016)*
NDP Number	*312-01*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Rimpar / MEGAL				39
Total				**39**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

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

Barriers

Barriers Type	**Barrier**

CS Rothenstadt

TRA-F-337	Project	Pipeline including CS	FID
			Advanced

Update Date	26/04/2016
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

GRTgaz Deutschland GmbH	55%
Open Grid Europe GmbH	44%

General Information

Promoter	*GRTgaz Deutschland GmbH*
Operator	*GRTgaz Deutschland GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan Gas 2015)*
NDP Number	*026-06*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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

Promoter	*Gasunie Deutschland Transport Services GmbH*
Operator	*Gasunie Deutschland Transport Services GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Draft Netzentwicklungsplan Gas 2016)*
NDP Number	*300-02*
Currently PCI	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% 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*	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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
	Level 1 - Exit Deutschneudorf2				
	GASCADE Gastransport GmbH	2020	DEg	CZ	535.2 GWh/d
	Level 2 includes Level 1 in total 1,196.4 GWh/d - Exit Deutschneudorf2				
	GASCADE Gastransport GmbH	2021	DEg	CZ	214.8 GWh/d
	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
	Level 1 - Exit Mallnow				
	GASCADE Gastransport GmbH	2020	DEg	PL/YAM	112.1 GWh/d
	Level 2 includes Level 1 in total 250.7 GWh/d - Exit Mallnow				
	GASCADE Gastransport GmbH	2021	DEg	PL/YAM	85.8 GWh/d
	Level 3 includes Level 1+2 in total 336.5 GWh/d - Exit Mallnow				
Vierow	GASCADE Gastransport GmbH	2019	RU/NO2	DEg	946.8 GWh/d
	Level 1 - Entry Vierow				
	GASCADE Gastransport GmbH	2020	RU/NO2	DEg	612.0 GWh/d
	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
	Level 3 includes Level 1+2 in total 1,901.9 GWh/d - Entry Vierow				

Sponsors

General Information

Promoter	*GASCADE Gastransport GmbH*
Operator	*GASCADE Gastransport GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

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))*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2016*	*01/2021*
Market Test		
Permitting	*05/2016*	*06/2018*
Supply Contracts		
FID		
Construction	*12/2020*	
Commissioning	*2019*	*2021*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Russia, VHP GASPOOL

Benefits

Main Driver	Market Demand
Main Driver Explanation	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.
Benefit Description	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/)

Barriers

Barriers Type	Barrier

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

NEL Gastransport GmbH	51%
Gasunie Deutschland Transport Services GmbH	25%
Fluxys Deutschland GmbH	23%

General Information

Promoter	*Gasunie Deutschland, NEL Gastransport, Fluxys Deutschland*
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

Part of NDP ?	*Yes (Draft Netzentwicklungsplan Gas 2016)*
NDP Number	*110-08*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*03/2016*	
Market Test		
Permitting	*03/2016*	
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers	
Barriers Type	**Barrier**

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 For Modelling

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

Sponsors

NEL Gastransport GmbH	51%
Gasunie Deutschland GmbH & Co. KG	25%
Fluxys Deutschland GmbH	23%

General Information

Promoter	*NEL Gastransport, Fluxys Deutschland, Gasunie Deutschland*
Operator	*NEL Gastransport GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (Entwurf Netzentwicklungsplan 2016)*
NDP Number	*408-01*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*01/2016*	*12/2016*
Supply Contracts		
FID		*03/2016*
Construction	*01/2017*	*01/2018*
Commissioning	*2017*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	Barrier

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 excisting infrastructure will be used.		
Regulatory Decisions and similar material conditions			

Capacity Increments 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

Promoter	*Gasunie Deutschland Transport Services GmbH*
Operator	*Gasunie Deutschland Transport Services GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (The project is only a Capacity Modification, which does not require actual investment or construction works.)*
NDP Number	

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*

Currently PCI	*No*	Supply Contracts		% Exemption in entry direction	*0.00%*
		FID		% Exemption in exit direction	*0.00%*
CBCA Decision	*No*	Construction			
Market Survey	*Not Relevant (no CBCA decision)*	Commissioning	*2030*	*2030*	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

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 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

bayernets GmbH	100%

General Information

Promoter	*bayernets GmbH*
Operator	*bayernets GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan (NEP))*

Schedule

	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

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	*()*	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 pipieline will provide better access of large storages located in Autria (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.

Barriers

Barriers Type	Barrier

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 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
			expected initial maximum flow-rate		

Sponsors

General Information

Promoter	*Nord Stream 2 AG*
Operator	*Nord Stream 2 AG*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (Nord Stream 2 is to be included in the German Net Development Plan 2016 (currently under discussion).)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2012*	*10/2012*
FEED		
Market Test		
Permitting	*04/2013*	*01/2018*
Supply Contracts		*12/2016*
FID		*09/2015*
Construction	*02/2018*	*10/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**	

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Russia

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 For Modelling

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

Sponsors	
GASCADE Gastransport GmbH	100%

General Information	
Promoter	*GASCADE Gastransport GmbH*
Operator	*GASCADE Gastransport GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information	
Part of NDP ?	*Yes (NOWAL)*
NDP Number	*083-07, 409-01, ...*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*01/2016*	*08/2016*
Supply Contracts		
FID		*03/2016*
Construction	*01/2017*	*01/2018*
Commissioning	*2017*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

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

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP	
Delay Explanation	

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

Barriers

Barriers Type	**Barrier**

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 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

Promoter	*Gastransport Nord GmbH*
Operator	*Gastransport Nord GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan Entwurf 2016)*
NDP Number	*432-01*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	FID		% Exemption in exit direction	*0.00%*
		Construction			
		Commissioning	*2020*	*2027*	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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

Pipeline "Forchheim-Finsing"	
Open Grid Europe GmbH	100%
Pipeline "Schwandorf-Forchheim"	
Open Grid Europe GmbH	100%

General Information

Promoter	*Open Grid Europe GmbH*
Operator	*Open Grid Europe GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan 2015 (German NDP 2015))*
NDP Number	*024-04a and 028-04a*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*01/2016*
Construction	*03/2017*	*12/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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

Barriers

Barriers Type	**Barrier**

Reverse Flow TENP Germany

TRA-F-208	Project	Pipeline including CS	FID
			Advanced

Update Date	24/05/2016
Description	The project includes reversing of CS Hügelheim 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 For Modelling

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

Sponsors

Fluxys TENP GmbH	64%
Open Grid Europe GmbH	35%

General Information

Promoter	*Fluxys TENP GmbH & Open Grid Europe GmbH*
Operator	*Fluxys TENP GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan 2015)*
NDP Number	*305-01*
Currently PCI	*Yes (5.10)*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2015*
Feasibility	*10/2012*	*01/2015*
FEED	*07/2016*	*12/2016*
Market Test		*05/2014*
Permitting	*12/2016*	*01/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

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, 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.

Barriers

Barriers Type	**Barrier**

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 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

Promoter	*Gasunie Deutschland Technical Services GmbH*
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

Part of NDP ?	*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).)*
NDP Number	

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*10/2015*
Permitting	*03/2016*	
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Currently PCI	*No*	Commissioning	*2021*	*2021*
CBCA Decision	*No*			
Market Survey	*Not Relevant (no CBCA decision)*			

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Russia

Benefits

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

Barriers

Barriers Type	**Barrier**

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 Köris and Kienbaum will be upgraded to Vn 2 Mio. m^3/h and Vn 1,7 m^3/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 Tm^3/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 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**
	Enabled by EUGAL project submitted by GASCADE				
	ONTRAS Gastransport GmbH	2019	PL	DEg	**45.4 GWh/d**
	Entry pressure of 63 bar required by GAZ-System				
Hora Svaté Kateřiny (CZ) / Deutschneudorf (Sayda) (DE)	ONTRAS Gastransport GmbH	2019	DEg	CZ	**55.2 GWh/d**
	Enabled by EUGAL project submited by GASCADE				

Sponsors

Compressor station Sayda

ONTRAS Gastransport GmbH 100%

Pressure reduction and metering stations at Groß Köris and Kienbaum

ONTRAS Gastransport GmbH 100%

Transmission pipeline Sayda - Deutschneudorf

ONTRAS Gastransport GmbH 100%

General Information

Promoter	*ONTRAS Gastransport GmbH*
Operator	*ONTRAS Gastransport GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*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.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*03/2016*
Feasibility		
FEED	*03/2016*	
Market Test		*10/2015*
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2016*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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

Barriers	
Barriers Type	**Barrier**

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	
bayernets GmbH	55%
OGE	45%

General Information	
Promoter	*bayernets GmbH*
Operator	*bayernets GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information	
Part of NDP ?	*Yes (Netzentwicklungsplan)*
NDP Number	*036-04*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*07/2015*	*11/2015*
FEED		
Market Test		
Permitting	*04/2016*	*04/2017*
Supply Contracts		
FID		
Construction	*04/2017*	*12/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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

Barriers	
Barriers Type	**Barrier**

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

Promoter	*GRTgaz Deutschland GmbH*
Operator	*GRTgaz Deutschland GmbH*
Host Country	*Germany*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan Gas 2015)*
NDP Number	*026-06*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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

CS ZEELINK	
Open Grid Europe GmbH, Germany	75%
Thyssengas GmbH, Germany	25%
ZEELINK 1	
Open Grid Europe GmbH, Germany	75%
Thyssengas GmbH, Germany	25%
ZEELINK 2	
Open Grid Europe GmbH, Germany	75%
Thyssengas GmbH, Germany	25%

General Information

Promoter	*Open Grid Europe GmbH*
Operator	*Open Grid Europe GmbH*
Host Country	*Germany*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Netzentwicklungsplan 2015 (German NDP 2015))*
NDP Number	*204-02a, 205-02a, ..*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*03/2020*
Construction	*04/2020*	*03/2021*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

	Commissioning	*2021*	*2021*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	**Barrier**

(Mirror) Baltic Pipe

TRA-N-428	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	This is a mirror project for the Baltic Pipe promoted by Gaz-System S.A. Entry/Exit is Dragør in Denmark and Niechorze in Poland. The identified, feasible infrastructure solution is a 3-10 bcm/y upstream connection from the Northsea gas-fields to Deanmark with transport through the Danish transmission system to Entry/Exit point of Baltic Pipe and further transport through Baltic Pipe to Niechorze (entry/exit) in Poland. In accordance with the ungoing feasibility study, Energinet.dk's mirror project is: - capacity increment – 306.8 GWh/d (10 bcm/y) from DK=>PL and 91.1 GWh/d (3bcm/y) from PL => DK - year of commissioning – 2022 - FID status – no - PCI status – yes		
Regulatory Decisions and similar material conditions			

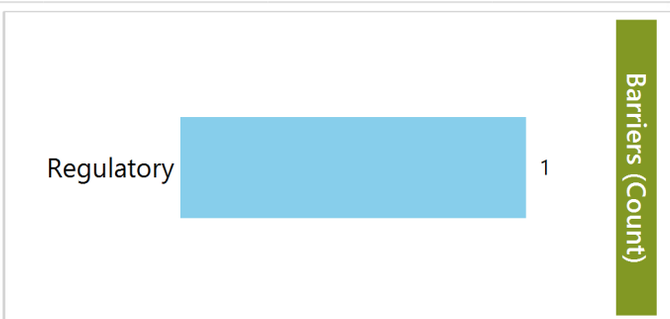
Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-DK	Energinet.dk	2022	DK	PL	306.8 GWh/d
	Energinet.dk	2022	PL	DK	91.1 GWh/d

Sponsors

General Information

Promoter	*Energinet.dk*
Operator	*Energinet.dk*
Host Country	*Denmark*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-394	Gassled - Danish upstream system
TRA-N-780	Nybro-Interconnector PL-DK - reinforcement

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*09/2015*	*12/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*

NDP and PCI Information

Part of NDP ?	*No (Presently a feasibility study for the Baltic Pipe is carried out in cooperation between Gaz-System (Polish TSO) and Energinet.dk (Danish TSO). This study will be finalized by end of 2016. Depending on the result of the study, the project will be included in the future national development plan.)*
NDP Number	
Currently PCI	*Yes (8.3)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	

Benefit Description

Barriers	
Barriers Type	**Barrier**
Regulatory	Lack of confidence and risk-taking in the private gas sector as it requires coordinated long-term business cases, fundamental change in current business models/subsidies and involves many parties from three countries. In addition this project must be coordinated with a connection from Norwagian Gassled to Denmarks gas infrastructure.

Gassled - Danish upstream system

TRA-N-394	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	From Norway to Denmark. Project possible within the next 10 years. The project is not planned, yet. But investigated. It will not be possible to get an exit point from Statoil but the project is vital for the the Baltic pipe project. Capacity: 3-10 bcm/year (one way flow direction from Norway to DK)		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Nybro	Energinet.dk	2022	IB-NPcDKn	DK	**306.8 GWh/d**

Sponsors

General Information

Promoter	*Energinet.dk*
Operator	*Energinet.dk*
Host Country	*Denmark*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

Enabled Projects

Project Code	Project Name
TRA-N-428	(Mirror) Baltic Pipe
TRA-N-780	Nybro-Interconnector PL-DK - reinforcement

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*09/2015*	*12/2016*
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

NDP and PCI Information

Part of NDP ?	*No (This is an upstream project from the North Sea (Norway) to a Danish North Sea Platform. The project is vital for the Baltic-Pipe project (gas pipeline between Denmark and Poland). The project will be included in future national plans in connection when possibly including the Baltic Pipe.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FID		
Construction		
Commissioning	*2022*	*2022*

% Exemption in exit direction	*0.00%*

PCI Details

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	Barrier
Market	Currently negotiations are ongoing with Norwegian partner. An important issue is the coordination with the Baltic pipe project (connection between DK and PL).
Market	Lack of market maturity

Nybro-Interconnector PL-DK - reinforcement

TRA-N-780	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Reinforcement of the Danish Transmission System for transporting 3-10 bcm/year from Gassled-TRA-N-394 (Danish upstrem system) entry point in Nybro to Baltic Pipe entry/ exit point in DK.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-DK	Energinet.dk	2022	DK	PL	0.1 GWh/d
	Value of 0.1 to avoid double counting (307 is already provided for interconnector PL-DK (TRA-N-428)				
	Energinet.dk	2022	PL	DK	0.1 GWh/d
	Value of 0.1 to avoid double counting (91.1 is already provided for interconnector PL-DK (TRA-N-428))				
Nybro	Energinet.dk	2022	IB-NPcDKn	DK	0.1 GWh/d
	Value of 0.1 to avoid double counting (307 is already provided for Gassled (TRA-N-394)				

Sponsors

General Information

Promoter	*Energinet.dk*
Operator	*Energinet.dk*
Host Country	*Denmark*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-428	(Mirror) Baltic Pipe
TRA-N-394	Gassled - Danish upstream system

NDP and PCI Information	
Part of NDP ?	*No (Presently a feasibility study for the Baltic Pipe is carried out in cooperation between Gaz-System (Polish TSO) and Energinet.dk. The study will be finalized by end of 2016. If the study recommends a capacity of Baltic Pipe well above 3 bcm/y , this reinforcement project will be included in NDP.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*09/2015*	*12/2016*
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

Balticconnector

TRA-N-895	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	New bidirectional offshore pipeline (Inkoo-Paldiski, DN500, 80 bar) of 80 km, plus 50 km onshore pipeline in EE (Kiili-Paldiski pipeline, DN 700, 55 bar) and 20 km onshore pipeline in FI (Siuntio-Inkoo pipeline, DN500, 80 bar) including metering and compressor stations at both ends with a daily nominal capacity of 7.2 mcm/day. The power of each compressor station is about 10 MW.		
Regulatory Decisions and similar material conditions	The Regulators of Finland (Energiavirasto) and Estonia (Konkurentsiamet) have made a common CBCA decision for the Balticconnector and Estonia-Latvia interconnection project.		

Capacity Increments For Modelling

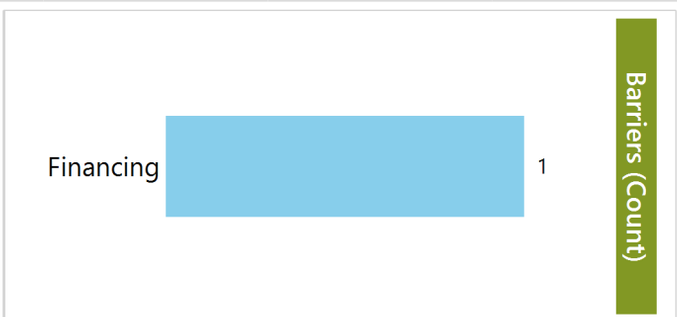
Point	Operator	Year	From Gas System	To Gas System	Capacity
Balticonnector / Paldiski (EE)	Elering AS	2019	EE	FI/BAC	**79.0 GWh/d**
	Elering AS	2019	FI/BAC	EE	**79.0 GWh/d**

Sponsors

EE Kiili pressure reduction station	
Elering AS	100%
EE Kiili-Paldiski pipeline	
Elering AS	100%
EE Paldiski metering and Compressor station	
Elering AS	100%
FI Inkoo metering and compressor station	
Baltic Connector OY	100%
FI Inkoo-Siuntio pipeline	
Baltic Connector OY	100%
FI-EE Inkoo-Paldiski Offshore pipeline	
Baltic Connector OY	50%
Elering AS	50%

General Information

Promoter	*Elering AS*
Operator	*Elering AS*
Host Country	*Estonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (EESTI GAASIÜLEKANDEVÕRGU ARENGUKAVA 2016-2025)*
NDP Number	*3.2*
Currently PCI	*Yes (8.1.1)*
CBCA Decision	*Yes (2016-04-22)*
Market Survey	*Other(2016-03-09)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2005*
Feasibility	*01/2006*	*12/2006*
FEED	*01/2016*	*02/2016*
Market Test		*03/2016*
Permitting	*12/2012*	*01/2018*
Supply Contracts		*11/2016*
FID		*09/2016*
Construction	*11/2016*	*12/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
EE Onshore	Kiili-Paldiski onshore pipeline, Paldiski compressor station	700	50	10
FI Onshore	Inkoo-Siuntio pipeline, Inkoo compressor statiion	500	20	10
Offshore	Inkoo-Paldiski offshore pipeline	500	80	
Total			**150**	**20**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 purpose of the Balticconnector natural gas pipeline project is to interconnect the Finnish and Estonian natural gas transmission networks and improve the energy security of the Baltic-Finnish region. The integration of the Finnish and Estonian gas infrastructures will ensure a more coherent and diverse natural gas transmission network in the Baltic Sea region, guarantee the security of natural gas supply for the north-eastern Member States of the EU by lifting Finland out of the current energy isolation and enhance EU energy solidarity by providing needed technical implementations for energy independence. The projects also target increased regional cooperation and have a strong focus on consumers and vulnerable energy customers. The aim is to move to Finnish-Baltic single entry-exit zone, which has been identified as the best fit solution in the “Baltic regional gas market study”.

Time Schedule

Grant Obtention Date	17/04/2015

Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Regulation-Interroperability
Main Driver Explanation	Balticconnector will lift Finland out of the current energy isolation and will provide Finland an opportunity to join in the European single gas market and to terminate the derogations on the EU gas market legislation.
Benefit Description	Project has several qualitative and quantitative benefits, such as inccrease in energy security, price convergence in the region, development of the energy market etc.

Barriers	
Barriers Type	**Barrier**
Financing	Availability of funds and associated conditions

Enhancement of Estonia-Latvia interconnection

TRA-N-915	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	The project composes of implementation of reverse flow in Karksi metering station in Estonia and of a compressor station in Puiatu, Estonia. The reverse flow gas measuring station would be erected to the location of the existing measuring station in Karksi. Karksi reverse flow enables the measuring of gas quantities thru Estonia with the main advantages of reverse flow used after the commissioning of the Balticconnector offshore pipeline. Karksi reverse flow enables the full use of Inculkalns UGS for all the market participants. Puiatu compressor station enables the transportation of gas thru Estonia and the Balticconnector offshore pipeline to the Finnish gas market. The current system design does not enable the full use of the planned offshore pipeline without a compressor station in south of Estonia. Puiatu compressor station is an integral part of the physical implementations needed for market integration between the Baltics and Finland.		
Regulatory Decisions and similar material conditions	The Regulators of Finland (Energiavirasto) and Estonia (Konkurentsiamet) have made a common CBCA decision for the Balticconnector and Estonia-Latvia interconnection project.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Karksi	Elering AS	2019	EE	LV	112.0 GWh/d
	Elering AS	2019	LV	EE	49.0 GWh/d

Sponsors

Karksi metering station

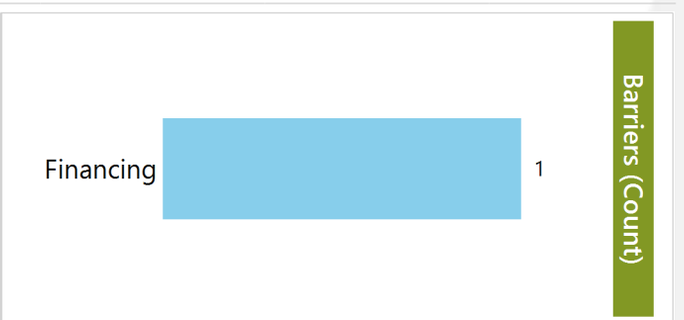
Elering AS 100%

Puiatu Compressor Station

Elering AS 100%

General Information

Promoter	*Elering AS*
Operator	*Elering AS*
Host Country	*Estonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (EESTI GAASIÜLEKANDEVÕRGU ARENGUKAVA 2016-2025)*
NDP Number	*3.2*
Currently PCI	*Yes (8.2.2)*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2015*
Feasibility	*01/2015*	*01/2016*
FEED	*05/2015*	*05/2016*
Market Test		*03/2016*
Permitting	*09/2015*	*09/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

		Supply Contracts		03/2018	% Exemption in entry direction 0.00%
CBCA Decision	Yes (2016-04-22)	FID		09/2016	% Exemption in exit direction 0.00%
Market Survey	Other(2016-03-09)	Construction	04/2017	12/2019	
		Commissioning	2019	2019	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Karsi GMS, Puiatu CS		0	0	10
Total			**0**	**10**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 projects also target increased regional cooperation and have a strong focus on consumers and vulnerable energy customers. The aim is to move to Finnish-Baltic single entry-exit zone, which has been identified as the best fit solution in the "Baltic regional gas market study".

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Regulation-Interroperability
Main Driver Explanation	Main project driver is the operational link with the Balticconnector project
Benefit Description	

Barriers

Barriers Type	Barrier
Financing	Availability of funds and associated conditions

Paldiski LNG Terminal

LNG-N-079	Project	LNG Terminal	Non-FID Advanced
Update Date	23/05/2016		
Description	LNG import and regasification terminal for regional use on the Pakri peninsula on the Easern coast of the Baltic Sea		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

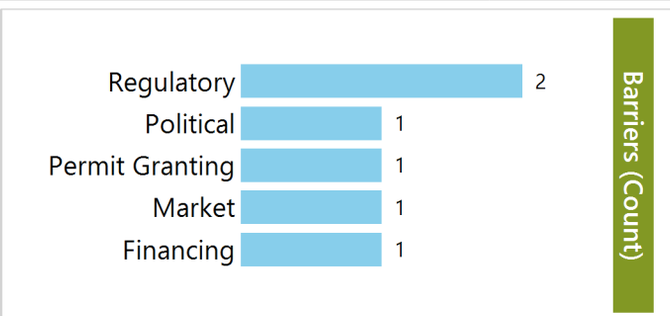
Point	Operator	Year	From Gas System	To Gas System	Capacity
Paldiski LNG	Balti Gaas plc	2020	LNG_Tk_EE	EE	37.6 GWh/d
	Construction plan, first step. Unloading capacity at the terminal is 105 GWh/day - one ship, which is unloaded in about 12h...				

Sponsors

Balti Gaas LLC	100%

General Information

Promoter	*Balti Gaas plc*
Operator	*Balti Gaas plc*
Host Country	*Estonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (There is no such thing as National Development Plan in Estonia. The project is mentioned in the development plan of transmission grid in Estonia, but only on an informative level.)*
NDP Number	
Currently PCI	*Yes (8.1.2.2)*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*11/2008*
Feasibility	*01/2012*	*01/2016*
FEED	*04/2013*	*04/2014*
Market Test		*10/2013*
Permitting	*01/2008*	*04/2016*
Supply Contracts		
FID		*12/2016*
Construction	*04/2017*	*07/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*

Technical Information (LNG)

LNG Facility	*Paldiski LNG Terminal*	
Expected Volume (bcm/y)	*0*	*Preliminary estimate only*
Storage Capacity (m3)	*160,000*	*There is size to increase the terminal to 320 000 m3.*
Ship Size (m3)	*175,000*	*Dependent on tank size*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	SoS storage possibility for Estonia and Finland if needed. Diversification of sources, routes and counterparties for the whole region. Sustainability is improved by switching from high emissions fuels to NatGas, the adoption of biogas as well as the spot supply necessary for load balancing power plants is facilitated.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Due to political uncertainties with regard to the existence of competing Regional Baltic LNG terminal projects on the PCI list. There is an MoU between the Estonian and Finnish states as well as Gasum and Alexela (parent group for Balti Gaas) signed on 28th February 2014 and facilitated by the European Commission. The outcome of the process cleared, when the Finngulf project by Gasum was withdrawn from the list of PCIs in October 2015, which meant the regional terminal will be built in Estonia. The project is technically ready for construction, but no FID can be taken before the competing projects issue is solved (two competing projects in Estonia).

Expected Gas Sourcing

LNG (?), Terminal operator is not responsible for LNG sourcing. This is done by terminal clients (TPA). The terminal has LNG quality a

Comments about the Third-Party Access Regime

The regulatory scheme applicable to this project is unclear. Since the project has a PCI lable,and thus would have significant cross-border impact, the regulatory scheme must be acceptable to all concerned regulators. Additionally, the regulation for LNG terminals in the project country (Estonia) does not yet exist.

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	The region as a whole is an energy island with Russia as the only counterpart and supply source for gas. An LNG import and re-gasification terminal would provide alternative sources as well as storage capability.
Benefit Description	Additionally the terminal is capable of servicing the potential Baltic bunkering demand as well as provide alternative fuel to road and rail transport in the affected countries.

Barriers	
Barriers Type	**Barrier**
Regulatory	Regulatory framework for LNG facilities in Estonia is insufficient to clarify this point.
Permit Granting	Long process
Political	The assesment methods of competing PCI projects is not well established.
Market	Lack of market maturity
Financing	Amortization rates
Regulatory	Lack of proper transposition of EU regulation

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Agreement between PMs of Estonia and Finland	Agreement in regards to the gas infrastructure in the countries.	Yes	17/11/2014
Memorandum of Understanding	MoU between Estonia and Finland and LNG project promoters	Yes	28/02/2014

Tallinn LNG

LNG-N-962	Project	LNG Terminal	Non-FID
Update Date	10/06/2016		Non-Advanced
Description	Conventional LNG import terminal (bunkering, break-bulk, on-grid and off-grid land transportation) for improving Baltic as well as Finnish security of supply and serving commercial customers. The project includes 6x800 m3 pressurized bullets, connection to the existing berth (LOA 198 m; depth -11 m), 2x100m3/h truck loading rack and connection to the low pressure natural gas distribution network located about 1 km from terminal site, covering about 60% of Estonian gas demand. And one to four flat bottom storage tanks with the total LNG storage capacity of 50 000 m3 to 320 000 m3, with second connection to the berth (LOA 365m depth -17m) capable of handling any size LNG carrier on the market, connection to DN711 (MOP 54 bar) national high pressure grid located about 13 km from the terminal site. Rail shunting tracks are 200m. Current scope is envisaged to 160 000 m3 (2x80 000 m3 tanks) with 4 bcma connection to the national high pressure grid. (grid connection on separate CAPEX).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

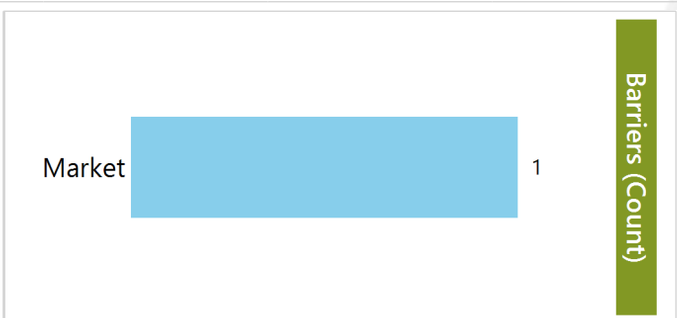
Point	Operator	Year	From Gas System	To Gas System	Capacity
Tallinn LNG	Vopak / Elering	2019	LNG_Tk_EE	EE	**121.0 GWh/d**

Sponsors

Vopak / Vopak E.O.S.	75%
Port of Tallinn	25%

General Information

Promoter	*Vopak E.O.S. AS / Vopak LNG Holdings B.V/ Port of Tallinn AS*
Operator	*Vopak / Elering*
Host Country	*Estonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		*09/2012*
Feasibility		
FEED		
Market Test		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Yet*

NDP and PCI Information

Part of NDP ?	*No (Valid energy NDA (ENMAK 2020) foresees the diversification of energy supply via construction of LNG terminals (p.18). The construction of LNG infrastructure is on the list of foremost measures (p.40) and activities (p.41). As this NDA was adopted in 2009 no specific PCI projects could be listed.)*
NDP Number	
Currently PCI	*Yes (8.1.2.3)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2019*	*2019*

% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Tallinn LNG*	
Expected Volume (bcm/y)	*4*	
Storage Capacity (m3)	*160,000*	
Ship Size (m3)	*160,000*	*Terminal berths can recieve any size LNG carrier on the market*
Reloading Ability	*No*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	

Delay Since Last TYNDP	One to two years
Delay Explanation	The project is delayed because of the uncertainty and delay in other PCI projects in the region, as this affects the project scope, feasibility, FEED and FID.

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Market Demand
Main Driver Explanation	Market integration and diversification, SoS, market development, clean energy.
Benefit Description	Reduces isolation and bottlenecks, interoperability, appropriate connections, diversification of sources, diversification of routes, sustainability.

Barriers

Barriers Type	Barrier
Market	Lack of market maturity

Gran Canaria 2º LNG Tank

LNG-N-162	Project	LNG Terminal	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	This projects consists in a second LNG Tank in Gran Canaria LNG Terminal, with a capacity of 150.000 m3 (GNL).		
Regulatory Decisions and similar material conditions			

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Gran Canaria: 2º Tanque de 150.000 m3 GNL)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Gran Canaria LNG Terminal*
Expected Volume (bcm/y)	*0*

Storage Capacity (m3)	*150,000*
Ship Size (m3)	*0*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Gran Canaria LNG Terminal

LNG-F-163	Project	LNG Terminal	FID
Update Date	10/06/2016		Advanced
Description	A new regasification terminal in Gran Canaria (Arinaga). The terminal is, currently, under construction.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gran Canaria LNG	Enagás S.A.	2021	LNG_Tk_ESc	ESc	41.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2021.				
	Gascan	2021	LNG_Tk_ESc	ESc	41.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2021.				

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Planta de regasificación de Gran Canaria)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2021*	*2021*

Technical Information (LNG)

LNG Facility	*Gran Canaria*
Expected Volume (bcm/y)	*1*
Storage Capacity (m3)	*150,000*
Ship Size (m3)	*140,000*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Gran Canaria send out increase

LNG-N-165	Project	LNG Terminal	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	this projects consists in the increment of the regasification capacity of Gran Canaria LNG Terminal, up to 225.000 m3(n)/h		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gran Canaria LNG	Enagás S.A.	2026	LNG_Tk_ESc	ESc	20.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2026.				
	Gascan	2026	LNG_Tk_ESc	ESc	20.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2026.				

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ampliación emisión en Gran Canaria)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2026*	*2026*

Technical Information (LNG)

LNG Facility	*Gran Canaria LNG Terminal*
Expected Volume (bcm/y)	*1*
Storage Capacity (m3)	*0*
Ship Size (m3)	*0*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

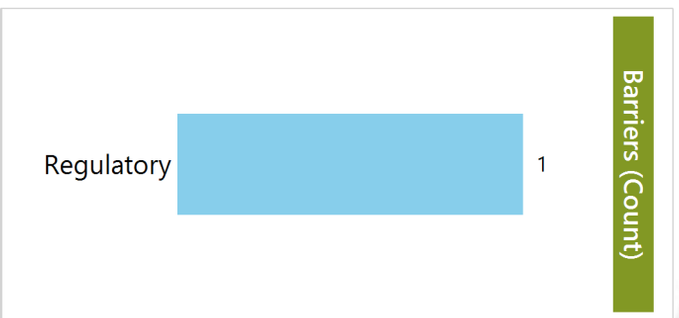
Guitiriz - Zamora pipeline

TRA-N-950	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Construction of the Interconnector between Guitiriz and Zamora, with a length of 320 km and 30" diameter.		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*Reganosa*
Operator	*Reganosa*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
LNG-N-295	Mugardos LNG Terminal: Send-out Increase

NDP and PCI Information

Part of NDP ?	*No (The last approved Spanish NDP ended in 2016. The Royal Decree-Law 13/2012 cancel the process of obtaining administrative authorization to transport pipelines and metering regulation stations even if they were included in this NDP.This Project was included in the NDP 2008-2016.)*
NDP Number	*N/A*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2017*
Feasibility	*01/2017*	*06/2017*
FEED	*06/2017*	*06/2018*
Market Test		*06/2017*
Permitting	*06/2017*	*01/2019*
Supply Contracts		*01/2019*
FID		*01/2019*
Construction	*01/2019*	*01/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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)
Guitiriz Zamora	It is necessary the increase of the compressor station of Zamora. This infrastructure should be associated to the third Interconnection point with Portugal	762	320	16,840
Total			**320**	**16,840**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG (WO)

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	The commissioning of the third interconnection point with Portugal will generate congestion in the existing entries in the northwest of the Iberian Peninsula, as well as the terminal El Musel. To ensure the capacity of existing and future entries in the northwest is real and firm, it would be necessary to input the pipeline Guitiriz Zamora as a cluster of the third interconnection with Portugal from its first phase, jointly with other reinforcements required for the correct El Musel integration. The same occurs with the correct integration of the El Musel Terminal, what makes this project "enabler" both for the third interconnection with Portugal and for the El Musel terminal.
Benefit Description	This project is an "enabler" both for the third interconnection with Portugal and for the El Musel terminal.

Barriers	
Barriers Type	Barrier
Regulatory	Lack of proper transposition of EU regulation

Iberian-French corridor: Eastern Axis - Midcat Project

TRA-N-727	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	MidCat consist of (Spain, Enagas zone) - A pipeline (loop) from Castelnou to Villar de Arnedo - A pipeline (loop) form Tivissa to Arbós - New filter in CS Tivissa - A increment in CS Arbós - An increment in CS Zaragoza		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

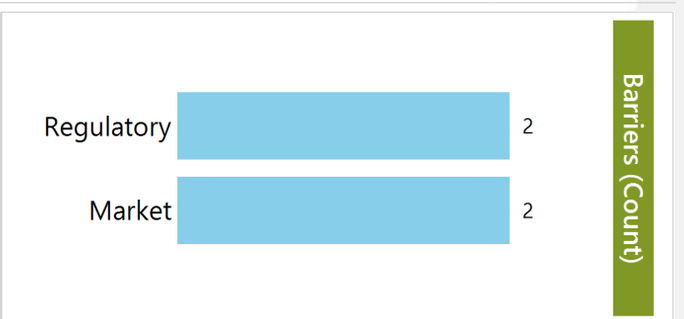
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP PIRINEOS	Enagás S.A.	2022	FRt	ES	135.0 GWh/d
	In 2015 Enagás,TIGF&GRTgaz developed a study to analyse the capacity created by a new IP between FR & ES. Common capacity value would be 230 ES-FR & 160 GWh FR-ES. Capacities on the Spanish side before applying the lesser rule: 230 ES-FR and 245 GWh FR-ES				
	Enagás S.A.	2022	ES	FRt	110.0 GWh/d
	In 2015 Enagás,TIGF&GRTgaz developed a study to analyse the capacity created by a new IP between FR & ES. Common capacity value would be 230 ES-FR & 160 GWh FR-ES. Capacities on the Spanish side before applying the lesser rule: 230 ES-FR and 245 GWh FR-ES				

Sponsors

Loop Castelnou – Villar de Arnedo + CS Zaragoza (increment)	
Enagás Transporte, S.A.U.	100%
Loop Tivissa – Arbós + CS Tivissa filters + CS Arbós (increment)	
Enagás Transporte, S.A.U.	100%

General Information

Promoter	*Enagás Transporte, S.A.U.*
Operator	*Enagás S.A.*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Conexión internacional con Francia por Cataluña)*
NDP Number	*No code in the NDP*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2008*	*01/2010*
FEED	*01/2018*	*05/2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

Currently PCI	*Yes (5.5)*	Market Test	*03/2018*	Exemption Granted	*No*
		Permitting	*09/2018* *12/2020*		
CBCA Decision	*No*	Supply Contracts		% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID	*05/2019*	% Exemption in exit direction	*0.00%*
		Construction	*01/2021* *12/2022*		
		Commissioning	*2022* *2022*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Loop Castelnou – Villar de Arnedo + CS Zaragoza (increment)	Date of Comissioning: December 2022	640	214	5
Loop Tivissa – Arbós + CS Tivissa filters + CS Arbós (increment)	Date of Comissioning: December 2022	740	114	21
Total			**328**	**26**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	ENTSOG PS-CBA demonstrates visible benefits for MidCat. • A better market integration of the Iberian Peninsula will be traduced by a price convergence between Spain and France. • Regarding competition, with the MidCat project France will improve the possibility to take benefit from a cheaper LNG price or Algerian gas. • At European level, the MidCat project can be considered as a way to reduce the dependency from Russian gas and therefore to improve the overall security of supply, as it reinforce the direct link between North Africa and Europe. • This project improves the CO2 emissions in several cases by making the gas cheaper than coal and replacing coal in specific zones.

Time Schedule

Grant Obtention Date	19/01/2016
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	The "Iberian-French corridor - Eastern Axis - Midcat" was included in the list of Projects of Common Interest (PCI) adopted by the European Commission the 18th of November 2015. This project will clearly improve the integration of the Iberian Peninsula with the rest of Europe reducing its isolation from the European gas markets, and helping to the price convergence of Iberian and European gas markets. Due to the lack of enough interconnection capacity, there is a price differential between Spain and France. This price differential has been steadily maintained since recent years, preventing the Spanish consumers, both domestic and industrial, to access to energy under the same conditions as their European counterparts, causing a loss of competitiveness for the Spanish economy.
Benefit Description	

Barriers

Barriers Type	Barrier
Regulatory	In 2010, Enagás, TIGF and GRTgaz carried out an OS to ask for binding commitments for capacities provided by MidCat and/or Irún/Biriatou and GRTgaz North-South link. Concerning MidCat, none of the three proposed infrastructure scenarios received enough bids to be triggered. This OS is currently the latest call made to the market regarding MidCat.However, MidCat has demonstrated benefits in terms of market integration (price convergence), security of supply and diversification of supply.Taking into account that the OS2015 was carried out in a context of economic prosperity in comparison with the current situation jointly with the new tendency in contracting capacity (from long term to short term) well as the decrease in gas consumption, it is not foreseen that network users would make enough long-term commitments in order to fully cover the investment. Besides, recent changes in the Spanish regulatory framework would not contribute to have an appropriate rate of return of the investment
Market	In the Open Season launched in 2010 between Spain and France MidCat didn't obtain enough market support .
Regulatory	Low rate of return
Market	Lack of market support

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes	04/03/2015

Interconnection ES-PT (3rd IP) - 1st phase

TRA-N-168	Project	Pipeline including CS	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	This projects consist on: - a pipeline from Zamora to the Portuguese border - an expansion of the compressor station in Zamora (Spain)		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

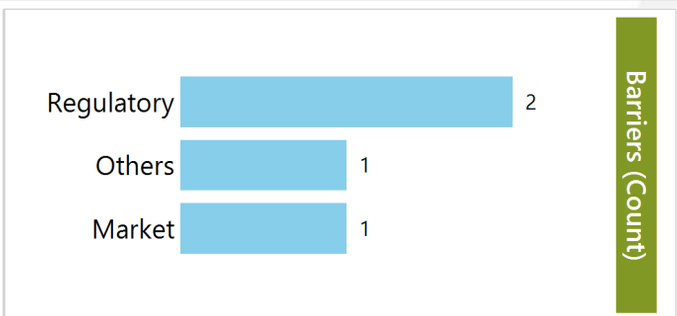
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP IBERICO	Enagás S.A.	2021	PT	ES	70.0 GWh/d
	According to the best available data of the Joint Technical Study being developed by Enagás and REN Gasodutos the common capacity value is 70 ES-PT & 70 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 70 ES-PT & 70 GWh PT-ES				
	Enagás S.A.	2021	ES	PT	70.0 GWh/d
	According to the best available data of the Joint Technical Study being developed by Enagás and REN Gasodutos the common capacity value is 70 ES-PT & 70 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 70 ES-PT & 70 GWh PT-ES				

Sponsors

CS Zamora	
Enagás Transporte, S.A.U.	100%
Zamora - Portuguese Border	
Enagás Transporte, S.A.U.	100%

General Information

Promoter	*Enagás Transporte, S.A.U.*
Operator	*Enagás S.A.*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2017*	*05/2018*
FEED	*01/2017*	*05/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

NDP and PCI Information

Part of NDP ?	*No (The project was not included in the last NDP that was published in 2008. The project was identified later on, and was selected as PCI by the European Commission in 2013 and in 2015. Additionally, this project is being considered in the High Level Group on Interconnections for South-West Europe.)*
NDP Number	
Currently PCI	*Yes (5.4)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Market Test		*03/2018*
Permitting	*09/2017*	*12/2019*
Supply Contracts		
FID		*05/2018*
Construction	*04/2020*	*12/2021*
Commissioning	*2021*	*2021*

% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Zamora	According to the best available data of the reassessment that is being developed by Enagás and REN Gasodutos the common capacity value is 70 ES-PT & 70 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 70 ES-PT & 70 GWh PT-ES			4
Zamora - Portuguese Border	According to the best available data of the reassessment that is being developed by Enagás and REN Gasodutos the common capacity value is 70 ES-PT & 70 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 70 ES-PT & 70 GWh PT-ES	700	86	
Total			**86**	**4**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes

Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project is important for the integration of the Portuguese market at Iberian and European level, improving competition and providing shippers with access to alternative balancing gas. From the point of view of security of supply, the 3rd Interconnection Portugal-Spain is necessary to improve the N-1 criterion fulfilment (Regulation (EC) Nº 994/2010) for the Portuguese natural gas system, considering the total failure of the most important supply infrastructure of the network - the LNG Terminal in Sines - during a day of exceptionally high gas demand occurring with a statistical probability of once in 20 years, as defined in the Regulation.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Integration of the Iberian Peninsula gas market with the rest of Europe
Benefit Description	The development of this project is linked to the development of a new interconnection between France and Spain by Spanish infrastructure promoters.

Barriers

Barriers Type	Barrier
Regulatory	It would be difficult to carry out an Open Season due to the size of the Portuguese market and the lack of long-term contracts in Portugal. The lack of long term binding commitments from network users cannot guarantee the return of the investment to the Spanish system.
Others	It would be difficult to carry out an Open Season due to the size of the Portuguese market and the lack of long-term contracts in Portugal. The lack of long term binding commitments from network users cannot guarantee the return of the investment to the Spanish system.
Regulatory	Low rate of return
Market	Lack of market support

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes	04/03/2015

Interconnection ES-PT (3rd IP) - 2nd phase

TRA-N-729	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The second phase of the third interconnection between Spain and Portugal consists on a pipeline from Guitiriz-Zamora-Adradas		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

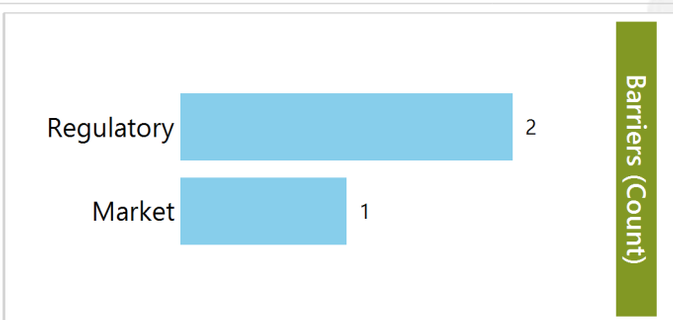
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP IBERICO	Enagás S.A.	2025	PT	ES	72.0 GWh/d
	According to the best available data of the reassessment that is being developed by Enagás and REN Gasodutos the common capacity value is 139 ES-PT & 126 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 142 ES-PT & 142 GWh PT-ES				
	Enagás S.A.	2025	ES	PT	72.0 GWh/d
	According to the best available data of the reassessment that is being developed by Enagás and REN Gasodutos the common capacity value is 139 ES-PT & 126 GWh PT-ES. Capacities on the Spanish side before applying the lesser rule: 142 ES-PT & 142 GWh PT-ES				

Sponsors

Castropodame - Zamora	
Enagás Transporte, S.A.U.	100%
Guitiriz - Lugo	
Enagás Transporte, S.A.U.	100%
Lugo - Villafranca del Bierzo	
Enagás Transporte, S.A.U.	100%
Villafranca del Bierzo - Castropodame	
Enagás Transporte, S.A.U.	100%
Zamora - La Barbolla - Adradas	
Enagás Transporte, S.A.U.	100%

General Information

Promoter	*Enagás Transporte, S.A.U.*
Operator	*Enagás S.A.*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*No (The project was not included in the last NDP that was published in 2008. The project was identified later on, and was selected as PCI by the European Commission in 2013 and in 2015. Additionally, this project is being considered in the High Level Group on Interconnections for South-West Europe.)*
NDP Number	
Currently PCI	*Yes (5.4)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2017*	*05/2018*
Market Test		*03/2018*
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2025*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Castropodame - Zamora		600	170	
Guitiriz - Lugo		740	28	
Lugo - Villafranca del Bierzo		740	90	
Villafranca del Bierzo - Castropodame		740	30	
Zamora - La Barbolla - Adradas		800	307	
Total			**625**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Integration of the Iberian Peninsula gas market with the rest of Europe
Benefit Description	The development of this project is linked to the development of a new interconnection between France and Spain by Spanish infrastructure promoters.

