



# **GAS REGIONAL INVESTMENT PLAN SOUTHERN CORRIDOR**

Based on ENTSOG's TYNDP 2018

## **ANNEX B**

Project Information

# SOUTHERN CORRIDOR



## Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)

TRA-N-390	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		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.		
PRJ Code - PRJ Name	PRJ-G-003 - Interconnection Slovenia-Croatia (Gas pipeline Lučko-Zabok-Rogatec)		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rogatec	Plinovodi d.o.o.	2022	HR	SI	162.0 GWh/d
	Plinovodi d.o.o.	2022	SI	HR	162.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Plinovodi	100%	Promoter	Plinovodi d.o.o.	Part of NDP	Yes (TYNDP for the period 2018-2027)
		Operator	Plinovodi d.o.o.	NDP Number	C12
		Host Country	Slovenia	NDP Release Date	09/10/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes (6.26.6)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED	07/2019	07/2021	Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID		07/2019	Exemption in entry direction	0.00%
Construction	07/2021	12/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-N-94	CS Kidričevo, 2nd phase of upgrade
TRA-N-389	Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Upgrade of Rogatec interconnection	The length is 3.8 km.	800	4		0
<b>Total</b>			<b>4</b>		

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project will provide security of supply for Croatia and Slovenia and a reverse flow (from Croatia to Slovenia). It will provide access to/from the gas markets of Austria and Italy via the Slovenian system. It will provide import and significant access to Krk LNG and IAP pipeline: contributing to the security of supply and benefits of the open gas market.

#### Expected Gas Sourcing

Norway, Russia, LNG (HR)

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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	No
Decision Date		Grants for studies amount	
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	No decision yet taken
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

## LNG Evacuation Pipeline Kozarac-Slobodnica

TRA-N-1058	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Advanced
Description	<p>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)</p> <p>will be connected to the future Ionian Adriatic Pipeline (IAP)</p> <p>will be connected to the future LNG solution in Omišalj</p> <p>It will be the "backbone" of the Croatian gas system.</p>		
PRJ Code - PRJ Name	PRJ-G-004 - Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2023	LNG_Tk_HR	HR	54.3 GWh/d
Dravaszerdahely	Plinacro Ltd	2023	HR	HU	54.3 GWh/d
	Plinacro Ltd	2023	HU	HR	135.9 GWh/d

Sponsors		General Information		NDP and PCI Information	
Plinacro	100%	Promoter	<i>Plinacro Ltd</i>	Part of NDP	<i>Yes (2018-2027)</i>
		Operator	<i>Plinacro Ltd</i>	NDP Number	<i>1.32</i>
		Host Country	<i>Croatia</i>	NDP Release Date	<i>15/12/2017</i>
		Status	<i>Planned</i>	NDP Website	<a href="#"><i>NDP URL</i></a>
		Website	<a href="#"><i>Project's URL</i></a>	Currently PCI	<i>Yes (6.5.6)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility	09/2015	10/2016	Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting	09/2014	01/2023	Exemption Granted	<i>No</i>
Supply Contracts				
FID		01/2020	Exemption in entry direction	0.00%
Construction	01/2021	01/2023	Exemption in exit direction	0.00%
Commissioning	2023	2023		
Grant Obtention Date	24/11/2015	24/11/2015		

#### Enabled Projects

Project Code	Project Name
TRA-N-90	LNG evacuation pipeline Omišalj - Zlobin (Croatia)
TRA-N-75	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac
TRA-N-1057	Compressor stations 2 and 3 at the Croatian gas transmission system

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Kozarac-Slobodnica		800	128		0
Total			128		

#### Fulfilled Criteria

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.



Delays since last TYNDP	
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
CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	
Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	Yes
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	No decision yet taken
Other Financial Assistance	No
Comments	
General Comments	



## LNG evacuation pipeline Omišalj - Zlobin (Croatia)

TRA-N-90	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Advanced
Description	<p>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)</p> <p>will be connected to the future Ionian Adriatic Pipeline (IAP)</p> <p>will be connected to the future LNG solution in Omišalj</p> <p>It will be the "backbone" of the Croatian gas system.</p>		
PRJ Code - PRJ Name	PRJ-G-004 - Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2019	LNG_Tk_HR	HR	81.5 GWh/d
Dravaszerdahely	Plinacro Ltd	2019	HR	HU	40.8 GWh/d

*Comment: It is necessary to use CS 1*

Sponsors	General Information	NDP and PCI Information
Plinacro	Promoter	Part of NDP
100%	Operator	NDP Number
	Host Country	NDP Release Date
	Status	NDP Website
	Website	Currently PCI
		Priority Corridor(s)

Yes (2018-2027)

1.18

15/12/2017

[NDP URL](#)

Yes (6.5.1)

NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting	07/2009	12/2019	Exemption Granted	<i>No</i>
Supply Contracts				
FID		06/2018	Exemption in entry direction	0.00%
Construction	07/2018	12/2019	Exemption in exit direction	0.00%
Commissioning	2019	2019		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-N-1058	LNG Evacuation Pipeline Kozarac-Slobodnica
TRA-N-75	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Omišalj-Zlobin		1,000	18		0
Total			18		

#### Fulfilled Criteria

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.

## Delays since last TYNDP

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, 2. It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower price

## Barriers

Barrier Type Description

Others The project completely depends on the realisation of the Krk LNG project

CBCA	
Decision	<i>Yes, we have submitted an investment request and have received a decision</i>
Submissin Date	<i>14/10/2016</i>
Decision Date	<i>10/04/2017</i>
Website	<i><a href="#">CBCA URL</a></i>
Countries Affected	<i>Croatia, Hungary, Ukraine</i>
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>Yes</i>
Grants for works amount	<i>Mln EUR 16</i>
Intention to apply for CEF	
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac

TRA-N-75	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		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.		
PRJ Code - PRJ Name	PRJ-G-004 - Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	Plinacro Ltd	2020	LNG_Tk_HR	HR	27.2 GWh/d
Dravaszerdahely	Plinacro Ltd	2020	HR	HU	54.3 GWh/d

Sponsors	General Information	NDP and PCI Information
Plinacro 100%	Promoter <i>Plinacro Ltd</i>	Part of NDP <i>Yes (2018-2027)</i>
	Operator <i>Plinacro Ltd</i>	NDP Number <i>1.19, 1.20, 1.21</i>
	Host Country <i>Croatia</i>	NDP Release Date <i>15/12/2017</i>
	Status <i>Planned</i>	NDP Website <a href="#">NDP URL</a>
	Website <a href="#">Project's URL</a>	Currently PCI <i>Yes (6.5.6)</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	09/2015	10/2016
FEED		
Permitting	07/2009	01/2020
Supply Contracts		
FID		07/2018
Construction	10/2018	01/2020
Commissioning	2020	2020
Grant Obtention Date	24/11/2015	24/11/2015

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%

### Enabled Projects

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

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Bosiljevo - Sisak		800	102		0
Kozarac - Sisak		800	20		0
Zlobin - Bosiljevo		800	58		0
Total			180		

Fulfilled Criteria	
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.
Delays since last TYNDP	
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. 2. It provides diversification of supply (also in case the previously mentioned threats fail to occur) and thereby competitiveness and lower pr



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

CBCA		Financial Assistance	
Decision	<i>Yes, we have submitted an investment request and have received a decision</i>	Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Submissin Date	<i>14/10/2016</i>	Grants for studies	<i>Yes</i>
Decision Date	<i>10/04/2017</i>	Grants for studies amount	<i>Mln EUR 2</i>
Website	<i><a href="#">CBCA URL</a></i>	Grants for works	<i>Yes</i>
Countries Affected	<i>Croatia, Hungary, Ukraine</i>	Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## LNG terminal Krk

LNG-N-82	Project	LNG Terminal	Non-FID
Update Date	22/05/2018		Advanced
Description	<p>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 to be developed in two phases - in first phase as FSRU and in second phase as onshore LNG terminal.</p> <p>First phase is planned to be developed as FSRU solution, with correspondent capacity of up to 2.6 bcm/y in the first development stage of transmission system of Republic of Croatia, up to 3.5 bcm/y after upgrade of transmission system and 7 bcm/y in final stage.</p>		
PRJ Code - PRJ Name	PRJ-G-004 - Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Croatia LNG	LNG Hrvatska d.o.o.	2019	LNG_Tk_HR	HR	82.0 GWh/d
				Comment: 2.6 bcm/y	
	LNG Hrvatska d.o.o.	2020	LNG_Tk_HR	HR	110.0 GWh/d
				Comment: 3.5 bcm/y	
	LNG Hrvatska d.o.o.	2023	LNG_Tk_HR	HR	220.0 GWh/d
				Comment: 7 bcm/y	

Sponsors		General Information		NDP and PCI Information	
Plinacro d.o.o.	50%	Promoter	LNG Hrvatska d.o.o. za poslovanje ukapljenim prirodnim plinom	Part of NDP	Yes (DESETOGODISNJI PLAN RAZVOJA PLINSKOG TRANSPORTNOG SUSTAVA REPUBLIKE HRVATSKE 2018. - 2027.)
HEP d.d.	50%	Operator	LNG Hrvatska d.o.o.	NDP Number	LNG terminal on the island of Krk
		Host Country	Croatia	NDP Release Date	01/11/2017
		Status	Planned	NDP Website	<a href="#">NDP URL</a>
		Website	<a href="#">Project's URL</a>	Currently PCI	Yes (6.5.1; 6.5.6)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		01/2013	Considered TPA Regime	<i>Not Applicable</i>
Feasibility	07/2012	01/2014	Considered Tariff Regime	<i>Not Applicable</i>
FEED	03/2017	12/2017	Applied for Exemption	<i>No</i>
Permitting	10/2013	05/2018	Exemption Granted	<i>No</i>
Supply Contracts				
FID		06/2018	Exemption in entry direction	<i>0.00%</i>
Construction	06/2018	11/2019	Exemption in exit direction	<i>0.00%</i>
Commissioning	2019	2023		
Grant Obtention Date	18/12/2017	18/12/2017		

Technical Information (LNG)									
Regasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Factor (%)
<i>The import terminal for the liquefied natural gas(LNG) on the Island of Krk</i>	<i>Yes</i>	<i>1st phase</i>	<i>2.6</i>	<i>160,000</i>	<i>7.12</i>	<i>160,000</i>	<i>FSRU not determined yet</i>	<i>2019</i>	<i>100</i>
<i>The import terminal for the liquefied natural gas(LNG) on the Island of Krk</i>	<i>Yes</i>	<i>1st phase</i>	<i>3.5</i>	<i>0</i>	<i>2.47</i>	<i>0</i>	<i>After upgrade of transmission system network</i>	<i>2020</i>	<i>100</i>
<i>The import terminal for the liquefied natural gas(LNG) on the Island of Krk</i>	<i>Yes</i>	<i>1st phase</i>	<i>7.0</i>	<i>0</i>	<i>9.59</i>	<i>0</i>	<i>After upgrade of transmission system network</i>	<i>2023</i>	<i>100</i>

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	All specific criteria are fulfilled by this project

### Delays since last TYNDP

Grant Obtention Date	18/12/2017
Delay Since Last TYNDP	None
Delay Explanation	In comparison with last TYNDP, the project is rescheduled with new beginning of operation from year 2019.