Barriers

Barriers Type	Barrier
Regulatory	It would be difficult to carry out an Open Season due to the size of the Portuguese market and the lack of long-term contracts in Portugal. The lack of long term binding commitments from network users cannot guarantee the return of the investment to the Spanish system.
Market	It would be difficult to carry out an Open Season due to the size of the Portuguese market and the lack of long-term contracts in Portugal. The lack of long term binding commitments from network users cannot guarantee the return of the investment to the Spanish system.
Regulatory	Low rate of return

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes	04/03/2015

Mugardos LNG Terminal: 2nd Jetty

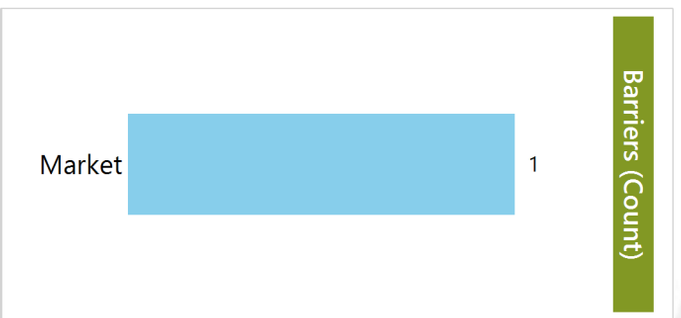
LNG-N-296	Project	LNG Terminal	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Construction of a second jetty for berthing of LNG ship with capacity from approximately 1,000m3 LNG up to 266,000m3 LNG.		
Regulatory Decisions and similar material conditions			

Sponsors

Reganosa	100%

General Information

Promoter	*Reganosa*
Operator	*Reganosa*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
LNG-N-297	Mugardos LNG Terminal: Storage Extension

NDP and PCI Information

Part of NDP ?	*No (The last aproved Spanish NDP ended in 2016. The Royal Decree-Law 13/2012 cancel any award procedures of new regasification plants in Spain.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2014*
Feasibility	*12/2014*	*02/2015*
FEED	*03/2018*	*08/2018*
Market Test		*08/2018*
Permitting	*07/2018*	*12/2018*
Supply Contracts		*01/2019*
FID		*02/2019*
Construction	*03/2019*	*08/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)		
LNG Facility	*Mugardos LNG Terminal*	
Expected Volume (bcm/y)	*0*	
Storage Capacity (m3)	*0*	
Ship Size (m3)	*0*	*Existing jetty is yet compatible with Q-Max*
Reloading Ability	*Yes*	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing
LNG (WO)

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Mugardos terminal is ideally located to take advantage of the US FOB volumes.

Barriers	
Barriers Type	**Barrier**
Market	Lack of market maturity

Mugardos LNG Terminal: Send-out Increase

LNG-N-295	Project	LNG Terminal	Non-FID
Update Date	10/06/2016		Non-Advanced
Description	The project aims to expand the LNG terminal capacity from 9,9 mcm/d to 19,8 mcm/d through the construction of new Open Rack Vaporizers.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Mugardos	Reganosa	2025	LNG_Tk_ES	ES	**115.0 GWh/d**
	Reganosa (LSO)	2023	LNG_Tk_ES	ES	**115.2 GWh/d**

Sponsors

Reganosa	100%

General Information

Promoter	*Reganosa*
Operator	*Reganosa*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (PLANIFICACION ELECTRICIDAD Y GAS 2008-2016)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2010*
Feasibility	*06/2010*	*11/2010*
FEED	*04/2021*	*10/2021*
Market Test		*10/2021*
Permitting	*09/2021*	*03/2022*
Supply Contracts		*06/2022*
FID		*06/2022*
Construction	*06/2022*	*12/2023*
Commissioning	*2023*	*2025*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Mugardos LNG Terminal*
Expected Volume (bcm/y)	*4*
Storage Capacity (m3)	*0*
Ship Size (m3)	*0*
Reloading Ability	*Yes*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG (WO)

Benefits

Main Driver	Market Demand
Main Driver Explanation	We consider that a growing amoun of flexibles volume will be available. These volume will allow more competitiveness in the south region but will required more regas capacity as well as a strong logisitcal support (jetty + tank) to allow the shipper to take advantage of spot market opportunity by buying/unloading and reselling/reloading according to the stronger price signal of the Mibgas. This project will be neccesary if an increase demand or export scenario will occur.
Benefit Description	Mugardos terminal is ideally located to take advantage of the US FOB volumes.

Barriers

Barriers Type	Barrier
Market	Lack of market maturity

Mugardos LNG Terminal: Storage Extension

LNG-N-297	Project	LNG Terminal	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	Construction of an additional storage tank with capacity of one hundred ninety thousand cubic meters of LNG.		
Regulatory Decisions and similar material conditions	N/A		

Capacity Increments For Modelling

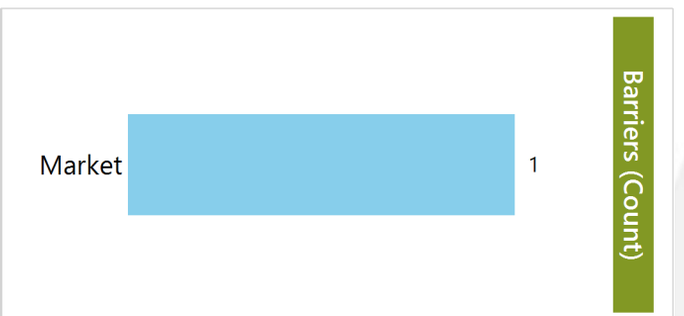
Point	Operator	Year	From Gas System	To Gas System	Capacity
Mugardos	Reganosa (LSO)	2022	LNG_Tk_ES	ES	**0.0 GWh/d**

Sponsors

Reganosa	100%

General Information

Promoter	*Reganosa*
Operator	*Reganosa*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (The last aproved Spanish NDP ended in 2016. The Royal Decree-Law 13/2012 cancel any award procedures of new regasification plants in Spain.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2015*
Feasibility	*01/2015*	*02/2015*
FEED	*04/2019*	*09/2019*
Market Test		*09/2019*
Permitting	*08/2019*	*03/2020*
Supply Contracts		*06/2019*
FID		*06/2019*
Construction	*07/2020*	*12/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)	
LNG Facility	*Mugardos LNG Terminal*
Expected Volume (bcm/y)	*0*
Storage Capacity (m3)	*190,000*
Ship Size (m3)	*0*
Reloading Ability	*Yes*

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing
LNG (WO)

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Mugardos terminal is ideally located to take advantage of the US FOB volumes.

Barriers	
Barriers Type	**Barrier**
Market	Lack of market maturity

Musel LNG terminal

LNG-F-178	Project	LNG Terminal	FID
Update Date	24/05/2016		Advanced
Description	A new LNG terminal in Musel (North of Spain). Facility pending start-up authorisation by the government according to Royal Decree-Law 13/2012.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Musel	Enagás S.A.	2026	LNG_Tk_ES	ES	**223.0 GWh/d**

Sponsors

General Information

Promoter	*Enagás Transporte, S.A.U.*
Operator	*Enagás S.A.*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (planta de regasificación de El Musel)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2026*	*2026*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Musel*
Expected Volume (bcm/y)	*7*
Storage Capacity (m3)	*300,000*
Ship Size (m3)	*266,000*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

South Transit East Pyrenees (STEP) - ENAGAS

TRA-N-161	Project	Pipeline including CS	Non-FID
Update Date	11/07/2016		Advanced
Description	This project consists of (Spain, Enagas zone) - A pipeline from Hostalrich to Figueras - A pipeline from Figueras to French Border - A compressor station in Martorell		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

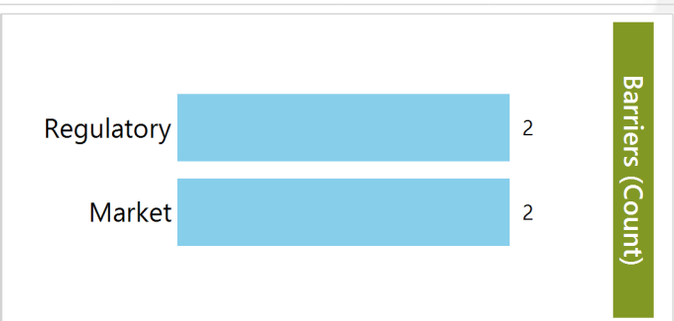
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP PIRINEOS	Enagás S.A.	2021	FRt	ES	110.0 GWh/d
	These are the capacities obtained from the subsequent probabilistic study developed by Enagás. For further explanations, see the comment on the project for the current publication.				
	Enagás S.A.	2021	ES	FRt	120.0 GWh/d
	These are the capacities obtained from the subsequent probabilistic study developed by Enagás. For further explanations, see the comment on the project for the current publication.				

Sponsors

CS Martorell	
Enagas Transporte, S.A.U.	100%
Figueras - French Border	
Enagas Transporte, S.A.U.	100%
Hostalrich - Figueras	
Enagas Transporte, S.A.U.	100%

General Information

Promoter	*Enagás Transporte, S.A.U.*
Operator	*Enagás S.A.*
Host Country	*Spain*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Conexión internacional con Francia por Cataluña)*
NDP Number	*No code in the NDP*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2009*
Feasibility	*01/2009*	*01/2009*
FEED	*01/2016*	*12/2016*
Market Test		*03/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

Currently PCI	*Yes (5.5)*	Permitting	*07/2016*	*12/2019*	
		Supply Contracts			% Exemption in entry direction *0.00%*
CBCA Decision	*No*	FID		*07/2017*	% Exemption in exit direction *0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	Construction	*04/2020*	*12/2021*	
		Commissioning	*2021*	*2021*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Martorell	Date of Comissioning: December 2021			36
Hostalrich - Figueras	Date of Comissioning: December 2021	900	79	
Pipeline Figueras - French Border	Date of Comissioning: December 2021	900	28	
Total			**107**	**36**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 was not simulated in PS-CBA of TYNDP 2015. Nevertheless, its benefits are expected to be similar to the ones of Full MidCat. ENTSOG PS-CBA demonstrated visible benefits for this project: • A better market integration of the Iberian Peninsula will be traduced by a price convergence between Spain and France • Regarding competition, this project will improve the possibility to take benefit from a cheaper LNG price or Algerian gas. • At EU level, it can be considered as a way to reduce the dependency from RU gas and therefore to improve the overall security of supply. • This project improves the CO2 emissions in several cases by making the gas cheaper than coal and replacing coal in specific zones.

Time Schedule

Grant Obtention Date	19/01/2016
Delay Since Last TYNDP	1 year
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	This project was part of the "Iberian-French corridor-Eastern Axis-Midcat Project" which was included in the PCI list adopted by the European Commission the 18th of November 2015. This project will clearly improve the integration of the Iberian Peninsula with the rest of EU reducing its isolation from the EU gas markets, and helping to the price convergence of Iberian and EU gas markets.
Benefit Description	According to the conclusions of the study developed by Ramboll, requested by the European Commission within the High Level Group on Interconnections for South-West Europe, MidCat is justified as it will integrate the Iberian gas market with the rest of the EU. In this study, it is also concluded that a stepwise implementation of the interconnector is possible, when accepting that mostly interrumptible capacity will be available after the first stage.

Barriers

Barriers Type	Barrier
Regulatory	In 2010, Enagás, TIGF and GRTgaz carried out an OS to ask for binding commitments for capacities provided by MidCat and/or Irún/Biriatou and GRTgaz North-South link. Concerning MidCat, none of the three proposed infrastructure scenarios received enough bids to be triggered. This OS is currently the latest call made to the market regarding MidCat.However, MidCat has demonstrated benefits in terms of market integration (price convergence), security of supply and diversification of supply.Taking into account that the OS2015 was carried out in a context of economic prosperity in comparison with the current situation jointly with the new endency in contracting capacity (from long term to short term) well as the decrease in gas consumption, it is not foreseen that network users would make enough long-term commitments in order to fully cover the investment. Besides, recent changes in the Spanish regulatory framework would not contribute to have an appropriate rate of return of the investments
Market	In the Open Season launched in 2010 between Spain and France MidCat didn't obtain enough market support .
Regulatory	Low rate of return
Market	Lack of market support

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes	04/03/2015

Tenerife Send-Out increase

LNG-N-185	Project	LNG Terminal	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	Increment of the regasification capacity of the LNG Terminal in Tenerife (Canary Island), with a total regasification capacity of 225.000 m3(N)/h.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Tenerife LNG	Enagás S.A.	2026	LNG_Tk_ESc	ESc	20.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2026.				
	Gascan	2026	LNG_Tk_ESc	ESc	20.9 GWh/d
	The earliest date estimated for the commissioning of this project is 2026.				

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ampliación emisión en Tenerife a 225.000 m3(n)/h)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2026*	*2026*

Technical Information (LNG)

LNG Facility	*Tenerife LNG Terminal*
Expected Volume (bcm/y)	*1*
Storage Capacity (m3)	*0*
Ship Size (m3)	*0*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Tenerife 2º LNG Storage Tank

LNG-N-184	Project	LNG Terminal	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	This project consists in a second LNG tank (150.000 m3 GNL) in Tenerife LNG Regasification Plant, resulting in a total storage capacity of 300.000 m3 (GNL).		
Regulatory Decisions and similar material conditions			

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Gran Canaria: 2º Tanque de 150.000 m3 GNL)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Tenerife LNG Terminal*
Expected Volume (bcm/y)	*0*

Storage Capacity (m3)	*150,000*
Ship Size (m3)	*0*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Tenerife LNG Terminal

LNG-F-183	Project	LNG Terminal	FID
Update Date	10/06/2016		Advanced
Description	This project consists in a new regasification Terminal in Tenerife (Arico-Granadilla, Spain), in the Canary Islands.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Tenerife LNG	Enagás S.A.	2020	LNG_Tk_ESc	ESc	41.9 GWh/d
	Gascan	2020	LNG_Tk_ESc	ESc	41.9 GWh/d

Sponsors

Gascan	100%

General Information

Promoter	*Gascan*
Operator	*Gascan*
Host Country	*Spain*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Planta de regasificacion de Tenerife)*
NDP Number	*No code in the NDP*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Tenerife LNG Terminal*
Expected Volume (bcm/y)	*1*
Storage Capacity (m3)	*150,000*
Ship Size (m3)	*200,000*
Reloading Ability	*No*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Underground Gas Storage in salt leached caverns in the Bages area (ES)

UGS-N-127	Project	Storage Facility	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	Underground storage in underground caverns to be constructed by salt leaching to be carried out on the base salt of the potassium formation from Ecocene in the catalan sector of the Ebro river		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

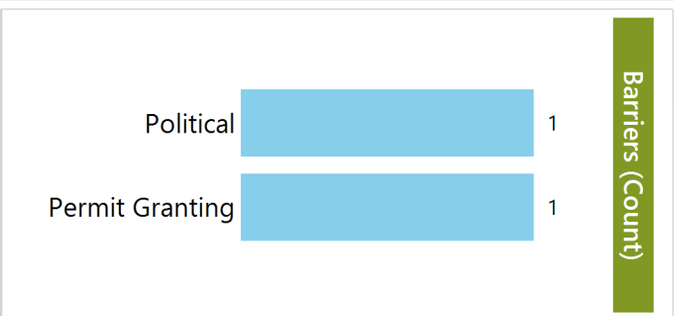
Point	Operator	Year	From Gas System	To Gas System	Capacity
Position 5D.02 of ENAGAS pipeline from Martorell to Figueras	gasNatural fenosa	2023	STcES	ES	156.0 GWh/d
	gasNatural fenosa	2023	ES	STcES	99.0 GWh/d

Sponsors

Petroleum Oil & Gas España, S.A.	100%

General Information

Promoter	*Gas Natural*
Operator	*gasNatural fenosa*
Host Country	*Spain*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (As of today there is not NPD. The project was initially included in a former draft. Afterwards the draft was amended without including this underground storage. Nowadays NPD is under study and we dont know whether this underground storage will be included or not.)*
NDP Number	

Schedule

	Start Date	End Date
Pre-Feasibility		*05/2012*
Feasibility	*07/2012*	*03/2016*
FEED	*09/2012*	*12/2013*
Market Test		*09/2018*
Permitting	*06/2012*	*09/2018*
Supply Contracts		
FID		*03/2019*
Construction	*03/2019*	*03/2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Currently PCI	*No*	Commissioning	*2023*	*2023*
CBCA Decision	*No*			
Market Survey	*Not Relevant (no CBCA decision)*			

Technical Information (UGS)

Storage Facility	*Pinasses*	
Storage Facility Type	*Salt Cavern*	
Multiple-Cycle	*Yes*	
Working Volume (mcm)	*240.00*	*It will be the first storage in the area which counts with important transport, interconnection and regas facilities. The first phase of the project (8 cavities) will achieve the mentioned capacity. However it could be increased in the future.*

Time Schedule

Grant Obtention Date	30/09/2018
Delay Since Last TYNDP	Two years delay
Delay Explanation	Permitting process

Comments about the Third-Party Access Regime

The current Spanish system allows Negotiated and Regulated regimes but, for the moment, only regulated storages are granted.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	As explained above this project is focused in increasing market integration between Spain and France (and indirectly with Portugal), enhancing diversification of supply and security. It will also improve sustainability and competition.
Benefit Description	As above mentioned, this project will improve capacity of the MIDCAT interconnection between France and Spain and the Barcelona Regas Terminal (interconectivity and diversification of supply). Besides, it will increase security from interruptions of supply or defaults in the infrastructure. By increasinfg flexibility of the gas system it will help renewals development, reduce emissions and increase sustainability. It will also help diversification of supplies in Europe (increasing capacity of Barcelona Regas Terminal and future MIDCAT interconnection) and commercial competition.

Barriers	
Barriers Type	**Barrier**
Permit Granting	Long timig administrative and environmental permitting process, several Administrations involved with not well defined competence distribution lead to incertitude of obtaining all the authorisations required
Political	Various Administrations involved (starte, regional and local) with different political composition and having differnet competences/opinions about the benefits and withdrawals of the Project

Balticconnector Finnish part

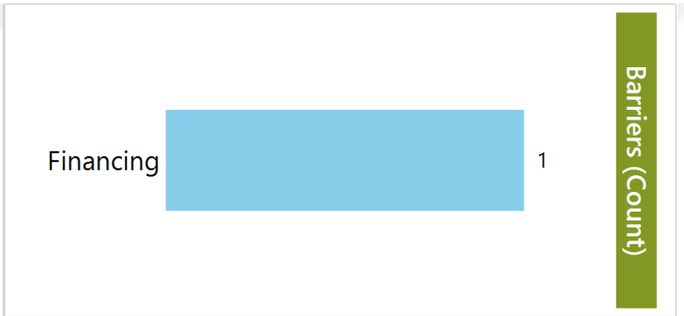
TRA-N-928	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Advanced
Description	New bidirectional offshore pipeline (Inkoo-Paldiski, DN500, 80 bar) of 80 km, plus 50 km onshore pipeline in EE (Kiili-Paldiski pipeline, DN 700, 55 bar) and 20 km onshore pipeline in FI (Siuntio-Inkoo pipeline, DN500, 80 bar) including metering and compressor stations at both ends with a daily nominal capacity of 7.2 mcm/day. The power of each compressor station is about 10 MW.		
Regulatory Decisions and similar material conditions	The Regulators of Finland (Energiavirasto) and Estonia (Konkurentsiamet) have made a common CBCA decision for the Balticconnector and Estonia-Latvia interconnection project.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Balticconnector / Siuntio (FI)	Baltic Connector Oy	2019	FI	FI/BAC	**79.0 GWh/d**
	Baltic Connector Oy	2019	FI/BAC	FI	**79.0 GWh/d**
Balticonnector / Paldiski (EE)	Baltic Connector Oy	2019	EE	FI/BAC	**79.0 GWh/d**
	Baltic Connector Oy	2019	FI/BAC	EE	**79.0 GWh/d**

Sponsors	
EE Kiili pressure reduction station	
Elering AS	100%
EE Kiili-Paldiski pipeline	
Elering AS	100%
EE Paldiski metering and Compressor station	
Elering AS	100%
FI Inkoo metering and compressor station	
Baltic Connector OY	100%
FI Inkoo-Siuntio pipeline	
Baltic Connector OY	100%
FI-EE Inkoo-Paldiski Offshore pipeline	
Baltic Connector OY	50%

General Information	
Promoter	*Baltic Connector Oy*
Operator	*Baltic Connector Oy*
Host Country	*Finland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*No (The national Natural Gas Market legislation does not set system operators any obligation to draw up and publish a NDP)*
NDP Number	
Currently PCI	*Yes (8.1.1)*
CBCA Decision	*Yes (2016-04-22)*
Market Survey	*Other(2016-03-09)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2005*
Feasibility	*01/2006*	*12/2006*
FEED	*01/2016*	*02/2016*
Market Test		*03/2016*
Permitting	*12/2012*	*01/2018*
Supply Contracts		
FID		*09/2016*
Construction	*11/2016*	*12/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
EE Onshore	Kiili-Paldiski onshore pipeline, Paldiski compressor station	500	50	10
FI Onshore	Inkoo-Siuntio pipeline, Inkoo compressor station	500	20	10
Offshore	Inkoo-Paldiski offshore pipeline	700	80	
Total			**150**	**20**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 purpose of the Balticconnector natural gas pipeline project is to interconnect the Finnish and Estonian natural gas transmission networks and improve the energy security of the Baltic-Finnish region. The integration of the Finnish and Estonian gas infrastructures will ensure a more coherent and diverse natural gas transmission network in the Baltic Sea region, guarantee the security of natural gas supply for the north-eastern Member States of the EU by lifting Finland out of the current energy isolation and enhance EU energy solidarity by providing needed technical implementations for energy independence. The projects also target increased regional cooperation and have a strong focus on consumers and vulnerable energy customers. The aim is to move to Finnish-Baltic single entry-exit zone, which has been identified as the best fit solution in the “Baltic regional gas market study”.

Time Schedule

Grant Obtention Date	17/04/2015
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Russia, Central Europe

Benefits

Main Driver	Regulation-Interroperability
Main Driver Explanation	Balticconnector will lift Finland out of the current energy isolation and will provide Finland an opportunity to join in the European single gas market and to terminate the derogations on the EU gas market legislation.
Benefit Description	Project has several qualitative and quantitative benefits, such as inccrease in energy security, price convergence in the region, development of the energy market etc.

Barriers	
Barriers Type	Barrier
Financing	Availability of funds and associated conditions

Adaptation L- gas - H-gas

TRA-N-429	Project	Pipeline including CS	Non-FID
Update Date	19/05/2016		Advanced
Description	The L-gas area covers around 10% of French gas consumption. It depends on the Netherlands L-gas production as the single supply source on annual basis. Additional flexibilty is ensured by Gournay UGS and peak H-to-L conversion facility at Loon-Plage. Due to the decline of L-gas production the conversion of the whole French L-gas area will have to be achieved by the end of 2029. The project covers both the required infrastructure to ensure access to H-gas supply and all required actions for the switch to H-gas. This project is coordinated with Belgian and Dutch operators.		
Regulatory Decisions and similar material conditions	The conversion project in France is covered by: - Article 164 of the Energy Transition Law (18/08/2015) - Decree 2016-348 (23/03/2016) Transmission, distribution and storage operators are preparing a conversion plan to be submitted to the French ministries by September 2016. Based on this conversion plan, the NRA will carry out an economical and technical analysis.		

Sponsors

Distribution	
GRDF	65%
Storage	
Storengy	2%
Transmission	
GRTgaz	33%

General Information

Promoter	*GRTgaz, GRDF and Storengy*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*
NDP Number	*na*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*07/2015*
Feasibility	*08/2015*	*10/2016*
FEED	*08/2015*	*10/2016*
Market Test		*03/2017*
Permitting	*11/2016*	*02/2018*
Supply Contracts		
FID		*10/2016*
Construction	*04/2017*	*12/2026*
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Arleux interconnection station	Adaptation			
Bethune area	New pipeline	300	8	
Brouckerque area	New pipeline	200	2	
Connection to H-gas grid	Gravelines, Diéval, Isbergues, Orchies, Beaurevoir, Caulaincourt and Nesle			
Interconnection with Gournay UGS	Adaptation			
Loon Plage H-to-L adaptator	Adaptation			
Taisnieres interconnection station	Adaptation			
Total			**10**	

PCI Details

PCI Benefits	
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project will ensure that gas consumers of the former L-gas area will benefit from the same competitive and secured supply as H-gas consumers.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

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

Benefits

Main Driver	Others
Main Driver Explanation	Decline of L-gas production in the Netherlands with supply contracts ending on 2029 for France and Belgium notwithstanding earlier termination date.

Benefit Description	Currently the L-gas area across France, Belgium and Germany is similar to a gas island connected to a single source. Through the conversion of the area to H-gas, the project is part of set of new regional infrastructures enabling market participants and consumers to take benefit from competitive and secured supply as the rest of North-West Europe.

Barriers

Barriers Type	Barrier

Developments for Fosmax (Cavaou) LNG 8.25 bcm expansion

TRA-N-269	Project	Pipeline including CS	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	Only core system developments are needed to offer firm capacity for this expansion as the connection between terminal and St-Martin de Crau station already fits the potential extension. In case both Midcat project and the Fos Cavaou terminal expansion are decided additional developments may be required.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Fos (Tonkin/Cavaou)	GRTgaz	2022	LNG_Tk_FRs	FRs	327.0 GWh/d

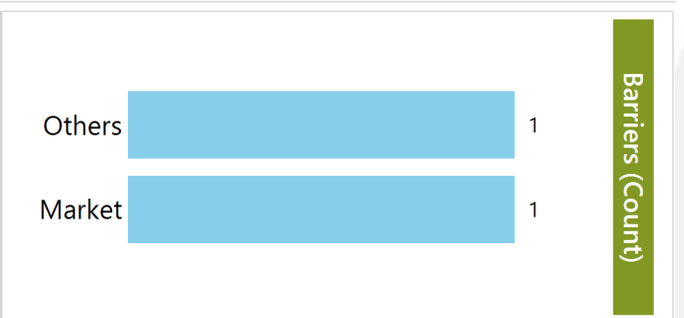
For an expansion of 8.25 bcm

Sponsors

GRTgaz	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*
NDP Number	*na*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2012*
Feasibility	*03/2007*	
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% 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)
Arc Lyonnais		1,200	150	
Eridan		1,200	220	
Palleau CS				50
Perche		900	63	
St-Avit CS				15
St-Martin de Crau CS				30
Total			**433**	**95**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Waiting for LNG terminal decision

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	This project enables to offer firm capcity to meet the developments planned by Fosmax at the LNG terminal of Fos Cavaou
Benefit Description	

Barriers

Barriers Type	Barrier
Others	The current context of LNG in Europe isn't favorable to the developements of LNG capacities
Market	Lack of market support

Developments for Montoir LNG terminal 2.5 bcm expansion

TRA-N-258	Project	Pipeline including CS	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	This entry capacity increase at Montoir needs specific developments and core system developments (Looping of Artère du Perche).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

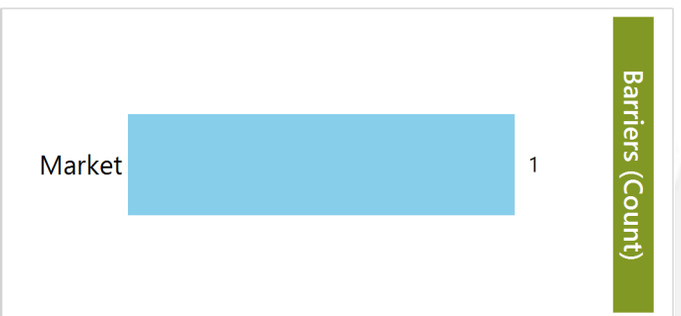
Point	Operator	Year	From Gas System	To Gas System	Capacity
Montoir de Bretagne	GRTgaz	2022	LNG_Tk_FRn	FRn	100.0 GWh/d

Sponsors

GRTgaz	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-257	New line Between Chemery and Dierrey

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*
NDP Number	*na*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2011*
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		*12/2022*
Commissioning	*2022*	*2022*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Artère du Maine	Ending the looping of the pipeline	1,050	200	
Artère du Perche	Ending the looping of the pipeline	900	63	
Auvers-le-Hamon CS	Station adaptation			0
Total			**263**	**0**

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Waiting for terminal promoter decision

Expected Gas Sourcing

LNG ()

Benefits	
Main Driver	Others
Main Driver Explanation	Developments of GRTgaz network required to offer firm capacity to the planned expansion of the LNG terminal at Montoir de Bretagne
Benefit Description	

Barriers	
Barriers Type	**Barrier**
Market	Lack of market support

Fos Cavaou LNG Terminal Expansion

LNG-N-227	Project	LNG Terminal	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The project aims to expand the LNG terminal capacity from 8.25 bcm/y up to 16.5 bcm/y, with possible intermediate steps		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

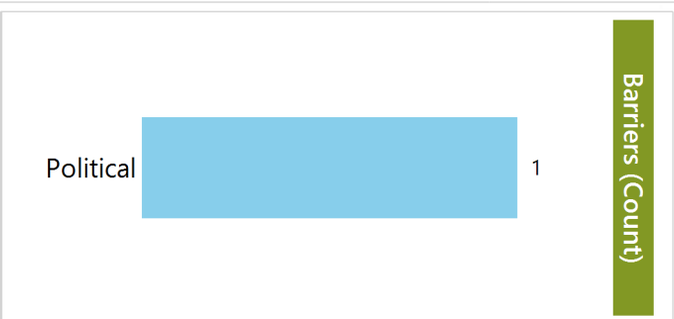
Point	Operator	Year	From Gas System	To Gas System	Capacity
Fos (Tonkin/Cavaou)	Fosmax LNG	2020	LNG_Tk_FRs	FRs	110.0 GWh/d
			intermediate phase at 11 bcm/y (i.e. +2,75 bcm/y)		
	Fosmax LNG	2022	LNG_Tk_FRs	FRs	220.0 GWh/d
			corresponds to 16.5 bcm:y (i.e. + 8,25 bcm/y)		

Sponsors

Fosmax LNG	100%

General Information

Promoter	*Fosmax LNG*
Operator	*Fosmax LNG*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz Ten Year Development plan 2015-2024)*
NDP Number	*Fos Cavaou Extension*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		*06/2018*
Supply Contracts		
FID		*06/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction	*06/2018*	*06/2022*
		Commissioning	*2020*	*2022*

Technical Information (LNG)

LNG Facility	*Fos Cavaou LNG Terminal*	
Expected Volume (bcm/y)	*8*	*possible intermediate steps up to a doubling of the existing capacity*
Storage Capacity (m3)	*220,000*	*up to 2 additional storage tanks (existing storage: 3 x 110 000 m3)*
Ship Size (m3)	*0*	*Reception of Q-Max vessels is already operational*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	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	• Market Integration and • Competition: The project will reinforce the existing linking between Northern and Southern European markets thanks to 1) its connections with hubs in the North (France, Germany, Benelux countries, Northern Italy, Switzerland and further east...) and 2) its role in the "LNG flexible floating pipelines" from and to the South (Spain, Italy, Greece, Malta...). • Security of Supply: LNG contributes by itself to SoS (cf. LNG sourcing below). Moreover as LNG is at first transported by LNG vessels, it will be always more efficient to get LNG delivered nearest to where gas is needed. • Sustainability: Gas/LNG is an ideal partner for intermittent renewable energy sources (e.g. wind and solar). Moreover the project will contribute to the development of LNG as a clean alternative fuel for trucks and ships.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG (DZ,CA,CY,LNG,NO,QA,RU,US,WO,YE), LNG diverted from, or reloaded in other European LNG terminals (Spain for example).

Benefits

Main Driver	Market Demand
Main Driver Explanation	Market based investments avoid future stranded assets and thus ensure the best use of money, in particular public money

Benefit Description	Forecasts indicate that LNG's role in Europe will increase in the coming years following the commissioning of new LNG production capacities (in USA and Australia, in particular). If there is a need to develop new infrastructures in Europe to allow the access of larger LNG quantities to where it is needed as well as to improve the LNG contribution to security of supply, the extension of Fos Cavaou LNG terminal, thanks to its location and its marginal cost, is an high efficient alternative to a third gas pipeline through the Pyreneans. It should be noted that recently such existing gas pipeline interconnection capacity was mainly used to compensate for LNG re-exports from Spain. Fos Cavaou is the best entry gate for LNG from Mediterranean, Middle East and Atlantic toward the core of European mainland gas market. Expansion of the Fos Cavaou will strongly contribute to market integration, competition, SoS and sustainability in the NSW corridor.

Barriers

Barriers Type	Barrier
Political	Discrimination aiming at preventing the project to be recognized as an efficient alternative to a third gas pipeline through the Pyreneans.

Gascogne Midi

TRA-F-331	Project	Pipeline including CS	FID
Update Date	06/05/2016		Advanced
Description	TIGF :60 kms pipeline with 5,5 M/h compression in Barbaira station. This pipeline should reduce bottlenecks between north and south french areas. GRTgaz : adaptation of stations in Cruzt and St Martin		
Regulatory Decisions and similar material conditions			

Sponsors

Adaptation of stations in Cruz and St Martin	
GRTgaz	100%
Artere Gascogne Midi	
TIGF	100%

General Information

Promoter	*TIGF - GRTgaz*
Operator	*TIGF*
Host Country	*France*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2015 NDP of GRTgaz and TIGF)*
NDP Number	*No number*
Currently PCI	*Yes (5.7.2)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*03/2015*	*06/2016*
Market Test		
Permitting	*02/2016*	*07/2017*
Supply Contracts		
FID		*09/2014*
Construction	*06/2017*	*07/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Pipeline Lussagnet - Barran + CS in Barbaira		900	60	6
Total			**60**	**6**

PCI Details	
PCI Benefits	
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	Merging of french north and south areas
Benefit Description	

Barriers	
Barriers Type	**Barrier**

Gascogne-Midi : adaptation of stations in Cruzy and St Martin

TRA-F-391	Project	Pipeline including CS	FID
Update Date	19/05/2016		Advanced
Description	The Gasgogne-Midi programm is needed to merge North and South market zones in France, in addition to the projects Arc de Dierrey and Val de Saône in the North and the looping of the Gascogne pipeline in TIGF area. For GRTgaz, the project consists in the adaptation of two interconnection stations in Cruzy and StMartin, enabling a reverse flow on the Gascogne Midi pipeline. The project will contribute to the priority corridor "North-South Gas Interconnections in Western Europe"		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Liaison Nord Sud	GRTgaz	2018	FRs	FRn	0.0 GWh/d
PIR MIDI	GRTgaz	2018	FRs	FRt	0.0 GWh/d
	PIR Midi does not exist any more starting 2015, but stll a physical constraint exists.				
	GRTgaz	2018	FRt	FRs	0.0 GWh/d
	PIR Midi does not exist any more starting 2015, but stll a physical constraint exists.				

Sponsors

GRTgaz	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-F-43	Val de Saône project

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*

Schedule

	Start Date	End Date
Pre-Feasibility		*09/2014*

Third-Party Access Regime

Considered TPA Regime	*Regulated*

NDP Number	*na*	Feasibility	*10/2013*	*03/2015*	Considered Tariff Regime	*Regulated*
		FEED	*04/2015*	*01/2016*	Applied for Exemption	*No*
Currently PCI	*Yes (5.7)*	Market Test		*03/2014*	Exemption Granted	*Not Relevant*
		Permitting				
CBCA Decision	*No*	Supply Contracts		*06/2017*	% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID		*12/2015*	% Exemption in exit direction	*0.00%*
		Construction	*12/2015*	*11/2017*		
		Commissioning	*2018*	*2018*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Cruzy CS	Adaptation of Cruzy station to enable reverse flow on Artère du Midi pipeline			0
St-Martin de Crau CS	Adaptation of St-Martin station to enable reverse flow on Artère du Midi pipeline			0
Total				**0**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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, in addition to Val de Saône project, will remove the current bottleneck between North and South of France anc thus enable the creation of a single market zone in France, considerably improving market integration in Western Europe and price convergence between northern and souther markets, currently submitted to LNG prices. By removing the bottleneck from North to South of France, dependence of the South of France and Iberian Peninsula to LNG will be reduced.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	The purpose of the Gascogne Midi projet (along with the Val de Saône project) is to remove the constraints on North to South gas flows in France, by enabling a reverse flow on the Gascogne Midi pipeline, and enhancing gas flows from West to East in the South of France, thus enabling to increase the potential share of gas imported by pipelines from the North of Europe within the South-Western part of the European market. In terms of market design, the Val de Saône project allows the creation of a single market area in France, thus solving the problem of price spreads in France while promoting a greater liquidity on the wholesale market.
Benefit Description	By facilitating the flow of gas from North-West Europe to Spain, the project will give Iberian Peninsula access to gas priced more extensively according to north west Europe price references. By creating a single French market place, current spread between PEG Nord and PEG South will disappear, and the Iberian peninsula will also benefit from the direct proximity of this large and liquid market place.

Barriers	
Barriers Type	**Barrier**

Iberian-French corridor: Eastern Axis-Midcat Project

TRA-N-256	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	GRTgaz and TIGF contribution to increase the firm capacity at the VIP Pireneos through the creation of an Eastern axis. The project covers both: - the specific TIGF investment related to the creation of a new physical interconnection - new infrastructure in the core of GRTgaz network necessary to offer capacity on a firm basis It contributes to the Priority corridor "North-South gas interconnections in Western Europe"		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP PIRINEOS	TIGF	2024	FRt	ES	160.0 GWh/d
	Commissioning year based on a FID in 2016 and standard feasability study lead time for the "Artère du Midi" looping				
	TIGF	2024	ES	FRt	230.0 GWh/d
	Commissioning year based on a FID in 2016 and standard feasability study lead time for the "Artère du Midi" looping				

Sponsors

GRTgaz section - Specific developments

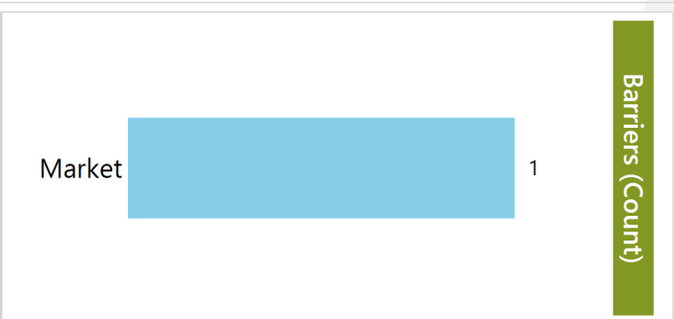
GRTgaz	100%

TIGF section - Specific developments

TIGF	100%

General Information

Promoter	*GRTgaz and TIGF*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz and TIGF development plans 2015)*
NDP Number	*na*
Currently PCI	*Yes (5.5 - 5.8)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2012*
Feasibility	*03/2007*	
FEED		
Market Test		*06/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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	*2024*	*2024*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Arc Lyonnais (GRTgaz section)		1,200	150	
Barbaira - Border (TIGF section)		900	120	
Barbaira CS (TIGF section)				7
Eridan (GRTgaz section)		1,200	220	
Midi pipeline (GRTgaz section)		1,050	200	
Midi pipeline (TIGF section)		1,050	40	
Palleau CS (GRTgaz section)	New station			50
Perche (GRTgaz section)		900	63	
St-Avit CS (GRTgaz section)				15
St-Martin de Crau CS	New station			30
Total			**793**	**102**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Absence of market interest and change in the scope of the project: inclusion of the looping of Midi pipeline in order to increase France to Spain capacity

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

Benefits	
Main Driver	Others
Main Driver Explanation	The Iberian-French Corridor aims to further interconnect the Iberian peninsula with the rest of Europe.
Benefit Description	Results of previous CBA (TYNDP 2015) will have to be updated on the basis of TYNDP 2017 new set of assumptions.

Barriers	
Barriers Type	**Barrier**
Market	Lack of market support

Montoir LNG Terminal Expansion

LNG-N-225	Project	LNG Terminal	Non-FID
Update Date	12/05/2016		Non-Advanced
Description	The project aims to expand the Montoir de Bretagne LNG terminal capacity by 2.5 bcm/y, from 10 bcm/y to 12.5 bcm/y.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Montoir de Bretagne	Elengy	2020	LNG_Tk_FRn	FRn	100.0 GWh/d
			commissioning year for storage 2022		

Sponsors

Elengy	100%

General Information

Promoter	*Elengy*
Operator	*Elengy*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz Ten Year Development plan 2015-2024)*
NDP Number	*Montoir Extension*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*06/2018*
Construction	*06/2018*	*06/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Montoir LNG Terminal*	
Expected Volume (bcm/y)	*3*	*existing capacity: 10 bcm/y*
Storage Capacity (m3)	*190,000*	*1 possible additional tank (existing storage capacity: 3 x 120 000 m3)*
Ship Size (m3)	*0*	*Reception of Q-Max vessels is already operational*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	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	• Market Integration and • Competition: The project will reinforce the existing linking between Northern and Southern European markets thanks to 1) its connections with hubs in the North (France, Germany, Benelux countries, Northern Italy, Switzerland and further east...) and 2) its role in the "LNG flexible floating pipelines" from and to the South (Spain and Portugal, in particular). • Security of Supply: LNG contributes by itself to SoS (cf. LNG sourcing below). Moreover as LNG is at first transported by LNG vessels, it will be always more efficient to get LNG delivered nearest to where gas is needed. • Sustainability: Gas/LNG is an ideal partner for intermittent renewable energy sources (e.g. wind and solar). Moreover the project will contribute to the development of LNG as a clean alternative fuel for trucks and ships.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG (DZ,CA,CY,LNG,NO,QA,RU,US,WO,YE), LNG diverted from, or reloaded in other European LNG terminals (Spain for example).

Benefits

Main Driver	Market Demand
Main Driver Explanation	Market based investments avoid future stranded assets and thus ensure the best use of money, in particular public money.

Benefit Description	Forecasts indicate that LNG's role in Europe will increase in the coming years following the commissioning of new LNG production capacities (in USA and Australia, in particular). If there is a need to develop new infrastructures in Europe to allow the access of larger LNG quantities to where it is needed as well as to improve the LNG contribution to security of supply, the extension of Montoir LNG terminal, thanks to its location and its marginal cost, is an high efficient alternative to a third gas pipeline through the Pyreneans. It should be noted that recently such existing gas pipeline interconnection capacity was mainly used to compensate for LNG re-exports from Spain. Montoir is one of the best entry gates for LNG from all over the world, in particular from USA, toward the core of European mainland gas market. Expansion of Montoir will strongly contribute to market integration, competition, SoS and sustainability in the NSW corridor.

Barriers

Barriers Type	Barrier
Political	Discrimination aiming at preventing the project to be recognized as an efficient alternative to a third gas pipeline through the Pyreneans.