### 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

### 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 <sub>2</sub> emissions in the region, facilitating economic development, etc.

### Barriers

Barrier Type	Description
Regulatory	.
Permit Granting	Permit granting process for onshore solution for the project has started in 10/2013 by requesting the EIA which was approved in 04/2014 and Location permit was approved in 09/2015. For the FSRU solution of the project permits will be modified / obtained accordingly.
Political	Onshore solution and FSRU solution of the LNG terminal project on the Island of Krk were declared 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.
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 is currently being carried out.
Financing	Availability of funds and associated conditions

### Intergovernmental Agreements

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

CBCA	
Decision	<i>Yes, we have submitted an investment request and have received a decision</i>
Submission Date	<i>09/07/2016</i>
Decision Date	<i>12/10/2016</i>
Website	<i><a href="#">CBCA URL</a></i>
Countries Affected	<i>Croatia, Hungary</i>
Countries Net Cost Bearer	<i>Croatia</i>
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 6</i>
Grants for works	<i>Yes</i>
Grants for works amount	<i>Mln EUR 101</i>
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>Yes</i>
Comments	<i>At European level, funding programme IPF TA (Western Balkans Investment Framework) financed – Conceptual Solution, Feasibility Study, EIA/SIA and Conceptual Design in amount of 1 mil €</i>
General Comments	

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

TRA-N-66	Project	Pipeline including CS	Non-FID
Update Date	26/02/2018		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 further extension to Zenica.		
PRJ Code - PRJ Name	PRJ-G-013 - North Interconnection of BiH and Croatia		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Slobodnica- Bosanski Brod-Zenica	Plinacro Ltd	2020	BA	HR	162.0 GWh/d
	Plinacro Ltd	2020	HR	BA	162.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
B&H, Bosanski Brod - Zenica	Promoter	<i>Plinacro Ltd</i>	Part of NDP	<i>Yes (2018-2027)</i>
BH Gas	Operator	<i>Plinacro Ltd</i>	NDP Number	<i>1.15</i>
Croatia, Slobodnica-Bosanski Brod (border)	Host Country	<i>Croatia</i>	NDP Release Date	<i>15/12/2017</i>
Plinacro	Status	<i>Planned</i>	NDP Website	<i><u>NDP URL</u></i>
	Website	<i><u>Project's URL</u></i>	Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting	01/2011	01/2019
Supply Contracts		
FID		11/2018
Construction	12/2019	12/2020
Commissioning	2020	2020
Grant Obtention Date		

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)	Comissioning Year
Slobodnica - Bosanski Brod		700	6		0
Total			6		

#### Delays since last TYNDP

Grant Obtention Date

Delay Since Last TYNDP

The start of the construction has been postponed until 2020.

Delay Explanation

#### 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 enable BH access to Croatian UGS. This project is an interconnection of the gas systems of Croatia and Bosnia and Herzegovina on the route Slobodnica-Brod-Zenica. The most important impacts and benefits of this project: 1. It provides viability and security of supply of Bosnia and Herzegovina; 2. It provides diversification of supply routes and sources for the market of Bosnia and Herzegovina; 3. It provides development of the gas market in Bosnia and Herzegovina; 4. Introducing an environmentally more acceptable energy source (replacement for firewood, coal, fuel oil and complementary generation to renewable energy, and the potential for new CCGT and PP); 5. Reducing CO2 and SO2 emissions in the B&H and region and facilitating economic development.

## Barriers

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

## 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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Interconnection Croatia-Bosnia and Herzegovina (South)

TRA-N-302	Project	Pipeline including CS	Non-FID
Update Date	26/02/2018		Advanced
Description	South Interconnection of Croatia and B&H - the pipeline is a new supply route for Bosnia and Herzegovina that will enable the reliable and diversified natural gas supply. The pipeline will enable the flow of IAP to Bosnia and Herzegovina		
PRJ Code - PRJ Name	PRJ-G-014 - South Interconnection of BiH and Croatia		

### Capacity Increments Variant For Modelling

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

Sponsors	General Information		NDP and PCI Information	
Croatian part of both options	Promoter	<i>Plinacro Ltd</i>	Part of NDP	<i>Yes (2018-2027)</i>
Plinacro d.o.o. 100%	Operator	<i>Plinacro Ltd</i>	NDP Number	<i>1.13</i>
parts in B&H	Host Country	<i>Croatia</i>	NDP Release Date	<i>15/12/2017</i>
BH Gas 100%	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
			Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		09/2013	Considered TPA Regime	Regulated
Feasibility			Considered Tariff Regime	Regulated
FEED			Applied for Exemption	No
Permitting	08/2014	01/2021	Exemption Granted	No
Supply Contracts				
FID		01/2019	Exemption in entry direction	0.00%
Construction	01/2020	01/2021	Exemption in exit direction	0.00%
Commissioning	2021	2021		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-N-68	Ionian Adriatic Pipeline

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Zagvozd-Imotski-Posušje		500	22		0
Total			22		

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project will provide the SoS for Bosnia and Herzegovina, as BiH has only one gas entry. Via this pipeline BiH will have an access to existing gas sources (Baumgarten) as well as new gas sources as Krk LNG and IAP. The pipeline will ensure the market integration of two transmission system. AS it will provide a new source of gas it will have an influence on the prices (competition). The project will have an influenc on gasification on the part of Croatia and Bosnia and Herzegovina, wich will influence on sustainability as it will come to the replacement of the usage of woods for heating.

#### Expected Gas Sourcing

Caspian Region, LNG (), Baumgarten via Slovenia and Croatia

## Benefits

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

## Intergovernmental Agreements

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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	Yes
Comments	
General Comments	

## Interconnection Croatia-Bosnia and Herzegovina (west)

TRA-N-303	Project	Pipeline including CS	Non-FID
Update Date	26/02/2018		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.		
PRJ Code - PRJ Name	PRJ-G-015 - West Interconnection of BiH and Croatia		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Rakovica (HR) / Trzac (BA)	Plinacro Ltd	2027	BA	HR	81.0 GWh/d
	Plinacro Ltd	2027	HR	BA	81.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Croatian part	Promoter	<i>Plinacro Ltd</i>	Part of NDP	<i>Yes (2018-2027)</i>
Plinacro d.o.o. 100%	Operator	<i>Plinacro Ltd</i>	NDP Number	<i>1.35 and 1.36</i>
part in B&H	Host Country	<i>Croatia</i>	NDP Release Date	<i>15/12/2018</i>
BH Gas 100%	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting	12/2012	09/2026	Exemption Granted	<i>No</i>
Supply Contracts				
FID		12/2025	Exemption in entry direction	0.00%
Construction	04/2026	11/2027	Exemption in exit direction	0.00%
Commissioning	2027	2027		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Lička Jesenica-Rakovica		500	20		0
Rakovica-Bihać		500	10		0
Total			30		

### Expected Gas Sourcing

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

### Benefits

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



Barriers

Barrier Type	Description
Market	Lack of market 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

CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	No
Comments	
General Comments	

## Eastring - Bulgaria

TRA-N-654	Project	Pipeline including CS	Non-FID
Update Date	14/09/2018		Non-Advanced
Description	Eastring-BG is subproject located in Bulgaria and is essential part of the Eastring project - a brand new pipeline project, which connects IP Veľké Kapušany / Veľké Zlievce in the territory of Slovakia with a new IP at an external border of the EU in the territory of Bulgaria (Black Sea coast or Turkey). 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.		
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slovakia [currently known as "Eastring"]		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring BG Domestic Point	Bulgartransgaz EAD	2023	BGn	BG/EAR	200.0 GWh/d
	Comment: ntry/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	2023	BG/EAR	BGn	200.0 GWh/d
	Comment: Entry/Exit capacity at domestic points may go up to the level of 200 GWh/d if sum of all Exit capacities from domestic system to adjacent networks (or vice versa) is able to reach this level.				
Eastring Cross-Border BG/EAR <> RO/EAR	Bulgartransgaz EAD	2023	BG/EAR	RO/EAR	570.0 GWh/d
	Comment: Phase 1 New IP, New capacity increment from Q4 2028 to the level of 1140 GWh/d				
	Bulgartransgaz EAD	2023	RO/EAR	BG/EAR	570.0 GWh/d
	Comment: Phase I New IP, New capacity increment from Q4 2028 to the level of 1140 GWh/d				
Eastring Cross-Border BG/EAR>TR	Bulgartransgaz EAD	2028	BG/EAR	RO/EAR	570.0 GWh/d
	Comment: Phase II				
	Bulgartransgaz EAD	2028	RO/EAR	BG/EAR	570.0 GWh/d
	Comment: Phase II				
	Bulgartransgaz EAD	2023	BG/EAR	TRe	570.0 GWh/d
Comment: Transmission between Eastring -Bulgaria and Turkey via new IP at BG/TR border. New capacity increment from Q4 2028 to the level of 1140 GWh/d					

Eastring Cross-Border BG/EAR>TR	Bulgartransgaz EAD	2028	BG/EAR	TRe	570.0 GWh/d
	Comment: Phase II				
Eastring Cross-Border TR>BG/EAR	Bulgartransgaz EAD	2023	TRi	BG/EAR	570.0 GWh/d
	Comment: Transmission between Eastring -Bulgaria and Turkey via new IP at BG/TR border. New capacity increment from Q4 2028 to the level of 1140 GWh/d				
	Bulgartransgaz EAD	2028	TRi	BG/EAR	570.0 GWh/d
	Comment: Phase II				