Reverse capacity from CH to FR at Oltingue

TRA-F-45	Project	Pipeline including CS	FID
Update Date	19/05/2016		Advanced
Description	This project is a section of the South North Reverse Flow project, from Italy to France, Germany and Belgium via Switzerland. It will contribute to the Corridor "North-South Gas interconnection in Western Europe" and is also related through Italy with the Southern Corridor. Developements are needed at Oltingue and Morelmaison stations to enable this reverse flow from Switzerland/Italy to France.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Oltingue (FR) / Rodersdorf (CH)	GRTgaz	2018	CH	FRn	0.0 GWh/d
	100 GWh/d of "nearly" firm capacity. Exact status under study within the framework of the merger of the North and South GRTgaz balancing zones				

Sponsors

GRTgaz -- Infrastructure Projects	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*
NDP Number	*na*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2010*
Feasibility	*10/2014*	*08/2015*
FEED	*09/2015*	*12/2016*
Market Test		*06/2012*
Permitting		
Supply Contracts		*01/2017*
FID		*07/2015*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction	*03/2017*	*12/2017*
Commissioning	*2018*	*2018*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Morelmaison CS	Enable reverse flow from Oltingue			0
Oltingue interconnection station	Enable reverse flow			0
Total				**0**

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Algeria, Caspian Region, Libya, LNG ()

Benefits

Main Driver	Market Demand
Main Driver Explanation	During last open seaon on the project, shippers have confirmed their interest for reverse capacitites at the Oltingue / Rodersdorf IP.
Benefit Description	

Barriers

Barriers Type	**Barrier**

Reverse capacity from France to Germany at Obergailbach

TRA-N-047	Project	Pipeline including CS	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	This project aims to create a reverse flow between France and Germany at the Obergailbach/Medelsheim IP. It includes pipelines (including compression) and requires changes in the odorisation system (replacing odoristaion stations at the entry of the transmission system by odorisation stations at the entry of the regional networks). As an alternative, GRTgaz is carrying out feasability study of deodorization process meeting threshold defined by adjacent operators. It will contribute to the "North-South Corridor in Western Europe"		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

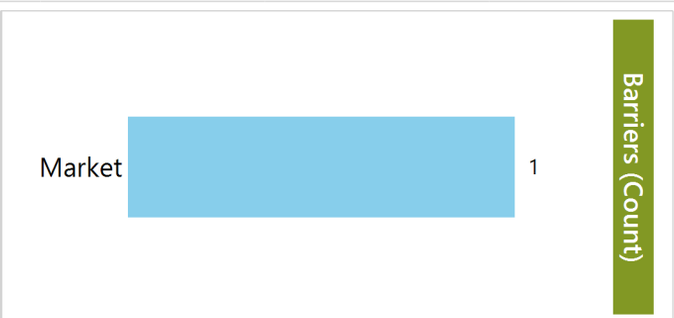
Point	Operator	Year	From Gas System	To Gas System	Capacity
Obergailbach (FR) / Medelsheim (DE)	GRTgaz	2022	FRn	Y-FRnm	**100.0 GWh/d**

Sponsors

GRTgaz	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*
NDP Number	*na*
Currently PCI	*Yes (5.6)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2013*
Feasibility	*07/2013*	*06/2017*
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Commissioning	*2022*	*2022*	

Pipelines and Compressor Stations				
Pipeline Section	**Pipeline Comment**	**Diameter (mm)**	**Length (km)**	**Compressor Power (MW)**
Artère du Nord-Est	Total or partial looping	1,050	87	0
Cheppy CS	New compression station to be created depending on the amount of capacity to be created (total additional compression power for the 3 stations is equal to 41 MW)			
Dierrey CS	Additional power depending on the amount of capacity to be created (total additional compression power for the 3 stations is equal to 41 MW)			
Morelmaison CS	Adaptation of station functionality			0
Obergailbach interconnection station	Enabling reverse flow			
Voisines CS	Additional power depending on the amount of capacity to be created (total additional compression power for the 3 stations is equal to 41 MW)			
	Total		**87**	**0**

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	Creating a reverse flow would contribute to security of supply by enabling gas flow from France to Germany and connecting LNG terminals in France and Iberia to Germany and Central Eastern Europe markets. It will also respond to the need of more H-Gas sources in Germany in order to replace L-gas which will be strongly declining from 2016. In addition, it would improve market integration between French PEG and German NCG.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	1 year
Delay Explanation	The project has been postponed from 2021 to 2022, pending on one hand confirmation of market and on the other hand a solution to odorization issues

Expected Gas Sourcing
LNG ()

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Creating a reverse flow from France to Germany to give access to LNG supplies from Atlantic and Mediterranean region
Benefit Description	Creating a reverse flow would improve integration of German and French markets, and competition as a result. Harmonisation of odorisation practices would enable development of new interconnections in the North Western markets.

Barriers	
Barriers Type	**Barrier**
Market	Lack of market support

South Transit East Pyrenees (STEP) - TIGF

TRA-N-252	Project	Pipeline including CS	Non-FID
Update Date	11/07/2016		Advanced
Description	In the French side, it is composed by a 120 km long pipeline between the border (near Le Perthus) and the CS of Barbaira.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP PIRINEOS	TIGF	2022	FRt	ES	0.0 GWh/d
	TIGF	2022	ES	FRt	0.0 GWh/d

Sponsors

TIGF	100%

General Information

Promoter	*TIGF*
Operator	*TIGF*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (2015 TIGF NDP)*
NDP Number	*No number*
Currently PCI	*Yes (5.5)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2016*	*01/2017*
FEED	*01/2016*	*06/2019*
Market Test		
Permitting	*02/2019*	*12/2020*
Supply Contracts		
FID		*04/2019*
Construction	*12/2020*	*10/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Pipeline Spanish Border-Barbaira + CS Barbaira	French side	900	120	
Total			**120**	

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	

Time Schedule	
Grant Obtention Date	06/04/2016
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Algeria, LNG ()

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier
Market	Lack of market support

Val de Saône project

TRA-F-43	Project	Pipeline including CS	FID
Update Date	27/05/2016		Advanced
Description	This reinforcement of the French Network consists in the looping of the Bourgogne pipeline (between Etrez and Voisines). In addition to the projetcs Arc de Dierrey in the North and Gascogne Midi in the South, this project is needed to merge GRTgaz's North and South market zones. It will contribute to the priority corridor "North South gas interconnections in Western Europe".		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Liaison Nord Sud	GRTgaz	2018	FRn	FRs	**999.0 GWh/d**
			merger of balancing zone		
	GRTgaz	2018	FRs	FRn	**999.0 GWh/d**
			merger of balancing zone		

Sponsors

GRTgaz	100%

General Information

Promoter	*GRTgaz*
Operator	*GRTgaz*
Host Country	*France*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-047	Reverse capacity from France to Germany at Obergailbach
TRA-F-45	Reverse capacity from CH to FR at Oltingue
TRA-F-391	Gascogne-Midi : adaptation of stations in Cruzy and St Martin

NDP and PCI Information

Part of NDP ?	*Yes (GRTgaz PDD 2015)*

Schedule

	Start Date	End Date
Pre-Feasibility		*07/2012*

Third-Party Access Regime

Considered TPA Regime	*Regulated*

NDP Number	*na*	Feasibility	*09/2012*	*07/2013*	Considered Tariff Regime	*Regulated*
		FEED	*07/2013*	*07/2014*	Applied for Exemption	*No*
Currently PCI	*Yes (5.7)*	Market Test		*03/2014*	Exemption Granted	*Not Relevant*
		Permitting	*10/2014*	*06/2016*		
CBCA Decision	*No*	Supply Contracts		*08/2016*	% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID		*09/2015*	% Exemption in exit direction	*0.00%*
		Construction	*06/2016*	*11/2018*		
		Commissioning	*2018*	*2018*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Bourgogne	Looping of Artère de Bourgogne pipeline	1,200	189	
Etrez CS				9
Palleau CS	Adaptation of station functionalities			0
Voisines CS	Adaptation of station functionalities			0
Total			**189**	**9**

PCI Details

PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project, in addition to Gascogne Midi project, will remove the current bottleneck between North and South of France and thus enable the creation of a single market zone in France, considerably improving market integration in Western Europe and price convergence between northern and souther markets, currently submitted to LNG prices. By removing the bottleneck from North to South of France, dependence of the South of France and Iberian Peninsula to LNG will be reduced.

Time Schedule

Grant Obtention Date	01/09/2015
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

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

Benefits

Main Driver	Market Demand
Main Driver Explanation	The purpose of the Val de Saône project (along with the Gascogne-Midi project) is to remove the constraints on North to South gas flows in France, thus enabling to increase the potential share of gas imported by pipelines from the North of Europe within the South-Western part of the European market. In terms of market design, the Val de Saône project allows the creation of a single market area in France. This will bring a final solution to higher prices of gas in South of France and Iberian Peninsula.
Benefit Description	By facilitating the flow of gas from North-West Europe to Spain, the project will give Iberian Peninsula access to gas priced more extensively according to north west Europe price references. By creating a single French market place, current spread between PEG Nord and PEG South will disappear, and the Iberian peninsula will also benefit from the direct proximity of this large and liquid market place.

Barriers

Barriers Type	**Barrier**

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Cross border cost allocation	Decision from CRE and CNMC on the request for cross order cost allocation between France and Spain for the project of common interest Val de Saône	Yes	10/04/2014

Compressor station at Nea Messimvria

TRA-N-971	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of a 27 MW compressor station in order to enable flow from the Greek transmission system to TAP. This project is the second phase of development of project "TRA-N-941-Metering and Regulating station at Nea Messimvria" .		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Nea Mesimvria	DESFA S.A.	2022	GR	GR/TAP	142.0 GWh/d

Sponsors

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (The Compressor station is included in the 10-year Development Study. The D. S. includes projects which are likely to be implemented but are not yet part of the compulsory Projects or projects that require the commercial binding agreements by users of the infrastructure.)*
NDP Number	
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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)
Nea Messimvria to TAP				27
Total				**27**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG ()

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The project will enable TAP to acquire increased flexibility since gas quantities that might be delivered by TAP to intermediate destinations will be compensated by quantities delivered by DESFA to TAP.

Barriers	
Barriers Type	**Barrier**

Compressor Station Kipi

TRA-N-128	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of a Compressor Station on the GR side of the GR/TK border aiming at increasing the capacity of the Greek transmission system in order to make possible the transmission of natural gas to the Greek and European markets with the use of downstream transmission systems. Depending on the variant that will be implemented the configuration will be (1+1) x 4.5 MW or(1+1) x 9.7 MW or (2+1) x 9.7 MW.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Variant : 103.20 GWh/d

case where TAP will be, from the beginning, connected to TANAP at the GR/TR border, and IGB will be supplied by TAP therefore the C/S will supply gas to the DESFA system and the ones of neighbouring operators.

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kipi (TR) / Kipi (GR)	DESFA S.A.	2020	TRi	IB-GRk	**54.4 GWh/d**
				3 bcm/y	
Komotini (DESFA) Bottleneck	DESFA S.A.	2020	IB-GRk	GR	**54.4 GWh/d**
				3 bcm/y	

Capacity Increments For Information Only

Variant : 206.40 GWh/d

case where TAP will be, from the beginning, connected to TANAP at the GR/TR border, and IGB will be supplied by the DESFA network therefore the C/S will supply gas to the DESFA system and the ones of neighbouring operators through IGB.

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kipi (TR) / Kipi (GR)	DESFA S.A.	2020	TRi	IB-GRk	**157.8 GWh/d**
				6 bcm/y	

Sponsors	
DESFA S.A.	100%

General Information	
Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*Yes (Development Plan NNGS 2015-2024)*
NDP Number	*2.2.1.3*
Currently PCI	*Yes (6.9.3 and 7.4.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

103.20 GWh/d

case where TAP will be, from the beginning, connected to TANAP at the GR/TR border, and IGB will be supplied by TAP therefore the C/S will supply gas to the DESFA system and the ones of neighbouring operators.

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Kipi		0	0	9
Total			**0**	**9**

Pipelines and Compressor Stations - Alternative Variant				
206.40 GWh/d	case where TAP will be, from the beginning, connected to TANAP at the GR/TR border, and IGB will be supplied by the DESFA network therefore the C/S will supply gas to the DESFA system and the ones of neighbouring operators through IGB.			
Pipeline Section	**Pipeline Comment**	**Diameter (mm)**	**Length (km)**	**Compressor Power (MW)**
Kipi		0	0	18
Total			**0**	**18**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders,
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	0
Delay Explanation	

Expected Gas Sourcing

Caspian Region, Russia, LNG (), Other Central Asian, Middle Eastern and East-Mediterranean sources

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

EastMed Pipeline

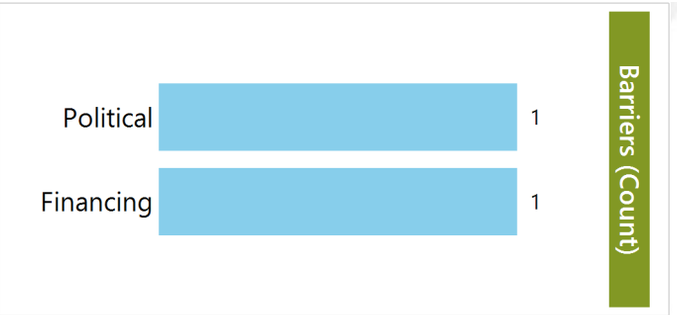
TRA-N-330	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	The EastMed project is an approximately 1900 km offshore/onshore pipeline project that will directly connect the East Mediterranean gas resources to the European gas system. The project consists of 5 sections connecting the following areas: Levantine basin – Cyprus –Crete- Peloponnese –West Greece-Thesprotia. The system will have a capacity of 320-350 GWh/d with the option to upgrade the capacity of the pipeline sections from Crete up to 510 Gwh/d, in case relevant reserves will be discovered in the offshore of Crete.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Crete (GR)	IGI Poseidon S.A.	2020	GRc	GR/EMD	190.0 GWh/d
	In case relevant gas reserves will be discoveredin the offshore area around Crete island.				
	IGI Poseidon S.A.	2020	GR/EMD	GRc	20.0 GWh/d
East Med / Cyprus (CY)	IGI Poseidon S.A.	2020	GR/EMD	CY	30.0 GWh/d
East Med / Cyprus/Israeli Production Field	IGI Poseidon S.A.	2020	NPcCY	GR/EMD	350.0 GWh/d
East Med / Peloponnesus (GR)	IGI Poseidon S.A.	2020	GR/EMD	GR	90.0 GWh/d
East Med / Thesprotia (Poseidon)	IGI Poseidon S.A.	2020	GR/IGI	GR/EMD	320.0 GWh/d
	It could be upgraded for further 190 Gwh/d, in case relevant gas reserves will be discoveredin the offshore area around Crete				

Sponsors	
EastMed pipeline: from Crete to Peloponnese	
IGI Poseidon SA	100%
EastMed pipeline: from Cyprus to Crete	
IGI Poseidon SA	100%
EastMed pipeline: from Levantine Basin to Cyprus	
IGI Poseidon SA	100%
EastMed pipeline: from Peloponnese to West Greece	
IGI Poseidon SA	100%
EastMed pipeline: from West Greece to Thesprotia (tie-in with Poseidon)	
IGI Poseidon SA	100%

General Information	
Promoter	*Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A*
Operator	*IGI Poseidon S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*No (EastMed pipeline is not included in the Greek NDP, as the project is considered an Indipendent Natural gas System. In Cyprus there is no NND as the country does not have any gas TSO.)*
NDP Number	
Currently PCI	*Yes (7.3.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*08/2012*
Feasibility	*05/2015*	*04/2016*
FEED	*09/2016*	*06/2017*
Market Test		*07/2017*
Permitting	*06/2016*	*12/2017*
Supply Contracts		*12/2017*
FID		*06/2017*
Construction	*01/2018*	*12/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Yet*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
EastMed pipeline: section from Crete to Peloponnese	his offshore pipeline section is designed to transport 320 GWh/d of natural gas form the Levantine Basine and can be upgraded for further 190 GWh/d of natural gas from the offshore of Crete in case relevant reserves will be discovered.	813	421	100
EastMed pipeline: section from Cyprus to Crete	This section of the project is related to the offshore pipeline between Cyprus and Crete.	660	732	125
EastMed pipeline: section from Levantine Basin to Cyprus	This offshore pipeline section will tansport 350GWh/d to Cyprus where it will deliver 30 Gwh/d for the internal consumption and the remaing 320GW/d will be exported to Greece via Crete.	610	165	
EastMed pipeline: section from West Greece to Thesprotia	This offshore pipeline section is designed to transport 320 GWh/d of natural gas form the Levantine Basine and can be upgraded for further 190 GWh/d of natural gas from the offshore of Crete in case relevant reserves will be discovered.	1,070	236	
EastMed: section from Peloponnese to West Greece	This offshore pipeline section is designed to transport 320 GWh/d of natural gas form the Levantine Basine and can be upgraded for further 190 GWh/d of natural gas from the offshore of Crete in case relevant reserves will be discovered.	1,170	317	
Total			**1,871**	**225**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, 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	Market Integration The project provides significant contribution to Market Integration as it allows to interconnect Cyprus and Crete to European gas network system. Security of Supply The contribution of EastMed project to Security of Supply is particularly relevant as it provides diversification of sources, routes and counterparts, providing solutions to the disruption scenarios. An additional benefit will be provided by enabling the gasification of Cyprus, Crete and Western Greece. Competition The EastMed project will enhance market competition along the whole gas chain, including among producers. The new gas will compete, to the advantage of the consumer, with all existing supplies available in the European markets, enhancing the benefits arising from a better diversified market. Sustainability The Eastmed project will provide competitive gas supply, contributing to displace power production from Coal and Oil, reducing CO2 emissions per energy unit generated.

Time Schedule

Grant Obtention Date	23/10/2015
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Levantine Basin and offshore of Crete in case relevant reserves will be discovered.

Comments about the Third-Party Access Regime

The access regime will be defined at a later stage of the development activities

Benefits

Main Driver	Others
Main Driver Explanation	The primary objective of the Eastern Mediterranean Pipeline is to provide a permanent connection of the recently discovered gas reserves in the Levantine Basin with the European gas markets. The specific objectives to be achieved with implementation of the project are to: • exploit the proximity of the Levantine Basin gas fields to mainland Europe, to diversify the sources, routes and counterparts of the European gas supply with 10-16 bcm/year of deliveries from new sources, which are wholly or partly produced within the EU; • integrate Cyprus with the European gas system, further promoting gas trading in the South Eastern Europe region; • promote the development of a gas trading hubs in Greece and in Italy, in connection with other Southern Corridor initiatives, facilitating gas exchanges in South Eastern Europe; • gasify regions of Greece that currently have no access to gas, such as Crete, Peloponnese and Western Greece.
Benefit Description	The dependence of the European Union on external gas supplies is continuously increasing, with indigenous production declining, leading to the need to diversify sources so as to strengthen security of the markets' supply, particularly in SEE. On the other hand, unlocking the recent discoveries in the Levantine Basin, including - referring to the sole Cyprus - the largest recent discovery of gas reserves in Europe, is particularly relevant for the development of the exploration and hydrocarbons in the whole East Mediterranean. Considering all the above, EastMed addresses the following main needs: • Increases security and diversification of gas supplies to Europe, as well as competition in line with the EU objectives to complete the internal energy market; • Contributes to the development of EU domestic gas resources, thus limiting the dependence on third countries • Secures access to gas sources strategically located for EU

Barriers	
Barriers Type	Barrier
Political	EastMed Pipeline has been consistently supported by the Cypriot, Greek and Italian Governments.
Financing	It is going to be submitted a request to access CEF funds for feasibility studies

Greek part of Tesla project

TRA-N-631	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists in the construction of a pipeline and three compressor stations, within the territory of Greece, from the GR/TK border to the GR/MK border. The project is part of a greater project (TESLA project) aiming at transporting natural gas from the GR/TK border to Central Europe, via Greece, FYROM, Serbia, Hungary and Austria, as well as Italy.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

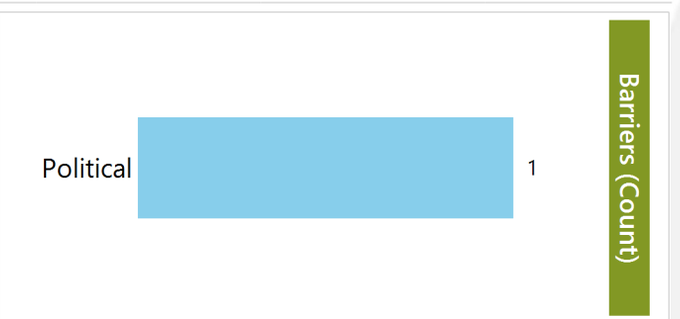
Point	Operator	Year	From Gas System	To Gas System	Capacity
TESLA / GR Offtake	DESFA S.A.	2020	GR/TLA	GR	**318.0 GWh/d**
TESLA / GR>FYROM	DESFA S.A.	2020	GR/TLA	MK/TLA	**909.0 GWh/d**
TESLA / TR>GR	DESFA S.A.	2020	TRr	GR/TLA	**1,227.0 GWh/d**

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (The NDP 2016-2025, (in consultation) presently refers to this project as a second stage of the M/R station installation that will enable the flow from TAP into the Greek Transmission System (TRA-N-941). At that second stage the Compressor station will also enable the flow from the Greek TS to TAP.)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

NDP Number		Construction	
		Commissioning	*2020* *2020*
Currently PCI	*Yes (6.25.2)*		
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)
Greek section		1,400	370	280
Total			**370**	**280**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	MI. The project will provide access to natural gas to countries/ regions without adequate access to it SoS. The project will provide a diversified supply route Sustainability. The project will increase gas penetration in countries/regions where it will replace less environment friendly energy sources

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	1 year
Delay Explanation	Uncertainties on geopolitical issues in SE Europe

Expected Gas Sourcing

Russia, Middle East, Central Asia

Comments about the Third-Party Access Regime

TPA status and tariff regime will be examined at the next stage.

Benefits	
Main Driver	Market Demand
Main Driver Explanation	The project investment decision will be taken based on commercial commitments.
Benefit Description	

Barriers	
Barriers Type	**Barrier**
Political	Uncertainty on the implementation of upstream infrastructure due to geopolitical issues in the Region.

Komotini-Thesprotia pipeline

TRA-N-014	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	High pressure pipeline from Komotini to Thesprotia area near Ionian coast along with 2 compressor stations and 1 operation & maintenance centre.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poseidon Greek Entry	DESFA S.A.	2023	IB-GRk	GR/IGI	275.4 GWh/d
	DESFA S.A.	2023	GR/IGI	IB-GRk	80.0 GWh/d

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (Development Plan NNGS 2015-2024)*
NDP Number	*2.2.1.4*
Currently PCI	*Yes (7.1.7)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Komotini-Thesprotia	total length of new pipes	1,067	613	58
Total			**613**	**58**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, 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	1 year
Delay Explanation	Lack of interest from the market

Expected Gas Sourcing

Caspian Region, Russia, Other Central Asian, Middle Eastern and East-Mediterranean sources.

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The project, together with Greece-Italy interconnector offshore project (sponsored by 3rd parties) will establish one more energy corridor between Asian, Middle Eastern and Eastern Mediterranean gas sources and European consumers. The project aims at enhancing the diversification of supply routes at a European level and possibly, depending on the source of gas to be transmitted, the diversification of supply sources thus contributing to the improvement of the Security of Supply level in the region of South Eastern Europe.

Barriers	
Barriers Type	**Barrier**
Market	Lack of market support

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Intergovernmental Agreement between Greece and Italy for the implementation of the Interconnection Greece Italy.	The Agreement was ratified by the Greek Parliament in 2006 (Law 3441/Government Gazette A' 39/27.02.2006).	Yes	04/11/2005

LNG terminal in northern Greece / Alexandroupolis - LNG Section

LNG-N-062	Project	LNG Terminal	Non-FID
Update Date	20/05/2016		Advanced
Description	Please note that this part refers only to LNG section of the Project, i.e. the floating terminal and its Mooring system. The Pipeline section of the Project is addressed in TRA-N-063. The project consists of an LNG offshore Floating Storage Regasification Unit, a Mooring & a Pipeline system (24km Subsea and 4km Onshore), connecting the floating unit to the Greek National Natural Gas System at the area of Amfitriti, 5.5km NE of Alexandroupolis where, DESFA, the NNGS TSO, will build a metering & regulating station. The floating unit, will be stationed in the sea of Thrace, 17.6km SW of Alexandroupolis in NE Greece, at an offshore distance of 5.4 n.m. from the nearest shore. It will have up to 170.000m3 LNG storage capacity and a gas send out capacity of 700.000 Nm3/h corresponding to 6.1bcm/y.		
Regulatory Decisions and similar material conditions	No TPA exemption requested NRA only gave opinion on the Independent Natural Gas System License issued by the Ministry of Energy & Environment on 19.08.2011 (opin. number: 29/2011)		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Alexandropoulis LNG	Gastrade S.A.	2018	LNG_Tk_GR	GRa	187.5 GWh/d
	Increment available 100% at operation start-up.				
Alexandroupolis Amphitriti	Gastrade S.A.	2018	GRa	IB-GRk	268.0 GWh/d
	Increment available 100% at operation start-up.				

Sponsors

LNG-N-062

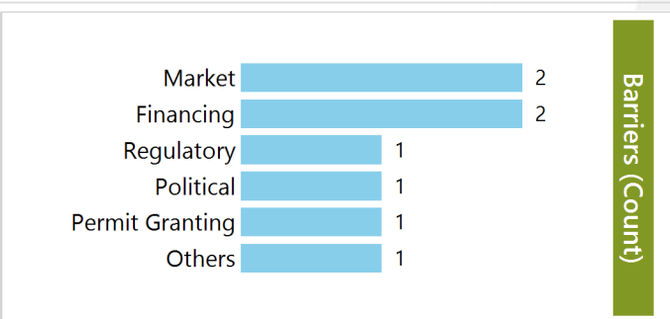
GASTRADE S.A. 100%

TRA-N-063

GASTRADE S.A. 100%

General Information

Promoter	*Gastrade S.A.*
Operator	*Gastrade S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-063	LNG terminal in northern Greece / Alexandroupolis - Pipeline Section

NDP and PCI Information	
Part of NDP ?	*No (The Project is not included in the NDP because it is an Independent Natural Gas System and therefore the NTSO is not obliged to include it in the NDP because it is not the Project's promoter and/or operator.)*
NDP Number	
Currently PCI	*Yes (6.9.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2010*
Feasibility	*01/2014*	*06/2014*
FEED	*05/2016*	*12/2016*
Market Test		*03/2017*
Permitting	*12/2010*	*01/2015*
Supply Contracts		
FID		*12/2016*
Construction	*04/2017*	*06/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)		
LNG Facility	*LNG terminal in northern Greece / Alexandroupolis*	
Expected Volume (bcm/y)	*6*	*New regaseification technical capacity increment will be available from start of operations.*
Storage Capacity (m3)	*170,000*	*4 storage tanks*
Ship Size (m3)	*170,000*	*DWT 85,000 MT, LOA 300-310 m., Breadth 46 m., Draft 12m.*
Reloading Ability	*Yes*	

PCI Details	
PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	Market Integration - Regional (SEE + Serbia + FYROM) and beyond (e.g. Hungary and through across the NSI gas corridor) Security of Supply through inter alia source and route diversification- Greece, Bulgaria, Serbia, FYROM, Hungary, Ukraine, Turkey Enhances competition in the region by introducing new sources and routes of supply Sustainability - Supports back up to renewables and power to gas

Time Schedule

Grant Obtention Date	16/04/2015
Delay Since Last TYNDP	12 months in commissining date / same delay in FID
Delay Explanation	Delays in permitting phase: competent authorities delayed in issuing the required licenses. In the case of Access to shore, seabed & sea area, there was a delay of 9 months in order to decide how the existing legislation would apply specifically to the Project. In the case of issuance of the Installation Act & Installation license, the main delay was due to the requirement for the introduction of a legislative change necessary to grant the RoW for the onshore pipeline. Other reasons: complex economic & political situation in Greece, in particular, in the 2H2015 (e.g. capital controls). Also, GASTRADE entered into discussions with Public Gas Corporation of Greece (DEPA) for the participation of the later in the Project. (The EC was duly informed on this since 06/2015). However, the finalization of DEPA's participation in the Project was delayed due to political developments in Greece and administrative changes with DEPA. This caused delay in execution of FEED & reaching FID.

Expected Gas Sourcing

LNG (), Multi-sourced supply including new sources (e.g. U.S., Mozambique)

Comments about the Third-Party Access Regime

It is not planned to run a formal Market Test as the Project has not applied for a TPA Exemption and Project's commercial viability will be determined by the success of the negotiations with potential gas offtakers and/or interested LNG suppliers who have interest in using the infrastructure.

Benefits

Main Driver	Market Demand
Main Driver Explanation	Main drivers: 1. Expressed requirement for diversification of supply sources and routes for SEE markets (Bulgaria, Serbia, FYROM, Romania,Hungary) creates market / demand opportunities for the project 2. Regional demand growth
Benefit Description	LNG terminal in northern Greece will: Secure new natural gas quantities for the supply of the Greek and the SE European markets, hence enhancing the security of supply of these markets. Diversify the supply sources and routes in particular with regards to markets with limited supply options (Bulgaria, Serbia, Romania, FYROM, Hungary, Ukraine) and to this extent lift existing isolation with an aim to reduce dependency on Russian gas while provide access for new gas findings in the East Med basin to the markets of SEE. Support the South Corridor project(s) by providing alternative/additional supply quantities when/if required and the interoperability of systems and the creation of a regional gas trading hub. The Project technical design will include provision for LNG-reloading ability for the purpose of supporting LNG bunkering activities or regional distribution of LNG to remote island locations for power generation and other industrial and commercial activities.

Barriers

Barriers Type	Barrier
Regulatory	If tariff levels for the Project do not enjoy the same regulatory regime as the one applied for other competitive regulated infrastructures in the area, then the Project will become commercially unattractive to potential regional offtakers and therefore financially not viable.
Permit Granting	See above. Delays in Permit granting have led to delays in Project implementation.

Political	No political barriers. On the contrary, there is clear and declared Political support for the Project from the impacted Member States and in particular from the governments of Greece and Bulgaria. Political stability in the region of the Project's direct influence will support commercial viability of the Project.
Others	Delays in the implementation/start up of new regional interconnection infrastructures (IGB, IBS) and upgrade of existing ones including reverse flow availability. The most critical one is the Interconnector Greece-Bulgaria (IGB). Also, availability of capacity in the greek, bulgarian and romanian Transmission Systems and reverse flow capacity in Trans Balkan will enable flows from the terminal to Ukraine. Finally, reverse flow functionality to the Turkey-Greece Interconnector will open up the Turkish market to the Project. Regarding Financing: The project received grants for studies (from the 1st CEF Energy Call-August 2014) and will apply for grants for works in a future Call from CEF. Award of such Public financing will be critical for the Project's commercial viability. Also access to EIB, EBRD, EFSI, IFC PCI favourable financing tools is very important for the Project.
Market	The markets in SEE are not mature. Currently all gas transactions are done on a bilateral basis and no price transparency exists. Creation of a trading hub in the region with multiple supply options will generate significant opportunities for the marketing of gas imported through the LNG Alexandroupolis floating terminal.
Financing	The Project has been awarded with grants for studies (CEF 2014 Call) and will apply for grants for works (in the next Calls) from the CEF. Award of such Public financing will be critical for the Project's commercial viability. Also access to EIB, EBRD, EFSI, IFC PCI favourable financing tools is very important for the Project.
Market	Lack of market maturity
Financing	Availability of funds and associated conditions

LNG terminal in northern Greece / Alexandroupolis - Pipeline Section

TRA-N-063	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Advanced
Description	Please note that this part refers only to the pipeline section of the Project. The LNG section of the Project is addressed in LNG-N-062. The project consists of an LNG offshore Floating Storage Regasification Unit, a Mooring & a Pipeline system (24km Subsea and 4km Onshore), connecting the floating unit to the Greek National Natural Gas System at the area of Amfitriti, 5.5km NE of Alexandroupolis where, DESFA, the NNGS TSO, will build a metering & regulating station. The regasified LNG will be transmissioned from the floating unit to the 30'' subsea and onshore pipeline through a Pipeline End Manifold. A valve station will be established to the shore-crossing point of the pipeline. The maximum capacity of the pipeline is 6.1 bcm/y.		
Regulatory Decisions and similar material conditions	No TPA exemption requested NRA only gave opinion on the Independent Natural Gas System License issued by the Ministry of Energy & Environment on 19.08.2011 (opin. number 29/2011)		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Alexandropoulis LNG	Gastrade S.A.	2018	LNG_Tk_GR	GRa	187.5 GWh/d
	Increment not assessed by ENTSOG: Submitted in the linked Pipelines project				
Alexandroupolis Amphitriti	Gastrade S.A.	2018	GRa	IB-GRk	268.0 GWh/d
	Increment not assessed by ENTSOG: Submitted in the linked LNG project				

Sponsors

LNG-N-062

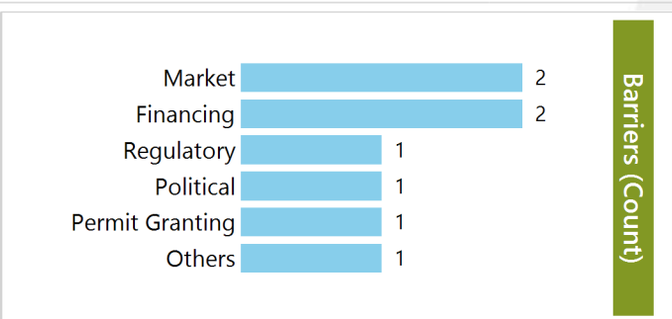
GASTRADE S.A. 100%

TRA-N-063

GASTRADE S.A. 100%

General Information

Promoter	*Gastrade S.A.*
Operator	*Gastrade S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
LNG-N-062	LNG terminal in northern Greece / Alexandroupolis - LNG Section

NDP and PCI Information	
Part of NDP ?	*No (The Project is not included in the NDP because it is an Independent Natural Gas System and therefore the NTSO is not obliged to include it in the NDP because it is not the Project's promoter and/or operator.)*
NDP Number	
Currently PCI	*Yes (6.9.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2010*
Feasibility	*01/2014*	*06/2014*
FEED	*05/2016*	*12/2016*
Market Test		*03/2017*
Permitting	*12/2010*	*01/2015*
Supply Contracts		
FID		*12/2016*
Construction	*04/2017*	*06/2018*
Commissioning	*2018*	*2018*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Alexandroupolis LNG terminal - M/R Amfitriti		762	28	0
Total			**28**	**0**

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	Market Integration - Regional (SEE + Serbia + FYROM) and beyond (e.g. Hungary and through across the NSI gas corridor) Security of Supply through inter alia source and route diversification- Greece, Bulgaria, Serbia, FYROM, Hungary, Ukraine, Turkey Enhances competition in the region by introducing new sources and routes of supply Sustainability - Supports back up to renewables and power to gas

Time Schedule

Grant Obtention Date	16/04/2015
Delay Since Last TYNDP	12 months in commissining date / same delay in FID

Delay Explanation	Delays in permitting phase: competent authorities delayed in issuing the required licenses. In the case of Access to shore, seabed & sea area, there was a delay of 9 months in order to decide how the existing legislation would apply specifically to the Project. In the case of issuance of the Installation Act & Installation license, the main delay was due to the requirement for the introduction of a legislative change necessary to grant the RoW for the onshore pipeline. Other reasons: complex economic & political situation in Greece, in particular, in the 2H2015 (e.g. capital controls). Also, GASTRADE entered into discussions with Public Gas Corporation of Greece (DEPA) for the participation of the later in the Project. (The EC was duly informed on this since 06/2015). However, the finalization of DEPA's participation in the Project was delayed due to political developments in Greece and administrative changes with DEPA. This caused delay in execution of FEED & reaching FID.

Expected Gas Sourcing

LNG (LNG), The pipeline will be fed with regasified LNG from the floating unit (LNG-N-062) -hence it means various sources.

Comments about the Third-Party Access Regime

It is not planned to run a formal Market Test as the Project has not applied for a TPA Exemption and Project's commercial viability will be determined by the success of the negotiations with potential gas offtakers and/or interested LNG suppliers who have interest in using the infrastructure.

Benefits

Main Driver	Market Demand
Main Driver Explanation	Main drivers: 1. Expressed requirement for diversification of supply sources and routes for SEE markets (Bulgaria, Serbia, FYROM, Romania, Hungary) creates market / demand opportunities for the project 2. Regional demand growth
Benefit Description	LNG terminal in northern Greece will: Secure new natural gas quantities for the supply of the Greek and the SE European markets, hence enhancing the security of supply of these markets. Diversify the supply sources and routes in particular with regards to markets with limited supply options (Bulgaria, Serbia, Romania, FYROM, Hungary, Ukraine) and to this extent lift existing isolation with an aim to reduce dependency on Russian gas while provide access for new gas findings in the East Med basin to the markets of SEE. Support the South Corridor project(s) by providing alternative/additional supply quantities when/if required and the interoperability of systems and the creation of a regional gas trading hub. The Project technical design will include provision for LNG-reloading ability for the purpose of supporting LNG bunkering activities or regional distribution of LNG to remote island locations for power generation and other industrial and commercial activities.

Barriers

Barriers Type	Barrier
Regulatory	If tariff levels for the Project do not enjoy the same regulatory regime as the one applied for other competitive regulated infrastructures in the area, then the Project will become commercially unattractive to potential regional offtakers and therefore financially not viable.
Permit Granting	See above. Delays in Permit granting have led to delays in Project implementation.
Political	No political barriers. On the contrary, there is clear and declared Political support for the Project from the impacted Member States and in particular from the governments of Greece and Bulgaria. Political stability in the region of the Project's direct influence will support commercial viability of the Project.

Others	Delays in the implementation/start up of new regional interconnection infrastructure (IGB/IBS) and upgrade of existing ones including reverse flow availability. The most critical one is the Interconnector Grece-Bulgaria (IGB). Also, availability of capacity in the greek, bulgarian and romanian Transmission Systems and reverse flow capacity in Trans Balkan will enable flows from the Terminal (through the assorted pipeline) to Ukraine. Finally, reverse flow functionality to the Turkey-Greece Interconnector will open up the Turkish market to the Project. Regarding financing: The Project received grants for studies (from the 1st CEF Energy Call-August 2014) and will apply for works in a future Call from CEF. Award of such Public financing will be critical for the Project's commercial viability. Also access to EIB, EBRD, EFSI, IFC PCI favourable financing tools is very important for the Project.
Market	The markets in SEE are not mature. Currently all gas transactions are done in a bilateral basis and no price transparency exists. Creation of a trading hub in the region with multiple supply options will generate significant opportunities for the marketing of gas imported through the LNG Alexandroupolis floating terminal (that the pipeline will be connected to).
Financing	The Project has been awarded with grants for studies (CEF 2014 Call) and will aply for grants for works (in the next Calls) from the CEF. Award of such Public financing will be critical for the Project's commercial viability. Also access to EIB, EBRD, EFSI, IFC PCI favourable financing tools is very important for the Project.
Market	Lack of market maturity
Financing	Availability of funds and associated conditions

Metering and Regulating Station at Alexandroupoli

TRA-N-1090	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of one Metering and Regulating Station at Alexandroupoli (Amphitriti) for the potential intrconnection of the Greek transmission system with the LNG terminal in Northern Greece.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Alexandroupolis Amphitriti	DESFA S.A.	2020	GRa	IB-GRk	**268.0 GWh/d**

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*No (This project is not included in the National Development Plan because no application has been made, by the promoter of the LNG terminal in Northern Greece, for the connection of this project to the Greek gas transmission system.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*100.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*

PCI Details

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**
Market	Lack of market maturity

Metering and Regulating station at Komotini

TRA-N-940	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of one Metering & Regulating station at Komotini for the potential interconnection of the Greek transmission system with transit projects developed in the area.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Komotini (DESFA) - GR / TAP	DESFA S.A.	2020	GR/TAP	IB-GRk	0.0 GWh/d

Sponsors

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Development Plan NNGS 2015-2024)*
NDP Number	*2.2.1.3*
Currently PCI	*Yes (7.1.6)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing
Caspian Region

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	The project will enable the Greek gas transmission system to be supplied by an additional gas source and route.

Barriers	
Barriers Type	**Barrier**

Metering and Regulating station at Megalopoli

TRA-N-1091	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of one Metering & Regulating station at Megalopoli, in the Peloponnese, for the potential interconnection of the Greek gas transmission system with the East-Med pipeline.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Peloponnesus (GR)	DESFA S.A.	2022	GR/EMD	GR	90.0 GWh/d

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*No (This project is not included in the National Development Plan because no application has been made, by the promoter of the East-Med pipeline, for the connection of this project to the Greek gas transmission system.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Cyprus, Israel

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**
Market	Lack of market maturity

Metering and Regulating station at Nea Messimvria

TRA-N-941	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of one Metering & Regulating station at Nea Messimvria for the interconnection of the Greek transmission system with TAP.		
Regulatory Decisions and similar material conditions			

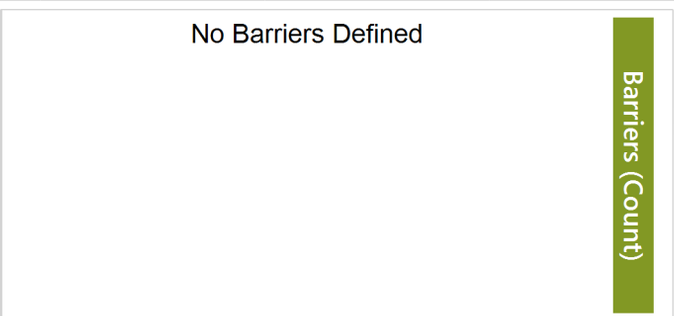
Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Nea Mesimvria	DESFA S.A.	2019	GR/TAP	GR	142.0 GWh/d

Sponsors

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Development Plan NNGS 2015-2024)*
NDP Number	*2.2.1.3*
Currently PCI	*Yes (7.1.6)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*05/2016*	*03/2018*
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Nea-Messivria to TAP			1	
Total			**1**	

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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG ()

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	The project will enable the Greek gas transmission system to be supplied by an additional gas source and route.

Barriers	
Barriers Type	**Barrier**

Metering and Regulating Station at UGS South Kavala

TRA-N-1092	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of the implementation of one Metering and Regulating Station at Kavala for the potential intrconnection of the Greek transmission system with the UGS in South Kavala.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS South Kavala (GR)	DESFA S.A.	2023	STcGR	IB-GRk	**44.0 GWh/d**
	DESFA S.A.	2023	IB-GRk	STcGR	**55.0 GWh/d**

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*No (This project is not included in the National Development Plan because no application has been made, by the promoter of the UGS in South Kavala, for the connection of this project to the Greek gas transmission system.)*
NDP Number	
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier
Market	Lack of market maturity

Metering Station at Komotini to IGB

TRA-N-957	Project	Pipeline including CS	Non-FID
Update Date	05/07/2016		Non-Advanced
Description	The project consists of a Metering staton that will enable the Gas Transmission System of Greece to supply gas into the IGB pipeline.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Komotini (DESFA) - GR / IGB	DESFA S.A.	2020	IB-GRk	BG/IGB	**206.4 GWh/d**

Sponsors

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (This project is included in the 10-year Development Study. The D. S. includes projects which are likely to be implemented but are not yet part of the compulsory Projects.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG (DZ,WO)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Nea-Messimvria to FYROM pipeline

TRA-N-967	Project	Pipeline including CS	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	The project consists of a pipeline from Nea-Messimvria to the GR/MK border allowing the supply of FYROM by the Greek Gas Transmission System		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

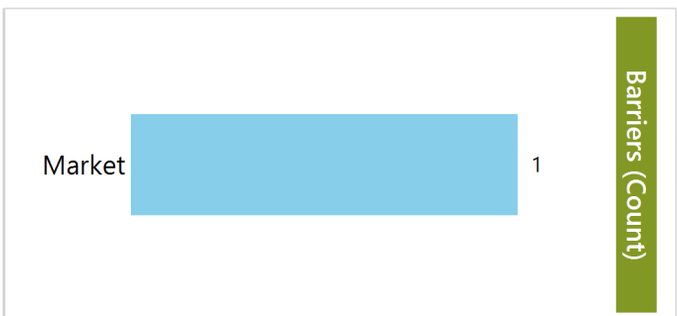
Point	Operator	Year	From Gas System	To Gas System	Capacity
Stojakovo village (MK) / Pontoiraklia (GR)	DESFA S.A.	2020	GR	MK	**76.5 GWh/d**

Sponsors

DESFA S.A.	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (The Project is included in the 10-year Development Study. The D. S. includes projects which are likely to be implemented but are not yet part of the compulsory Projects.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Nea-Messimvria to Pontoiraklia/Stojakovo		700	50	
Total			**50**	

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG (DZ,WO)

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
Market	Lack of market maturity

Poseidon Pipeline

TRA-N-010	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	The Poseidon project consists of a multisource offshore pipeline that will connect the Greek and Italian natural gas transportation systems. The Poseidon project is designed to import 14 Billion cubic meters per year of natural gas from sources available at the Greek borders, such as Caspian, East Mediterranean, Middle East. The total capacity could be upgraded up to 20 Bcm/y with minimal modification of the basic configuration, mainly regarding increased power of the compression station.		
Regulatory Decisions and similar material conditions	Decree of the Italian Ministry for Economic Development, dated 31.01.2007 (amended by the Decree dated 21.06.2007) granting exemption from Third Party Access to IGI Poseidon S.A.		