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz EAD	100%	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
		Operator	<i>Bulgartransgaz EAD</i>	NDP Number	<i>Section 5.1(5.1,2)</i>
		Host Country	<i>Bulgaria</i>	NDP Release Date	<i>10/04/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.25.1)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		<i>08/2016</i>	Considered TPA Regime	<i>Not Applicable</i>
Feasibility	<i>09/2017</i>	<i>06/2018</i>	Considered Tariff Regime	<i>Not Applicable</i>
FEED	<i>10/2018</i>	<i>02/2020</i>	Applied for Exemption	<i>Not Relevant</i>
Permitting	<i>03/2020</i>	<i>12/2020</i>	Exemption Granted	<i>Not Relevant</i>
Supply Contracts		<i>01/2020</i>		
FID			Exemption in entry direction	<i>0.00%</i>
Construction	<i>01/2021</i>	<i>09/2023</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2023</i>	<i>2028</i>		
Grant Obtention Date	<i>12/05/2017</i>	<i>12/05/2017</i>		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
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 2028, compressor power at level of 374 MW will be needed	1,400	257	88	0
Total			257	88	
Fulfilled Criteria					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	The Project is located in one of the least developed gas market regions. The Project meets criteria of one of the pillars of the Energy Union. Based on the latest stress tests it is one of the most vulnerable region regarding the SoS. The Project will enhance overall development of the region.				
Delays since last TYNDP					
Grant Obtention Date	12/05/2017				
Delay Since Last TYNDP					
Delay Explanation	Time schedule in the last TYNDP was estimated according to the data from the pre-feasibility study with lower level of details.				
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	- Physical alternative for providing 100% of all Balkan countries' consumption; enhancing market development and liquidity of the region; - 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. -price convergence of Balkan region to EU West - Decrease of market concentration on producers side				
Intergovernmental Agreements					
Agreement Declaration	Agreement Description			Is Signed	Agreement Signature Date
	Governmental declaration			No	21/05/2015

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submission Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>Yes, for studies and works</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	<i>Eustream applied and was granted Financial support for feasibility study execution from CEF.</i>
		General Comments	

## Eastring - Hungary

TRA-N-656

Update Date

Description

PRJ Code - PRJ Name

Project

Pipeline including CS

Non-FID

14/09/2018

Non-Advanced

A Eastring-HU is subproject located in Hungary and is essential part of the Eastring project, which connects the RO, HU and SK system in the following routing options: via HU, (new pipeline) from RO-HU border (Csengersima) to HU/SK border (Zemplénagárd). At this moment the load factor is estimated at 0% by all Project Promoters because of the low project maturity. The Project Promoters are in the phase of the preparation of the feasibility study, results of which could be basis for further assessments.

PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slovakia [currently known as "Eastring"]

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border HU/EAR <> SK/EAR	FGSZ Ltd.	2023	HU/EAR	SK/EAR	570.0 GWh/d
				<i>Comment: I.phase</i>	
	FGSZ Ltd.	2023	SK/EAR	HU/EAR	570.0 GWh/d
				<i>Comment: I.phase</i>	
Eastring Cross-Border RO/EAR <> HU/EAR	FGSZ Ltd.	2028	HU/EAR	SK/EAR	570.0 GWh/d
				<i>Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d</i>	
	FGSZ Ltd.	2028	SK/EAR	HU/EAR	570.0 GWh/d
				<i>Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d</i>	
	FGSZ Ltd.	2023	HU/EAR	RO/EAR	570.0 GWh/d
				<i>Comment: I.phase</i>	

## Eastring Cross-Border RO/EAR <> HU/EAR

FGSZ Ltd.	2023	RO/EAR	HU/EAR	570.0 GWh/d
Comment: I.phase				
FGSZ Ltd.	2028	HU/EAR	RO/EAR	570.0 GWh/d
Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d				
FGSZ Ltd.	2028	RO/EAR	HU/EAR	570.0 GWh/d
Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d				

## Eastring HU Domestic Point

FGSZ Ltd.	2023	HU/EAR	HU	570.0 GWh/d
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Sponsors		General Information		NDP and PCI Information	
FGSZ Ltd.	100%	Promoter	<i>FGSZ Ltd.</i>	Part of NDP	<i>Yes (National Development Plan 2017)</i>
		Operator	<i>FGSZ Ltd.</i>	NDP Number	<i>12.13.</i>
		Host Country	<i>Hungary</i>	NDP Release Date	<i>28/12/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.25.1)</i>
				Priority Corridor(s)	<i>NSIE</i>



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		08/2016	Considered TPA Regime	Regulated
Feasibility	09/2017	06/2018	Considered Tariff Regime	Regulated
FEED	10/2018	02/2020	Applied for Exemption	No
Permitting	03/2020	12/2020	Exemption Granted	Not Relevant
Supply Contracts		01/2020		
FID			Exemption in entry direction	0.00%
Construction	01/2021	09/2023	Exemption in exit direction	0.00%
Commissioning	2023	2028		
Grant Obtention Date	12/05/2017	12/05/2017		

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Eastring-HU-1/2	Data refers to the first stage - capacity 570 GWh/d for new route via SK,HU,RO,BG, in case of increase	1,400	112	0	2023
Total			112	0	

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The Project is located in one of the least developed gas market regions. The Project meets criteria of one of the pillars of the Energy Union. Based on the latest stress tests it is one of the most vulnerable region regarding the SoS. The Project will enhance overall development of the region.

### Delays since last TYNDP

Grant Obtention Date	12/05/2017
Delay Since Last TYNDP	
Delay Explanation	Time schedule in the last TYNDP was estimated according to the data from the pre-feasibility study with lower level of details.

### 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. Decrease of market concentration on producers side; price convergence; Decrease of carbon emissions
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 - TANAP, Caspian, Iran, Iraq, Egypt, Israel, Cyprus. Most of them from perspective Turkish natural gas hub/border Turkey/BG;

## Barriers

Barrier Type	Description
Regulatory	Capacity quotas
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market maturity

## Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding	Memorandum of Understanding	Yes	30/10/2017
Memorandum of Understanding	Memorandum of Understanding	Yes	13/07/2016
Declaration	Goverment declaration	No	21/05/2015

CBCA	
Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	<i>Eustream received 1,000,000 EUR financial support for feasibility study for execution the whole SK-HU-RO-BG route from CEF.</i>
General Comments	

## Eastring - Romania

TRA-N-655	Project	Pipeline including CS	Non-FID
Update Date	23/03/2018		Non-Advanced
Description	<p>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).</p> <p>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 &amp; Southern Europe</p>		
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slovakia [currently known as "Eastring"]		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border BG/EAR <> RO/EAR	SNTGN Transgaz S.A.	2023	BG/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2023	RO/EAR	BG/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2028	BG/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2028	RO/EAR	BG/EAR	570.0 GWh/d
Eastring Cross-Border RO/EAR <> HU/EAR	SNTGN Transgaz S.A.	2023	HU/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2023	RO/EAR	HU/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2028	HU/EAR	RO/EAR	570.0 GWh/d
	SNTGN Transgaz S.A.	2028	RO/EAR	HU/EAR	570.0 GWh/d
Eastring RO Domestic Point	SNTGN Transgaz S.A.	2023	RO	RO/EAR	150.0 GWh/d
	SNTGN Transgaz S.A.	2023	RO/EAR	RO	150.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Transgaz S.A.	100%	Promoter	<i>SNTGN Transgaz SA</i>	Part of NDP	<i>No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP)</i>
		Operator	<i>SNTGN Transgaz S.A.</i>		
		Host Country	<i>Romania</i>		
		Status	<i>Planned</i>		
		Website	<i><a href="#">Project's URL</a></i>		
				NDP Number	
				NDP Release Date	
				NDP Website	
				Currently PCI	<i>Yes (6.25.1)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date
Pre-Feasibility		<i>08/2016</i>
Feasibility	<i>09/2017</i>	<i>06/2019</i>
FEED	<i>10/2018</i>	<i>02/2019</i>
Permitting	<i>03/2020</i>	<i>12/2020</i>
Supply Contracts		<i>01/2020</i>
FID		
Construction	<i>01/2021</i>	<i>09/2023</i>
Commissioning	<i>2023</i>	<i>2028</i>
Grant Obtention Date		

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

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
<i>Eastring-RO-2</i>		<i>1,400</i>	<i>651</i>	<i>2023</i>
<b>Total</b>			<b>651</b>	

Fulfilled Criteria	
Specific Criteria Fulfilled	<i>Competition, Market Integration, Security of Supply, Sustainability</i>
Specific Criteria Fulfilled Comments	<i>Market Integration, SoS, Sustainability, Competition</i>

## Delays since last TYNDP

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation Time schedule in the last TYNDP was estimated according to the data from the pre-feasibility study with lower level of details.

## 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, Turkey, etc.

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Eastring - Slovakia

TRA-N-628	Project	Pipeline including CS	Non-FID
Update Date	14/09/2018		Advanced
Description	Eastring-SK is subproject located in Slovakia and is essential part of the Eastring project - a brand new pipeline project, which connects IP Veľké Kapušany / Veľké Zlievce in the territory of Slovakia with a new IP at an external border of the EU in the territory of Bulgaria (Black Sea coast or Turkey). 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.		
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slovakia [currently known as "Eastring"]		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Eastring Cross-Border HU/EAR <> SK/EAR	Eastring B.V.	2023	HU/EAR	SK/EAR	570.0 GWh/d
				<i>Comment: I.phase</i>	
	Eastring B.V.	2023	SK/EAR	HU/EAR	570.0 GWh/d
				<i>Comment: I.phase</i>	
	Eastring B.V.	2028	HU/EAR	SK/EAR	570.0 GWh/d
				<i>Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d</i>	
	Eastring B.V.	2028	SK/EAR	HU/EAR	570.0 GWh/d
				<i>Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d</i>	
Eastring SK/EAR <-> Veľké Kapušany	Eastring B.V.	2023	SK	SK/EAR	570.0 GWh/d
				<i>Comment: I.phase; Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK)</i>	
	Eastring B.V.	2023	SK/EAR	SK	570.0 GWh/d
				<i>Comment: I.phase; Connection of Eastring - SK to existing SK transmission system at Veľké Kapušany IP (VK)</i>	
	Eastring B.V.	2028	SK	SK/EAR	570.0 GWh/d
				<i>Comment: II.phase; total incremental capacity I.+II.phase is at the level of 1140 Gwh/d</i>	
	Eastring B.V.	2028	SK/EAR	SK	570.0 GWh/d

## Eastring SK/EAR <-> Velké Kapušany

Comment: II.phase, Connection of Eastring - SK to existing SK transmission system at Velké Kapušany IP (VK), New capacity increment I.+II phase (from 4Q 2028) to the level of 1140 GWh/d.