Capacity Increments For Modelling

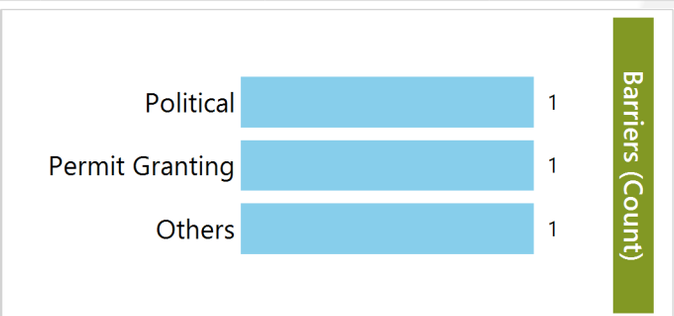
Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Thesprotia (Poseidon)	IGI Poseidon S.A.	2020	GR/EMD	GR/IGI	320.0 GWh/d
Otranto - IT / IGI Poseidon	IGI Poseidon S.A.	2020	IB-ITs	GR/IGI	252.5 GWh/d
	IGI Poseidon S.A.	2020	GR/IGI	IB-ITs	329.4 GWh/d
Poseidon Greek Entry	IGI Poseidon S.A.	2020	IB-GRk	GR/IGI	329.4 GWh/d
	IGI Poseidon S.A.	2020	GR/IGI	IB-GRk	252.5 GWh/d

Sponsors

IGI POSEIDON S.A. 100%

General Information

Promoter	*Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A*
Operator	*IGI Poseidon S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-330	EastMed Pipeline

NDP and PCI Information	
Part of NDP ?	*No (Poseidon pipeline is mentioned in the latest Italian NDP in ANNEX 4 (page 76) while in the Greek NDP there is no reference to the project, since it constitutes an Independent Natural Gas System (INGS).)*
NDP Number	
Currently PCI	*Yes (7.1.4)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*06/2003*
Feasibility	*03/2004*	*10/2007*
FEED	*04/2010*	*04/2013*
Market Test		*06/2017*
Permitting	*11/2006*	*12/2016*
Supply Contracts		*12/2017*
FID		*06/2017*
Construction	*12/2017*	*07/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*89.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Poseidon pipeline	In 2015 technical studies have been finalized for the potential upgrade of capacity up to 20 Bcm/yr in order to allow the transportation of gas from sources available at the Greek borders and from the sources recently discovered in East Med region.	808	216	120
Total			**216**	**120**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 creates the connection between the markets of Greece and Italy, enhancing connectivity and market integration, while promoting price convergence. Poseidon strengthens security of supply by promoting diversified sources of gas, potentially from the East Mediterranean, broadens the Southern Gas Corridor and provides reverse flow. Furthermore, by creating more liquidity the project will boost competition leading to more competitive and affordable prices in the markets concerned. The Poseidon pipeline furthers the EU's goal regarding the transition towards a low carbon economy by promoting the use of natural gas and contributing to the displacement of coal while constituting a valuable back up for renewables.

Time Schedule

Grant Obtention Date	28/07/2010
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, Levantine Basin (Cyprus and Israel), offshore Crete and any other gas volumes that could be available at the GR/TU boarders

Comments about the Third-Party Access Regime

The exempted capacity is only relative to the forward flow capacity from Greece to Italy.

Benefits

Main Driver	Market Demand
Main Driver Explanation	The Poseidon pipeline will provide valuable amounts of diversified sources of gas, leading to greater liquidity of the impacted markets, enhancing the competitiveness of prices. Other than Italy (as well as Greece through reverse flow) Poseidon, functioning in complementarity with the SNAM RETE GAS, Adriatica line will enable the delivery of gas to markets in North East Europe where its benefits will also be felt. While market demand is a key driver, the Poseidon pipeline, by allowing gas from the Southern Corridor to European markets, contributes fundamentally to security of supply.
Benefit Description	Through the promotion of diversification of sources, routes and counterparts, Poseidon serves to enhance energy security. In conjunction with the EastMed pipeline, it will enable the delivery of a completely new source, via a new route to reach markets, in Italy and beyond. Moreover, due to the reverse flow function, Poseidon will supply gas from Italy to the Greek system and thereby contribute decisively during disruption periods. As regards Italy, Poseidon creates a new entry point with firm capacity, enhancing the effectiveness of the N-I indicator. The new gas will also lead to greater market liquidity creating conditions for healthy gas trading. Via synergies with the Transitgas pipeline, these benefits and excess gas created can contribute to SoS in regions bordering NE and NW of Italy while SE European market conditions will also be positively influenced through the connection, via Greece, with these more developed, hub-based markets.

Barriers

Barriers Type	Barrier
Permit Granting	The major permits for Poseidon Pipeline have been obtained including the EIA in both Italy and Greece and no significant barriers are foreseen for the remaining permits.
Political	Poseidon Pipeline has been consistently supported by the Greek and Italian Governments.

Others	Poseidon Pipeline was initially conceived to transport gas from the Azeri Shah Deniz 2 field. Following the selection of TAP by the SD2 Consortium, IGI Poseidon is in the process of securing new sources, while maintaining the project's objectives to diversify sources, rotues and counterparts.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Italy-Greece Intergovernmental Agreement		Yes	01/11/2005
Italy-Greece-Turkey Intergovernmental Agreement		Yes	01/07/2007
Joint statement of the Italian Minister of Economic Development and the Turkish Minister of Energy and Natural Resources		Yes	01/11/2009
Memorandum of Understanding between Greece and Turkey		Yes	01/05/2010
Protocol of Cooperation between Italy and Azerbaijan		Yes	01/12/2007

Revythoussa (2nd upgrade)

LNG-F-147	Project	LNG Terminal	FID
Update Date	04/07/2016		Advanced
Description	The projects consists of: - the upgrading of the send-out capacity from 1000 to 1400 m3/h (from 14,14 to 19,82 Nm3/d) - the upgrading of the storage capacity from 130.000 m3 to 225.000 m3 with the addition of a 3rd tank - the increase of maximum ship size from 140.000 to 260.000 m3		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

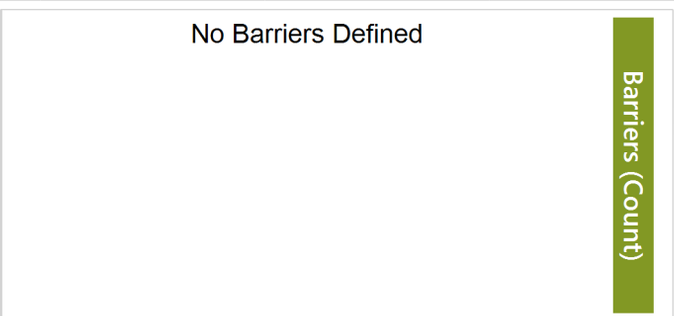
Point	Operator	Year	From Gas System	To Gas System	Capacity
Agia Triada	DESFA S.A.	2017	LNG_Tk_GR	GR	**80.4 GWh/d**

Sponsors

DESFA	100%

General Information

Promoter	*DESFA S.A.*
Operator	*DESFA S.A.*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Development Plan NNGS 2015-2024)*
NDP Number	*2.2.1.5*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		*12/2017*
Commissioning	*2017*	*2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Revythoussa LNG Terminal*	
Expected Volume (bcm/y)	*2*	
Storage Capacity (m3)	*95,000*	*130,000 presently*
Ship Size (m3)	*120,000*	*140.000 presently*
Reloading Ability	*Yes*	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	two quarters
Delay Explanation	Delays in the contract award procedure Delays due to the capital controls imposed in Greece in July 2015

Expected Gas Sourcing

LNG (DZ,WO)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The Revythoussa LNG Terminal plays a significant role regarding the Security of Supply of gas in Greece and the SE Europe region. The project will enhance this role along with its flexibility for serving more shippers. It will also increase the storage capacity of the terminal. The above benefits will also be felt by BG and RO through the reverse flow arrangements or new North-South interconnections

Barriers

Barriers Type	**Barrier**

South Kavala Underground Gas Storage facility

UGS-N-385	Project	Storage Facility	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	The projects consists in converting the offshore depleted gas field of South Kavala to an Underground Gas Storage Facility.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS South Kavala (GR)	Hellenic Republic Asset Management Fund	2022	STcGR	IB-GRk	44.0 GWh/d
	Hellenic Republic Asset Management Fund	2022	IB-GRk	STcGR	55.0 GWh/d

Sponsors

Hellenic Republic Asset Develpment Fund (HRADF)	100%

General Information

Promoter	*Hellenic Republic Asset anagement Fund*
Operator	*Hellenic Republic Asset Management Fund*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Draft*

NDP and PCI Information

Part of NDP ?	*No (The Project Promoter is not a Transmission System Operator and as such does not have the obligation to submit a National Development Plan.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Commissioning	*2022*	*2022*

Technical Information (UGS)

Storage Facility	*South Kavala*
Storage Facility Type	*Aquifer*
Multiple-Cycle	*Yes*
Working Volume (mcm)	*360.00*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Decision on the procedure to select the project promoter and time needed to prepare the relevant tender procedure.

Expected Gas Sourcing

Caspian Region, Russia, LNG (?), The project may source gas from all gas sources supplying or transitting Greece

Comments about the Third-Party Access Regime

At the present stage of maturity of the project the tariff regime is not known. It is possible that the project capacity might be split into a part under regulated tariff and a part under negociated access.

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The project will enhance the national and regional (GR, BG, RO) security of supply and will help Users benefit from market oppportunities, especially in the LNG market. Given the proximity of the project location to the TAP route the benefits might also reach Italy.

Barriers	
Barriers Type	Barrier
Market	Lack of market maturity

Trans Adriatic Pipeline

TRA-F-051	Project	Pipeline including CS	FID
Update Date	24/05/2016		Advanced
Description	The Trans Adriatic Pipeline (TAP) will transport natural gas from Kipoi in Greece near the Greek/Turkish border, via Albania and across the Adriatic Sea, to Italy's southern Puglia region in Province of Lecce. In its upstream part, TAP will interconnect with TANAP which is linked further to the east with systems in Turkey, to secure access to the Shah Deniz natural gas field in Azerbaijan and tie into Italy's gas transportation grid operated by Snam Rete Gas in the province of Lecce. TAP's capacity can be expanded up to a total of 20 bcm/a, subject to binding market demand. The Expansion Capacity will be offered to the market via market tests, from no later than start of operations and subsequently every two years.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gostivar (MK) / TAP	Trans-Adriatic Pipeline AG	2019	GR/TAP	MK	25.0 GWh/d
	Point not in TAP's initial design. GCV used for capacity calculations: 11.071 kWh/Sm3. Incremental capacity available for allocation is subject to a check of the system's capabilities and dependent on the capacity bookings in place.				
Ionic-Adriatic Pipeline - IAP Entry	Trans-Adriatic Pipeline AG	2019	GR/TAP	IB-HRi/IAP	150.0 GWh/d
	Point not in TAP's initial design. GCV used for capacity calculations: 11.071 kWh/Sm3. Incremental capacity available for allocation is subject to a check of the system's capabilities and dependent on the capacity bookings in place.				
Kipi (TR) / Kipi (TAP)	Trans-Adriatic Pipeline AG	2019	TR/TNP	GR/TAP	350.0 GWh/d
	GCV used for capacity calculations: 11.071 kWh/Sm3.				
Komotini - TAP / IGB	Trans-Adriatic Pipeline AG	2019	GR/TAP	BG/IGB	142.0 GWh/d
	GCV used for capacity calculations: 11.071 kWh/Sm3.				
Melendugno - IT / TAP	Trans-Adriatic Pipeline AG	2019	GR/TAP	IB-ITs	334.0 GWh/d

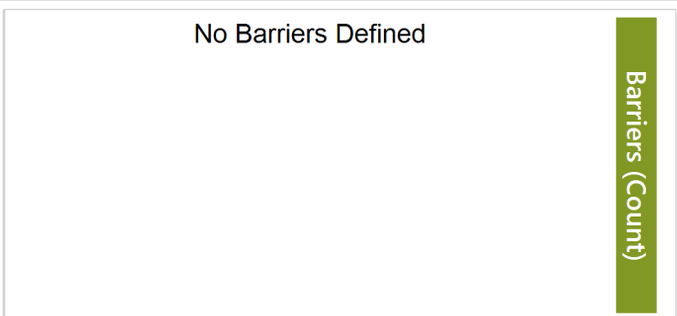
Melendugno - IT / TAP					GCV used for capacity calculations: 11.071 kWh/Sm3.
	Trans-Adriatic Pipeline AG	2019	GR	GR/TAP	**142.0 GWh/d**
					GCV used for capacity calculations: 11.071 kWh/Sm3. Incremental capacity available for allocation is subject to a check of the system's capabilities and dependent on the capacity bookings in place.
Nea Mesimvria					
	Trans-Adriatic Pipeline AG	2019	GR/TAP	GR	**142.0 GWh/d**
					GCV used for capacity calculations: 11.071 kWh/Sm3. Incremental capacity available for allocation is subject to a check of the system's capabilities and dependent on the capacity bookings in place.

Sponsors

BP	20%
Snam	20%
SOCAR	20%
Fluxys	19%
Enagas	16%
Axpo	5%

General Information

Promoter	*Trans Adriatic Pipeline AG*
Operator	*Trans-Adriatic Pipeline AG*
Host Country	*Greece*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (The TAP project is being developed on a stand-alone basis, independent from the national transmission systems of Greece, Albania and Italy.)*
NDP Number	
Currently PCI	*Yes (7.1.3)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2008*	*03/2013*
Market Test		*11/2014*
Permitting	*09/2011*	*03/2017*
Supply Contracts		*09/2013*
FID		*12/2013*
Construction	*05/2016*	*12/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Negotiated*
Considered Tariff Regime	*Negotiated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*100.00%*
% Exemption in exit direction	*100.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Main onshore section	48" onshore section Greece and Albania	1,200	773	90
Offshore section	36" offshore sectoin and short onshore section Italy	900	105	90
Total			**878**	**180**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region

Comments about the Third-Party Access Regime

Initial Capacity exempted from third party access. Expansion Capacity is subject to third party access and will be offered to the market via market tests, fromm no later than start of operations and subsequently every two years.

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	TAP will contribute to the security and diversity of Europe's energy supply by connecting to existing gas networks and will allow gas to flow directly from the Caspian basin into European markets. TAP will be providing the necessary infrastructure to transport gas from the Shah Deniz field in Azerbaijan by the most direct route to Southern Europe.

Barriers

Barriers Type Barrier

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Host-government agreement between TAP and Albania	The HGA is designed to fill legal, regulatory and fiscal caviats to mitigate commercial risks and thereby provide the necessary investor protection to ensure that the project is built and enable construction and operation in accordance with high standards	Yes	05/04/2013
Host-government agreement between TAP and Greece	The HGA is designed to fill legal, regulatory and fiscal caviats to mitigate commercial risks and thereby provide the necessary investor protection to ensure that the project is built and enable construction and operation in accordance with high standards	Yes	26/06/2013
Inter-governmental Agreements (only applicable for import pipeline projects	An IGA between Italy, Greece and Albania has formalized the state parties' support for the TAP project, ensure cross-country harmonization of standards in order to facilitate the implementation of TAP and provide the necessary investor protection measure	Yes	13/02/2013
Inter-ministerial agreement between Italy, Albania and Greece	An inter-ministerial agreement between Italy, Albania and Greece is required under Italian law to commence the TPA exemption application process in Italy.	Yes	27/09/2012

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	
Plinacro	100%

General Information	
Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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	
Part of NDP ?	*Yes (2017-2026)*

Schedule	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime	
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 (6.24.3)*	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, 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	
Delay Explanation	

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 neccessary 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.

Barriers

Barriers Type	**Barrier**

Compressor stations 2 and 3 at the Croatian gas tranmission system

TRA-N-1057	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2020	LNG_Tk_HR	HR	39.0 GWh/d
Dravaszerdahely	Plinacro Ltd	2020	HR	HU	39.0 GWh/d
	Plinacro Ltd	2020	HU	HR	56.3 GWh/d

Sponsors

Plinacro	100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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	
Part of NDP ?	*Yes (2017-2026)*
NDP Number	*5.2 and 5.3*
Currently PCI	*Yes (6.24.3)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*01/2017*	*01/2020*
Supply Contracts		
FID		*01/2018*
Construction	*01/2018*	*01/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 neccessary 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.

Barriers	
Barriers Type	Barrier

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

TRA-N-066	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica- Bosanski Brod-Zenica	Plinacro Ltd	2019	BA	HR	146.0 GWh/d
	Plinacro Ltd	2019	HR	BA	146.0 GWh/d

Sponsors

B&H, Bosanski Brod - Zenica

BH Gas 100%

Croatia, Slobodnica-Bosanski Brod (border)

Plinacro 100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.13*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*08/2016*
Permitting	*01/2011*	*01/2019*
Supply Contracts		
FID		*12/2017*
Construction	*01/2018*	*01/2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*70.00%*
% Exemption in exit direction	*30.00%*

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, 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 fullffilling and the folloving criteria: Lifting isolation for Bosnia and Herzegovina, reducing bottelnecks, 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	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.

Benefit Description	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 anable 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.

Barriers

Barriers Type	Barrier
Political	This project is politicaly very sensitive and depends on the agreement with Republika Srpska and agremments within B&H and its TSOs (BH Gas and GasRES)

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

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

TRA-N-070	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica - Sotin (HR) / Bačko Novo Selo (RS)	Plinacro Ltd	2023	HR	RS	205.0 GWh/d
	Plinacro Ltd	2023	RS	HR	205.0 GWh/d

Sponsors

Croatian section

Plinacro	100%

Serbian section

Srbijagas	100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.11, 1.12*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*08/2016*
Permitting	*01/2010*	*10/2023*
Supply Contracts		
FID		*10/2021*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*70.00%*
% 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, 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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	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
Benefit Description	It will be new entry point and transmission route for the needs of Serbia

Barriers

Barriers Type	Barrier

Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)

TRA-F-86	Project	Pipeline including CS	FID
Update Date	25/05/2016		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 For Modelling

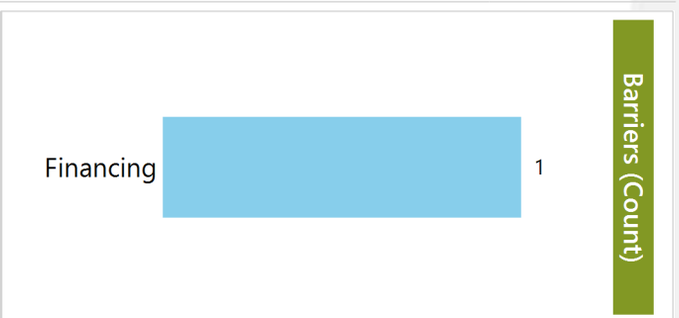
Point	Operator	Year	From Gas System	To Gas System	Capacity
Rogatec	Plinacro Ltd	2019	HR	SI	**146.0 GWh/d**
	For calculating the capacity expressed in u bcm [billion cubic meters/y] into GWh/d net calorific value of gas was used [NCV @15 degC/15degC], which is 9,611 kWh/m3.				
	Plinacro Ltd	2019	SI	HR	**146.0 GWh/d**
	For calculating the capacity expressed in u bcm [billion cubic meters/y] into GWh/d net calorific value of gas was used [NCV @15 degC/15degC], which is 9,611 kWh/m3.				

Sponsors

Plinacro	100%

General Information

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 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	*1.24, 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, 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

Barriers Type	Barrier
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

Interconnection Croatia/Slovenia (Umag-Koper)

TRA-N-336	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		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 alocated 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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sečovlje (SI) / Plovanija (HR)	Plinacro Ltd	2026	HR	SI	14.6 GWh/d
	Plinacro Ltd	2026	SI	HR	14.6 GWh/d

Sponsors

Plinacro	100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.34*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction	*04/2026*	*11/2026*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*70.00%*
% Exemption in exit direction	*30.00%*

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**	

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

LNG (HR), Croatian gas transmission system

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Interconnection Croatia-Bosnia and Herzegovina (South)

TRA-N-302	Project	Pipeline including CS	Non-FID Advanced
Update Date	23/05/2016		
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 dievrsifed natural gas supply. The pipeline will enable the flow of IAP to Bosnia and Herzegovina		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Posušje	Plinacro Ltd	2021	BA	HR/IAP	73.0 GWh/d
	Plinacro Ltd	2021	HR/IAP	BA	73.0 GWh/d

Sponsors

Croatian part of both options

Plinacro d.o.o. 100%

parts in B&H

BH Gas 100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.3*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*09/2013*
Feasibility		
FEED		
Market Test		
Permitting	*08/2014*	*01/2021*
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% 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, 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	
Delay Explanation	

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.

Barriers

Barriers Type	**Barrier**

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	22/05/2016		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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rakovica (HR) / Trzac (BA)	Plinacro Ltd	2026	BA	HR	73.0 GWh/d
	Plinacro Ltd	2026	HR	BA	73.0 GWh/d

Sponsors

Croatian part

Plinacro d.o.o. 100%

part in B&H

BH Gas 100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.32 and 1.33*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting	*12/2012*	*09/2026*
Supply Contracts		
FID		*12/2024*
Construction	*04/2025*	*11/2026*
Commissioning	*2026*	*2026*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*70.00%*
% Exemption in exit direction	*30.00%*

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**	

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

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

Barriers Type	Barrier
Market	Lack of market maturity
Market	Lack of market support

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

Ionian Adriatic Pipeline

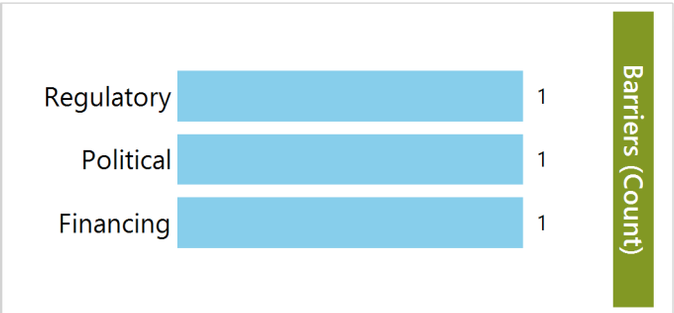
TRA-N-068	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	The pipeline will cross the territory along the Adriatic coast from Fieri in Albania via Montenegro to Split in Croatia and will be linked to the existing Croatian gas transmission system (main direction Bosiljevo – 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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Ionic-Adriatic Pipeline - IAP / AB	Plinacro Ltd	2023	HR/IAP	AL	30.0 GWh/d
Ionic-Adriatic Pipeline - IAP / ME	Plinacro Ltd	2023	HR/IAP	ME	15.0 GWh/d
Ionic-Adriatic Pipeline - IAP / Split - HR	Plinacro Ltd	2022	HR	HR/IAP	75.0 GWh/d
	Plinacro Ltd	2023	HR/IAP	HR IT is Exit Croatia	75.0 GWh/d
Ionic-Adriatic Pipeline - IAP Entry	Plinacro Ltd	2023	IB-HRi/IAP The Entry point is from TAP in Fieri	HR/IAP	150.0 GWh/d

Sponsors	
Bosnia and Herzegovina	
BH Gas (Bosnia and Herzegovina); Ministry of Foreign Trade and Economic Relations (BiH)	100%
Croatia (From Split to Montenegro border)	
Plinacro Ltd; Ministry of Economy (Croatia)	100%
Fieri to Montenegro border	
Ministry of Economy , Trade and Energy (Albania), Albpetrol	100%
Montenegro	
Ministry of Economy (Montenegro), Montenegro Bonus Ltd	100%

General Information	
Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.1, 1.2,1.4,1.5,5.4*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*01/2008*
Feasibility	*05/2012*	*02/2014*
FEED		
Market Test		
Permitting	*07/2009*	*01/2023*
Supply Contracts		
FID		*01/2019*
Construction	*01/2020*	*01/2023*
Commissioning	*2022*	*2023*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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- Montenego 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, 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

Barriers Type	Barrier
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 enegry of Albania, Montenegro and Croatia, from dezember 2008, Bosnia and Herzegovina signed as well	Yes	27/09/2007

LNG Evacuation Pipeline Kozarac-Slobodnica

TRA-N-1058	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2023	LNG_Tk_HR	HR	99.0 GWh/d
Dravaszerdahely	Plinacro Ltd	2023	HR	HU	53.0 GWh/d
	Plinacro Ltd	2023	HU	HR	51.0 GWh/d

Sponsors

Plinacro	100%

General Information

Promoter	*Plinacro Ltd*
Operator	*Plinacro Ltd*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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 (2.5.2)*	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, 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	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	
Barriers Type	**Barrier**

LNG evacuation pipeline Omišalj - Zlobin (Croatia)

TRA-N-90	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

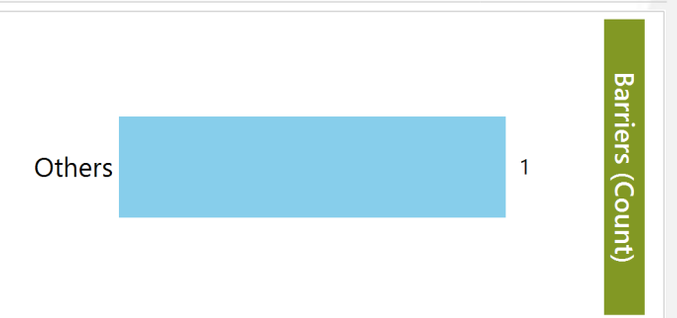
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2018	LNG_Tk_HR	HR	47.0 GWh/d
Dravaszerdahely	Plinacro Ltd	2018	HR	HU	47.0 GWh/d
			It is necessary to use and CS1		

Sponsors

Plinacro	100%

General Information

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-1058	LNG Evacuation Pipeline Kozarac-Slobodnica

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*

Schedule

	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

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, 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	
Barriers Type	**Barrier**
Others	The project completly depends on the realisation of the Krk LNG project

LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

TRA-N-075	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		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 For Modelling

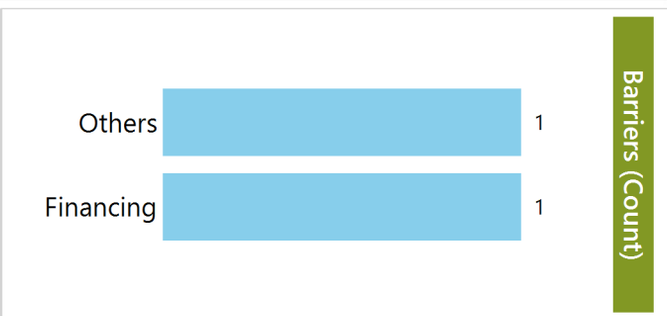
Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2020	LNG_Tk_HR	HR	**45.0 GWh/d**
Dravaszerdahely	Plinacro Ltd	2020	HR	HU	**45.0 GWh/d**

Sponsors

Plinacro	100%

General Information

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

NDP and PCI Information

Part of NDP ?	*Yes (2017-2026)*
NDP Number	*1.18, 1.19, 1.20*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*09/2015*	*10/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
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, 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	
Barriers Type	**Barrier**
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 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

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 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	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 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
Croatia LNG	LNG Hrvatska d.o.o.	2024	LNG_Tk_HR	HR	**100.0 GWh/d**

If market demands, expand (with minimum investment in re-gasificators) the LNG terminal send-out

COD - 2024+

Capacity Increments 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
Croatia LNG	LNG Hrvatska d.o.o.	2023	LNG_Tk_HR	HR	**40.0 GWh/d**

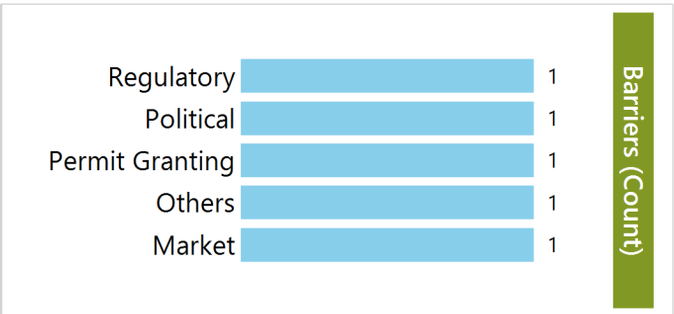
In case that the limited volume risk condition is reached, expansion

Introduction of the second tank to allow peak management

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

Sponsors	
HEP d.d.	50%
Plinacro d.o.o.	50%

General Information	
Promoter	*LNG Hrvatska d.o.o. za poslovanje ukapljenim prirodnim plinom*
Operator	*LNG Hrvatska d.o.o.*
Host Country	*Croatia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (Desetogodišnji plan razvoja plinskog...)*
NDP Number	*6.5.1.*
Currently PCI	*Yes (6.5.1.)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*01/2013*
Feasibility	*07/2012*	*01/2014*
FEED	*06/2015*	*12/2015*
Market Test		*10/2015*
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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 pepeline 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 bearth 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, 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_2emissions in the region, facilitating economic development, etc.

Barriers

Barriers Type	Barrier
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

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 For Modelling

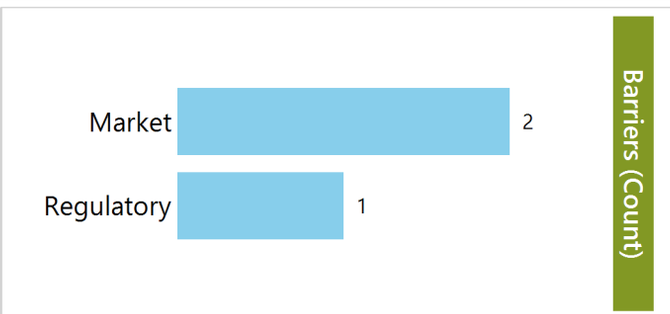
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota 2	FGSZ Ltd.	2024	HU	RO	145.5 GWh/d
	FGSZ Ltd.	2024	RO	HU	145.5 GWh/d
Mosonmagyarovar 2	FGSZ Ltd.	2024	AT	HU	145.5 GWh/d
	FGSZ Ltd.	2024	HU	AT	145.5 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
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	Városföld CS
TRA-N-061	Ercsi-Szazhalombatta
TRA-N-018	Városföld-Ercsi-Győr

NDP and PCI Information	
Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.13.1.-12.14.7*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2015*
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		*12/2023*
Commissioning	*2024*	*2024*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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,
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	

Benefit Description

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

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

Promoter	*Magyar Gáz Tranzit Zrt.*
Operator	*MGT Hungarian Gas Transit Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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

Part of NDP ?	*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 dosn't propose it for approval.)*
NDP Number	

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

		Construction		
Currently PCI	*Yes (TRA-N-636)*	Commissioning	*2017*	*2017*
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)
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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers

Barriers Type	Barrier

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 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**
	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**
	New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	FGSZ Ltd.	2025	HU/EAR	RO/EAR	**570.0 GWh/d**
	FGSZ Ltd.	2025	RO/EAR	HU/EAR	**570.0 GWh/d**
Eastring HU Domestic Point	FGSZ Ltd.	2021	HU	HU/EAR	**570.0 GWh/d**
	FGSZ Ltd.	2021	HU/EAR	HU	**570.0 GWh/d**

Sponsors	
FGSZ Ltd.	100%

General Information	
Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information	
Part of NDP ?	*Yes (Eastring pipeline)*
NDP Number	*12.16*
Currently PCI	*Yes (Not Defined yet)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*05/2016*	*04/2017*
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2021*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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	
Delay Explanation	

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;

Barriers	
Barriers Type	**Barrier**

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 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
Vecsés MGT / FGSZ	MGT Hungarian Gas Transit Ltd.	2017	HU	HUi	102.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2017	HUi	HU	26.0 GWh/d

Sponsors

General Information

Promoter	*Magyar Gáz Tranzit Zrt.*
Operator	*MGT Hungarian Gas Transit Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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	
Part of NDP ?	*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 dosn't propose it for approval.)*
NDP Number	
Currently PCI	*Yes (TRN-A-524)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2017*	*2017*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	

Delay Explanation

Expected Gas Sourcing

Norway, Russia, LNG (HR,PL)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.9.*
Currently PCI	*Yes (6.24.5)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2014*
Feasibility	*09/2016*	*07/2017*
FEED	*11/2018*	*04/2020*
Market Test		*12/2016*
Permitting	*05/2017*	*09/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

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,
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	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

Barriers Type	Barrier

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

FGSZ Ltd.	100%

General Information

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*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12-11*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
hajdúszoboszló CS				6
Hajduszoboszlo 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	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.

Barriers	
Barriers Type	**Barrier**

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 accoridng 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 For Modelling

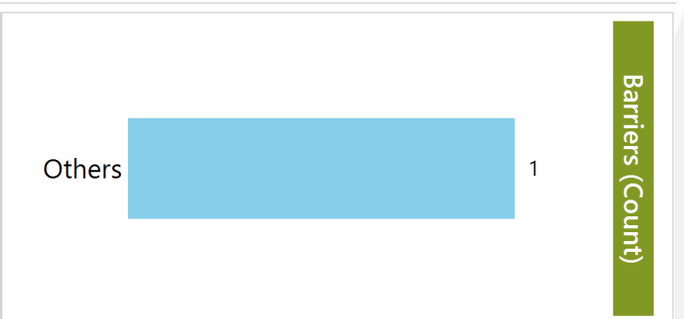
Point	Operator	Year	From Gas System	To Gas System	Capacity
TESLA / HU Offtake	FGSZ Ltd.	2020	HU/TLA	HU	**175.0 GWh/d**
TESLA / RS>HU	FGSZ Ltd.	2020	RS/TLA	HU/TLA	**582.0 GWh/d**

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.15.1. - 12.15.2.*
Currently PCI	*Yes (6.25.2.)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2015*
Feasibility	*01/2017*	*12/2017*
FEED	*10/2016*	*03/2018*
Market Test		*10/2016*
Permitting	*10/2016*	*03/2018*
Supply Contracts		*08/2018*
FID		*03/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% 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,
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

Barriers Type	Barrier
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 For Modelling

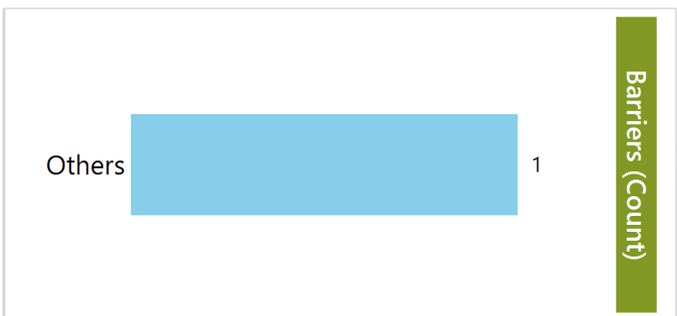
Point	Operator	Year	From Gas System	To Gas System	Capacity
Beregdaróc 800 (HU) - Beregovo (UA) (HU>UA)	FGSZ Ltd.	2020	HU	UAe	180.0 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.17.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	
Barriers Type	**Barrier**
Others	Financing difficulties.

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 For Modelling

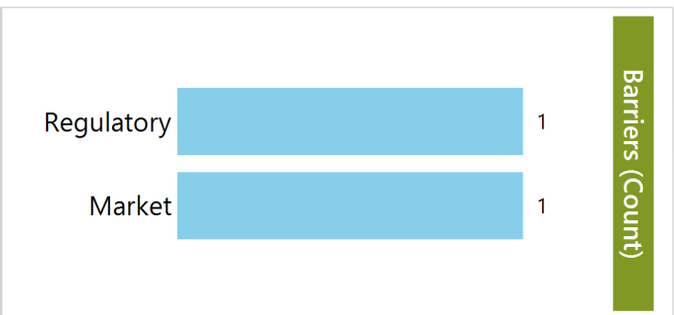
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	FGSZ Ltd.	2020	RO	HU	48.9 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.6.1.*
Currently PCI	*Yes (6.24.1)*
CBCA Decision	*Yes (2016-10-06)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2014*
Feasibility	*09/2016*	*07/2017*
FEED	*07/2018*	*10/2018*
Market Test		*12/2016*
Permitting	*07/2018*	
Supply Contracts		*06/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% 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, 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

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

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 For Modelling

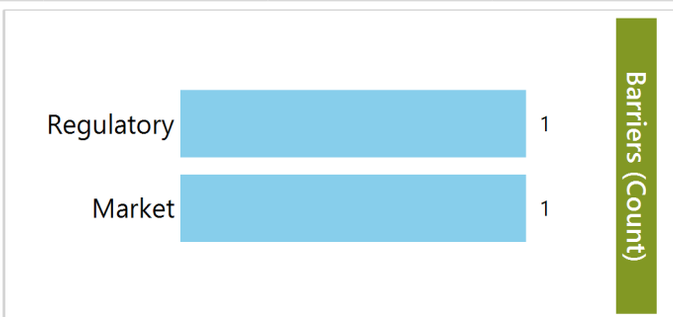
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	FGSZ Ltd.	2022	HU	RO	76.5 GWh/d
	FGSZ Ltd.	2022	RO	HU	76.5 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
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

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.6.1.*
Currently PCI	*Yes (6.24.9.)*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2014*
Feasibility	*09/2016*	*07/2017*
FEED	*11/2018*	*04/2020*
Market Test		*12/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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, 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

Barriers Type	Barrier
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 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
	1/3 is firm capacity+2/3 is interuptible capacity				
	FGSZ Ltd.	2020	SI	HU	38.2 GWh/d
	1/3 is firm capacity + 2/3 is interruptible capacity				

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (Hungarien TYNDP 2015)*
NDP Number	*12.12.1.-12.12.2*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2015*
Feasibility	*05/2016*	*12/2017*
FEED	*06/2017*	*11/2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
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,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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.

Barriers	
Barriers Type	Barrier

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 For Modelling

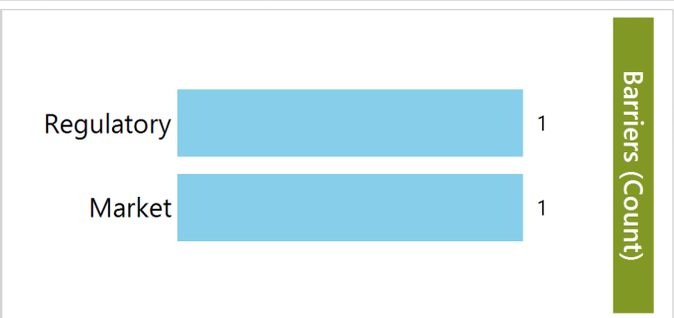
Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyarovar	FGSZ Ltd.	2022	AT	HU	25.0 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

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
TRA-N-286	Romanian-Hungarian reverse flow Hungarian section 1st stage

NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.10.*
Currently PCI	*Yes (6.24.6.)*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2014*
Feasibility	*09/2016*	*07/2017*
FEED	*11/2018*	*04/2020*
Market Test		*12/2016*
Permitting	*05/2017*	*09/2018*
Supply Contracts		*04/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% 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,
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

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

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 Mosonmagyarovar interconnection point to reach its full capacity of 153 GWh/d from Austria to Hungary.It will also enable the Mosonmagyarovar 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 For Modelling

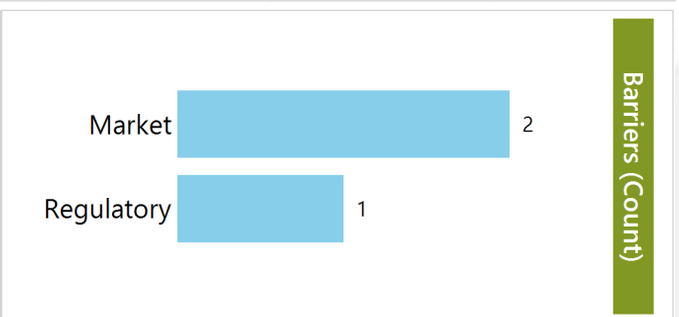
Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyarovar	FGSZ Ltd.	2022	AT	HU	25.0 GWh/d
	FGSZ Ltd.	2022	HU	AT	153.0 GWh/d

Sponsors

FGSZ Ltd.	100%

General Information

Promoter	*FGSZ Ltd.*
Operator	*FGSZ Ltd.*
Host Country	*Hungary*
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	Városföld CS

NDP and PCI Information

Part of NDP ?	*Yes (Hungarian TYNDP 2015)*
NDP Number	*12.7.*

Schedule

	Start Date	End Date
Pre-Feasibility		*06/2014*
Feasibility	*09/2016*	*07/2017*
FEED	*11/2018*	*04/2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
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, 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

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

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 Interconnecton 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

Promoter	*Magyar Gáz Tranzit Zrt.*
Operator	*MGT Hungarian Gas Transit Ltd.*
Host Country	*Hungary*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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

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.)*
NDP Number	

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

		Construction		
Currently PCI	*No*	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, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	

Barriers

Barriers Type	Barrier

Physical Reverse Flow on South North Pipeline

TRA-N-071	Project	Pipeline including CS	Non-FID
Update Date	17/05/2016		Non-Advanced
Description	Currently gas flow between Ireland & Northern Ireland via the South North Pipeline is uni-directional (at the Gormanston Interconnection Point)		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
South North CSEP	Gas Networks Ireland	2022	UKn/BGI	IE	27.6 GWh/d
	PremierTransmission Ltd may also be a potential TSO under 'From TSO'				

Sponsors

Gas Networks Ireland	100%

General Information

Promoter	*Gas Networks Ireland*
Operator	*Gas Networks Ireland*
Host Country	*Ireland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Gaslink, Network development Plan 2013)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*05/2018*
Feasibility	*06/2018*	*05/2019*
FEED	*06/2019*	*05/2020*
Market Test		*06/2018*
Permitting	*06/2020*	*05/2021*
Supply Contracts		
FID		
Construction	*06/2021*	*12/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	The work would involve compression and tie-in facilities to the Irish onshore transmission system. To be determined post feasibility study.			
Total				

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	
Benefit Description	1.Physical reverse flow between Ireland and Northern Ireland is beneficial to the development of an integrated market on the island of ireland, having significant importance in the development and operation of a single gas market between both jurisdictions. 2. It would widen the market that is available to Northern Ireland gas market participants. 3. Contributes to the viability of LNG and storage projects.

Barriers	
Barriers Type	Barrier

Shannon LNG Terminal and Connecting Pipeline

LNG-N-030	Project	LNG Terminal	Non-FID
Update Date	19/05/2016		Non-Advanced
Description	Shannon LNG proposes to construct a liquefied natural gas (LNG) terminal on the southern shore of the Shannon Estuary in County Kerry, Ireland. Shannon LNG has obtained all of the major permits and consents for the LNG project including planning permission for the terminal and 26 KM export pipeline, pipeline rights of way and foreshore leases and licenses. Shannon LNG has planning permission to bulid a 500 MW CHP plant and associated 220 kV transmission infrastructure to connect the CHP plant to the national grid. The Shannon LNG terminal is designed and permitted to export to the national gas grid up to 26.8 million normal cubic metres per day of natural gas. It is currently envisaged the project will have initial deliverability of 16.1 normal million cubic metres per day.		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*Shannon LNG*
Operator	*Shannon LNG*
Host Country	*Ireland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Gas Networks Ireland 2015 Network Development Plan)*
NDP Number	*PCI 5.3*
Currently PCI	*Yes (Project Code 5.3 under Commission Delegated Regulation (EU) No 1391/2013)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		*05/2006*
Feasibility	*05/2006*	*09/2007*
FEED	*07/2016*	*06/2017*
Market Test		*01/2010*
Permitting	*10/2007*	*12/2009*
Supply Contracts		*06/2018*
FID		*06/2018*
Construction	*07/2018*	*06/2021*
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Negotiated*
Considered Tariff Regime	*Negotiated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*Shannon LNG Limited*			
Expected Volume (bcm/y)	*3*	*Year1: 2.7*	*Year2: 2.9*	*Year3: 3.4*
Storage Capacity (m3)	*200,000*	*up to 800,000 at full build out.*		
Ship Size (m3)	*265,000*	*Up to 265,000 m3 LNG*		
Reloading Ability	*No*			

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Shannon Pipeline	The pipeline is part of the core project and will connect the LNG terminal to the National Gas Grid.			
Total				

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	Ireland currently fails the EU's Infrastructure Standard N-1 test under Regulation EU 994 of 2010 and has to rely on a regional approach with Great Britain (GB) to pass this important test. The Shannon LNG project, at full capacity, would allow Ireland to pass the N-1 test and provide the added benefit of increasing the resilience of the GB system. This will also have the effect of increasing the resilience of the Great Britain gas supply system as approximately 5 billion cubic metres per annum of demand could be removed from the GB System. The UK's DECC published a National Preventive Action Plan in November 2012 in line with the requirements of Regulation (EU) 994/2010.The DECC report stated (page 19) the following with respect to the impact of the Shannon LNG project on Northern Ireland (part of the UK) "Additionally the CAG project also aims to develop a regional gas market within the context of the wider EU Internal Market in gas where Northern Ireland gas consumers could access

Time Schedule

Grant Obtention Date	01/01/2015
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	Ireland currently fails the EU's Infrastructure Standard N-1 test under Regulation EU 994 of 2010 and has to rely on a regional approach with Great Britain (GB) to pass this important test. The Shannon LNG project, at full capacity, would allow Ireland to pass the N-1 test and provide the added benefit of increasing the resilience of the GB system. This will also have the effect of increasing the resilience of the Great Britain gas supply system as approximately 5 billion cubic metres per annum of demand could be removed from the GB system. The Shannon LNG terminal would establish a new supply point for natural gas on the western edge of Europe, thereby facilitating greater West to East flows of natural gas and reducing Europe's reliance on East to West flows.
Benefit Description	The Shannon LNG project will increase Irelands security of gas supply. Ireland imports over 90% of its gas via two pipelines from Scotland. Ireland is unable to meet its N-1 Infrastruture requirements under Regulation (EU) No 994/2010 demonstrated in the Commission for Energy Regulations Consultation Paper "Draft National Preventive Action Plan – Gas 2012-2014 Ireland" (CER/12/088)). If the permitted ultimate capacity from the Shannon LNG terminal is added to the CER's calculation, the result demonstrates that the Shannon LNG terminal has the potential to satisfy the N-1 infrastructure requirement. The initial phase of the Shannon LNG project (16.1 mcm/d) will be capable of supplying approximatly 60% of forecast Irish peak demand (26.6 mcm/d) for 2020/2021 (Calculated using 1 in 50 Winter Peak Day Demand Scenario forecast, CER 2012 Joint Gas Capacity Statement). The proposed LNG terminal will increase market integration and system flexibility by providing a new gas supply route to

Barriers	
Barriers Type	**Barrier**

Additional Southern developments

TRA-N-009	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The project consists in new on-shore and off-shore pipelines and in development of compressor stations along the center-south of Italy to permit the increase of transport capacity at new or existing Entry Points in south Italy.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Italy Mezzogiorno Import Fork	Snam Rete Gas S.p.A.	2034	IB-ITs	IT	264.0 GWh/d
	Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSOG considers the capacity increment as relevant for modelling purposes in the final year of the publication (2035).				
Italy Southern Import Fork	Snam Rete Gas S.p.A.	2034	IB-ITi	IB-ITs	264.0 GWh/d
	Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSOG considers the capacity increment as relevant for modelling purposes in the final year of the publication (2035).				

Sponsors

Snam Rete Gas s.p.a.	100%

General Information

Promoter	*Snam Rete Gas S.p.A.*
Operator	*Snam Rete Gas S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*TRA-N-009(into text)*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

		Market Test			
CBCA Decision	*No*	Permitting		% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	Supply Contracts		% Exemption in exit direction	*0.00%*
		FID			
		Construction			
		Commissioning	*2034*	*2034*	

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Section 1		800	255	0
Section 2		1,050	115	0
Section 3		1,200	590	0
Section 4		0	0	60
Total			**960**	**60**

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Security of Supply, Market integration, Diversification of sources, N-1 National (ITALY), Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), Flexibility of the system.

Barriers	
Barriers Type	**Barrier**

Bordolano first phase

UGS-F-259	Project	Storage Facility	FID
Update Date	13/06/2016		Advanced
Description	The project is to convert the depleted reservoir of Bordolano, into a reservoir for the storage of methane gas.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/STOGIT	STOGIT	2016	STcIT	IT	32.0 GWh/d
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				
	STOGIT	2016	IT	STcIT	109.0 GWh/d
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				

Sponsors

Stogit	100%

General Information

Promoter	*STOGIT*
Operator	*STOGIT*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*NA*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	FID		% Exemption in exit direction	*0.00%*
		Construction			
		Commissioning	*2016*	*2016*	

Technical Information (UGS)

Storage Facility	*Bordolano*	
Storage Facility Type	*Depleted Field*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*379.00*	*Total w.g. of Bordolano (first + second phases) is 1136 M Nmc*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

Barriers

Barriers Type	**Barrier**

Bordolano Second phase

UGS-F-1045	Project	Storage Facility	FID
Update Date	13/06/2016		Advanced
Description	The project is related to the conversion of the depleted reservoir of Bordolano, into a reservoir for the storage of methane gas		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/STOGIT	STOGIT	2019	STcIT	IT	185.0 GWh/d
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				
	STOGIT	2019	IT	STcIT	109.0 GWh/d
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				

Sponsors

General Information

Promoter	*STOGIT S.p.A.*
Operator	*STOGIT*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*NA*
Currently PCI	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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*		

Technical Information (UGS)

Storage Facility	*Bordolano*	
Storage Facility Type	*Depleted Field*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*757.00*	*the entire w.g. volume of Bordolano (first + second phases) is 1.136 M Nmc*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

Barriers

Barriers Type	**Barrier**

Development for new import from the South (Adriatica Line)

TRA-N-007	Project	Pipeline including CS	Non-FID
Update Date	13/06/2016		Non-Advanced
Description	The project consists in new on-shore pipeline and compressor station along the center-south of Italy that will allow the increase of transport capacity at new or existing Entry Points in south Italy.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Italy Mezzogiorno Import Fork	Snam Rete Gas S.p.A.	2023	IB-ITs	IT	**264.0 GWh/d**

Sponsors

Snam Rete Gas s.p.a.	100%

General Information

Promoter	*Snam Rete Gas S.p.A.*
Operator	*Snam Rete Gas S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*TRA-N-007(into text)*
Currently PCI	*Yes (6.18)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
All the pipe		1,200	430	33
Total			**430**	**33**

PCI Details	
PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project fulfills also the criteria of diversification of sources, diversification of routes, N-1 National (Italy), back-up for renewables, power-to-gas, market Integration (Increase of competition) and flexibility of the system.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Security of supply, diversification of sources, diversification of routes, N-1 National (Italy), back-up for renewables, power-to-gas, market Integration (Increase of competition) and flexibility of the system.

Barriers	
Barriers Type	**Barrier**

GALSI Pipeline Project

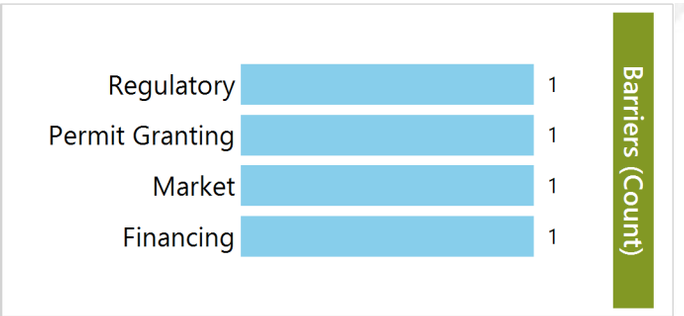
TRA-N-012	Project	Pipeline including CS	Non-FID
Update Date	09/05/2016		Advanced
Description	Gas pipeline project aiming to create a new link between Algeria and Italy via Sardinia. It will be the first direct route between Algeria and Italy transporting 8 billions mc of gas. From El Kala (Koudiet Draouche) in Algeria an offshore section will cross the Mediterranean Sea going down to 2.800 m of depth getting to Porto Botte in Sardinia (which will be the entry point in the Italian RNG - Rete Nazionale Gasdotti or Gas National Network). From Porto Botte an onshore section will cross Sardinia towards Olbia in the north of the island (with 39 offtake point along the route to finally bring the long awaited gas to Sardinian users and thus remove the isolation of Sardinia from RNG). From Olbia then another offshore section of the pipeline will cross the Tyrrhenian Sea at around 800 m of depth to get to Piombino in Tuscany where the pipeline will be connected with the existing Rete Nazionale Gasdotti of Snam Rete Gas.		
Regulatory Decisions and similar material conditions	The Project has already received from the competent Italian Ministry (Ministero dello Sviluppo Economico) a Priority Allocation (Allocazione Prioritaria) for 100% of its capacity for a period of 25 years.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Koudiet Eddraouch (Galsi) (DZ)	Galsi S.p.A.	2019	DZ	DZi/GAL	258.0 GWh/d
			Entry of GALSI International Section Increment is equivalent to 8 bcm/y		
Olbia (Galsi)	Galsi S.p.A.	2019	ITs	ITn/GAL	258.0 GWh/d
			Increment is equivalent to 8 bcm/y		
	Galsi S.p.A.	2019	ITn/GAL	ITs	32.0 GWh/d
				Equivalent to 1 bcm/y	
Piombino (Galsi)	Galsi S.p.A.	2019	ITn/GAL	IB-ITs	226.0 GWh/d
				Equivalent to 7 bcm/y	
Porto Botte (Galsi)	Galsi S.p.A.	2019	DZi/GAL	ITs	258.0 GWh/d
			Exit of GALSI International Section Increment is equivalent to 8 bcm/y		

Sponsors	
Sonatrach	47%
Edison SpA	23%
Enel Produzione SpA	17%
Hera SpA	11%

General Information	
Promoter	*Galsi S.p.A.*
Operator	*Galsi S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*Yes (SNAM NDP 2015 (page 61))*
NDP Number	*n.a.*
Currently PCI	*Yes (5.20)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2006*
Feasibility	*01/2006*	*12/2006*
FEED	*01/2007*	*12/2010*
Market Test		*10/2010*
Permitting	*07/2008*	*05/2016*
Supply Contracts		*05/2016*
FID		*05/2016*
Construction	*06/2016*	*06/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
GALSI International Section	The GALSI International Section includes a compression station on the Algerian coast (3x33 MW) and a gas sealine from Algerian coast to South Sardinia coast (Porto Botte, near Cagliari)	660	288	99
GALSI Italian Section 1 onshore pipeline crossing Sardinia	The GALSI National Section will become integral part of the Italian National Gas Network, with the Entry Point located at the landfall of the sealine from Algeria in South Sardinia coast (Porto Botte). In Sardinia the project foresees 39 offtake points.	1,219	285	

GALSI Italian Section 2 sealine Sardinia - Tuscany	This section includes a 285 km sealine from Olbia (Sardinia) - where it will be realized a 2x26 MW compression station - to Piombino (Tuscany) and 3 km onshore pipeline in Tuscany up to the interconnection with existing Snam gas newtwork.	812	288	52
Total			**861**	**151**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	The project will contribute to the creation of an Italian Gas Hub, by opening a more efficient route to reach the barycentre of Italian gas demand and further on the Central EU market. It will give a significant contribution to security of supply and competition for Italy and Europe. It represents a unique opportunity of a clean and sustainable energy source for Sardinia (and possibly for Corsica).

Time Schedule

Grant Obtention Date	13/08/2010
Delay Since Last TYNDP	12 months
Delay Explanation	Delay mainly due to delays in the authorisation process in Italy and Algeria.

Expected Gas Sourcing

Algeria, In the longer term, with the realisation of ambitious projects aiming to interconnect new African gas reserves to European ma

Comments about the Third-Party Access Regime

On 29th October 2010, the project has received from the competent Italian Authority (Ministry of the Economic Development) by decree a Priority Allocation right (Allocazione Prioritaria) of the entry capacity at the Porto Botte Entry Point, for 100% of the capacity and for a periofd of 25 years.

Benefits

Main Driver	Market Demand
Main Driver Explanation	The project has been developed from its start on the basis of the prospected timing of European gas demand growth.

Benefit Description	- The Galsi project will improve security of supply in Italy and Europe, providing for a new and more efficient route for Algerian gas to reach the centre of Italian gas consumption (located in northern Italy) and further on the northern European markets. In the longer term, with the development of new projects interconnecting different gas sources in Africa (e.g. new Algerian shale gas or TSGP project for Nigerian gas), the Galsi pipeline could provide a highly strategic diversification of gas supply routes to European markets and their supply flexibility. - The Galsi project will contribute to the creation of an Italian gas hub for gas supply to Europe which, through the increase of gas liquidity, will enable the export of major gas volumes from Italy to other European markets through the development of reverse flow capacities. - Reduction of GHG emissions; the Galsi project complies with sustainable development guidelines, i.e. the promotion of the substitution of high pollutant fo

Barriers

Barriers Type	Barrier
Regulatory	The Italian Section of the project will be ruled under the Italian regulatory framework. The International Section (from Algeria to Italian territorial waters in Sardinia) will be build and operated by Galsi as an independent operator with a tariff agreed between the Company and shippers.
Permit Granting	Permitting process (involved inter alia 2 regions, 9 provinces and 40 townships) substantially completed: environmental permi
Market	The persistent uncertainties in the market scenarios make more complex the finalisation by the Shareholders of the commercial framework of the project, i.e. the definition of suitable terms and conditions for the gas supply and gas transportation agreements, which represents an essential piece for the final investment decision.
Financing	EEPR funds for 120 millions euros were granted by the European Commission with decision on 13th August 2010. This grant was then cancelled with decision on 26th September 2014. Future availability of new European Commission funds would be a key issue for the success of the project.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Italy – Algeria Inter-Governmental Agreement for Galsi project	Agreement between Italy and Algeria to promote and support the permitting, the construction and the commissioning of the Galsi Pipeline Project.	Yes	14/11/2007

Import developments from North-East

TRA-N-008	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The project consists in new on-shore pipeline and in a new compressor station in the north east of Italy to permit the increase of transport capacity at new or existing Entry Points in that area.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
New IP North-East Italy	Snam Rete Gas S.p.A.	2034	IB-ITn	IT	340.0 GWh/d
	Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSOG considers the capacity increment as relevant for modelling purposes in the final year of the publication (2035).				

Sponsors

Snam Rete Gas s.p.a.	100%

General Information

Promoter	*Snam Rete Gas S.p.A.*
Operator	*Snam Rete Gas S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*TRA-N-008(into text)*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2034*	*2034*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Section 1		1,050	15	0
Section 2		1,400	119	0
Section 3		0	0	75
Total			**134**	**75**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Security of Supply, Market integration, Diversification of sources, Diversification of routes, N-1 National (Italy), Back-up for renewables, Power-to-gas, Market Integration (Increase of competition), Flexibility of the system.

Barriers

Barriers Type	**Barrier**

Interconnection with Slovenia

TRA-N-354	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	In line with the expected increase in gas consumption in the area of Koper (SLO), the project foresees new capacity at the new exit point of the national network of San Dorligo della Valle.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
San Dorligo della Valle (IT) /Osp (SI)	Snam Rete Gas S.p.A.	2023	IT	SI	3.6 GWh/d

Sponsors

Snam Rete Gas s.p.a.	100%

General Information

Promoter	*Snam Rete Gas S.p.A.*
Operator	*Snam Rete Gas S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*TRA-N-354*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
All the pipe		250	6	0
Total			**6**	**0**

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

LARINO - RECANATI Adriatic coast backbone

TRA-N-974	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Advanced
Description	Complete the realisation of a Gas Tranportation system on Adriatic coast. The project forsees the development under 5 phases of the main backbone and the compression station. Of these 5 phases, one section is already completed and another one is under construction. - 1 Construction of 110 km 24" LARINO-CHIETI - 55 km 20" CHIETI - CELLINO (already completed and running) - 90 km 20" CELLINO - SAN MARCO (15 km completed and 75 km under construction) - Construction of 32 km 24" SAN MARCO Recanati - Construction 3 MW compression station SAN MARCO		
Regulatory Decisions and similar material conditions	The construction and operation of each project section has been already authorized by MISE (Italian Ministry of Economic Development) as part of the National Gas Network. Decree No. 14624 of 25 May 2016, the Italian Ministry of Economic Development has assessed the consistency of SGI's TYNDP with the National Energy Strategy. SGI has included the project in its own TYNDP, as submitted to MiSE and the NRS (AEEGSI). TYNDP approval process is currently being revised due to the transfer of the relevant competences from MiSE to AEEGSI.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Larino (IT)	Società Gasdotti Italia	2022	IT	ITg	53.0 GWh/d
	Capacity values refer to the whole completed project				
	Società Gasdotti Italia	2022	ITg	IT	53.0 GWh/d
	Capacity values refer to the whole completed project				
Recanati (IT)	Società Gasdotti Italia	2022	IT	ITg	53.0 GWh/d
	Capacity values refer to the whole completed project				
	Società Gasdotti Italia	2022	ITg	IT	53.0 GWh/d
	Capacity values refer to the whole completed project				

Sponsors

General Information

Promoter	*Società Gasdotti Italia*
Operator	*Società Gasdotti Italia*
Host Country	*Italy*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*Yes (There is no NDP currently in force)*
NDP Number	*Not applicable*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*12/2013*
Feasibility	*01/2014*	*12/2014*
FEED	*01/2015*	*01/2015*
Market Test		*06/2012*
Permitting	*01/2015*	*12/2019*
Supply Contracts		*06/2019*
FID		*12/2016*
Construction	*06/2018*	*12/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Cellino-San Marco	15 km completed, 75 km under construction	500	90	
Chieti-Cellino	already completed and running	500	55	
Larino - Chieti		600	110	
San Marco-Recanati	Construction 3 MW compression station SAN MARCO	600	32	3
Total			**287**	**3**

PCI Details

PCI Benefits	Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Security of Supply
Specific Criteria Fulfilled Comments	The project appears necessary considering that the stress test on the existing pipeline system have proved critical issues in case of emergency or peak demand in an area where gas flows from the south and from the north merges at a relatively low pressure regime.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	The construction of the adriatic coast pipeline will strengthen the flow capacity to SGI's network from the South. The project will enable a new connection to the Stogit's San Salvo Storage facitity and to additional potential future storage facilities planned in the area It is expected to deliver incremental capacity northward through connection to existing storage facilities (Cellino) and will complete a major integrated gas transport system in Central Italy The pipe, together with the construction of the planned compression station, will allow the return to SRG of volumes coming from Stogit San Salvo storage The project will strenghten an area where gas flows from the south and from the north merges at a relatively low pressure regime. In critical conditions this set up will face problem in meeting peak gas demand. The project will add 5 mil standard cubic meters per day to the peak gas capacity in reverse flow mode (both in the flow south/north and in the flow north/south).
Benefit Description	Increasing flexibility and allowing reverse flow along the Adriatic coasto:1) support the management of Emergency situation by Snam and 2) ensure the capability to meet increasing peak demand requirement in the area.

Barriers	
Barriers Type	**Barrier**

Nuovi Sviluppi Edison Stoccaggio

UGS-N-235	Project	Storage Facility	Non-FID Advanced
Update Date	13/05/2016		
Description	The project concerns some technical interventions on existing wells of the operating gas storage field of Collalto to increase performances of the field in particular withdrawal and injection capacity.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

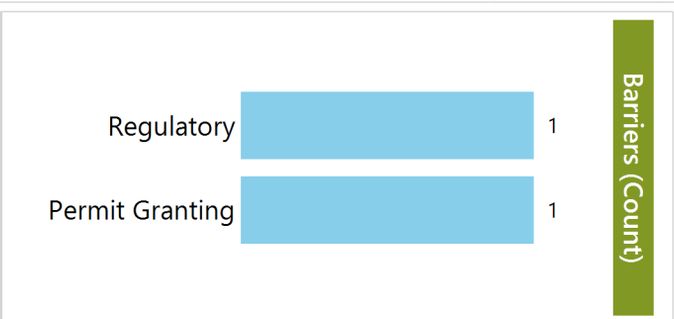
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/Edison	Edison Stoccagio S.p.A.	2017	STcIT	IT	16.0 GWh/d
	The commissioning year is the year of start up of commercial operations.				
	Edison Stoccagio S.p.A.	2017	IT	STcIT	11.0 GWh/d
	The commissioning year is the year of start up of commercial operations.				

Sponsors

Edison Stoccagio	100%

General Information

Promoter	*Edison Stoccagio S.p.A*
Operator	*Edison Stoccagio S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (National Energy Strategy)*
NDP Number	*No Number*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2016*	*01/2017*
FEED	*01/2016*	*01/2017*
Market Test		
Permitting	*01/2016*	*01/2017*
Supply Contracts		
FID		*12/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction	*01/2016*	*01/2017*
Commissioning	*2017*	*2017*

Technical Information (UGS)

Storage Facility	*Nuovi Sviluppi Edison Stoccaggio*	
Storage Facility Type	*Depleted Field*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*0.00*	*in 10^6 Sm^3*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	1 year delay
Delay Explanation	Delays due to authorization process.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	Market Integration (Increase of competition) and Security of Supply. The Italian Storage system is a market characterized by two operators (Stogit Spa 97% and Edison Stoccaggio Spa 3% of the market share) and our project will enhance the level of competition at national level. it is necessary having in mind that only storage jointly with production are present on national territory and can intervene in case of serious gas crisis. New storages are more flexible to operate for security of supply. The project brings some benefits in case of disruption on critical gas supply routes (such as Ukraine and Libya) towards Italy and more broadly Europe The project is also synergic to develop Italian system as a gas hub and to improve Europe security of supply.

Barriers

Barriers Type	Barrier
Regulatory	Authority has set a new regulation to boost the increase of withdrawal capacity.
Permit Granting	Local permitting

Onshore LNG terminal in the Northern Adriatic

LNG-N-217	Project	LNG Terminal	Non-FID
Update Date	04/07/2016		Non-Advanced
Description	Onshore regasification terminal with 8 bcm/y capacity. Storage capacity: 2 x 140.000 m3; Send-out capacity: 1.075.000 m3(s)/hour. Single jetty and maximum vessel size of 145.000 m3.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Zaule LNG (Trieste)	gasNatural Rigassificazione S.p.A.	2021	LNG_Tk_IT	IB-ITn	**258.0 GWh/d**

Sponsors

GAS NATURAL RIGASSIFICAZIONE ITALIA S.p.A.	100%

General Information

Promoter	*Gas Natural Rigassificazione Italia*
Operator	*gasNatural Rigassificazione S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (This project is not part of a National Development Plan as it is located on the Italian coast and there is no National Development Plan in Italy, which is the project host country.)*
NDP Number	
Currently PCI	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*12/2017*
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

CBCA Decision	*No*	Commissioning	*2021*	*2021*
Market Survey	*Not Relevant (no CBCA decision)*			

Technical Information (LNG)

LNG Facility	*Zaule LNG Terminal (Trieste - Italy)*	
Expected Volume (bcm/y)	*8*	
Storage Capacity (m3)	*280,000*	*net storage capacity in 2 tanks*
Ship Size (m3)	*145,000*	
Reloading Ability	*No*	

PCI Details

PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Market Integration
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	The temporary suspension of the validity of the July 2009 EIA by Italian Environment Ministry Decree (April 18, 2013), has delayed up to date the Services Conference procedures, the award of Final Authorization and therefore the project construction and commissioning dates The final resolution recently issued in February 2015 restoring the validity of the EIA will resume the last phase of permitting process (Services Conference).

Expected Gas Sourcing

LNG for the terminal may come from any LNG producer in the world . We envisage a liquid LNG market with a crescent importance

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	Decontamination of part of Trieste Industrial Harbour. Boost in economic activity in the city, province and region.

Barriers	
Barriers Type	Barrier

Palazzo Moroni

UGS-N-237	Project	Storage Facility	Non-FID
Update Date	06/05/2016		Advanced
Description	The project foresees the conversion to storage of a depleting field owned by Edison Stoccaggio S.p.A. in Italy (Marche Region).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

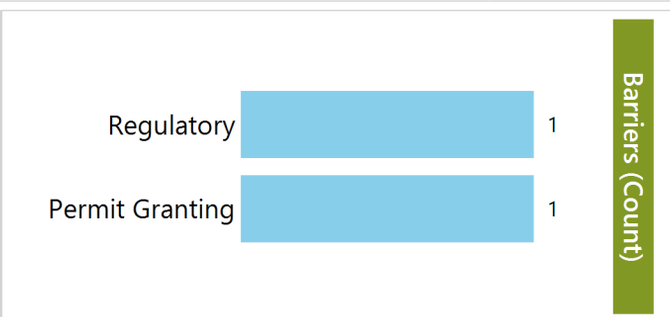
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/Edison	Edison Stoccagio S.p.A.	2019	STcIT	IT	11.0 GWh/d
	The commissioning year is the year of start up of commercial operations.				
	Edison Stoccagio S.p.A.	2019	IT	STcIT	11.0 GWh/d
	The commissioning year is the year of start up of commercial operations.				

Sponsors

Edison Stoccagio	100%

General Information

Promoter	*Edison Stoccaggio S.p.A*
Operator	*Edison Stoccaggio S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (National Energy Strategy)*
NDP Number	*No Number*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2009*	*01/2013*
FEED	*01/2013*	*01/2017*
Market Test		*01/2019*
Permitting	*01/2009*	*01/2017*
Supply Contracts		
FID		*01/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction	*01/2017*	*01/2019*
Commissioning	*2019*	*2019*

Technical Information (UGS)

Storage Facility	*Palazzo Moroni*	
Storage Facility Type	*Depleted Field*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*50.00*	*in 10^6 Sm^3*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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
Specific Criteria Fulfilled Comments	Security of Supply and Market Integration (Increase of competition); The Italian Storage system is a market characterized by two operators (Stogit Spa 97% and Edison Stoccaggio Spa 3% o f the market share), and our projects will enhance the level of competition at national level. It is necessary having in mind that only storage jointly with production are present on national territory and can intervene in case of serious gas crisis. New storages are more flexible to operate for security of supply and to work as back up to renewables. The project increases security of supply on European gas system. The project brings some benefits in case of disruption on critical gas supply routes (such as Ukraine and Libya) towards Italy and more broadly Europe Our project is also synergic to develop Italian system as a gas hub and to improve Europe security of supply.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	Security of Supply and Market Integration (Increase of competition); The Italian Storage system is a market characterized by two operators (Stogit Spa 97% and Edison Stoccaggio Spa 3% o f the market share). The project will enhance the level of competition and security of supply at national level. It's synergic to develop Italian system as a gas hub and to improve Europe security of supply. Palazzo Moroni has an optimal working gas/withdrawal capacity ratio which is in line with the Italian energy strategy.

Barriers	
Barriers Type	Barrier
Regulatory	Authority has set a new regulatory framework for 2015-2018, which was really different from the previous. In 2018 the Authority will set the new framework for 2019-2022.
Permit Granting	Delays with local permitting. The project has already achieved important autorization such as EIA and Seveso.

Porto Empedocle LNG

LNG-N-198	Project	LNG Terminal	Non-FID Advanced
Update Date	25/05/2016		
Description	The planned Porto Empedocle LNG Terminal will be located in Italy, in the Sicily Region, cadastral area of Porto Empedocle, for which the promoter received a thirty-year concession. It will consist of two underground storage tanks of 160.000 of m^3 of capacity each, vaporiser pumps and other treatment facilities required to process LNG and a breakwater with mooring jetty and unloading arms. The LNG Terminal at Porto Empedocle will offer a nominal yearly regasification capacity of 8 billion m3; will be able to receive LNG tankers up to 155.000 m3 of capacity. The LNG Terminal will be able to inject the gas at the standard grid pressure (around 70 bar) and will be connected to the transmission system operated by SnamReteGas by means of a pipeline section specifically built by SnamReteGas.		
Regulatory Decisions and similar material conditions	awaiting Ministerial decree to be classified as "Strategic Infrastructure" for Italian system		

Capacity Increments For Modelling

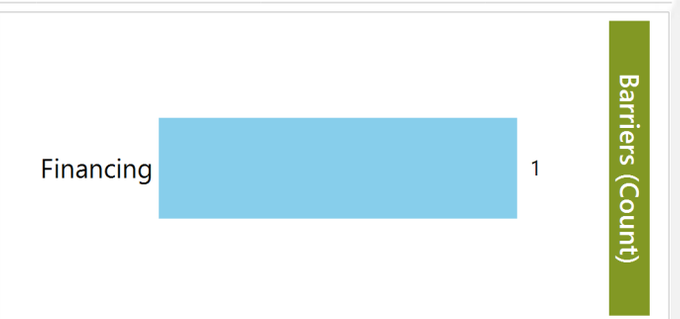
Point	Operator	Year	From Gas System	To Gas System	Capacity
Porto Empedocle LNG	Nuove Energie S.r.l.	2021	LNG_Tk_IT	IB-ITi	**301.5 GWh/d**

Sponsors

Nuove Energie Srl	100%

General Information

Promoter	*Nuove Energie S.r.l.*
Operator	*Nuove Energie S.r.l.*
Host Country	*Italy*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Piano decennale di sviluppo SNAM 2015-2024)*
NDP Number	*n.a.*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2006*
Feasibility	*01/2006*	
FEED	*03/2006*	*09/2006*
Market Test		*01/2018*
Permitting	*01/2009*	*10/2009*
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Negotiated*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*100.00%*
% Exemption in exit direction	*100.00%*

Market Survey	*Not Relevant (no CBCA decision)*	FID		*10/2017*
		Construction	*11/2017*	*12/2021*
		Commissioning	*2021*	*2021*

Technical Information (LNG)

LNG Facility	*Porto Empedocle LNG*	
Expected Volume (bcm/y)	*8*	
Storage Capacity (m3)	*320,000*	
Ship Size (m3)	*155,000*	*Current design foresees that the terminal will be able to receive LNG tankers up to 155.000 m3 of capacity. Possible future studies to allow the berthing of larger ships*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	market integration: it provides a good contribution to the EU gas market integration, being the Italian system well interconnected with the rest of EU gas market, through TAG and Transitgas, with positive impact on prices, gas flows, diversification, flexibility and price convergence. security of supply: it provides a strong improvement of the SoS of the system, not only in Italy but also in other Member States; LNG is more diversified and flexible than gas via pipeline and it gives access to a plurality of markets and players. sustainability: it provides additional gas-fired operational flexibility required by the growing intermittent renewables generation; building a terminal in South Italy (Sicily) would help to create local and sutainable jobs inthe area. competition: it provides additional competitive pressure to traditional import sources (Algeria, Norway, Lybia, Russia) which are becoming more important because of the indegenous production depletion

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	about 2 years
Delay Explanation	Nuove Energie is awaiting the ministerial decree that have to follow the National Energy Strategy (SEN) which will identify the "Strategic Infrastructure" for the gas italian system. Such decree should also clarifies possible incentive mechanisms for infrastructure which are classified as "strategic".

Expected Gas Sourcing

LNG (DZ,QA,US), Nigeria, Trinindad and Tobago, Equatorial Guinea

Comments about the Third-Party Access Regime
The TPA exemption has been granted as per EC Decision issued on 7.5.2012 and Italian Ministry of Economic Development Decree issued on June 6th, 2012. Nuove Energie is currently evaluating the possibility to revise its initial position of full TPA exemption.

Benefits	
Main Driver	Others
Main Driver Explanation	Diversification: the presence of PE terminal facilitates a strong diversification of supply (in terms of both origins and counterparties) and makes Italy and Europe more resilient in case of disruption and / or increase in prices of the other gas sources System flexibility: Porto Empedocle LNG terminal is a strategic infrastructure for the supply of power technology like the CCGT plants, which provide flexibility to the electric system, also to compensate swift changes in electricity generation from intermittent renewable source. It is a matter of fact that the growing level of intermittent renewable energy sources requires more flexible operation of gas-fired power plants and that this implies a more flexible gas system
Benefit Description	The LNG terminal will provide some storage capacity within its tanks allowing to provide flexibility to the entire system and capability to cope gas emergency. The Porto Empedocle LNG terminal will represent a future platform for additional LNG services for ship bunkering and truck loading that are not currently existing in Italy.

Barriers	
Barriers Type	**Barrier**
Financing	in the current italian market context, the PCI project status would help to finance the project

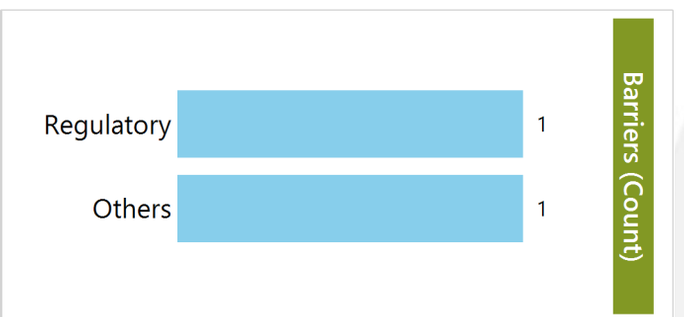
Sardinia Gas Transportation Network

TRA-N-975	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Construction of an onshore Gas Tranportation Network on Sardinia island, to be supplied at least by 1 or more micro/mini/midi LNG regassification terminals with small scale LNG capabilities and/or by an offshore connection to mainland. The project forsees the development of the main backbone of the national gas transmission grid (national line) and the parallel connection of the regional lines: - Construction of 292,4 km of 16" national backbone - Additional 657 km of regional primary and secondary connections with diameter ranging from 4" to 16"		
Regulatory Decisions and similar material conditions	SGI has included the project in its own TYNDP, as submitted to MiSE and the NRA (AEEGSI). TYNDP approval process is currently being revised due to the recent transfer of the relevant competence from MiSE to AEEGSI. Sardinia Region Energy and Environmental Plan as issued on 28.01.2016, "PEARS 2015-2030 Proposta Tecnica". Decree No. 14624 of 25 May 2016, the Italian Ministry of Economic Development has assessed the consistency of SGI's TYNDP		

Sponsors

General Information

Promoter	*Società Gasdotti Italia*
Operator	*Società Gasdotti Italia*
Host Country	*Italy*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (There is no NDP currently in force)*
NDP Number	*Not applicable*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		*09/2015*
Feasibility	*02/2016*	*03/2016*
FEED	*03/2016*	*12/2016*
Market Test		*06/2014*
Permitting	*01/2017*	*12/2018*
Supply Contracts		*06/2019*
FID		*12/2016*
Construction	*06/2019*	
Commissioning	*2031*	*2031*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details	
PCI Benefits	
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Sustainability
Specific Criteria Fulfilled Comments	This Project will halt Sardinia industrial decline driven - also - by higher than average energy cost. The high energy cost is a barrier to the development of new competitive productive activities. Current generation capacity is coal/fuel oil based. Gas substition is an upside which will bring environmental benefits. An integrated onshoregas + Small Scale LNG development will be the catalist for developing LNG bunkering leveraging on Sardinia ferry connections and its position at the centre of the Med.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing
LNG ()

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Sardinia, located off the West coast of Italy, has ca. 1.7mn inhabitants and is currently the only region in Italy that does not have a proper gas infrastructure Sassari, Nuoro, Oristano and Cagliari have already a developed local distribution network, supplied by aired LPG; local distribution companies are developing a network covering ca. 40% of the population. Additional investments would significantly improve gas penetration in the island. MSE, the Sardinia region and AEEGSI are assessing possible solutions to Sardinia's gas supply via LNG
Benefit Description	Converting coal and oil fired power stations to gas will lead to a substantial reduction of CO2 emissions. A single Sardinia price for gas - enabled by a region wide gaas Network - will also bring a relevant cost reduction for Sardinia citizens and industries, whose energy prices can be as high as twice Italian average.

Barriers	
Barriers Type	**Barrier**
Regulatory	NRA to clarify: 1) that Tariff Regime applicable in mainland Italy is also applicable on Sardinia gas network development, irrespective of its physical connection with Italy's Network; 2) Tariff and TPA Regime for SSLNG (this only indirectly relevant to onshore network)
Others	Time-table of the project can be affected by the effective realization of LNG Terminals

Support to the North West market and bidirectional cross-border flows

TRA-F-214	Project	Pipeline including CS	FID
Update Date	13/06/2016		Advanced
Description	The project consists in new on-shore pipelines and new compressor stations in the north of Italy and it permits to increase the flexibility of the gas transmission and the security of supply in the north-west area of Italy and it makes available additional export capacity over the project Support to the North West market.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Griespass (CH) / Passo Gries (IT)	Snam Rete Gas S.p.A.	2018	IB-ITe	CH	368.0 GWh/d
	Total capacity of TRA-F-213 and TRA-F-214 is equal to 421 GWh/d. 232 GWh/d can be booked only at the point of Gries Pass, 189 GWh/d can be booked at the point of Tarvisio and/or Gries (competing capacity).				
Italy Northern Export Fork	Snam Rete Gas S.p.A.	2018	IT	IB-ITe	421.0 GWh/d
	Total capacity of TRA-F-213 and TRA-F-214 is equal to 421 GWh/d. 232 GWh/d can be booked only at the point of Gries Pass, 189 GWh/d can be booked at the point of Tarvisio and/or Gries (competing capacity).				
Tarvisio (IT) / Arnoldstein (AT)	Snam Rete Gas S.p.A.	2018	IB-ITe	AT	189.0 GWh/d
	Total capacity of TRA-F-213 and TRA-F-214 is equal to 421 GWh/d. 232 GWh/d can be booked only at the point of Gries Pass, 189 GWh/d can be booked at the point of Tarvisio and/or Gries (competing capacity).				

Sponsors

Snam Rete Gas S.p.A.	100%

General Information

Promoter	*Snam Rete Gas S.p.A.*
Operator	*Snam Rete Gas S.p.A.*
Host Country	*Italy*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*TRA-F-214(into text)*
Currently PCI	*Yes (5.11)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Section 1		1,400	62	0
Section 2		1,200	19	0
Section 3		0	0	85
Total			**81**	**85**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project fulfills also the criteria of reverse flows, diversification of routes, N-1 regional, back-up for renewables, power-to-gas, market integration (increase of competition), flexibility of the system and reduction of GHG emissions.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Security of supply, reverse flows, diversification of routes, N-1 regional, back-up for renewables, power-to-gas, market integration (increase of competition), flexibility of the system and reduction of GHG emissions.

Barriers	
Barriers Type	**Barrier**

System Enhancements - Stogit - on-shore gas fields

UGS-F-260	Project	Storage Facility	FID
Update Date	13/06/2016		Advanced
Description	The project envisages the development of the following depleted on-shore gas fields: Fiume Treste - Minerbio - Ripalta - Sabbioncello - Sergnano - Alfonsine		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/STOGIT	STOGIT	2026	STcIT	IT	**207.0 GWh/d**
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				
	STOGIT	2026	IT	STcIT	**147.0 GWh/d**
	Interconnection point Storage hub/Transportation grid is a commercial point. The capacity available is equal to the capacity offered or planned to be offered by the storage companies.				

Sponsors

Stogit	100%

General Information

Promoter	*STOGIT*
Operator	*STOGIT*
Host Country	*Italy*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Snam Rete Gas TYNDP 2016-2025)*
NDP Number	*NA*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		*01/2025*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

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*	

Technical Information (UGS)

Storage Facility	*Stogit Enhancements and New Developments*
Storage Facility Type	*Depleted Field*
Multiple-Cycle	*No*
Working Volume (mcm)	*2,120.00*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

Barriers

Barriers Type	**Barrier**

Enhancement of Latvia-Lithuania interconnection (Lithuania's part)

TRA-N-342	Project	Pipeline including CS	Non-FID
Update Date	05/05/2016		Non-Advanced
Description	The project aims at enhancing the capacity of the gas systems interconnection Latvia-Lithuania, ensuring safe and reliable natural gas supply, and achieving a more effective use of the infrastructure and better integration of the gas markets of the Baltic States. It is beneficial and important for the creation of the regional gas market. After the implementation of the project, the bi-directional capacity between Latvia and Lithuania will be increased up to 124.8 GWh (12 MCM) per day. The project is conditional upon other projects diversifying gas flows to be carried out in the Baltic States.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kiemenai	AB Amber Grid	2020	LV	LT	60.0 GWh/d
	AB Amber Grid	2020	LT	LV	57.4 GWh/d

Sponsors

AB Amber Grid	100%

General Information

Promoter	*AB Amber Grid*
Operator	*AB Amber Grid*
Host Country	*Lithuania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ten-year Network Development Plan 2014-2023)*
NDP Number	*n/a*
Currently PCI	*Yes (8.2.1)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*06/2017*	*12/2017*
FEED	*01/2018*	*12/2018*
Market Test		*06/2017*
Permitting	*01/2019*	*01/2020*
Supply Contracts		*01/2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*

CBCA Decision	*No*	FID	*12/2019*	% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	Construction	*01/2020*	*12/2020*	
		Commissioning	*2020*	*2020*	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	Increased gas flows between Latvia and Lithuania
Benefit Description	The enhancement of bi-directional capacity of up to up to 124.8 GWh (12 MCM) per day between Latvia and Lithuania will increase the opportunities for a cross-border trade, higher usage of Latvia's UGS and ensures safe and reliable natural gas supply, flexibility of the transmission systems both in Lithuania and Latvia and better integration of the gas markets of the Baltic States.

Barriers

Barriers Type	**Barrier**

Gas Interconnection Poland-Lithuania (GIPL) (Lithuania's section)

TRA-N-341	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Advanced
Description	The project is aimed to establish a well-functioning new bidirectional interconnection between the Polish and Lithuanian gas transmission systems to integrate the isolated gas markets of the Baltic States into the EU gas grid, by introducing an alternative gas supply route to the Baltic States. By implementing the project a 165 km-long and 700 mm-diameter pipeline and gas pressure reduction and metering station will be constructed on Lithuania's side.		
Regulatory Decisions and similar material conditions	On 11 August 2014 ACER adopted a decision No 01/2014 On The Investment Request including Cross-Border Cost Allocation for The Gas Interconncetion Poland-Lithuania Project of Common Interest No. 8.5.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-LT	AB Amber Grid	2019	LT	PL	51.1 GWh/d
	AB Amber Grid	2019	PL	LT	73.9 GWh/d

Sponsors

AB Amber Grid	100%

General Information

Promoter	*AB Amber Grid*
Operator	*AB Amber Grid*
Host Country	*Lithuania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ten-year Network Development Plan 2014-2023)*
NDP Number	*n/a*
Currently PCI	*Yes (8.5)*
CBCA Decision	*Yes (2014-08-11)*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2012*
Feasibility	*02/2012*	*02/2013*
FEED	*05/2015*	*09/2016*
Market Test		*09/2012*
Permitting	*07/2016*	*09/2016*
Supply Contracts		*09/2017*
FID		*10/2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Other(2012-09-21)*	Construction	*10/2016*	*06/2019*
		Commissioning	*2019*	*2019*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Border PL/LT - Jauniunai		700	165	
Total			**165**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	15/10/2015
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

LNG Terminal in Klaipeda

LNG-N-824	Project	LNG Terminal	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	As this pilot action turned to be a success story, Klaipedos nafta decided to develop a project centred on the purchase of the FSRU Terminal, i.e. exercise the purchase option available within the pilot action's existing TCP contract. The long-term solution and the project need is an assurance of the already achieved substantial regional benefits of Klaipeda LNG terminal to be utilised to the full extent in the future. The benefits include security of supply, availability of alternative natural gas supplies, LNG break bulk infrastructure and effective natural gas price cap. Purchase of the FSRU would also facilitate substantially lower regasification and reload tariffs and consequentially lower the effective natural gas price cap for all consumers in the region, as well as facilitate faster development of small and mid-scale LNG infrastructure and faster switch-over to LNG from more polluting fuels.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

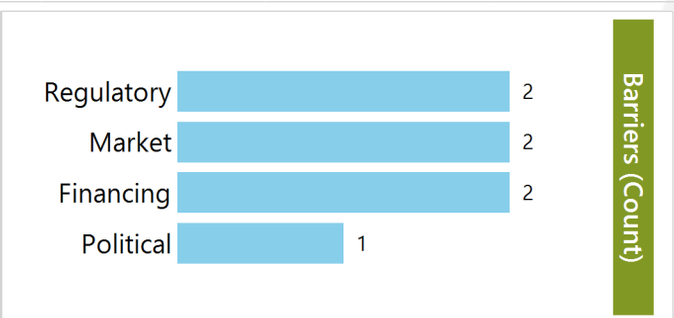
Point	Operator	Year	From Gas System	To Gas System	Capacity
Klaipeda (LNG)	AB Klaipėdos Nafta	2024	LNG_Tk_LT	LT	**122.4 GWh/d**

Sponsors

AB Klaipėdos Nafta	100%

General Information

Promoter	*AB Klaipėdos Nafta*
Operator	*AB Klaipėdos Nafta*
Host Country	*Lithuania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (NDP covers only TSO investments. LNG terminal is not a part of TSO network, therefore NDP does not include LNG terminal projects. LNG projects are covered by TYNDP at EU level, not at the national level.)*
NDP Number	

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

		FID	*12/2018*	% Exemption in exit direction	*0.00%*
Currently PCI	*No*	Construction			
		Commissioning	*2024*	*2024*	
CBCA Decision	*No*				
Market Survey	*Not Relevant (no CBCA decision)*				

Technical Information (LNG)

LNG Facility	*FSRU Independence*	
Expected Volume (bcm/y)	*4*	
Storage Capacity (m3)	*170,000*	*170.000 m3 of LNG capacity for short period of time due to LNG aging*
Ship Size (m3)	*170,000*	
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	Enhanced security of natural gas supply Diversification of natural gas supply sources Full Third Party access Baltic States connection to the global gas markets Natural gas prices cap in the region LNG break bulk facility for the Baltic Sea Region Significant economic benefits created for the region

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Comments about the Third-Party Access Regime

Tariff regulation created by Lithuania NRA and Parliament, which was also approved by EC -State aid SA.36740 (2013/NN) – Lithuania. All services of Klaipeda LNG terminal is regulated.