Sponsors		General Information		NDP and PCI Information	
Eastring B.V.	100%	Promoter	<i>eustream, a.s. (a joint stock company)</i>	Part of NDP	<i>Yes (National Development Plan 2018-2027)</i>
		Operator	<i>eustream, a.s.</i>	NDP Number	<i>4.1.1.3. Eastring</i>
		Host Country	<i>Slovakia</i>	NDP Release Date	<i>30/11/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.25.1)</i>
				Priority Corridor(s)	<i>NSIE</i>
Schedule	Start Date	End Date	Third-Party Access Regime		
Pre-Feasibility		<i>08/2016</i>	Considered TPA Regime	<i>Regulated</i>	
Feasibility	<i>09/2017</i>	<i>06/2018</i>	Considered Tariff Regime	<i>Regulated</i>	
FEED	<i>10/2018</i>	<i>02/2020</i>	Applied for Exemption	<i>No</i>	
Permitting	<i>03/2020</i>	<i>12/2020</i>	Exemption Granted	<i>Not Relevant</i>	
Supply Contracts		<i>01/2020</i>			
FID			Exemption in entry direction	<i>0.00%</i>	
Construction	<i>01/2021</i>	<i>09/2023</i>	Exemption in exit direction	<i>0.00%</i>	
Commissioning	<i>2023</i>	<i>2028</i>			
Grant Obtention Date	<i>12/05/2017</i>	<i>12/05/2017</i>			



Pipelines and Compressor Stations						
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
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 2028, increase of compressor power to the level of 93 MW will be needed	1,400	19	52	2023
Total				19	52	
Fulfilled Criteria						
Specific Criteria Fulfilled		Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments		The Project is located in one of the least developed gas market regions. The Project meets criteria of one of the pillars of the Energy Union. Based on the latest stress tests it is one of the most vulnerable region regarding the SoS. The Project will enhance overall development of the region.				
Delays since last TYNDP						
Grant Obtention Date		12/05/2017				
Delay Since Last TYNDP		no				
Delay Explanation		Time schedule in the last TYNDP was estimated according to the data from the pre-feasibility study with lower level of details.				
Expected Gas Sourcing						
Caspian Region, Norway, Russia, LNG (QA,TR,US), 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. Decrease of market concentration on producers side; price convergence; Decrease of carbon emissions				
Benefit Description		- Physical alternative for providing 100% of all Balkan countries' consumption; enhancing market development and liquidity of the region; - 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. -price convergence of Balkan region to EU West - Decrease of market concentration on producers side				

Barriers	
Barrier Type	Description
Regulatory	Capacity quotas
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market maturity

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding	Memorandum of Understanding	Yes	13/07/2016
Memorandum of Understanding	Memorandum of Understanding	Yes	30/10/2017
Declaration	Governmental declaration	Yes	21/05/2015

CBCA	
Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	Yes
Grants for studies amount	Mln EUR 1
Grants for works	No
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	Yes
Comments	<i>Financial support for feasibility study execution from CEF</i>
General Comments	

## Development of Transmission Capacity at Slovak-Hungarian interconnector

TRA-N-636	Project	Pipeline including CS	Non-FID
Update Date	21/11/2018		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.		
PRJ Code - PRJ Name	PRJ-G-045 - Enhancement of the capacity at SK-HU interconnector		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Balassagyarmat (HU) / Velké Zlievce (SK)	MGT Hungarian Gas Transit Ltd.	2022	HUi	SK	102.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2022	SK	HUi	26.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Magyar Gáz Tranzit ZRt.	100%	Promoter	Magyar Gáz Tranzit Zrt.	Part of NDP	Yes (National Development Plan - MGT 10 Year Development Plan)
		Operator	MGT Hungarian Gas Transit Ltd.	NDP Number	TRA-N-636
		Host Country	Hungary	NDP Release Date	
		Status	Planned	NDP Website	NDP URL
		Website		Currently PCI	Yes (6.2.13)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction	03/2020	03/2022
Commissioning	2022	2022
Grant Obtention Date		

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

#### Enabled Projects

Project Code	Project Name
TRA-N-524	Enhancement of Transmission Capacity of Slovak-Hungarian interconnector

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Hungarian section		800	92		0
Slovak section		800	18		0
Total			110		

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	This capacity project is to promote the diversified procurement of gas and the security of supply the member states of the EU. The project will increase price convergence of the HU gas market to the EU markets. As part of the north-south axis it will contribute also to handling of the SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the existing assets of the domestic natural gas system and to improve the transit routes in order to improve transit services, while providing for the expected quality of the natural gas on the connecting systems. The project shall result in the operational efficiencies -linking of the 75 bar transit systems (RO-HU, HR-HU, Srb-HU, SK-HU, Ukr-HU, AT-HU).

## Expected Gas Sourcing

Norway, Russia, LNG (), Romania - Pipeline

## 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.

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Enhancement of Transmission Capacity of Slovak-Hungarian interconnector

TRA-N-524	Project	Pipeline including CS	Non-FID
Update Date	14/09/2018		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.		
PRJ Code - PRJ Name	PRJ-G-045 - Enhancement of the capacity at SK-HU interconnector		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Balassagyarmat (HU) / Velké Zlievce (SK)	MGT Hungarian Gas Transit Ltd.	2022	HUi	SK	102.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2022	SK	HUi	26.0 GWh/d
Vecsés MGT / FGSZ	MGT Hungarian Gas Transit Ltd.	2022	HU	HUi	102.0 GWh/d
	MGT Hungarian Gas Transit Ltd.	2022	HUi	HU	26.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Magyar Gáz Tranzit Zrt.	Promoter	Magyar Gáz Tranzit Zrt.	Part of NDP	Yes (National Development Plan- MGT 10 Year Development Plan)
100%	Operator	MGT Hungarian Gas Transit Ltd.	NDP Number	TRA-N-524 (new nr will be received once project is approved)
	Host Country	Hungary	NDP Release Date	
	Status	Planned	NDP Website	<a href="#">NDP URL</a>
	Website		Currently PCI	Yes (6.2.13)
			Priority Corridor(s)	NSIE