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	Ensure certainty on the SoS in the region Without a project there is uncertainty on: - compliance with N-1 standard - competition of gas supply in the market - regional gas market
Benefit Description	Ensure certainty on independence on the single external natural gas supplier Ensure certainty on diversification of natural gas supply sources Ensure certainty to the regional gas market players and create real gas market ensuring natural gas supply in the Baltics The project is also driven by a market demand to have flexibility in choosing different sources of supply, to be connected with global market

Barriers	
Barriers Type	**Barrier**
Regulatory	According to LNG terminal Law, all fixed LNG terminal expenses are covered via gas transmission tariff, while variable costs are included in regasification tariff. Due to low or none variable costs, capacity reservation is free of charge. Additional income from other regulated LNG terminal activities shall cover fixed terminal expenses and no additional profit shall be experienced.
Political	Klaipeda LNG terminal project is supported by all political institutions in Lithuania (i.e. President office, the Government, Ministries, Parliament, other). Project is supported by COM and pilot action is regarded as a success story: https://ec.europa.eu/energy/sites/ener/files/documents/1_EN_ACT_part1_v10-1.pdf
Regulatory	Low or zero-priced short-term capacity
Financing	Amortization rates
Financing	Availability of funds and associated conditions
Market	Lack of market maturity
Market	Lack of market support

Syderiai

UGS-N-034	Project	Storage Facility	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Expected total capacity – 1 bcm, working capacity - 500 mcm. Storage will create conditions for gas reserve storage in Lithuania, increase the security of supply and contribute to the creation of national gas market.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

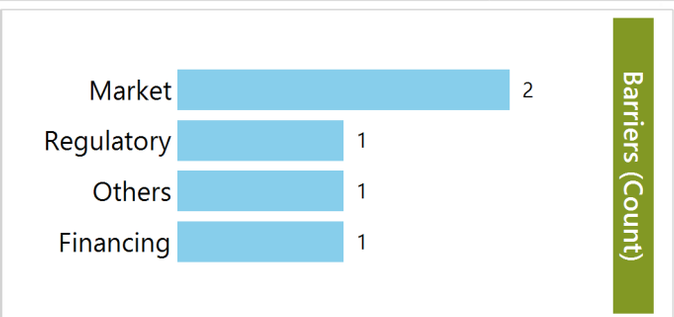
Point	Operator	Year	From Gas System	To Gas System	Capacity
Syderiai	Lietuvos energija AB	2019	STcLT	LT	110.0 GWh/d
	Could be updated in next ENTSOG TYNDP				
	Lietuvos energija AB	2019	LT	STcLT	55.0 GWh/d
	Could be updated in next ENTSOG TYNDP				

Sponsors

Geological investigations	
Lietuvos energijos gamyba, AB	100%
Project CBA	
Lietuvos energijos gamyba, AB	100%
Reservoir static and dynamic modeling	
Lietuvos energijos gamyba, AB	100%
Seismic & geological data reinterpretation	
Lietuvos energijos gamyba, AB	100%

General Information

Promoter	*JSC Lietuvos energija AB*
Operator	*Lietuvos energija AB*
Host Country	*Lithuania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (NPD was prepared by public entities, which didnt include projects form third parties. Yet project is included in the National energy independancy strategy.)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

NDP Number		Market Test		Exemption Granted	*No*
		Permitting			
Currently PCI	*No*	Supply Contracts		% Exemption in entry direction	*0.00%*
		FID		% Exemption in exit direction	*0.00%*
CBCA Decision	*No*	Construction			
Market Survey	*Not Relevant (no CBCA decision)*	Commissioning	*2019*	*2019*	

Technical Information (UGS)

Storage Facility	*Syderiai underground gas storage*
Storage Facility Type	*Aquifer*
Multiple-Cycle	*No*
Working Volume (mcm)	*500.00*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Comments about the Third-Party Access Regime

Issues regarding the TPA regime will be determined at the later stages of the Project implementation

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	The project should create conditions for natural gas reserve storage in Lithuania, increase the security of supply in the region (Latvia and by using Lithuanian-Polish gas internconnection (GIPL))and contribute to the creation of national as well as regional gas market, increase the flexibility of the whole sytem.

Barriers	
Barriers Type	Barrier
Others	High investment costs, unclear payback potential, necessity of implementation of Lithuanian-Polish gas interconnection (GIPL) project.
Market	Lack of market support
Financing	Availability of funds and associated conditions
Regulatory	Low rate of return
Market	Lack of market maturity

Enhancement of Incukalns UGS

UGS-N-374	Project	Storage Facility	Non-FID Advanced
Update Date	28/04/2016		
Description	The Incukalns Underground Gas Storage facility is the only gas storage of the East-Baltic region located within the EU. Reliable operation of Incukalns UGS is essential for the whole East-Baltic Region because considerable amount of gas in the region is used for heating, therefore, winter and summer consumption figures differ few times, and the storage is used for meeting of gas demand during the heating season. Analysis of gas flows in the East-Baltic region carried out jointly by TSOs showed that daily withdrawal capacity of Incukalns UGS shall be increased, and especially it is important in the end of withdrawal season when currently withdrawal capacity drops significantly. After completion of enhancement of Incukalns UGS, increase of withdrawal capacity will have significant positive impact on efficiency of operation of the whole East-Baltic joined gas system and will increase security of supply. After construction of GIPL pipeline and Balticconector the market area for Incukalns		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

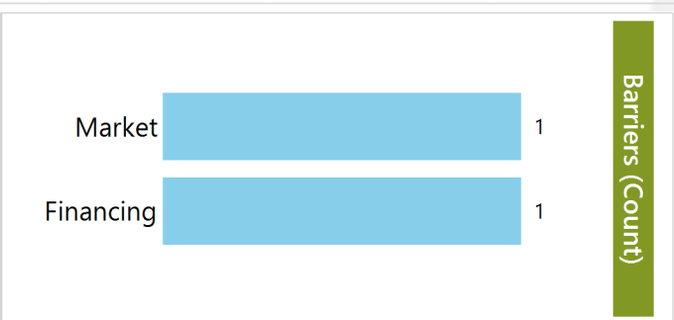
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Incukalns (LV)	Latvijas Gaze	2019	STcLV	LV	**30.0 GWh/d**
	Latvijas Gaze	2021	STcLV	LV	**20.0 GWh/d**

Sponsors

JSC "Latvijas Gaze"	100%

General Information

Promoter	*JSC "Latvijas Gaze"*
Operator	*Latvijas Gaze*
Host Country	*Latvia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (National developmeny plan for 2014-2020 does not specify particular projects, however, under Activity "Energy efficiency and energy production" item "7. Development of enery infrastructure networks" may include the project.)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*10/2011*	*02/2012*
FEED		
Market Test		
Permitting	*05/2014*	

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

NDP Number		Supply Contracts		% Exemption in entry direction	*0.00%*
		FID		% Exemption in exit direction	*0.00%*
Currently PCI	*Yes (8.2.4)*	Construction	*03/2014*		
		Commissioning	*2019*	*2021*	
CBCA Decision	*Yes (2014-04-30)*				
Market Survey	*Other(2014-01-17)*				

Technical Information (UGS)

Storage Facility	*Incukalns Underground Gas Storage*	
Storage Facility Type	*Aquifer*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*0.00*	*Depending on market needs the increment can reach 900 mcm*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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 is extremely important for security of supply for the whole East-Baltic region and together with the other complimentary projects contributes to market integration, sustainability and competition

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	Two years
Delay Explanation	Lack of financing

Expected Gas Sourcing

Russia, LNG ()

Benefits

Main Driver	Market Demand

Main Driver Explanation	East-Baltic TSOs joint analysis. Other important driver is security of supply determined by the joint risk assessment of Lithuania, Latvia and Estonia. After competion of GIPL and Balticconector it is expected that market area for the storage will also include Poland and Finland
Benefit Description	The major benefit of the project is improvement of the security of supply for the East-Baltic region in case of gas supply disruption. In addition, jointly together with other gas infrastructure projects in the Baltic region (Intra-Baltic Connections, GIPL, Balticconnector and LNG terminal in the Gulf of Finland, Klaipeda LNG terminal) the project increases security of gas supply to the consumers by contributing into diversification of gas supply sources and routes, as well as integrating gas networks of the Baltic countries and Finland into the common EU gas network. It also provides possibility to optimize the gas flows in the East-Baltic region by offering required volumes of gas for business purposes and in case of emergency and contributes towards creation of a liquid gas market in the East-Baltic region and possibility to be used as a gas hub for the whole region.

Barriers

Barriers Type	Barrier
Financing	Availability of funds and associated conditions
Market	Lack of market support

Enhancement of Latvia-Lithuania interconnection (Latvian part)

TRA-N-382	Project	Pipeline including CS	Non-FID
Update Date	02/05/2016		Non-Advanced
Description	The project is aimed at the increase of interconnection capacity between Latvia and Lithuania and on Latvian side includes construction of a new pipeline Riga-Iecava and Iecava-Lithuanian border. On Lithuanian side it is planned to increase the capacity of Kiemenai metering station . The project is conditional upon other projects (GIPL) and gas market development in the Baltic countries.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kiemenai	Latvijas Gaze	2020	LV	LT	**59.9 GWh/d**
	Latvijas Gaze	2020	LT	LV	**57.4 GWh/d**

LT→LV 57.41 GWH/d, LT←LV 59.90 GWh/d

Sponsors

General Information

Promoter	*JSC "Latvijas Gaze"*
Operator	*Latvijas Gaze*
Host Country	*Latvia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (National Development Plan for 2014-2020 does not specify particular projects. Under activity "Energy efficiency and energy production" title "7.Development of energy infrastructure networks" may include project of enhancement of Latvia-Lithuania interconnection)*
NDP Number	

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*

		FID		% Exemption in exit direction	*0.00%*
Currently PCI	*Yes (8.2.1)*	Construction			
		Commissioning	*2020*	*2020*	
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)
Riga-Iecava-Lithuanian border	In case of lower market demand diameter of 500 mm can be used	700	93	
Total			**93**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Expected Gas Sourcing

Russia, LNG ()

Benefits

Main Driver	Market Demand
Main Driver Explanation	Main driver of the project will be increased gas flows between Lithuania and Latvia.
Benefit Description	The enhancement of bi-directional capacity up to 12 mcm/d between Latvia and Lithuania could increase opportunities for cross-border trade, access to Incukalns UGS for Lithuania and Poland, security of supply, market integration, flexibility of gas transmission systems of Latvia and Lithuania etc.

Barriers	
Barriers Type	Barrier

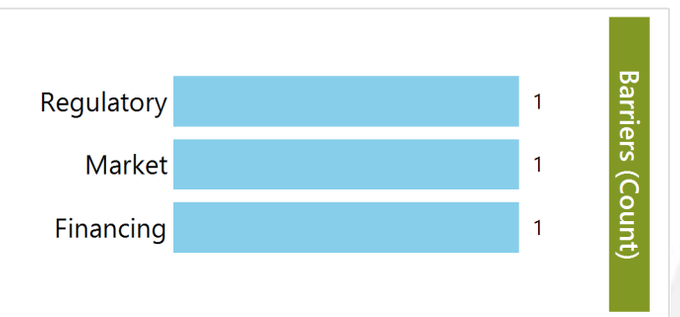
Skulte LNG

LNG-N-912	Project	LNG Terminal	Non-FID Advanced
Update Date	22/05/2016		
Description	The purpose of the project is to build cost effective LNG FRU solution which will have directly linkend to Latvia Ičukalns underground storage facilities thus providing big flexibility in terms of acquiring favourable LNG prices and seasonal balance.		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*AS Skulte LNG Terminal*
Operator	*AS Skulte LNG Terminal*
Host Country	*Latvia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (Project will be included in NDP at beginning of June 2016 when a special meeting of the Council for Large Investment Projects of Stretegic Importance will be held. The meeting will be leaded by Prime Minister.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*03/2015*
Feasibility	*03/2015*	*05/2015*
FEED	*05/2015*	*06/2015*
Market Test		*05/2016*
Permitting	*04/2016*	*12/2016*
Supply Contracts		*09/2018*
FID		*01/2017*
Construction	*05/2017*	*12/2018*
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*FRU*	
Expected Volume (bcm/y)	*5*	
Storage Capacity (m3)	*400*	*No gas trorage needed - direct link to UGS*
Ship Size (m3)	*170,000*	
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	03/01/2018
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Security of supply, Market intergartion, Market demand, Flexibility
Benefit Description	Low cost LNG terminal with direct link to UGS - provides felixibility of supply.

Barriers

Barriers Type	Barrier
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market maturity

Infrastructure gas pipeline Skopje - Tetovo - Gostivar - Albanian border

TRA-N-545	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	I phase : Construction of DN 500 gas pipeline Skopje - Tetovo - Gostivar II phase : Construction of DN 500 gas pipeline Gostivar - Albanian border with interconnection to TAP		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gostivar (MK) / TAP	GA-MA - Skopje	2018	GR/TAP	MK	**25.0 GWh/d**

Sponsors

General Information

Promoter	*GA-MA joint stock company Skopje*
Operator	*GA-MA - Skopje*
Host Country	*former Yugoslav Republic of Macedonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (The project is part of GA-MA development plan and is submitted to the Ministry of economy which is responsible for energy matters.)*
NDP Number	
Currently PCI	*No*

Schedule	Start Date	End Date
Pre-Feasibility		*10/2016*
Feasibility	*11/2016*	*04/2017*
FEED	*05/2017*	*07/2017*
Market Test		*08/2017*
Permitting	*09/2017*	*01/2018*
Supply Contracts		*02/2018*
FID		*03/2018*
Construction	*04/2018*	*12/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

CBCA Decision	*No*	Commissioning	*2018*	*2018*
Market Survey	*Not Relevant (no CBCA decision)*			

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Infrastructure gas pipeline Skopje - Tetovo - Gostivar - Albanian border		500	165	
Total			**165**	

PCI Details

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Caspian Region, LNG (AL,HR)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier

Interconnection Macedonia-Albania

TRA-N-998	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Main gas pipeline section Kichevo-Ohrid-Struga-Kafasan (border with Albania) Dimensions and capacity: Diameter: DN500 Length: 75 km Capacity(m3/day):Q= 248.000 m3/h - Working (operating), maximum and minimum pressure p= 40 bars; pmax = 54 bars, pmin = 25 bars, Data on accompanying elements of the gas pipeline: Valve stations with nominal diameter DN500 2 pcs. Launching-Receiving Station DN500 2 pcs. Telemetric system for monitoring. Main regulation and measuring station		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

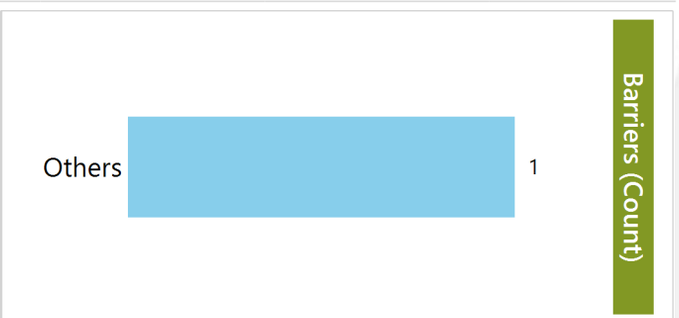
Point	Operator	Year	From Gas System	To Gas System	Capacity
Kafasan (MK) / Perrenjas (AL)	MER JSC Skopje	2022	AL	MK	**1.0 GWh/d**

Sponsors

Albpetrol JSC Tirana	100%

General Information

Promoter	*MER JSC Skopje*
Operator	*MER JSC Skopje*
Host Country	*'ormer Yugoslav Republic of Macedonia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Work Program of the Government of R.Macedonia)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*04/2009*	*07/2010*
FEED		*07/2010*
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2022*	*2022*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	MER JSC Skopje for the first time submits this project in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Russia, The interconnection allows access to all gas sources from the neighbouring countries.

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

Benefits

Main Driver	Market Demand
Main Driver Explanation	Enormous development of the national gasification systemand hence increased consumption/demand on the market.
Benefit Description	-Security of supply -Diversification of sources -Development of the region (reversible gas pipelines).

Barriers

Barriers Type	Barrier
Others	Barriers regarding the implementation of the projects have not been encountered.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of understanding between Macedonia and Albania		No	18/05/2016

Interconnection Macedonia-Bulgaria

TRA-N-976	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Main gas pipeline section Hamzali – Novo Selo (border with Bulgaria). Within this section the following objects and systems are included: -Line part in length of 25 km with pipe diameter DN 700 (28''), -Valve stations with nominal diameter DN700, 3 pcs. -Pig Launching-Receiving station DN700, 2 pcs. -Main Measuring station Novo Selo, -System for automatic operating with the technological process for natural gas transport (DCS/SCADA); -Line for connection with optic fibres; -Power supply system -Cathodic protection system -Security Signaling System and fire signalization working (operating) pressure p= 40 bars; maximum pressure (projected) pmax = 54 bars minimum pressure pmin = 25 bars -Capacity 326.000 m3/h (76,4 GWh/d)		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

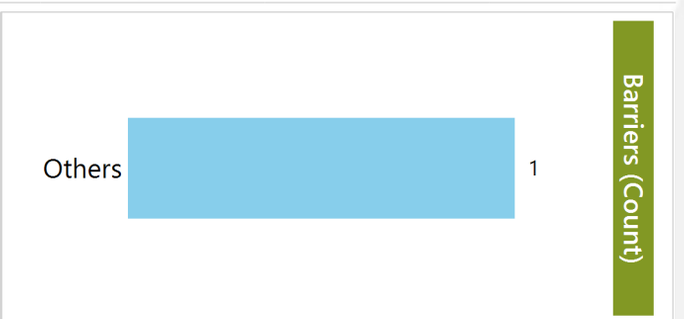
Point	Operator	Year	From Gas System	To Gas System	Capacity
Novo Selo (MK) / Samuilova Krepost (BG)	MER JSC Skopje	2021	BGg/BGT	MK	1.0 GWh/d

Sponsors

Bulgartransgaz	100%

General Information

Promoter	*MER JSC Skopje*
Operator	*MER JSC Skopje*
Host Country	*'ormer Yugoslav Republic of Macedonia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Work Program of the Government of R.Macedonia)*
NDP Number	*N/A*
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*04/2009*	*07/2010*
FEED		*07/2010*
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% 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	*2021*	*2021*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Main gas pipeline section Hamzali – Novo Selo (border with Bulgaria)		700	25	
Total			**25**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	MER JSC Skopje for the first time submits its projects in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Caspian Region, Russia, The interconnection allows access to all gas sources from the neighbouring countries

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Development of the national gasification system and hence increased consumption/demand on the market.
Benefit Description	-Security of supply -Diversification of sources -Development of the region (reversible gas pipelines)

Barriers

Barriers Type	Barrier
Others	Barriers regarding the realization of the project have not been encountered.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of understanding between Macedonia and Bulgaria		No	18/05/2016

Interconnection Macedonia-Greece

TRA-N-980	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Main gas pipeline section Stip-Hamzali-Stojakovo (border with Greece) Within this section the following objects and systems are included: - Line part in length of 110 km with pipe diameter DN 700 (28"), - Valve stations - Pig Launching-Receiving Station DN700, -System for automatic operating with the technological process for natural gas transport (DCS/SCADA); -Line for connection with optic fibres; -Power supply system - Cathodic protection system - Security Signaling System and fire signalization. working (operating) pressure p= 40 bars; maximum pressure (projected)pmax = 54 bars minimum pressurepmin = 25 bars -Capacity 326.000 m3/h (76,4 GWh/day)		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

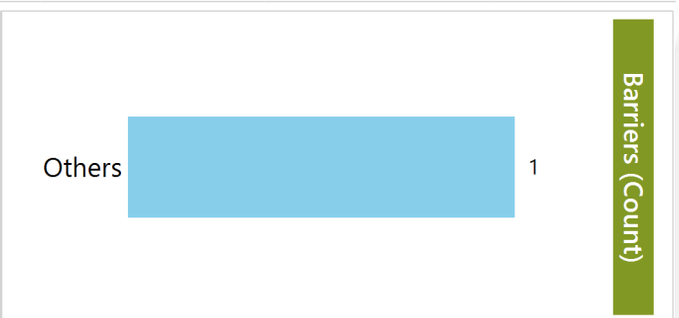
Point	Operator	Year	From Gas System	To Gas System	Capacity
Stojakovo village (MK) / Pontoiraklia (GR)	MER JSC Skopje	2021	GR	MK	**1.0 GWh/d**

Sponsors

DESFA	100%

General Information

Promoter	*MER JSC Skopje*
Operator	*MER JSC Skopje*
Host Country	*ormer Yugoslav Republic of Macedonia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Work Program of the Government of R.Macedonia)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*04/2009*	*07/2010*
FEED		*07/2010*
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction		
		Commissioning	*2021*	*2021*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Stip-Hamzali-Stojakovo (border with Greece)		700	110	
Total			**110**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	MER JSC Skopje for the first time submits this project in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Caspian Region, Russia, The interconnection allows access to all gas sources from the neighbouring countries.

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Enormous development of the national gasification systemand hence increased consumption/demand on the market
Benefit Description	-Security of supply -Diversification of sources -Development of the region (reversible gas pipelines)

Barriers

Barriers Type	Barrier
Others	Barriers regarding the implementation of the project have not been encountered.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of understanding between DESFA S.A. and MER JSC Skopje		No	18/05/2016

Interconnection Macedonia-Kosovo

TRA-N-966	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Main gas pipeline section Matka-Grachani (border with Kosovo) Dimensions and capacity: Diameter: DN500 Length: 16 km Capacity (m3/day): Q= 236.000 m3/h Working (operating), maximum and minimum pressure p= 40 bars; pmax = 54 bars, pmin = 25 bars. Data on accompanying elements of the gas pipeline: Valve stations with nominal diameter DN500: 2 pcs. Pig Launching-Receiving Station DN500: 1 pcs Pig Receiving Station DN500: 1 pcs. Telemetric system for monitoring. Main regulation and measuring station		
Regulatory Decisions and similar material conditions			

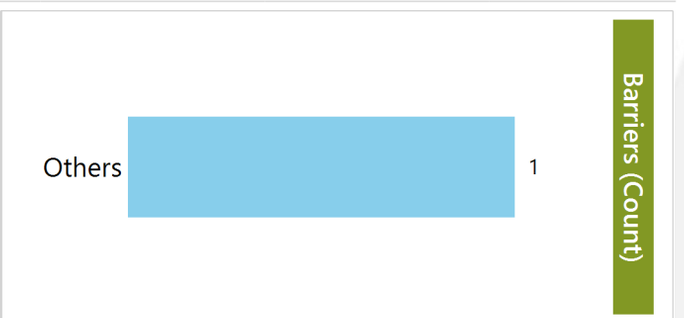
Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gracani (MK) / Gorance	MER JSC Skopje	2022	MK	RSk	1.0 GWh/d

Sponsors

General Information

Promoter	*MER JSC Skopje*
Operator	*MER JSC Skopje*
Host Country	*'ormer Yugoslav Republic of Macedonia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Work Program of the Government of R.Macedonia)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*04/2009*	*07/2010*
FEED		*07/2010*
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% 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)
Main gas pipeline section Matka-Grachani (border with Kosovo)		500	16	
Total			**16**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	MER JSC Skopje for the first time submits its projects in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Caspian Region, Russia

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	Enormous development of the national gasification systemand hence increased consumption/demand on the market
Benefit Description	-Security of supply -Diversification of sources -Development of the region (reversible gas pipelines)

Barriers	
Barriers Type	**Barrier**
Others	Due to obstacles to the development of the gasification, the projects in Kosovo have been postponed.

Interconnection Macedonia-Serbia

TRA-N-965	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Main gas pipeline section Klechovce-Sopot (border with Serbia). Dimensions and capacity: Diameter: DN500 Length: 23 km Capacity (m3/day): Q= 160. 000 m3/h Working (operating), maximum and minimum pressure p= 40 bars; pmax = 54 bars, pmin = 25 bars. Data on accompanying elements of the gas pipeline: Valve stations with nominal diameter DN500: 2pcs. Pig Launching-Receiving Station DN500: 1 pcs Pig Receiving station DN500: 1 pcs. Telemetric system for monitoring Main regulation and measuring station		
Regulatory Decisions and similar material conditions			

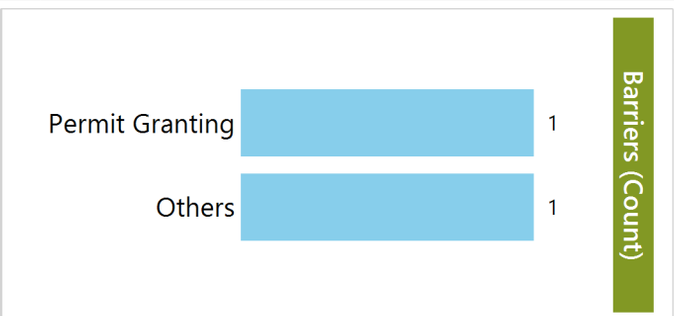
Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sopot (MK) / Strezovac (RS)	MER JSC Skopje	2021	RS	MK	**1.0 GWh/d**

Sponsors

General Information

Promoter	*MER JSC Skopje*
Operator	*MER JSC Skopje*
Host Country	*'ormer Yugoslav Republic of Macedonia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Work Program of the Government of R. Macedonia)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*04/2009*	*07/2010*
FEED		*07/2010*
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Yes*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2021*	*2021*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Main gas pipeline section Klechovce-Sopot (border with Serbia)		500	23	
Total			**23**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	MER JSC Skopje for the first time submits its projects in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Caspian Region, Russia, The interconnection allows access to all gas sources from the neighbouring countries.

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Enormous development of the national gasification systemand hence increased consumption/demand on the market
Benefit Description	-Security of supply -Diversification of sources -Development of the region (reversible gas pipelines)

Barriers

Barriers Type	Barrier
Permit Granting	After determining the project financing.
Others	Barriers regarding the implementation of the projects have not been encountered.

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of understanding between Macedonia and Serbia		No	18/05/2016

Macedonian part of Tesla project

TRA-N-582	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		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.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Variant : Default — Default

Point	Operator	Year	From Gas System	To Gas System	Capacity
TESLA / FYROM Offtake	GA-MA - Skopje	2019	MK/TLA	MK	**35.0 GWh/d**
TESLA / FYROM>RS	GA-MA - Skopje	2019	MK/TLA	RS/TLA	**640.0 GWh/d**
TESLA / GR>FYROM	GA-MA - Skopje	2019	GR/TLA	MK/TLA	**675.0 GWh/d**

Capacity Increments For Information Only

Variant : Variant 2 — Variant 2

Point	Operator	Year	From Gas System	To Gas System	Capacity
TESLA / FYROM Offtake	GA-MA - Skopje	2019	MK/TLA	MK	**35.0 GWh/d**
TESLA / FYROM>RS	GA-MA - Skopje	2019	MK/TLA	RS/TLA	**1,073.0 GWh/d**
TESLA / GR>FYROM	GA-MA - Skopje	2019	GR/TLA	MK/TLA	**1,108.0 GWh/d**

Sponsors	
GA-MA AD	100%

General Information	
Promoter	*GA-MA joint stock company Skopje*
Operator	*GA-MA - Skopje*
Host Country	*former Yugoslav Republic of Macedonia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*No (This project is part of the development plan of GAMA and it is provided to the relevant Ministry of economy, which is responsible for energy matters.)*
NDP Number	
Currently PCI	*Yes (TRA-N-582)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*09/2016*
Feasibility	*01/2017*	*06/2017*
FEED	*08/2017*	*12/2017*
Market Test		*01/2018*
Permitting	*02/2018*	*06/2018*
Supply Contracts		*07/2018*
FID		*08/2018*
Construction	*09/2018*	*11/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	

Delay Explanation	

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

Barriers Type	**Barrier**

Connection of Malta to the European Gas Network - LNG Regasification

LNG-N-211	Project	LNG Terminal	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	This project addresses the 'LNG Regasification Infrastructure' component of PCI 5.19 'Malta Connection' and reflects the results from the pre-feasibility study concluded in April 2015 which identified the Malta-Italy gas pipeline interconnection (TRA-N-031) as the first phase of the PCI which will end Malta's isolation from the Trans European gas network. Following completion of this first phase and subject to further in-depth analysis and market development; a second future phase consisting of a Floating Storage and Regasification Unit berthed approximately 12km offshore from Malta together with an associated pipeline infrastructure to Delimara (Malta) is being planned. This project, besides meeting Malta's natural gas requirements, shall provide for the possibility of exporting natural gas to the European Natural Gas network through the gas interconnector which will enable it to operate in bi-directional flow mode. TRA-N-031 and LNG-N-211 are complementary projects.		
Regulatory Decisions and similar material conditions	N/A		

Capacity Increments For Modelling

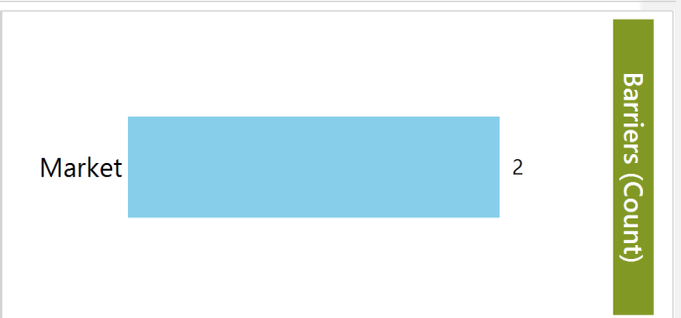
Point	Operator	Year	From Gas System	To Gas System	Capacity
Malta FSRU Offshore Terminal	Office of the Prime Minister (Energy) – Malta	2031	LNG_Tk_MT	MT	56.0 GWh/d

Amended to reflect send-out capacity from FSRU Offshore Terminal to Delimara (Malta)

Sponsors

General Information

Promoter	*Office of the Prime Minister (Energy)*
Operator	*Office of the Prime Minister (Energy) – Malta*
Host Country	*Malta*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Malta National Reform Programme April 2015)*

Schedule

	Start Date	End Date
Pre-Feasibility		*01/2019*
Feasibility	*01/2019*	*01/2025*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*

NDP Number	*Section 3.4.2*	FEED	*01/2026*	*01/2028*	Applied for Exemption	*No*
		Market Test		*01/2027*	Exemption Granted	*No*
Currently PCI	*Yes (5.19)*	Permitting	*01/2025*	*01/2028*		
		Supply Contracts		*01/2028*	% Exemption in entry direction	*0.00%*
CBCA Decision	*No*	FID		*01/2028*	% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	Construction	*01/2029*	*01/2031*		
		Commissioning	*2031*	*2031*		

Technical Information (LNG)

LNG Facility	*Malta FSRU Offshore Terminal*	
Expected Volume (bcm/y)	*2*	*No change from TYNDP 2015*
Storage Capacity (m3)	*180,000*	*No change from TYNDP 2015*
Ship Size (m3)	*135,000*	*No change from TYNDP 2015*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	The overall PCI will end Malta's isolation from the Trans-European gas network and thus contribute to gas market integration, improved security of energy supply and more diversified sources, routes, suppliers of energy for the island and improved competitiveness and affordability. It is expected to support objectives of sustainability as it will contribute towards the reduction of GHG emissions. The 'LNG infrastructure' component besides meeting Malta's natural gas requirements including future demand for maritime LNG bunkering; shall also achieve the gas N-1 infrastructure requirement as there would be two sources of natural gas supply to Malta and provide for the possibility to export gas to Italy/Europe. The LNG component will also complement the provisions of Directive 2014/94/EU and the Energy Union strategy in fuel of an added entry point of natural gas to the EU i.e. effectively contributing towards the diversification of sources, routes and suppliers of gas to the EU.

Time Schedule

Grant Obtention Date	25/11/2013
Delay Since Last TYNDP	Yes

Delay Explanation	Since the last TYNDP, a pre-feasibility study of the PCI was completed in April 2015. The re-scheduling above for the gas pipeline interconnector component of the PCI reflects conclusions from this study which identified the gas pipeline interconnection (TRA-N-031) between Sicily and Malta as Phase 1 for the PCI implementation; whilst the possibility of exporting gas to Italy sourced from an FSRU located approx. 12km offshore from Malta (i.e. LNG-N-211) is to be considered as Phase 2 of PCI 5.19.

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Regulation SoS
Main Driver Explanation	The main project driver for this component of the PCI is the Gas Security of Supply EU Regulation No. 994/2010. This second phase of the PCI will achieve the N-1 infrastructure requirement and contribute to the overall system flexibility and interoperability. The infrastructure will be capable to offer capacity for bi-directional flow through the gas pipeline interconnector.
Benefit Description	The 'LNG infrastructure' (i.e. LNG-N-211) component besides meeting Malta's gas requirements, including future demand for maritime LNG bunkering (i.e. complementing provisions of Directive 2014/94EU on the deployment of alternative fuels infrastructure); it shall also achieve Malta's N-1 infrastructure requirement for gas as there would be two sources of gas supply to Malta. Since this project also provides for the possibility of export of gas to the Trans European gas network, Europe and Italy in particular; the project would effectively mean a new entry point of natural gas within the EU. This would complement the Energy Union's strategy towards the diversification of sources, routes and suppliers of natural gas.

Barriers

Barriers Type	Barrier
Market	Lack of market maturity
Market	Lack of market support

Connection of Malta to the European Gas Network - Pipelines

TRA-N-031	Project	Pipeline including CS	Non-FID
Update Date	18/05/2016		Non-Advanced
Description	Malta is a small island Member State with no gas interconnections to the European network. This project addresses the 'Transmission' component of PCI 5.19 'Malta Connection' and reflects the results from the pre-feasibility study completed in April 2015. The study identified a 22 inch diameter and 155km long gas pipeline interconnection (i.e. TRA-N-031) between Gela (Sicily) and Delimara (Malta) as the most economically feasible solution to be considered as Phase 1 for the PCI implementation; and which will primarily end Malta's isolation from the Trans European gas network. The possibility of exporting gas to Italy sourced from an FSRU located approx. 12km offshore from Malta (i.e. LNG-N-211) is to be considered as Phase 2 of the PCI.		
Regulatory Decisions and similar material conditions	None presently.		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Delimara (Malta) to Sicily (Italy) Interconnection	Office of the Prime Minister (Energy) – Malta	2026	IB-ITi	MT	**56.0 GWh/d**
	Office of the Prime Minister (Energy) – Malta	2026	MT	IB-ITi	**56.0 GWh/d**

Malta-Italy gas pipeline interconnection will have bi-directional capacity as from 2026. Gas for export to Italy will be sourced from FSRU (Malta) as from 2031.

Sponsors

General Information

Promoter	*Office of the Prime Minister (Energy)*
Operator	*Office of the Prime Minister (Energy) – Malta*
Host Country	*Malta*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
LNG-N-211	Connection of Malta to the European Gas Network - LNG Regasification

NDP and PCI Information

Part of NDP ?	*Yes (Malta National Reform Programme April 2015)*
NDP Number	*Section 3.4.2*
Currently PCI	*Yes (5.19)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		*04/2015*
Feasibility	*04/2013*	*04/2015*
FEED	*08/2019*	*06/2020*
Market Test		*04/2019*
Permitting	*04/2017*	*06/2020*
Supply Contracts		*10/2021*
FID		*06/2020*
Construction	*05/2023*	*11/2025*
Commissioning	*2026*	*2026*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Delimara (Malta) to Gela (Sicily) Italy	Length & diameter of interconnector have been updated following results from pre-feasibility study completed in April 2015.	560	155	
FSRU (Malta) to Delimara (Malta)	Diameter updated to reflect send-out capacity of offshore FSRU.	560	12	
Total			**167**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 will contribute to market integration as it will eliminate Malta's isolation by connecting to the European gas network. It will improve Malta's security of energy supply and diversification of fuels by reducing the current dependence on imported fuel oils. The project will support objectives of sustainability as it will contribute to the reduction of GHG emissions and will support back-up for renewable energy. It will contribute to diversification of import sources and thus enhance competition in Italy. In Malta, it will provide access to a potentially lower cost fuel for power generation and potentially for maritime LNG bunkering and the inland market sector thereby improving competitiveness and affordability.

Time Schedule

Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	Yes
Delay Explanation	The pre-feasibility study was completed in April 2015 and concluded that the optimal solution for the natural gas interconnection (Phase 1) between Malta and continental Europe would be a 560mm diameter pipeline interconnection between Gela in Sicily and Delimara in Malta. As part of the pre-feasibility study, the project timeline for Phase 1 was analysed for each distinct phase of the project and updated to reflect more realistically the expected time required for complete project implementation. The main project stages include the basic design studies, permitting process and related environmental studies, detailed engineering design (FEED), tendering procedures and finally the construction and commissioning. The re-scheduling of 39 months in the commissioning date compared to the TYNDP 2015 reflects this result.

Expected Gas Sourcing

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

Benefits

Main Driver	Others
Main Driver Explanation	The main driver is the elimination of Malta's isolation from the European Gas network.
Benefit Description	The project will end Malta's isolation from the Trans-European gas network and thus contribute to gas market integration and improved security of energy supply and diversification of fuels for the island. The project is expected to support objectives of sustainability as it will contribute towards the reduction of GHG emissions whilst also acting as a back-up for renewable energy. It will contribute towards diversification of imported sources, thus enhancing competition in Italy. In Malta, it will provide access to a potentially lower cost fuel for both power generation and the inland market thereby improving competitiveness and affordability.

Barriers

Barriers Type	**Barrier**

Blending

TRA-N-191	Project	Pipeline including CS	Non-FID
Update Date	10/05/2016		Non-Advanced
Description	Due to the decline of the production from the Groningenfield, more h-gas has to be converted to l-gas to supply the market. Additional blending facilities to allow additional Quality Conversion.		
Regulatory Decisions and similar material conditions			

Sponsors

Gas Transport Services	100%

General Information

Promoter	*Gasunie Transport Services B.V.*
Operator	*Gasunie Transport Services B.V.*
Host Country	*Netherlands*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Additional quality conversion)*
NDP Number	*n.a.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
	Blending facilities for quality conversion			
Total				

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	quality conversion
Benefit Description	

Barriers	
Barriers Type	Barrier

Capacity expansion OSZ related to West Stream

TRA-N-873	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	This projects enables additional flow at the interconnection point between GTS and Gaspool at Oude Statenzijl. Market demand in the Netherlands and surrounding countries to compensate for declining indigenous production is an important driver for additional imports.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Transport Services B.V.	2021	DEg	IB-NLg	223.2 GWh/d
	Gasunie Transport Services B.V.	2023	DEg	IB-NLg	276.0 GWh/d
Virtual Ips (GTS) NL-DE (Gaspool)	Gasunie Transport Services B.V.	2021	IB-NLg	NL	223.2 GWh/d
	Gasunie Transport Services B.V.	2023	IB-NLg	NL	276.0 GWh/d

Sponsors

Gasunie Transport Services B.V.	100%

General Information

Promoter	*Gasunie Transport Services B.V.*
Operator	*Gasunie Transport Services B.V.*
Host Country	*Netherlands*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (Expansion measures at Oude Statenzijl were already foreseen in the Netwerk Ontwikkeling Plan 2015 (NOP). Recently, the scope of these measures was expanded, related to the plans of Nord Stream 2 and West Stream)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

NDP Number		Supply Contracts		% Exemption in entry direction	*0.00%*
		FID		% Exemption in exit direction	*0.00%*
Currently PCI	*No*	Construction			
		Commissioning	*2021*	*2023*	
CBCA Decision	*No*				
Market Survey	*Not Relevant (no CBCA decision)*				

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Entry capacity expansion GATE terminal

TRA-N-192	Project	Pipeline including CS	Non-FID
Update Date	04/05/2016		Non-Advanced
Description	Expansion of entry capacity into GTS network The project consists of an additional pipeline on a section of the existing route between the GATE terminal and the compressor station at Wijngaarden		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gate Terminal (I)	Gasunie Transport Services B.V.	2020	LNG_Tk_NL	NL	134.0 GWh/d
				Planned	

Sponsors

Gas Transport Services	100%

General Information

Promoter	*Gasunie Transport Services B.V.*
Operator	*Gasunie Transport Services B.V.*
Host Country	*Netherlands*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Exp. entry cap. due to add. supply GATE Terminal)*
NDP Number	*n.a.*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction		
		Commissioning	*2020*	*2020*

Pipelines and Compressor Stations				
Pipeline Section	**Pipeline Comment**	**Diameter (mm)**	**Length (km)**	**Compressor Power (MW)**
Maasvlakte - Wijngaarden		1,200	25	
Total			**25**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

Gate terminal phase 3

LNG-N-050	Project	LNG Terminal	Non-FID
Update Date	23/06/2016		Non-Advanced
Description	Increase the capacity by 4 billion cubic meters per year from the current value of 12 BCM p.a. to 16 BCM p.a		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gate Terminal (I)	Gate Terminal B.V.	2020	LNG_Tk_NL	NL	121.0 GWh/d
			additional 11 (in million Nm3 per day)		

Sponsors

NV Nederlandse Gasunie	50%
Royal Vopak NV	50%
	0%
OMV	0%

General Information

Promoter	*Gate*
Operator	*Gate Terminal B.V.*
Host Country	*Netherlands*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (It is not known whether this project has to be part of a National Development Plan, according to the promoter indications.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Yes*
Exemption Granted	*Yes*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*100.00%*

Technical Information (LNG)

LNG Facility	*Gate terminal Rotterdam*	
Expected Volume (bcm/y)	*4*	*additional 4 (in 10^9 Nm^3/y)*
Storage Capacity (m3)	*180,000*	*additional 180000 (in m^3 LNG)*
Ship Size (m3)	*266,000*	
Reloading Ability	*Yes*	

Time Schedule

Grant Obtention Date	31/12/2007
Delay Since Last TYNDP	2 years
Delay Explanation	more time for the market to develop and finalise commercial discussions.

Expected Gas Sourcing

LNG ()

Comments about the Third-Party Access Regime

The exemption was applied for in March 2006; the exemption has been granted by the Dutch Minister on 14 July 2007; the EC gave its approval on 2 October 2007. Was not sure what to fill in regulated or negotiated. It is exempted

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	o SoS o Market Integration (Increase of competition) Gate terminal obtained an exempted ex Art 22 Gas Directive 2003/55/EC. In order to obtain an exemption it needed to be demonstrated that Gate terminal enhanced both security of supply and the competition on the gas market.

Barriers

Barriers Type	**Barrier**

H-gas conversion of L-gas export border points

TRA-N-882	Project	Pipeline including CS	Non-FID
Update Date	20/05/2016		Non-Advanced
Description	Due to the of production of the Groningen field, L-gas export from the Netherlands to Germany is reduced. This projects enables the flow of H-gas via the existing L-gas border station at Oude Statenzijl. This project is linked to project initiatives of Gasunie Deutschland and GTG Nord.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GTG Nord)	Gasunie Transport Services B.V.	2020	IB-NLg	DEg	48.0 GWh/d
	Gasunie Transport Services B.V.	2022	IB-NLg	DEg	12.0 GWh/d
	Gasunie Transport Services B.V.	2024	IB-NLg	DEg	12.0 GWh/d
	Gasunie Transport Services B.V.	2026	IB-NLg	DEg	24.0 GWh/d
	Gasunie Transport Services B.V.	2027	IB-NLg	DEg	24.0 GWh/d
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Transport Services B.V.	2020	IB-NLg	DEg	72.4 GWh/d
	Gasunie Transport Services B.V.	2030	IB-NLg	DEg	137.5 GWh/d
Virtual Ips (GTS) NL-DE (Gaspool)	Gasunie Transport Services B.V.	2020	NL	IB-NLg	120.4 GWh/d
	Gasunie Transport Services B.V.	2022	NL	IB-NLg	12.0 GWh/d
	Gasunie Transport Services B.V.	2024	NL	IB-NLg	12.0 GWh/d
	Gasunie Transport Services B.V.	2026	NL	IB-NLg	24.0 GWh/d
	Gasunie Transport Services B.V.	2027	NL	IB-NLg	24.0 GWh/d
	Gasunie Transport Services B.V.	2030	NL	IB-NLg	137.5 GWh/d

Sponsors	
Gasunie Transport Services	100%

General Information	
Promoter	*Gasunie Transport Services B.V.*
Operator	*Gasunie Transport Services B.V.*
Host Country	*Netherlands*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*No (The project idea was mentioned in the Netwerk Ontwikkeling Plan 2015 (NOP) as a topic for cross border cooperation. Initially, measures at Tegelen, Winterswijk en Zevenaar were proposed. However, after discussion with the German TSO's, the project scope was changed.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2030*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

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 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

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (N/A. This is a new project)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Construction		
Commissioning	*2020*	*2020*

Technical Information (LNG)

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

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Competition, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG ()

Benefits

Main Driver	Others
Main Driver Explanation	Project driver: SoS, market demand
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 Rembelszczyzna and PL-LT border, CS Rembelszczyzna and CS Gustorzyn.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

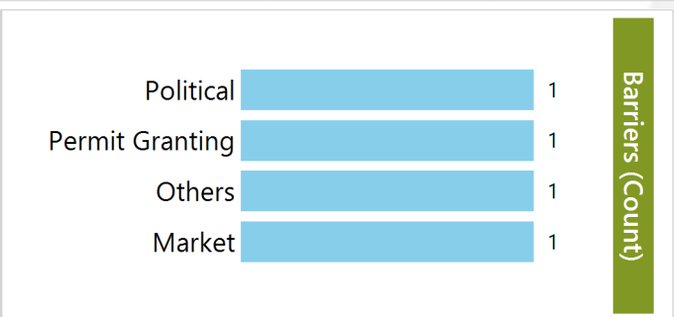
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL-LT	GAZ-SYSTEM S.A.	2019	LT	PL	51.1 GWh/d
	GAZ-SYSTEM S.A.	2019	PL	LT	73.9 GWh/d

Sponsors

Lithuanian section	
AB Amber Grid	100%
Polish section	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*
Currently PCI	*Yes (8.5)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2014*	*01/2017*
Market Test		
Permitting		*01/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*

		Supply Contracts			% Exemption in entry direction	*0.00%*
CBCA Decision	*Yes (2014-08-11)*	FID		*01/2017*	% Exemption in exit direction	*0.00%*
Market Survey	*Open Season(2013-09-21)*	Construction	*01/2017*	*01/2019*		
		Commissioning	*2019*	*2019*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Gustorzyn				14
CS Rembelszczyzna				14
GIPL - Polish section		700	357	
Total			**357**	**28**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	

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 Incukalns UGS. Also through GIPL, gas could be supplied to currently non-gasified areas in Poland and Lithuania.

Barriers

Barriers Type	Barrier
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 unmaturity 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 For Modelling

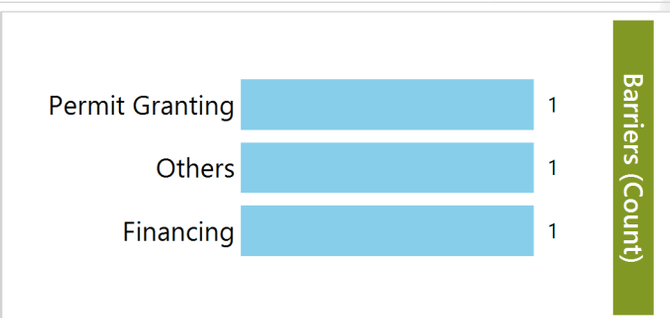
Point	Operator	Year	From Gas System	To Gas System	Capacity
Aggregated Distribution (PL)	GAZ-SYSTEM S.A.	2023	DScPL	PL	0.0 GWh/d
	Increment not assessed by ENTSOG: Distribution points are not in the scope of the TYNDP				

Sponsors

Gas Transmission Operator GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
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)

Third-Party Access Regime

Considered TPA Regime	*Regulated*

NDP and PCI Information	
Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*
Currently PCI	*Yes (6.2.2)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2023*	*2023*

Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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	
Delay Explanation	

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 adjecent systems.

Barriers

Barriers Type	Barrier
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 For Modelling

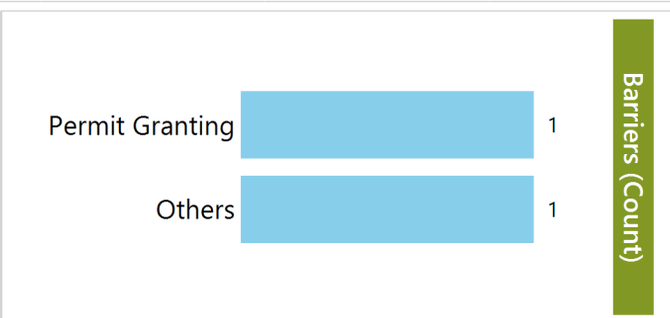
Point	Operator	Year	From Gas System	To Gas System	Capacity
Aggregated Distribution (PL)	GAZ-SYSTEM S.A.	2019	DScPL	PL	**0.0 GWh/d**

Sponsors

Gas Transmission Operator GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



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

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2013*	*01/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

Currently PCI	*Yes (6.1.2)*	Market Test		Exemption Granted	*Not Relevant*
		Permitting	*01/2017*		
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	*01/2017* *01/2019*		
		Commissioning	*2019* *2019*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Lwowek-Odolanow pipeline		1,000	162	
Odolanow 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, 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	
Delay Explanation	

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	
Barriers Type	**Barrier**
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 - 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 subsiquent sections in the project questionnaire.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

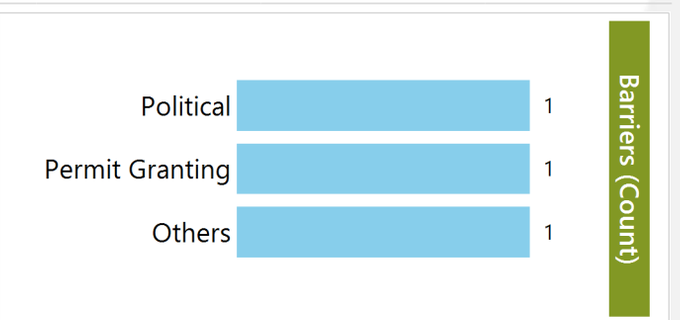
Point	Operator	Year	From Gas System	To Gas System	Capacity
Hať	GAZ-SYSTEM S.A.	2019	CZ	PL	219.1 GWh/d
	GAZ-SYSTEM S.A.	2019	PL	CZ	153.2 GWh/d

Sponsors

Czech section	
NET4GAS, s.r.o.	100%
Polish section	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

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

NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*

NDP Number	*N/A*	FEED	*01/2012*	*01/2017*	Applied for Exemption	*No*
		Market Test			Exemption Granted	*Not Relevant*
Currently PCI	*Yes (6.1.1, 6.1.2)*	Permitting		*01/2017*		
		Supply Contracts			% Exemption in entry direction	*0.00%*
CBCA Decision	*Yes (2014-06-24)*	FID		*01/2017*	% Exemption in exit direction	*0.00%*
Market Survey	*Other(2012-04-24)*	Construction	*01/2017*	*01/2019*		
		Commissioning	*2019*	*2019*		

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, 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	
Delay Explanation	

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	
Barriers Type	**Barrier**
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 - 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 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

Danish section

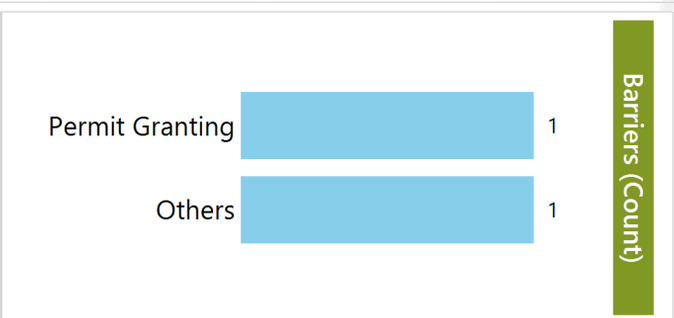
Energinet.dk	100%

Polish section

GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*
Currently PCI	*Yes (8.3)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*03/2016*	*01/2017*
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

CBCA Decision	*No*	Supply Contracts		% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID			
		Construction			
		Commissioning	*2022*	*2022*	

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	
Damaslawek - Mogilno pipeline	Power of the compressor station to be determined at a later stage	1,200	50	
Mogilno - Odolanow pipeline	Power of the compressor station to be determined at a later stage	1,000	165	
Onshore terminal - Ploty	Power of the compressor station to be determined at a later stage	1,000	80	
Ploty-Damaslawek pipeline	Power of the compressor station to be determined at a later stage	1,200	240	
Total			**815**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Expected Gas Sourcing

Norway, LNG ()

Benefits	
Main Driver	Others
Main Driver Explanation	Regulation SoS and market integration
Benefit Description	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 Balticonnector). Since the project is bidirectional it will also provide the security of supply benefits for DK and SE (access to LNG).

Barriers	
Barriers Type	**Barrier**
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Others	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/susbisdies 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.

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 relavant internal transmission investments in Poland and in Slovakia to ensure full functionality of the interconnection. Detailed information on these projects is provided in subsiquents section in the project questionnaire.		
Regulatory Decisions and similar material conditions			

Capacity Increments 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

Polish section

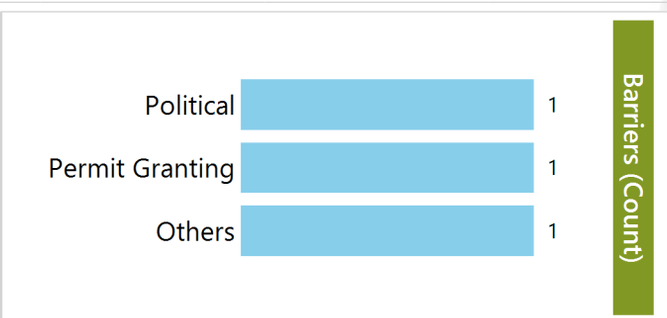
Gas Transmission Operator GAZ-SYSTEM S.A. 100%

Slovak section

eustream, a.s. 100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
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

Part of NDP ? *Yes (Network Development Plan 2016-2025)*

Schedule

	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*

NDP Number	*N/A*	Feasibility		Applied for Exemption	*No*
		FEED	*01/2014* *01/2017*	Exemption Granted	*Not Relevant*
Currently PCI	*Yes (6.2.1, 6.2.3)*	Market Test			
		Permitting	*01/2017*	% Exemption in entry direction	*0.00%*
CBCA Decision	*Yes (2014-11-28)*	Supply Contracts		% Exemption in exit direction	*0.00%*
Market Survey	*Open Season(2016-07-01)*	FID	*01/2017*		
		Construction	*01/2017* *12/2019*		
		Commissioning	*2019* *2019*		

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, 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

Barriers Type	Barrier
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. Extenstion 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 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**
				245,28 GWh/d	
UA>PL Interconnector	GAZ-SYSTEM S.A.	2020	UA	PL	**215.0 GWh/d**
				215,04 GWh/d	

Sponsors

PL section

Gas Transmission Operator GAZ-SYSTEM S.A.	100%

UA section

Ukrtransgaz	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*01/2016*	*01/2016*
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
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		% Exemption in exit direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	Construction			
		Commissioning	*2020*	*2020*	

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, 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	
Delay Explanation	

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)

Barriers

Barriers Type	**Barrier**

UGS Damaslawek

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 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

GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*GAZ-SYSTEM S.A.*
Host Country	*Poland*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Commissioning	*2026*	*2026*

Technical Information (UGS)

Storage Facility	*UGS Damasławek*
Storage Facility Type	*Salt Cavern*
Multiple-Cycle	*Yes*
Working Volume (mcm)	*450.00*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	Project drivers: SoS, market demand
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 For Modelling

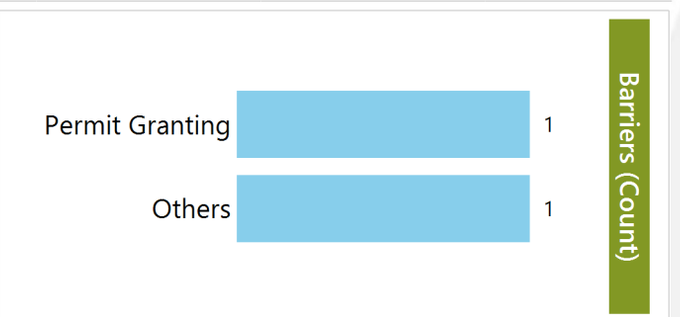
Point	Operator	Year	From Gas System	To Gas System	Capacity
Swinoujscie	GAZ-SYSTEM S.A.	2020	LNG_Tk_PL	PL	158.0 GWh/d
	Polskie LNG S.A.	2020	LNG_Tk_PL	PL	158.0 GWh/d

Sponsors

Gas Transmission Operator GAZ-SYSTEM S.A.	100%

General Information

Promoter	*GAZ-SYSTEM S.A.*
Operator	*Polskie LNG S.A.*
Host Country	*Poland*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Network Development Plan 2016-2025)*
NDP Number	*N/A*
Currently PCI	*Yes (8.7)*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		*11/2015*
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	Construction		
		Commissioning	*2020*	*2020*

Technical Information (LNG)

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

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

LNG (), LNG exporting countries

Benefits

Main Driver	Others
Main Driver Explanation	Implementation of the project is driven by SoS and market demand considarations

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

Barriers Type	Barrier
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 committments to enable the investment decision for the infrastructure operator. It could be mitgated by external susbisdies (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).

3rd IP between Portugal and Spain (Compressor Station)

TRA-N-284	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	The 3RD Interconnection Point (IP) PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States. This project will contain a compressor station in the already existing pipeline Cantanhede-Mangualde. This project enables the project TRA-N-285 3rd IP between Portugal and Spain Spain (pipeline Cantanhede-Mangualde).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

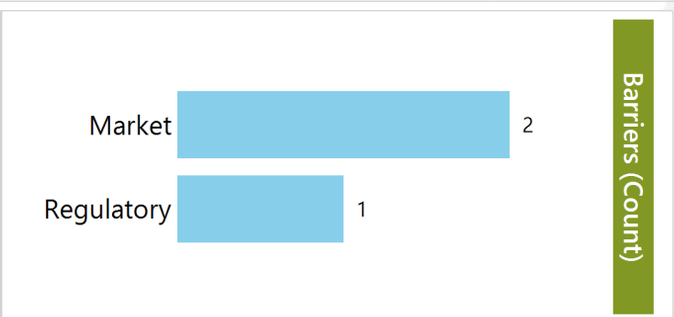
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP IBERICO	REN - Gasodutos, S.A.	2025	PT	ES	27.0 GWh/d
	econd Step. of the 3RD Interconnection Point (IP) between Portugal and SP.				
	REN - Gasodutos, S.A.	2025	ES	PT	22.0 GWh/d
	Second Step. of the 3RD Interconnection Point (IP) between Portugal and SP.				

Sponsors

REN Gasodutos	100%

General Information

Promoter	*REN-Gasodutos, S.A.*
Operator	*REN - Gasodutos, S.A.*
Host Country	*Portugal*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-285	3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)

NDP and PCI Information

Part of NDP ?	*Yes (PDIRGN 2015)*
NDP Number	-

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

Currently PCI	*Yes (5.4)*	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		*12/2022*	% Exemption in exit direction	*0.00%*
		Construction	*01/2023*	*12/2025*		
		Commissioning	*2025*	*2025*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Cantanhede Compressor Station	Second Step of the 3RD Interconnection Point (IP) between Portugal and Spain.			12
Total				**12**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project aims at fulfilling the infrastructure standard (N-1) rule, 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	The project increases the security of supply in the Portuguese gas system and guarantees the fulfilment of the N-1 criterion of the Regulation Nº 994/2010. It facilitates the integration of the Portuguese market at Iberian and European level, improving competition and providing shippers with access to alternative balancing gas enhancing transmission fluidity. It also contributes to the European gas sources diversification, as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the moment, Portuguese NG system has lower diversification indexes measured both on capacity and on supply sources, than most of the European countries. The assessment carried out by the Commission on the selection process for the second List of PCI, identified a high and balanced contribution of the project, between the criterions' of the Regulation nº 347/2013: market integration, security of supply and competition.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	4 years
Delay Explanation	Demand forecasts decrease due to the economic and financial context in Portugal and in the EU, with especial relevance to the decrease on the CCGTs demand observed in the lasts years, due to greater renewable power production and lower coal prices. In the Madrid Declaration from March 2015, "The 3rd Portugal-Spain interconnection should be developed in accordance" with the MIDCAT project. As a consequence the delay in the MIDCAT project has also introduced a delay in the 3RD IP between Portugal and Spain project.

Expected Gas Sourcing
Norway, Russia, LNG ()

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between Portugal and Spain, it should be noticed their planning shall be adjusted according to the real evolution of gas demand and market development in the Iberian Peninsula.
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidity between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the security of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems; Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European gas infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.

Barriers	
Barriers Type	**Barrier**
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream respecting the part of the project allocated to Portuguese consumers (after the CBCA decision by the regulators of Portugal and Spain) will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.
Market	Regarding the market survey, the 3rd interconnection between the gas systems of Portugal and Spain is regarded as commercially non-viable as has been demonstrated by the responses of the stakeholders to the public consultation process on the gas sector TYNDP for Portugal held in 2015 in what concerns this specific project, meaning that its potential users are not willing to make any prior commitments in terms of capacity booking.
Market	Lack of market support

3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)

TRA-N-285	Project	Pipeline including CS	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	TThe 3RD Interconnection Point (IP) PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States. This project corresponds to a second pipeline parallel to the already existing pipeline between Cantanhede and Mangualde.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

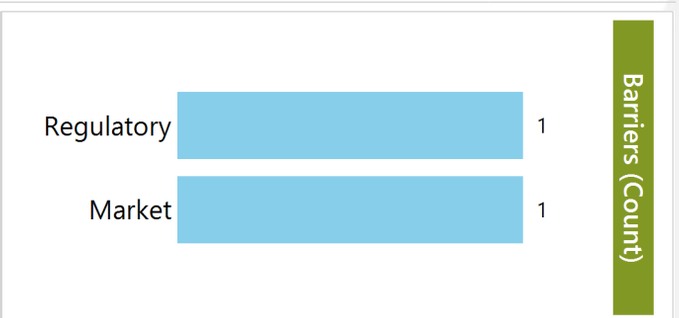
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP IBERICO	REN - Gasodutos, S.A.	2025	PT	ES	29.0 GWh/d
	Third Step of the 3RD Interconnection Point between Portugal and Spain.				
	REN - Gasodutos, S.A.	2025	ES	PT	32.0 GWh/d
	Third Step of the 3RD Interconnection Point between Portugal and Spain.				

Sponsors

REN Gasodutos	100%

General Information

Promoter	*REN-Gasodutos, S.A.*
Operator	*REN - Gasodutos, S.A.*
Host Country	*Portugal*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (PDIRGN 2015)*
NDP Number	-
Currently PCI	*Yes (5.4)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*

CBCA Decision	*No*	Supply Contracts		% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID	*12/2022*	% Exemption in exit direction	*0.00%*
		Construction	*01/2023* *12/2025*		
		Commissioning	*2025* *2025*		

Pipelines and Compressor Stations				
Pipeline Section	**Pipeline Comment**	**Diameter (mm)**	**Length (km)**	**Compressor Power (MW)**
Pipeline Cantanhede-Mangualde	Third Step of the 3RD Interconnection Point between Portugal and Spain.	500	67	
Total			**67**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 security of supply in the Portuguese gas system and guarantees the fulfilment of the N-1 criterion of the Regulation Nº 994/2010. It facilitates the integration of the Portuguese market at Iberian and European level, improving competition and providing shippers with access to alternative balancing gas enhancing transmission fluidity. It also contributes to the European gas sources diversification, as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the moment, Portuguese NG system has lower diversification indexes measured both on capacity and on supply sources, than most of the European countries. The assessment carried out by the Commission on the selection process for the second List of PCI, identified a high and balanced contribution of the project, between the criterions' of the Regulation nº 347/2013: market integration, security of supply and competition.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	Demand forecasts decrease due to the economic and financial context in Portugal and in the EU, with especial relevance to the decrease on the CCGTs demand observed in the lasts years, due to greater renewable power production and lower coal prices. In the Madrid Declaration from March 2015, "The 3rd Portugal-Spain interconnection should be developed in accordance" with the MIDCAT project. As a consequence the delay in the MIDCAT project has also introduced a delay in the 3RD IP between Portugal and Spain project.

Expected Gas Sourcing

Norway, Russia, LNG ()

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between Portugal and Spain, it should be noticed their planning shall be adjusted according to the real evolution of gas demand and market development in the Iberian Peninsula.
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidity between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the security of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems; Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European gas infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.

Barriers	
Barriers Type	Barrier
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream respecting the part of the project allocated to Portuguese consumers (after the CBCA decision by the regulators of Portugal and Spain) will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.
Market	Regarding the market survey, the 3rd interconnection between the gas systems of Portugal and Spain is regarded as commercially non-viable as has been demonstrated by the responses of the stakeholders to the public consultation process on the gas sector TYNDP for Portugal held in 2015 in what concerns this specific project, meaning that its potential users are not willing to make any prior commitments in terms of capacity booking.

3rd IP between Portugal and Spain (pipeline Celorico-Spanish border)

TRA-N-283	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Advanced
Description	The 3RD Interconnection Point (IP) PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal and Spain by crossing the border between both Member States. This project will connect both gas systems between Celorico da Beira (Portugal) and Spanish border, through a pipeline with 162 km of length. This project enables the projects TRA-N- 284 3rd IP between Portugal and Spain (Compressor Station), TRA-N-285 3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde) and TRA-N-320 Carregado Compressor Station.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

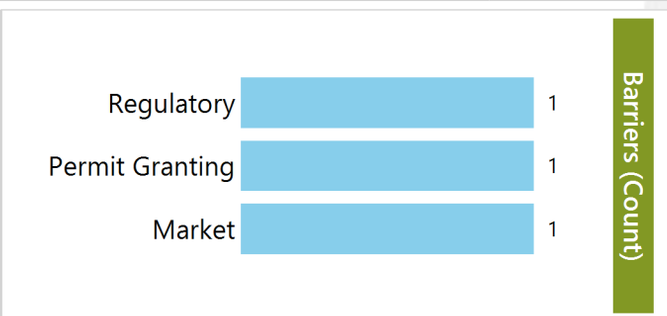
Point	Operator	Year	From Gas System	To Gas System	Capacity
VIP IBERICO	REN - Gasodutos, S.A.	2021	PT	ES	**70.0 GWh/d**
	First Step of the 3RD Interconnection Point (IP) PORTUGAL-SPAIN.				
	REN - Gasodutos, S.A.	2021	ES	PT	**85.0 GWh/d**
	First Step of the 3RD Interconnection Point (IP) PORTUGAL-SPAIN.				

Sponsors

REN Gasodutos	100%

General Information

Promoter	*REN-Gasodutos, S.A.*
Operator	*REN - Gasodutos, S.A.*
Host Country	*Portugal*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-285	3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)
TRA-N-284	3rd IP between Portugal and Spain (Compressor Station)
TRA-N-320	Carregado Compressor Station

NDP and PCI Information		Schedule	Start Date	End Date	Third-Party Access Regime	
Part of NDP ?	*Yes (PDIRGN 2015)*	Pre-Feasibility		*12/2014*	Considered TPA Regime	*Regulated*
NDP Number	-	Feasibility	*01/2015*	*03/2015*	Considered Tariff Regime	*Regulated*
		FEED	*07/2015*	*05/2018*	Applied for Exemption	*No*
Currently PCI	*Yes (5.4)*	Market Test		*12/2017*	Exemption Granted	*No*
		Permitting	*02/2016*	*12/2018*		
CBCA Decision	*No*	Supply Contracts		*12/2019*	% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID		*05/2018*	% Exemption in exit direction	*0.00%*
		Construction	*01/2020*	*11/2021*		
		Commissioning	*2021*	*2021*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Celorico-Spanish border	First Step of the 3RD Interconnection Point (IP) PORTUGAL-SPAIN.	700	162	
Total			**162**	

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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 security of supply in the Portuguese gas system and guarantees the fulfilment of the N-1 criterion of the Regulation Nº 994/2010. It facilitates the integration of the Portuguese market at Iberian and European level, improving competition and providing shippers with access to alternative balancing gas enhancing transmission fluidity. It also contributes to the European gas sources diversification, as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the moment, Portuguese NG system has lower diversification indexes measured both on capacity and on supply sources, than most of the European countries. The assessment carried out by the Commission on the selection process for the second List of PCI, identified a high and balanced contribution of the project, between the criterions' of the Regulation nº 347/2013: market integration, security of supply and competition.

Time Schedule

Grant Obtention Date	15/10/2015
Delay Since Last TYNDP	3 years

Delay Explanation	Demand forecasts decrease due to the economic and financial context in Portugal and in the EU, with especial relevance to the decrease on the CCGTs demand observed in the lasts years, due to greater renewable power production and lower coal prices. In the Madrid Declaration from March 2015, "The 3rd Portugal-Spain interconnection should be developed in accordance" with the MIDCAT project. As a consequence the delay in the MIDCAT project has also introduced a delay in the 3RD IP between Portugal and Spain project.

Expected Gas Sourcing

Norway, Russia, Other LNG sources from the diversification of supply are expected, namely from the result of the integration of the Iberian m

Benefits

Main Driver	Market Demand
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between Portugal and Spain, it should be noticed their planning shall be adjusted according to the real evolution of gas demand and market development in the Iberian Peninsula.
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidity between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the security of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems; Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European gas infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.

Barriers

Barriers Type	Barrier
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream respecting the part of the project allocated to Portuguese consumers (after the CBCA decision by the regulators of Portugal and Spain) will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.
Permit Granting	A pre-application decision is expected by December 2016 and the statutory decision is expected by December 2018.
Market	Regarding the market survey, the 3rd interconnection between the gas systems of Portugal and Spain is regarded as commercially non-viable as has been demonstrated by the responses of the stakeholders to the public consultation process on the gas sector TYNDP for Portugal held in 2015 in what concerns this specific project, meaning that its potential users are not willing to make any prior commitments in terms of capacity booking.

Carregado Compressor Station

TRA-N-320	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Advanced
Description	The project consists of a Compressor Station in the main high pressure pipeline and it aims to increase the capacity of the pipeline section between Sines and Leiria, to enable that higher flow rates can be transported from the Sines LNG Terminal. This project enables the projects TRA-N-283 3rd IP between Portugal and Spain (pipeline Celorico-Spanish Border), TRA-N- 284 3rd IP between Portugal and Spain (Compressor Station) and TRA-N-285 3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde).		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

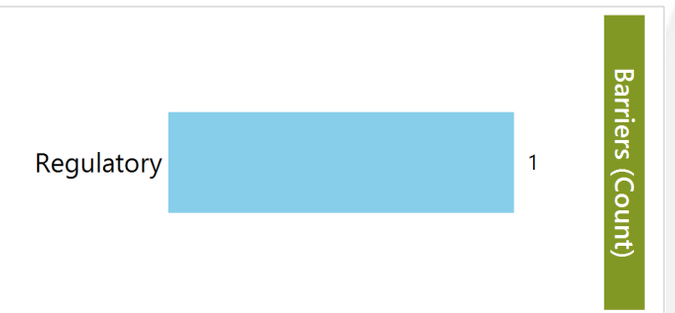
Point	Operator	Year	From Gas System	To Gas System	Capacity
Sines	REN - Gasodutos, S.A.	2021	LNG_Tk_PT	PT	92.8 GWh/d
	Incremental capacity in pipeline network from Sines LNG regaseification.				

Sponsors

REN Gasodutos, SA	100%

General Information

Promoter	*REN-Gasodutos, S.A.*
Operator	*REN - Gasodutos, S.A.*
Host Country	*Portugal*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-284	3rd IP between Portugal and Spain (Compressor Station)
TRA-N-283	3rd IP between Portugal and Spain (pipeline Celorico-Spanish border)
TRA-N-285	3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)

NDP and PCI Information

Part of NDP ?	*Yes (PDIRGN 2015)*
NDP Number	-

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*09/2008*	*01/2010*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*

		FEED	*08/2010*	*11/2010*	Applied for Exemption	*No*
Currently PCI	*No*	Market Test			Exemption Granted	*No*
		Permitting	*02/2011*			
CBCA Decision	*No*	Supply Contracts			% Exemption in entry direction	*0.00%*
Market Survey	*Not Relevant (no CBCA decision)*	FID		*05/2018*	% Exemption in exit direction	*0.00%*
		Construction	*01/2019*	*12/2021*		
		Commissioning	*2021*	*2021*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Setubal - Leiria (Lote 1)	Carregado Compressor Station.			14
Total				**14**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	3 years
Delay Explanation	Demand forecasts decrease due to the economic and financial context in Portugal and in the EU. Decrease in the demand for the CCGTs due to the low prices of the CO2 emissions.The investment in this infrastructure should be decided by 2018, with the commissioning to occur by the end of 2021.The schedule of this project is aligned and is a enabler of the PCI project 5.4 - 3rd interconnection between Portugal and Spain (TRA-N-283, TRA-N-284, TRA-N-285).

Expected Gas Sourcing

LNG (DZ,NO,QA,US,WO,YE)

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The project aims to increase the capacity of the pipeline section between Sines and Leiria, to enable that higher flow rates can be transported from the Sines LNG Terminal. The project will increase the interoperability and system flexibility and consequently support intermitent renewable generation, mainly from the high share of wind generation capacity installed in Portugal and Spain. With the expansion of the Sines LNG Terminal and the consequent increase in their regasification capacity to RNTGN, this project will contribute for the diversification of supply sources and also supplying counter parts. From the strategic and planning point of view, the Carregado CS is proposed in order to integrate the other infrastructures of the RNTIAT, namely the Sines LNG terminal, the construction of the 3rd interconnection Portugal-Spain and the development of the Carriço underground storage (UGS).

Barriers	
Barriers Type	Barrier
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). These revenues will be ensured through the payment of regulated TPA tariffs by network users Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.

RENC-8 Carriço UGS cavern

UGS-N-659	Project	Storage Facility	Non-FID
Update Date	09/05/2016		Non-Advanced
Description	New salt cavern in the Carriço UGS site (7th cavern). Carriço UGS is based on caverns leached in a salt dome. Surface plant includes the facilities for injection and withdrawal of natural gas from the caverns in operation. The Carriço UGS site currently has 6 salt caverns in operation (the latest of which was commissioned in late 2014). Currently the plans for construction of additional caverns have been postponed and are pending from the reassessment of security of supply and market requirements post economic and financial downturn.		
Regulatory Decisions and similar material conditions			

Sponsors

REN - Armazenagem, S.A.	100%

General Information

Promoter	*REN - Armazenagem, S.A.*
Operator	*REN Armazenagem*
Host Country	*Portugal*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (PDIRGN 2015)*
NDP Number	-
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		*01/2018*
Construction	*01/2018*	*09/2022*
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (UGS)

Storage Facility	*Armazenamento Subterrâneo do Carriço*	
Storage Facility Type	*Salt Cavern*	
Multiple-Cycle	*No*	
Working Volume (mcm)	*58.00*	*Equivalent to 690 GWh*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	Currently the plans for construction of additional caverns have been postponed and are pending from the reassessment of security of supply and market requirements post economic and financial downturn.
Benefit Description	Increase in competition in Portugal, better market integration in the Iberian Peninsula aiming for the Mibgás development and increase in security of supply.

Barriers

Barriers Type	**Barrier**

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 posibility 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 For Modelling

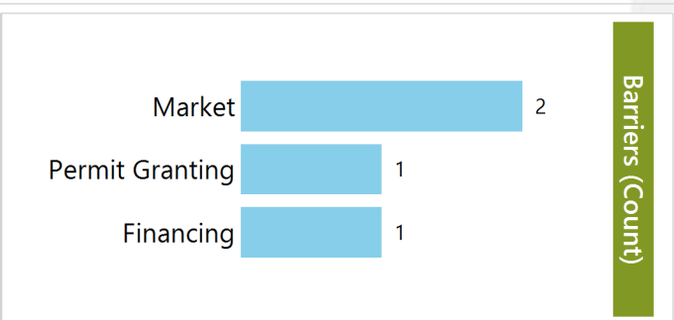
Point	Operator	Year	From Gas System	To Gas System	Capacity
AGRI / Constanta (RO)	AGRI	2026	GEa	RO Regazification terminal	240.0 GWh/d
AGRI / Poti (GE)	AGRI	2026	GE?	GEa Liquefaction terminal	240.0 GWh/d

Sponsors

GOGC (GE)	25%
MVM (HU)	25%
ROMGAZ (RO)	25%
SOCAR (AZ)	25%

General Information

Promoter	*AGRI LNG Project Company SRL (RO)*
Operator	*AGRI*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*06/2012*	*04/2015*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*

NDP and PCI Information

Part of NDP ?	*No (AGRI is not a Transmission System Operator, so it is not necessary for its project to be part of a National Development Plan.)*
NDP Number	
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FEED	*01/2019*	*04/2020*	Applied for Exemption	*Not Relevant*
Market Test		*06/2021*	Exemption Granted	*Not Relevant*
Permitting	*01/2018*	*09/2019*		
Supply Contracts		*10/2022*	% Exemption in entry direction	*0.00%*
FID		*11/2020*	% Exemption in exit direction	*0.00%*
Construction	*06/2022*	*08/2026*		
Commissioning	*2026*	*2026*		

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	
Barriers Type	Barrier
Permit Granting	long duration for obtaining permits
Market	market further integration with the local Project is required
Financing	Availability of funds and associated conditions
Market	Lack of market support

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 For Modelling

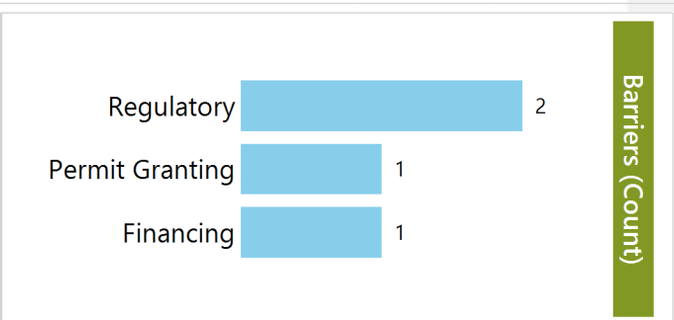
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Targu Mures	Depomures	2019	STcRO	RO	15.8 GWh/d
	To be considered for modeling purposes.				
	Depomures	2019	RO	STcRO	15.8 GWh/d
	To be considered for modeling purposes.				
	Depomures	2022	STcRO	RO	18.9 GWh/d
	To be considered for modeling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

Sponsors

GDF International	59%

General Information

Promoter	*Engie Romania SA*
Operator	*Depomures*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information	
Part of NDP ?	*No (As far as we are aware, currently there is no comprehrensive 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 anually.)*
NDP Number	
Currently PCI	*Yes (6.20.4)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		*06/2004*
Feasibility	*06/2008*	*06/2009*
FEED	*06/2011*	*06/2012*
Market Test		*06/2016*
Permitting	*06/2012*	*06/2016*
Supply Contracts		
FID		*11/2016*
Construction	*07/2015*	*01/2022*
Commissioning	*2019*	*2022*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

PCI Details	
PCI Benefits	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	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.

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

Barriers Type	Barrier
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.
Regulatory	Low or zero-priced short-term capacity
Regulatory	Low rate of return
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	22/06/2016		Non-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 Podişor-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 Recaş–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 For Modelling

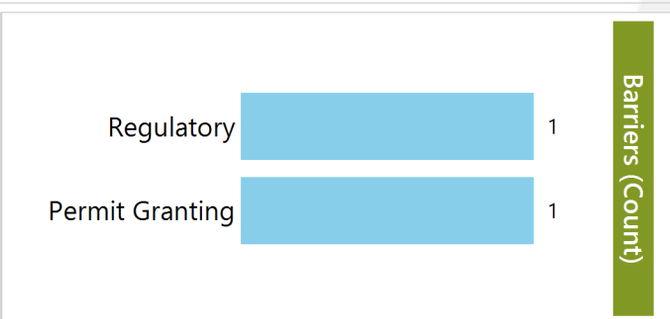
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	SNTGN Transgaz S.A.	2020	HU	RO	76.5 GWh/d
	SNTGN Transgaz S.A.	2020	RO	HU	126.1 GWh/d
Ruse (BG) / Giurgiu (RO)	SNTGN Transgaz S.A.	2020	RO	BGn	29.3 GWh/d

Sponsors

SNTGN Transgaz S.A.	100%

General Information

Promoter	*SNTGN Transgaz S.A.*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Enabled Projects

Project Code	Project Name
TRA-N-362	Development on the Romanian territory of the Southern Transmission Corridor
TRA-F-029	Romania-Bulgaria Interconnection (EEPR-2009-INTg-RO-BG)

NDP and PCI Information	
Part of NDP ?	*Yes (Development Plan for the National GTS 2016-2025)*
NDP Number	*7.1*
Currently PCI	*Yes (Stage I: 6.24.2 Stage II: 6.24.7)*
CBCA Decision	*Yes (2015-10-06)*
Market Survey	*Open Season(2017-10-02)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*10/2017*
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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 Interroperability
Benefit Description	

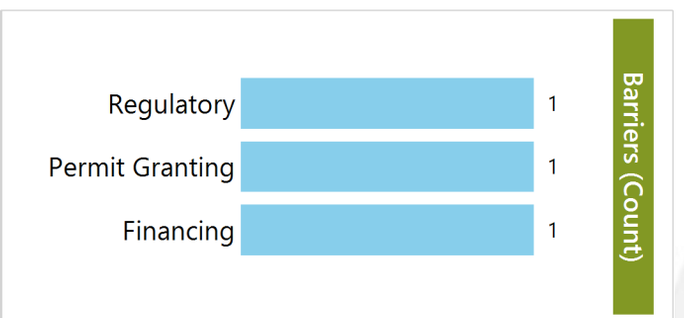
Barriers	
Barriers Type	**Barrier**
Regulatory	The Competent Authority to coordinate all permit granting processes is not yet functional in Romania.
Permit Granting	Long and complicated process implying the need to receive the right of access on the field

Development on the Romanian territory of the Southern Transmission Corridor

TRA-N-362	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-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	
SNTGN Transgaz SA	100%

General Information	
Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
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	
Part of NDP ?	*Yes (Development Plan for the National GTS 2016-2025)*
NDP Number	*7.2*
Currently PCI	*Yes (6.24.8)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Black Sea - Podişor	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	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	
Barriers Type	**Barrier**
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

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 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

Transgaz S.A.	100%

General Information

Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*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.)*
NDP Number	
Currently PCI	*Yes (6.25.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2021*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

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	Regulation SoS
Main Driver Explanation	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.

Benefit Description	- 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.

Barriers

Barriers Type	Barrier

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 Oneşti – Coroi – Haţeg – 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 For Modelling

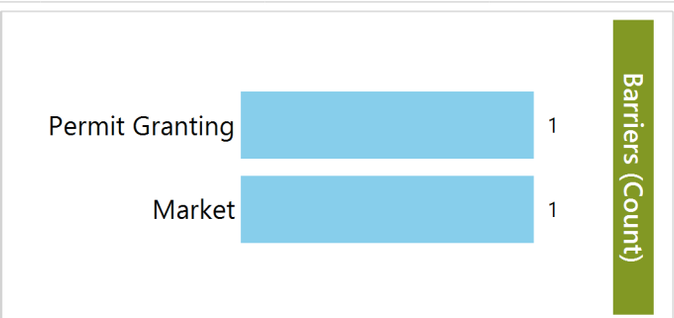
Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota 2	SNTGN Transgaz S.A.	2023	HU	RO	128.7 GWh/d
	SNTGN Transgaz S.A.	2023	RO	HU	128.7 GWh/d

Sponsors

SNTGN Transgaz SA	100%

General Information

Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Developement Plan for the National GTS 2016 - 2025)*
NDP Number	*7.5*
Currently PCI	*Yes (6.25.3)*
CBCA Decision	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% 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)
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, 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	
Delay Explanation	

Expected Gas Sourcing

Black Sea or other on-shore blocks

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

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

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

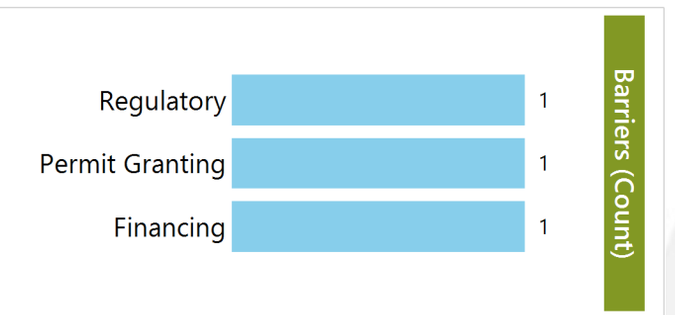
TRA-N-139	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	The project consists of: □ the modernisation and extension of the Siliștea compressor station; □ the modernisation and extension of the Onești compressor station; □ changes within the Isaccea metering station;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

Sponsors

Transgaz	100%

General Information

Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
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

Part of NDP ?	*Yes (Developement Plan for the National GTS 2016 - 2025)*
NDP Number	*7.3*
Currently PCI	*Yes (6.15)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Commissioning	*2019*	*2019*	

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-Interroperability
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
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

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

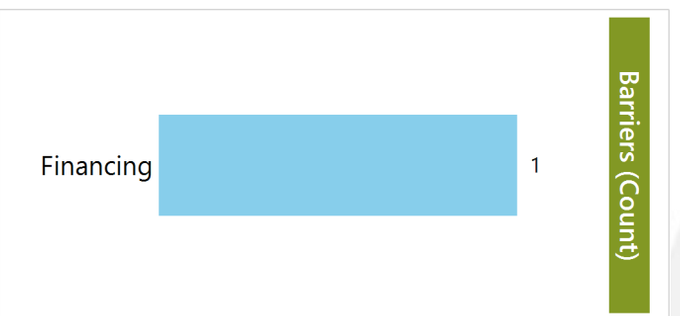
TRA-N-964	Project	Pipeline including CS	Non-FID
Update Date	07/05/2016		Non-Advanced
Description	The project consists of the NTS extension for creating an additional overtaking point for the offshore Black Sea blocks gas. In this respect it is considered the building of a transmission pipeline approximately 25 – 30-km long, from the Black Sea shore to the existing T1 international transmission pipeline.		
Regulatory Decisions and similar material conditions			

Sponsors

SNTGN Transgaz SA	100%

General Information

Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Development Plan for the National GTS 2016 - 2025)*
NDP Number	*7.6*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		*12/2016*
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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 pipleine 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

Barriers Type	Barrier
Financing	Availability of funds and associated conditions

New undergound 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 For Modelling

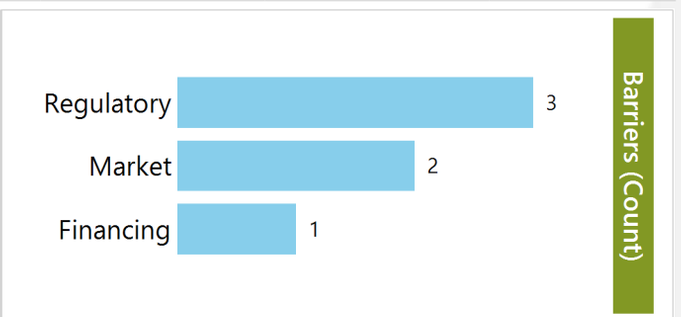
Point	Operator	Year	From Gas System	To Gas System	Capacity
New Gas Storage Facility in Romania	SNTGN Romgaz S.A.	2023	STcRO	RO	**21.0 GWh/d**
	SNTGN Romgaz S.A.	2023	RO	STcRO	**15.0 GWh/d**

Sponsors

SNGN ROMGAZ S.A.	100%

General Information

Promoter	*Societatea Naţională de Gaze Naturale ROMGAZ S.A.*
Operator	*SNTGN Romgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		*06/2016*
Feasibility	*10/2016*	*10/2017*
FEED	*11/2017*	*11/2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*

NDP and PCI Information

Part of NDP ?	*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.)*
NDP Number	
Currently PCI	*Yes (6.20.5)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Market Test		*10/2017*	Exemption Granted	*No*
Permitting	*03/2017*	*11/2018*		
Supply Contracts		*07/2021*	% Exemption in entry direction	*0.00%*
FID		*12/2018*	% Exemption in exit direction	*0.00%*
Construction	*07/2019*	*05/2023*		
Commissioning	*2023*	*2023*		

Technical Information (UGS)

Storage Facility	*UGS Moldova*
Storage Facility Type	*Depleted Field*
Multiple-Cycle	*No*
Working Volume (mcm)	*200.00*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule,
General Criteria Fulfilled	Yes
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 Disupted 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 Repubic 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

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

NTS developments in North-East Romania

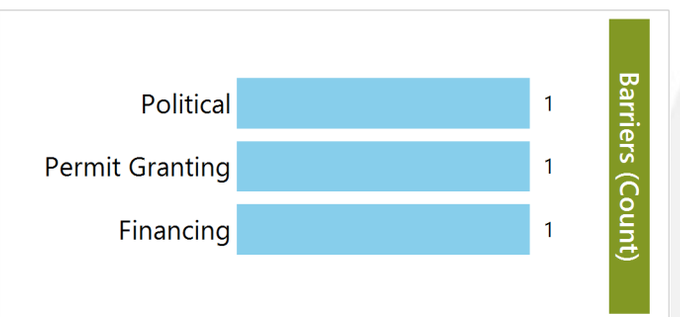
TRA-N-357	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	Development of the Romanian gas transmission system in order to improve the gas supply in the North –East region of Romania and to increase transmission capacities so as to improve gas supply in the area 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

SNTGN Transgaz S.A.	100%

General Information

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

Part of NDP ?	*Yes (Developement Plan for the National GTS 2016 - 2025)*
NDP Number	*7.4*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing
European gas market

Benefits	
Main Driver	Regulation-Interroperability
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
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

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 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

Bulgartransgaz	54%
Transgaz	46%

General Information

Promoter	*SNTGN Transgaz SA*
Operator	*SNTGN Transgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

Barriers (Count)

No Barriers Defined

NDP and PCI Information

Part of NDP ?	*No (The project is in the final stage of the construction works and will be comissioned during 2016.)*
NDP Number	
Currently PCI	*No*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*

		Supply Contracts		% Exemption in exit direction	*0.00%*
CBCA Decision	*No*	FID			
Market Survey	*Not Relevant (no CBCA decision)*	Construction	*01/2016*		
		Commissioning	*2016*	*2016*	

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 bad 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.

Barriers

Barriers Type	**Barrier**

Sarmasel undeground 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 For Modelling

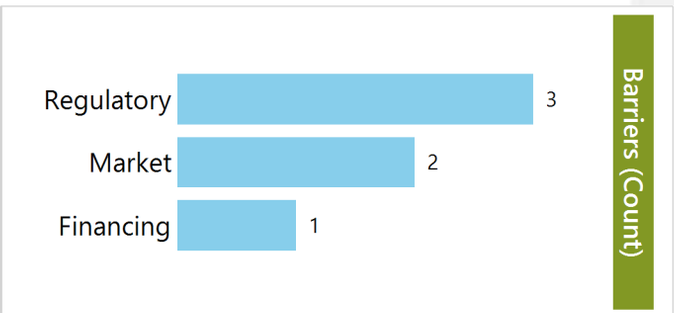
Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Sarmasel	SNTGN Romgaz S.A.	2022	STcRO	RO	34.0 GWh/d
	SNTGN Romgaz S.A.	2022	RO	STcRO	42.0 GWh/d
VIP Romgaz UGS (RO)	SNTGN Romgaz S.A.	2022	STcRO	RO	34.0 GWh/d
	SNTGN Romgaz S.A.	2022	RO	STcRO	42.0 GWh/d

Sponsors

SNGN ROMGAZ S.A. 100%

General Information

Promoter	*Societatea Naţională de Gaze Naturale ROMGAZ S.A.*
Operator	*SNTGN Romgaz S.A.*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		*06/2016*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*

NDP and PCI Information

Part of NDP ?	*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.)*
NDP Number	
Currently PCI	*Yes (6.20.6)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Feasibility	*10/2016*	*10/2017*	Considered Tariff Regime	*Regulated*
FEED	*11/2017*	*08/2018*	Applied for Exemption	*No*
Market Test		*10/2017*	Exemption Granted	*No*
Permitting	*03/2017*	*09/2018*		
Supply Contracts		*03/2021*	% Exemption in entry direction	*0.00%*
FID		*09/2018*	% Exemption in exit direction	*0.00%*
Construction	*04/2019*	*05/2022*		
Commissioning	*2022*	*2022*		

Technical Information (UGS)

Storage Facility	*UGS SARMASEL*
Storage Facility Type	*Depleted Field*
Multiple-Cycle	*No*
Working Volume (mcm)	*650.00*

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, Project aims at supplying directly or indirectly at least two Member States
General Criteria Fulfilled	Yes
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

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

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 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
South Caucasus Pipeline / White Stream	White Stream	2022	AZ	AZ/SCP	505.0 GWh/d

Sponsors

w-stream-pipeline Ltd	90%
M Bryza	10%

General Information

Promoter	*White Stream Ltd*
Operator	*White Stream*
Host Country	*Romania*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

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

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Negotiated*

NDP and PCI Information

Part of NDP ?	*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)*	FEED			Applied for Exemption	*No*
NDP Number		Market Test			Exemption Granted	*Not Relevant*
Currently PCI	*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)
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,
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	

Delay Explanation	

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

Barriers

Barriers Type	**Barrier**

Project GO4LNG LNG terminal Gothenburg

LNG-N-032	Project	LNG Terminal	Non-FID Advanced
Update Date	04/05/2016		
Description	A small-scale LNG terminal, including connection to the transmission grid, placed in the Gothenburg harbour, with flexible send out by rail, truck, bunkering and regasification.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

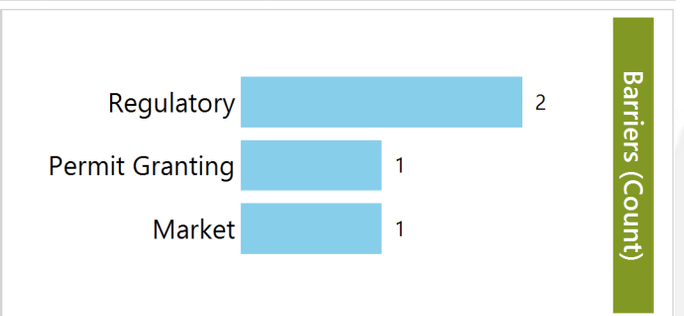
Point	Operator	Year	From Gas System	To Gas System	Capacity
Gothenburg LNG	Swedegas AB	2020	LNG_Tk_SE	SE	**26.0 GWh/d**

Sponsors

Swedegas AB	100%

General Information

Promoter	*Swedegas AB*
Operator	*Swedegas AB*
Host Country	*Sweden*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*No (Not applicable for Sweden. There is no NDP.)*
NDP Number	
Currently PCI	*Yes (8.6)*
CBCA Decision	*Yes (2015-10-01)*
Market Survey	*Open Season(2013-02-27)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		*01/2012*
Feasibility	*01/2012*	*06/2012*
FEED	*04/2016*	*10/2016*
Market Test		*01/2013*
Permitting	*10/2013*	*05/2014*
Supply Contracts		*12/2016*
FID		*01/2017*
Construction	*01/2017*	*01/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (LNG)

LNG Facility	*GO4LNG Gothenburg*	
Expected Volume (bcm/y)	*1*	
Storage Capacity (m3)	*25,000*	*7,500 m3 bullet tanks or 25,000 m3 full containment tank*
Ship Size (m3)	*75,000*	*This size is subject to certain availability at the jetty. If not available, 15600 m3 is the limit.*
Reloading Ability	*Yes*	

PCI Details

PCI Benefits	Project aims at fulfilling the infrastructure standard (N-1) rule, 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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	Delayed
Delay Explanation	Slower market development than expected.

Expected Gas Sourcing

LNG (?)

Benefits

Main Driver	Market Demand
Main Driver Explanation	The project is designed to cover several market segments with the main volume driver LNG send out to marine and industrial segments but also for injection to Swedegas' existing transmission grid.
Benefit Description	Facilitates supply to non grid customers, such as industry replacing oil and future bunkering of ships to comply with the coming SECA regulation. Connetion to the grid allows an second entry point to the Swedish transmission grid increasing security of supply and competition. Connection also timproves functionality such as pressure holding, short term storage etc.

Barriers

Barriers Type	Barrier
Regulatory	Small scale LNG is an emerging market with no mature trade patterns which make it difficult to combine capacity holders in a cost-efficient way - given a low rate of return.

Permit Granting	Permits obtained
Regulatory	Low rate of return
Market	Lack of market support

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	
Plinovodi	100%

General Information	
Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-108	M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

NDP and PCI Information	
Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C1*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2021*	*2021*

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

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	
Plinovodi	100%

General Information	
Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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	
Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C1*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% 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)**
CS Ajdovščina, 2nd phase of upgrade	Two compressor units with total power of up to 20 MW.			20
Total				**20**

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C5*
Currently PCI	*Yes (6.26.2)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2018*	*11/2019*
Market Test		
Permitting		
Supply Contracts		
FID		*01/2018*
Construction	*01/2019*	*12/2020*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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

Barriers	
Barriers Type	**Barrier**

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 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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C2*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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

Barriers	
Barriers Type	**Barrier**

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 For Modelling

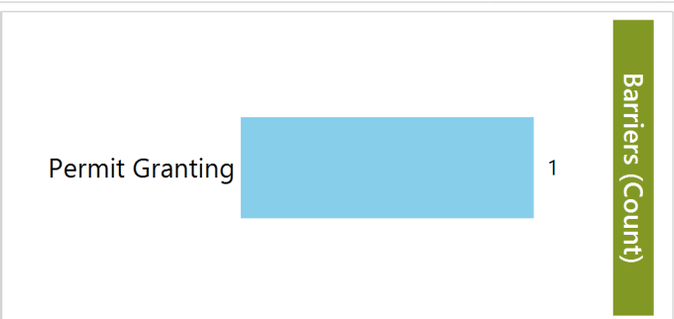
Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI) (Planned)	Plinovodi d.o.o.	2022	IB-ITn	SI	**340.0 GWh/d**
	Incremental capacity would be up to 340 GWh/d.				
	Plinovodi d.o.o.	2022	SI	IB-ITn	**340.0 GWh/d**
	Incremental capacity would be up to 340 GWh/d.				

Sponsors

Plinovodi	100%

General Information

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-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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*

Schedule

	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

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**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	Barrier
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

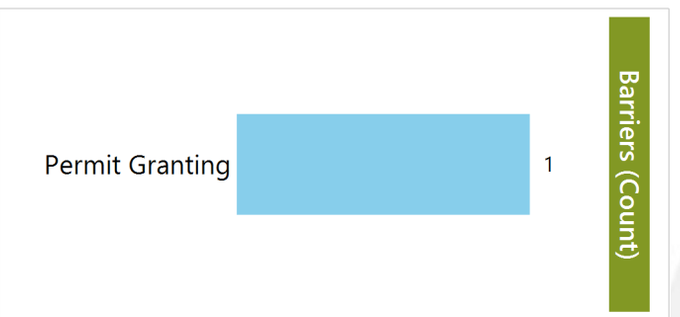
TRA-N-262	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO, LNG North Adriatic, cross-border transmission. The project is connected to M3/1a Šempeter - Ajdovščina, M3/1c Kalce - Vodice, M8 Kalce - Jelšane and CS Ajdovščina, 2nd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

Sponsors

Plinovodi	100%

General Information

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C8*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% 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**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
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.)

M3/1c Kalce - Vodice

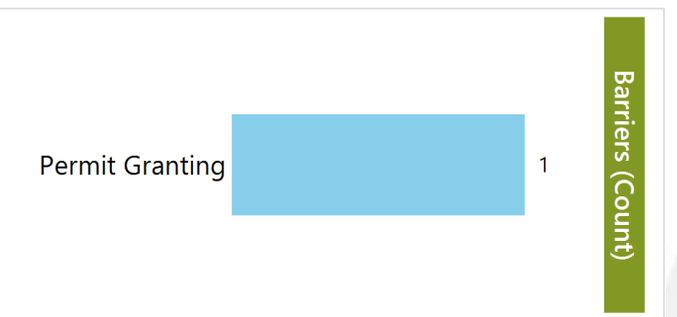
TRA-N-261	Project	Pipeline including CS	Non-FID
Update Date	22/05/2016		Non-Advanced
Description	Interconnector with the Italian TSO, LNG North Adriatic, cross-border transmission. The project is connected to M3/1a Šempeter - Ajdovščina, M3/1b Ajdovščina - Kalce, M8 Kalce - Jelšane and CS Ajdovščina,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

Sponsors

Plinovodi	100%

General Information

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-262	M3/1b Ajdovščina - Kalce

NDP and PCI Information

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C9*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% 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**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
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

Plinovodi d.o.o.	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
TRA-N-107	M6 Interconnection Osp
TRA-N-114	R61 Dragonja - Izola

NDP and PCI Information

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*A15*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
M6 Ajdovščina - Lucija		250	69	
Total			**69**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

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 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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*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.)*
NDP Number	
Currently PCI	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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)
M6 Interconnection Osp	The length is approximately 1.2 km.	250	1	
Total			**1**	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

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 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

Plinovodi	100%

General Information

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C10*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2022*	*2022*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**
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.)

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 For Modelling

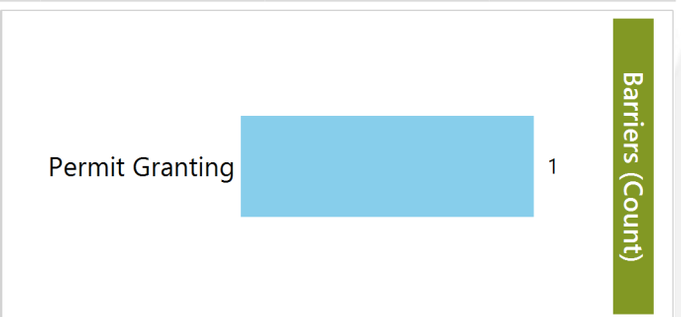
Point	Operator	Year	From Gas System	To Gas System	Capacity
Pince (SI) / Tornyszentmiklos (HU)	Plinovodi d.o.o.	2020	HU	SI	38.1 GWh/d
	Plinovodi d.o.o.	2020	SI	HU	38.1 GWh/d

Sponsors

Plinovodi	100%

General Information

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C3*
Currently PCI	*Yes (6.23)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2018*	*11/2019*
Market Test		*09/2017*
Permitting		
Supply Contracts		
FID		*01/2018*
Construction	*06/2019*	*12/2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

	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	

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

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	
Barriers Type	**Barrier**
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 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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C11*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2024*	*2024*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

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 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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C4*
Currently PCI	*Yes (6.26.5)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2018*	*11/2019*
Market Test		*09/2017*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

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

Barriers

Barriers Type	Barrier

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 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

Plinovodi	100%

General Information

Promoter	*Plinovodi d.o.o.*
Operator	*Plinovodi d.o.o.*
Host Country	*Slovenia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

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

Part of NDP ?	*Yes (TYNDP for the period 2016-2025)*
NDP Number	*C12*
Currently PCI	*Yes (6.26.6)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	*01/2018*	*11/2019*
Market Test		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
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	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

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

Barriers

Barriers Type	Barrier

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 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 For Information Only

Variant : 2 — Increment at level of 988GWh/d

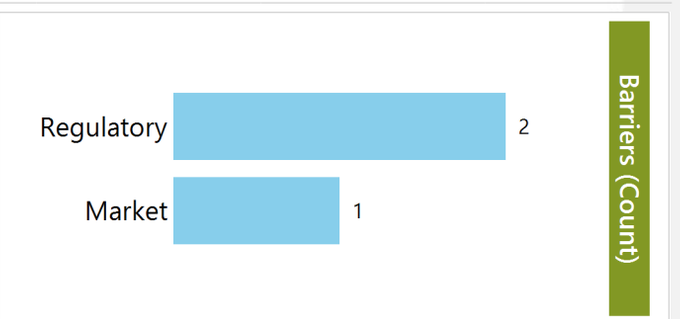
Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	eustream, a.s.	2020	CZ	SK	**988.0 GWh/d**

Sponsors

eustream, a.s.	100%

General Information

Promoter	*eustream, a.s.*
Operator	*eustream, a.s.*
Host Country	*Slovakia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (National Development Plan 2016-2025)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*

NDP Number	*10.1.2. Lanžhot*	Feasibility		Considered Tariff Regime	*Regulated*
		FEED	*09/2015* *08/2017*	Applied for Exemption	*No*
Currently PCI	*No*	Market Test	*06/2017*	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	*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, 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	
Delay Explanation	

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	
Barriers Type	**Barrier**
Regulatory	Capacity quotas
Regulatory	Low rate of return
Market	Lack of market maturity

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 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

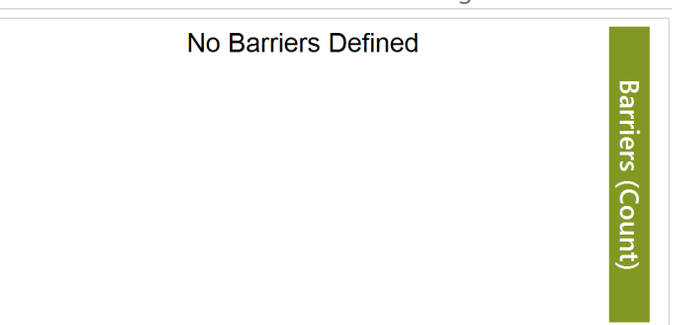
Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border HU/EAR <> SK/EAR	Eastring B.V.	2021	HU/EAR	SK/EAR	570.0 GWh/d
	New interconnection point, New capacity increment from 4Q 2025 to the level of 1140 GWh/d.				
	Eastring B.V.	2021	SK/EAR	HU/EAR	570.0 GWh/d
	New interconnection 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
	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
	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 SK/EAR <-> Veľké Kapušany	Eastring B.V.	2025	SK	SK/EAR	570.0 GWh/d
	Eastring B.V.	2025	SK/EAR	SK	570.0 GWh/d
Capacity Increments 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
	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
	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
	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
	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 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
	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

Eastring Cross-Border RO/EAR <> UA/EAR	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 B.V.	2025	RO/EAR	UA/EAR	**570.0 GWh/d**
	Eastring B.V.	2025	UA/EAR	RO/EAR	**370.0 GWh/d**
	Exit means direction UA->RO.				
Eastring Cross-Border UA/EAR <> SK/EAR	Eastring B.V.	2021	SK/EAR	UA/EAR	**342.0 GWh/d**
	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**
	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**
	Exit means direction SK->UA.				
	Eastring B.V.	2025	UA/EAR	SK/EAR	**570.0 GWh/d**
Eastring SK/EAR <-> Veľké Kapušany	Eastring B.V.	2021	SK	SK/EAR	**570.0 GWh/d**
	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**
	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**
	Exit means direction EUS->Eastring.				

Sponsors	
Eastring B.V.	100%

General Information	
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	
Part of NDP ?	*Yes (National Development Plan 2016-2025)*
NDP Number	*10.1.2. Eastring*
Currently PCI	*Yes (6.25.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	*05/2016*	*04/2017*
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2021*	*2025*

Third-Party Access Regime	
Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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	
Delay Explanation	

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.

Barriers

Barriers Type	**Barrier**

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 For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Budince	eustream, a.s.	2016	SK	UAe	**135.2 GWh/d**

Sponsors

eustream, a.s.	100%

General Information

Promoter	*eustream, a.s.*
Operator	*eustream, a.s.*
Host Country	*Slovakia*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Slovak national development plan 2015-2024)*
NDP Number	*11.a.i.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2016*	*2016*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers	
Barriers Type	**Barrier**

Poland - Slovakia interconnection

TRA-N-190	Project	Pipeline including CS	Non-FID Advanced
Update Date	25/05/2016		
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 For Modelling

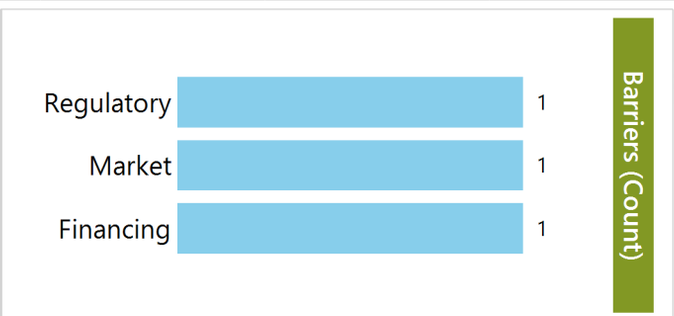
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector PL - SK	eustream, a.s.	2019	PL	SK	144.0 GWh/d
	eustream, a.s.	2019	SK	PL	174.6 GWh/d

Sponsors

eustream, a.s.	100%

General Information

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

Part of NDP ?	*Yes (National Development Plan 2016-2025)*
NDP Number	*10.1.2.-PL-SK*
Currently PCI	*Yes (6.2.1.)*
CBCA Decision	*Yes (2014-11-28)*
Market Survey	*Open Season(2016-06-01)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*05/2011*	*07/2013*
FEED	*10/2015*	*04/2018*
Market Test		*06/2016*
Permitting	*08/2015*	*09/2017*
Supply Contracts		
FID		
Construction		*12/2019*
Commissioning	*2019*	*2019*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

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, 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	
Barriers Type	**Barrier**
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

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

eustream, a.s.	100%

General Information

Promoter	*eustream, a.s.*
Operator	*eustream, a.s.*
Host Country	*Slovakia*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (National Development Plan 2016-2025)*
NDP Number	*10.3.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2026*	*2026*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	

Delay Explanation	

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.

Barriers	
Barriers Type	**Barrier**

Trans-Caspian

TRA-N-339	Project	Pipeline including CS	Non-FID
Update Date	08/07/2016		Non-Advanced
Description	TCP will branch-off at a connection with the East-West pipeline or for the first stage from a collection point of the offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal and SCP-X (SCP-(F)X at a later stage). Several economically justified scenarios of TCP's step by step expansion are possible. A first early gas stage associated with one pipeline string is intended to transport 8-10 bcm/y towards Turkey (TANAP). Later on, the capacity is intended to be increased to up to 30-32 bcm/y and feed both Turkish (TANAP) and cross-Black Sea (via White Stream towards Baumgarten) directions. We are currently evaluating 2 options: a) 3 phased development, each for 10 bcm/y, with three 30in strings to be installed over time, b) 2 phased development, each for 15 bcm/y , with two 34in strings. Estimated costs: a) for 3x30in pipelines + one compression station terminal -€ 2 billion. b) for 2x34in pipelines + one compression station and terminal -€ 1.5 billion.		
Regulatory Decisions and similar material conditions			
ENTSOG Remarks	The project does not lie in the geographical perimeter of the TYNDP retained for modeling.		

Sponsors

W-STREAM PIPELINE COMPANY LIMITED	100%

General Information

Promoter	*W-Stream Caspian Pipeline Company Ltd*
Operator	*W-Stream Caspian Pipeline Company Ltd*
Host Country	*Turkmenistan*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

Enabled Projects

Project Code	Project Name
TRA-N-053	White Stream

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Negotiated*
Applied for Exemption	*No*

NDP and PCI Information

Part of NDP ?	*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)*
NDP Number	
Currently PCI	*Yes (7.1.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FEED	
Market Test	
Permitting	
Supply Contracts	
FID	
Construction	
Commissioning	

Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

PCI Details

PCI Benefits	
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	
Delay Explanation	

Expected Gas Sourcing

Caspian Region

Benefits

Main Driver	Market Demand

Main Driver Explanation	Gas from Turkmenistan can be the most competitively priced gas on the market. TCP could also further improve economics of Azeri gas transportation via TANAP and anable the White Stream.
Benefit Description	

Barriers

Barriers Type	Barrier
Regulatory	Lack of proper transposition of EU regulation

TANAP - Trans Anatolian Natural Gas Pipeline Project

TRA-F-221	Project	Pipeline including CS	FID
Update Date	11/07/2016		Advanced
Description	TANAP intends for the transportation of the natural gas to be produced in Shah Deniz-2 field and other fields of Azerbaijan through Turkey to Europe.The TANAP (Trans-Anatolian Natural Gas Pipeline) Project will contribute to the European gas supply security and diversity by opening up the Southern Gas Corridor. It constitutes a significant part of the gas supply value chain together with SCPX (South Caucasus Pipeline-Expansion) and TAP (Trans Adriatic Pipeline) pipelines and provides a platform to foster gas to gas competition in European gas market based initially upon gas supplies from Azerbaijan's Shah Deniz gas field. The TANAP pipeline length within the borders of Turkey is about 1850 km on the section up to Greece connection to TAP Pipeline Project. TANAP includes an outside pipe diameter of 56 and 48 inches, across land and two 36 inches outside diameter Offshore pipeline are planned for the Dardanelle crossing through the Sea of Marmara.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

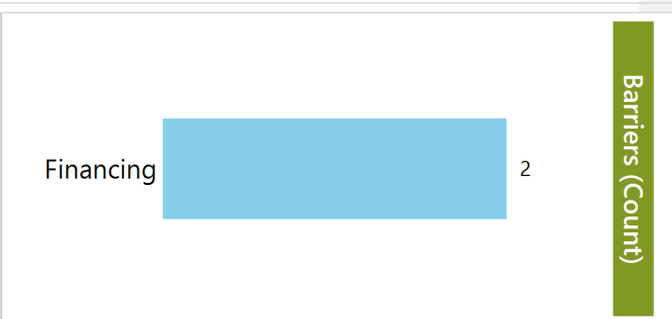
Point	Operator	Year	From Gas System	To Gas System	Capacity
Kipi (TR) / Kipi (TAP)	TANAP TSO	2019	TR/TNP	GR/TAP	**318.0 GWh/d**
Türkgözü	TANAP TSO	2018	AZ/SCP	TR/TNP	**490.0 GWh/d**
					490.95257 Gwh/d

Sponsors

"SOUTHERN GAS CORRIDOR" CLOSED JOINT STOCK COMPANY	58%
BORU HATLARI İLE PETROL TAŞIMA A.Ş. (BOTAS)	30%
BP PIPELINES (TANAP) LIMITED	12%

General Information

Promoter	*SOCAR (The State Oil Company of the Azerbaijan Republic)*
Operator	*TANAP TSO*
Host Country	*Turkey*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



Schedule	Start Date	End Date
Pre-Feasibility		*08/2012*
Feasibility	*01/2013*	*03/2013*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*

NDP and PCI Information

Part of NDP ?	*No (TANAP Project is not directly constructed by Turkish Government whereas it is executed by a private legal entity. However, there are referrals to TANAP Project in National Development Plans of Turkey since TANAP has a strategic importance.)*
NDP Number	
Currently PCI	*Yes (7.1.1)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

FEED	*09/2012*	*05/2014*	Applied for Exemption	*No*
Market Test		*12/2013*	Exemption Granted	*No*
Permitting	*04/2014*	*07/2014*		
Supply Contracts		*06/2019*	% Exemption in entry direction	*0.00%*
FID		*12/2013*	% Exemption in exit direction	*0.00%*
Construction	*06/2014*	*06/2019*		
Commissioning	*2018*	*2019*		

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Eskishehir (Turkey)-Greece Border		1,219	460	46
Georgia/Turkey border- Eskishehir		1,442	1,347	46
Total			**1,807**	**92**

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders,
General Criteria Fulfilled	Yes
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	13/05/2015
Delay Since Last TYNDP	No
Delay Explanation	#Error

Expected Gas Sourcing

Caspian Region

Benefits

Main Driver	Others
Main Driver Explanation	Market demand Competition Access to new markets
Benefit Description	Diversification of supply Diversification of routes Benefits sustainability Emission Reduction Benefit infrastructure bottleneck Enabling other PCİ and non-PCİ projects Significant cross-border effect Possibility of further expansion

Barriers

Barriers Type	Barrier
Financing	Low oil prices in the world, which constitute the income of TANAP's major shareholder SGC, leads to difficulties on TANAP's financing
Financing	Availability of funds and associated conditions

Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Intergovernmental Agreement between Turkey and Azerbaijan	Intergovernmental Agreement (IGA) between the Government of the Republic of Turkey and the Government of the Republic of Azerbaijan Concerning the Trans Anatolian Natural Gas Pipeline System	Yes	26/06/2012

HU-UA Interconnector (Ukrainian section)

TRA-N-645	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	Currently at the Hungarian-Ukrainian border at interconnection point Beregdaroc 800 (HU>UA) only interruptible capacity is available. The main aim of the project is to provide firm capacity in the Hungary - Ukraine direction in order to ensure 178 GWh/d. This project needs certain system development in Ukraine and Hungary. Ukrainian section was finished in April 2016 and Hungarian section needs reconstruction and system enhancement which will be finished in two years after final investment decision.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Beregdaróc 800 (HU) - Beregovo (UA) (HU>UA)	Ukrtransgaz	2017	HU	UAe	0.0 GWh/d

Sponsors

PJSC UKRTRANSGAZ	100%

General Information

Promoter	*PJSC Ukrtransgaz*
Operator	*Ukrtransgaz*
Host Country	*Ukraine*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ten-Year Network Development Plan of UTG)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

	Commissioning	*2017*	*2017*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project concerns investment in reverse flow capacity,
General Criteria Fulfilled	No
Specific Criteria Fulfilled	Security of Supply
Specific Criteria Fulfilled Comments	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Norway, LNG ()

Benefits

Main Driver	Market Demand
Main Driver Explanation	Providing firm capacity for shippers working in IP Beregdaroc. Increase of security of supply.
Benefit Description	The commissioning of the project will contribute towards enlarging the area covered by the North-South gas corridor via stronger integration of Ukrainian transmission network with the CEE Region. This is of crucial importance in particular, as Ukraine is a country that plays a vital role for a secure functioning of the gas markets in the CEE region due to its significance in terms of gas transit from Russia. The project will also largely increase the volume of an integrated gas market in the region. Such scale effect should positively influence the competition and attractiveness of the region towards upstream players and shippers. In addition, the market potential of the CEE region will grow significantly thanks to interconnected gas markets and will create a possibility of new gas flows between the concerned countries.

Barriers

Barriers Type	**Barrier**

Poland-Ukraine Interconnector (Ukrainian section)

TRA-N-561	Project	Pipeline including CS	Non-FID
Update Date	24/05/2016		Non-Advanced
Description	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 the EU countries Using Interconnector in forward and reverse direction will enable inject and withdraw natural gas from Ukrainian UGS for foreign owners up to 15 billion cubic meters.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
PL>UA Interconnector	Ukrtransgaz	2019	PL	UAe	245.0 GWh/d
UA>PL Interconnector	Ukrtransgaz	2019	UA	PL	215.0 GWh/d

Sponsors

Ukrtransgaz	100%

General Information

Promoter	*PJSC Ukrtransgaz*
Operator	*Ukrtransgaz*
Host Country	*Ukraine*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Ten-Year Network Development Plan of UTG)*
NDP Number	*N/A*
Currently PCI	*No*
CBCA Decision	*No*

Schedule

	Start Date	End Date
Pre-Feasibility		*12/2014*
Feasibility	*12/2014*	*12/2015*
FEED	*05/2016*	*01/2017*
Market Test		
Permitting	*01/2017*	*12/2017*
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*

Market Survey	*Not Relevant (no CBCA decision)*	FID		*04/2017*	% Exemption in exit direction *0.00%*
		Construction	*01/2018*	*11/2019*	
		Commissioning	*2019*	*2019*	

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Drozdovychi - Bilche Volytsya		1,000	110	
Total			**110**	

PCI Details

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

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Expected Gas Sourcing

Norway, LNG (QA,US)

Benefits

Main Driver	Market Demand
Main Driver Explanation	Introduction of pipeline interconnector with capacity to 8 bcm/year will allow to increase technical abilities of gas import by Ukraine from European countries by 40% (to 29.6 bcm/year). Resolution of the issue of connection of existing pipelines and planned interconnectors of four Vyshegrad States to the West part of Ukrainian GTS and Ukrainian underground storage facilities makes it possible to create the powerful East-European gas hub. Pipeline interconnector will allow for Ukraine to purchase not nly Russian gas, but also gas through the LNG terminal in Świnoujście from Qatar, the United States etc. and gas from Norway.
Benefit Description	

Barriers

Barriers Type	**Barrier**

Gas to the West

TRA-N-660	Project	Pipeline including CS	Non-FID
Update Date	10/05/2016		Non-Advanced
Description	Gas to the West is a major energy infrastructure project bringing natural gas to the West of Northern Ireland		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*West Transmission Limited*
Operator	*Premier Transmission Ltd*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Northern Ireland Gas Capacity Statement)*
NDP Number	*n.a.*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2017*	*2017*

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
West Transmission Limited		400	77	
Total			**77**	

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

Industrial Emissions Directive (IPPC) - FID

TRA-F-025	Project	Pipeline including CS	FID
Update Date	18/05/2016		Advanced
Description	Emissions related investment to replace Industrial Emissions Directive (IPPC) non-compliant gas compressors with electric drives.		
Regulatory Decisions and similar material conditions			

Sponsors	
Nationalgrid	100%

General Information	
Promoter	*National Grid Gas plc*
Operator	*National Grid Gas plc*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information	
Part of NDP ?	*Yes (Gas Ten Year Statement 2015)*
NDP Number	*Section 5.2*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime	
Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Huntingdon	three new compressor units (3*15MW)			45

Peterborough	three new compressor units (3*15MW)	45
Total		**90**

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	Regulatory
Benefit Description	The compression fleet enhancements currently being completed by National Grid are installing alternative compression fuel capability at selected sites.

Barriers

Barriers Type	**Barrier**

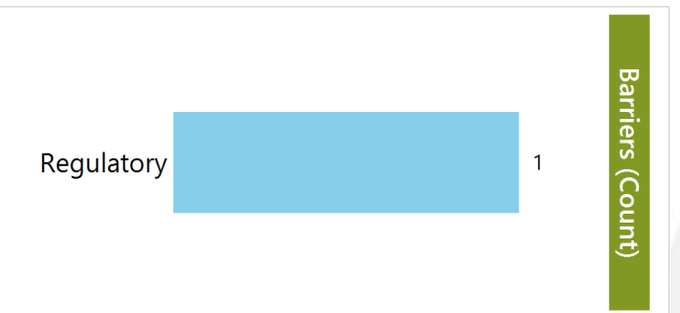
Industrial Emissions Directive (LCP)

TRA-N-346	Project	Pipeline including CS	Non-FID
Update Date	18/05/2016		Non-Advanced
Description	EU environmental policy places stricter controls on industrial emissions. Industrial Emissions Directive (IED) came into force on 6 January 2011. Under the Large Combustion Plant (LCP) component of IED, seventeen compressor units at seven compressor sites located on the National Transmission System (NTS) will not be compliant from 2023.		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*National Grid Gas plc*
Operator	*National Grid Gas plc*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Gas Ten Year Statement 2015)*
NDP Number	*Section 5.2*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Others
Main Driver Explanation	Regulatory
Benefit Description	3 medium units at Hatton. 1 converted unit as Wisbech.

Barriers	
Barriers Type	**Barrier**
Regulatory	Allowed Revenue

Industrial Emisssion Directive (IPPC) - Non-FID

TRA-N-349	Project	Pipeline including CS	Non-FID
Update Date	25/05/2016		Non-Advanced
Description	Emissions related investment, which aims at replacing non-compliant gas compressors with electric drives.		
Regulatory Decisions and similar material conditions			

Sponsors

General Information

Promoter	*National Grid Gas plc*
Operator	*National Grid Gas plc*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (Gas Ten Year Statement 2015)*
NDP Number	*Section 5.2*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*Unknown*	*Unknown*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	Regulatory
Benefit Description	

Barriers

Barriers Type	**Barrier**

Islandmagee Gas Storage Facility

UGS-N-294	Project	Storage Facility	Non-FID
Update Date	09/05/2016		Non-Advanced
Description	IMSL plans to create seven caverns, capable of storing up to a total of 500 million cubic metres of gas. This facility will safeguard Northern Ireland's ability to meet the increasing peak gas demand, whilst also providing a greater degree of security of supply to Ireland and Great Britain.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

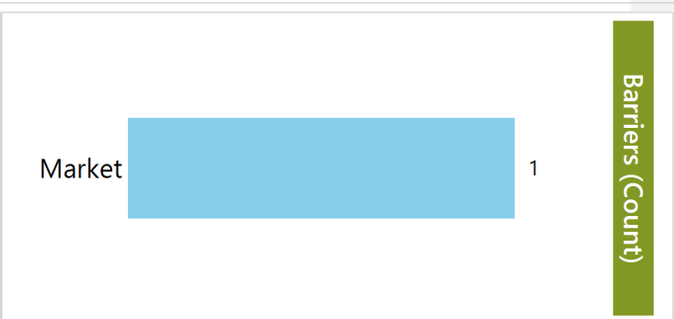
Point	Operator	Year	From Gas System	To Gas System	Capacity
Ballylumford	Premier Transmission Ltd	2021	STcUK	UKn/PTL	66.0 GWh/d
	Premier Transmission Ltd	2021	UKn/PTL	STcUK	121.0 GWh/d
	Premier Transmission Ltd	2022	STcUK	UKn/PTL	83.0 GWh/d
	Premier Transmission Ltd	2022	UKn/PTL	STcUK	152.0 GWh/d
	Premier Transmission Ltd	2025	STcUK	UKn/PTL	99.0 GWh/d
	Premier Transmission Ltd	2025	UKn/PTL	STcUK	181.0 GWh/d
	Premier Transmission Ltd	2026	STcUK	UKn/PTL	132.0 GWh/d
	Premier Transmission Ltd	2026	UKn/PTL	STcUK	242.0 GWh/d

Sponsors

Islandmagee Storage Limted	100%

General Information

Promoter	*Islandmagee Storage Limited*
Operator	*Premier Transmission Ltd*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*



NDP and PCI Information

Part of NDP ?	*Yes (Northern Ireland Gas Capacity Statement)*

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		

Third-Party Access Regime

Considered TPA Regime	*Not Applicable*
Considered Tariff Regime	*Not Applicable*

NDP Number	*n.a.*	FEED		Applied for Exemption	*Not Relevant*
		Market Test		Exemption Granted	*Not Relevant*
Currently PCI	*Yes (5.1.3)*	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	*2021*	*2026*	

Technical Information (UGS)

Storage Facility	*Islandmagee Storage Facility*
Storage Facility Type	*Salt Cavern*
Multiple-Cycle	*Yes*
Working Volume (mcm)	*420.00*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, Project aims at fulfilling the infrastructure standard (N-1) rule, 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	The Islandmagee facility will enhance physical and price security of supply for the Northern Ireland, Republic of Ireland and Great Britain gas markets.

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	approx 3 years
Delay Explanation	The project has been delayed due to absence of competitive tariffs for gas storage.

Benefits

Main Driver	Others
Main Driver Explanation	

Benefit Description	The facility will remove the bottleneck between Northern Ireland (NI) and Republic of Ireland (ROI) markets caused by pressure differentials between the two networks, by enabling the pressures within NI to be sufficient to enable export of gas from NI to ROI. The project will end energy isolation due to greater connectivity with ROI and Great Britain (GB) markets. NI is currently fully import dependent. The facility will permit exports to be delivered from NI, enhancing free flow of gas to meet localised demand. An alternative source of gas supply to the island of Ireland. The facility will enhance physical and price security of supply for the N.Ireland, ROI and GB markets. The project will provide support to renewable electricity generation in both ROI and NI by increasing the availbility of flexible gas supplies to support gas generating plant which will be increasingly required to operate in conjunction with intermittent wind generation.

Barriers

Barriers Type	Barrier
Market	The Islandmagee gas storage facility requires competitive gas storage transmission tariffs in order to compete against GB storage facilities.

Moffat Physical Reverse Flow

TRA-N-1064	Project	Pipeline including CS	Non-FID
Update Date	23/05/2016		Non-Advanced
Description	Physical Reverse Flow at the Moffat interconnection point, which is currently uni-directional, supporting forward flow only from UK to IE, the Isle of Man and Northern Ireland (onshore). The planned capacity is 38.5GWH/d		
Regulatory Decisions and similar material conditions	This project is subject to a third party applying to National Grid Gas to connect to the system in accordance with the UK regulatory and commercial framework. This process may require certain approvals from Ofgem, the UK Regulatory, depending on the nature of the commercial arrangements (i.e. capacity substitution).		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Moffat	National Grid Gas plc	2020	Y-UKm	UK	**38.5 GWh/d**

Sponsors

GNI (UK) Limited	100%

General Information

Promoter	*National Grid Gas plc*
Operator	*National Grid Gas plc*
Host Country	*United Kingdom*
Status	*Planned*
Website	
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*No (This project is not part of our network development plan as we do not view it as a network development issue but rather we view it as a connection issue. It is for Gaslink to make the investment decision on this project.)*
NDP Number	
Currently PCI	*Yes (TRA-N-532)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

PCI Details

PCI Benefits	Project changes the capability to transmit gas across the borders, 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	
Delay Explanation	

Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**

PCI 5.1.1 Physical Reverse Flow at Moffat interconnection point (IE/UK)

TRA-N-829	Project	Pipeline including CS	Non-FID
Update Date	06/05/2016		Non-Advanced
Description	Physical Reverse Flow at the Moffat interconnection point, which is currently uni-directional, supporting forward flow only from UK to IE, the Isle of Man and Northern Ireland (onshore). The planned capacity is 38.5GWH/d		
Regulatory Decisions and similar material conditions	Not relevant at this time		

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Moffat	Gas Networks Ireland	2020	IE	Y-UKm	**38.5 GWh/d**

Sponsors

GNI (UK) Limited	100%

General Information

Promoter	*GNI (UK) Limited*
Operator	*Gas Networks Ireland*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (GNI, Network Development Plan 2015)*
NDP Number	*PCI 5.1.1*
Currently PCI	*Yes (PCI 5.1.1/Tran-N-059)*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility	*10/2016*	*12/2017*
FEED	*01/2018*	*12/2018*
Market Test		*10/2016*
Permitting	*01/2018*	*12/2018*
Supply Contracts		
FID		*12/2018*
Construction	*01/2019*	*12/2019*
Commissioning	*2020*	*2020*

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*No*
Exemption Granted	*No*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
interconnector 1 & 2		914	100	40
Total			**100**	**40**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, 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	Market Integration: The intention of PRF is to enhance interoperability of the Irish and Northern Ireland (UK) gas markets with the Great Britain (UK) market, in line with the goal of the European Union in achieving an EU Single Market in Gas. Ireland and Northern Ireland (UK) are currently at the extremity of the EU gas network with no ability to export to Great Britain (UK) and beyond. The PRF projects would allow, for the first time, trade from Ireland/Northern Ireland (UK) to Great Britain (UK). This opportunity is likely to encourage new gas supply sources in Ireland and Northern Ireland which in turn would help increase trading opportunities between Ireland, Northern Ireland (UK) and Great Britain (UK), further enhancing market integration in these regions. Security of Supply: PRF would mean that new gas supply sources (e.g. Corrib) in Ireland/Northern Ireland can compete which those in Great Britain (UK). In addition, by providing an export option for the first time to Great

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	The intention of PRF is to enhance interoperability of the Irish and Northern Irish gas markets with the UK market, in line with the goal of the European Union in achieving an EU Single Market in Gas. Ireland and Northern Ireland are currently at the extremity of the EU gas network with no ability to export to the UK and beyond. The PRF projects would allow, for the first time, trade from Ireland to the UK. This opportunity is likely to encourage new gas supply sources in Ireland and Northern Ireland which in turn would help increase trading opportunities between Ireland, Northern Ireland (UK), the UK and Europe, further enhancing market integration in these regions.
Benefit Description	The PCI of which this action is an element would primarily benefit the UK through improvements in Security of Supply and would also benefit the operators of supply sources in ROI by facilitating access to the UK and continental markets.

Barriers

Barriers Type	Barrier

Physical reverse flow from NI to GB and IE via SNIP pipeline

TRA-N-027	Project	Pipeline including CS	Non-FID
Update Date	22/06/2016		Non-Advanced
Description	Installation of bi-drectional compression on Scotland to Northern Ireland pipeline (SNIP); pipework modifications at 2 AGI's to allow bidirectional metering and flow control and moving gas odourisation point to a new point(s) downstream of the bidirectional transmission system.		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Twynholm	Premier Transmission Ltd	2021	UKn/PTL	Y-UKm	**131.0 GWh/d**

Sponsors

Premier Transmission Ltd	100%

General Information

Promoter	*Premier Transmission Limited*
Operator	*Premier Transmission Ltd*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

Enabled Projects

Project Code	Project Name
UGS-N-294	Islandmagee Gas Storage Facility

NDP and PCI Information

Part of NDP ?	*Yes (Northern Ireland Gas Capacity Statement)*
NDP Number	*n.a.*
Currently PCI	*Yes (5.1.2)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		

Third-Party Access Regime

Considered TPA Regime	*Regulated*
Considered Tariff Regime	*Regulated*
Applied for Exemption	*Not Relevant*
Exemption Granted	*Not Relevant*
% 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	*2021*	*2021*	

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
SNIP-Scotland to Northern Ireland		600		10
Total				**10**

PCI Details	
PCI Benefits	Project changes the capability to transmit gas across the borders, Project aims at fulfilling the infrastructure standard (N-1) rule, 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	This project will open up the GB-NI-Republic of Ireland corridor, and the Republic of Ireland-NI-GB corridor, both currently unavailable. All three markets would have the ability for physical bi-directional links for the first time. The project would allow future gas finds in Northern Ireland to be accessed by GB and RoI. The project will allow GB and RoI to access flexible gas storage planned for Northern Ireland – which is essential for Northern Ireland gas storage to be feasible.

Time Schedule	
Grant Obtention Date	
Delay Since Last TYNDP	Approx 2 years
Delay Explanation	This project is linked to the Islandmagee gas storage project and has been subsequently delayed, in line with the gas storage project being delayed – caused by the absence of competitive transmission tariffs for gas storage.

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Mainly due to Islandmagee Gas Storage Project
Benefit Description	This project will open up the GB-NI-Republic of Ireland corridor, and the Republic of Ireland-NI-GB corridor, both currently unavailable. All three markets would have the ability for physical bi-directional links for the first time. The project would allow future gas finds in Northern Ireland to be accessed by GB and RoI. The project will allow GB and RoI to access flexible gas storage planned for Northern Ireland – which is essential for Northern Ireland gas storage to be feasible. The planned upgrade will allow security of supply benefits due to the ability to use the planned gas storage facility. It will also provide back-up support for renewable generation.

Barriers	
Barriers Type	Barrier

Preesall Gas Storage

UGS-N-203	Project	Storage Facility	Non-FID
Update Date	15/06/2016		Non-Advanced
Description	A fast cycle salt cavern project with shallow depths allowing for rapid turnaround at low operating costs		
Regulatory Decisions and similar material conditions			

Capacity Increments For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Preesall	Halite Energy Group Ltd	2018	STcUK	UK	330.0 GWh/d
	Halite Energy Group Ltd	2018	UK	STcUK	330.0 GWh/d

Sponsors

DE Shaw	100%

General Information

Promoter	*Halite Energy Group Ltd*
Operator	*Halite Energy Group Ltd*
Host Country	*United Kingdom*
Status	*Planned*
Website	*Project's URL*
Publication Approval Status	*Approved*

No Barriers Defined

Barriers (Count)

NDP and PCI Information

Part of NDP ?	*Yes (National Grid Ten Year Statement)*
NDP Number	*Preesall*
Currently PCI	*No*
CBCA Decision	*No*
Market Survey	*Not Relevant (no CBCA decision)*

Schedule

	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Market Test		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	*2018*	*2018*

Third-Party Access Regime

Considered TPA Regime	*Negotiated*
Considered Tariff Regime	*Negotiated*
Applied for Exemption	*No*
Exemption Granted	*Not Yet*
% Exemption in entry direction	*0.00%*
% Exemption in exit direction	*0.00%*

Technical Information (UGS)

Storage Facility	*Preesall*
Storage Facility Type	*Salt Cavern*
Multiple-Cycle	*Yes*
Working Volume (mcm)	*600.00*

Time Schedule

Grant Obtention Date	
Delay Since Last TYNDP	1 Year
Delay Explanation	Delays in Planning permitting

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barriers Type	**Barrier**