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction	03/2020	03/2022
Commissioning	2022	2022
Grant Obtention Date		

Third-Party Access Regime	
Considered TPA Regime	<i>Regulated</i>
Considered Tariff Regime	<i>Regulated</i>
Applied for Exemption	<i>Yes</i>
Exemption Granted	<i>No</i>
Exemption in entry direction	<i>0.00%</i>
Exemption in exit direction	<i>0.00%</i>

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Hungarian section		800	92		0
Slovak		800	18		0
Total			110		

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	This capacity project is to promote the diversified procurement of gas and the security of supply the member states of the EU. The project will increase price convergence of the HU gas market to the EU markets. As part of the north-south axis it will contribute also to handling of the SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the existing assets of the domestic natural gas system and to improve the transit routes in order to improve transit services, while providing for the expected quality of the natural gas on the connecting systems. The project shall result in the operational efficiencies -linking of the 75 bar transit systems (RO-HU, HR-HU, Srb-HU, SK-HU, Ukr-HU, AT-HU).

Expected Gas Sourcing
Norway, Russia, LNG (HR,PL), Romania- pipeline

Benefits	
Main Driver	Market Demand
Main Driver Explanation	As part of the north-south axis it will contribute also to handling of the SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the existing assets of the domestic natural gas system and to improve the transit routes in order to improve transit services, while providing for the expected quality of the natural gas on the connecting systems
Benefit Description	

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>Yes, for studies and works</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	



## Romanian-Hungarian reverse flow Hungarian section 1st stage

TRA-F-286	Project	Pipeline including CS	FID
Update Date	29/03/2018		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.		
PRJ Code - PRJ Name	PRJ-G-047 - RO-HU Transmission Corridor		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	FGSZ Ltd.	2019	RO	HU	48.9 GWh/d

Sponsors	General Information	NDP and PCI Information
FGSZ Ltd. 100%	Promoter <i>FGSZ Ltd.</i>	Part of NDP <i>Yes (Hungarian TYNDP 2016)</i>
	Operator <i>FGSZ Ltd.</i>	NDP Number <i>12.1.</i>
	Host Country <i>Hungary</i>	NDP Release Date <i>21/12/2016</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>Yes (6.24.1.1)</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
FEED	07/2018	10/2018	Applied for Exemption	No
Permitting	07/2018	09/2018	Exemption Granted	No
Supply Contracts		12/2018		
FID		06/2017		
Construction	10/2018	12/2019	Exemption in entry direction	0.00%
Commissioning	2019	2019	Exemption in exit direction	0.00%
Grant Obtention Date	14/10/2015	14/10/2015		

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Csanadpalota				9	0
Total				9	

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The pipeline enables to increase capacity of Csanádpalota (RO>HU) and Csanádpalota (HU>RO).

### Delays since last TYNDP

Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	
Delay Explanation	

### Expected Gas Sourcing

Romanian sources and/or other available sources from Bulgaria direction

## Benefits

Main Driver Others

Main Driver Explanation

Benefit Description

### CBCA

Decision *Yes, we have submitted an investment request and have received a decision*

Submission Date

Decision Date *06/10/2015*

Website

Countries Affected *Hungary, Romania*

Countries Net Cost Bearer

Additional Comments

### Financial Assistance

Applied for CEF *(1) Yes, we have applied for CEF and we have received a decision*

Grants for studies *Yes*

Grants for studies amount *Mln EUR 2*

Grants for works *No*

Grants for works amount

Intention to apply for CEF *No, we do not plan to apply*

Other Financial Assistance *No*

Comments

General Comments

## Romanian-Hungarian reverse flow Hungarian section 2nd stage

TRA-N-377	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Advanced
Description	A third compressor unit (4.5 MW) is needed at Csanádpalota to reach the increased 4.4 bcm/a capacity of the corridor at the RO/HU border.		
PRJ Code - PRJ Name	PRJ-G-047 - RO-HU Transmission Corridor		

### Capacity Increments Variant For Modelling

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

Sponsors		General Information		NDP and PCI Information	
FGSZ Ltd.	100%	Promoter	<i>FGSZ Ltd.</i>	Part of NDP	<i>Yes (Hungarian TYNDP 2017)</i>
		Operator	<i>FGSZ Ltd.</i>	NDP Number	12.1.
		Host Country	<i>Hungary</i>	NDP Release Date	28/12/2017
		Status	<i>Planned</i>	NDP Website	<a href="#">NDP URL</a>
		Website	<a href="#">Project's URL</a>	Currently PCI	Yes (6.24.4.6)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
FEED	01/2019	01/2020	Applied for Exemption	No
Permitting	10/2019	04/2020	Exemption Granted	No
Supply Contracts		05/2020		
FID		03/2019	Exemption in entry direction	0.00%
Construction	05/2020	12/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date	08/11/2016	08/11/2016		

#### Enabled Projects

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

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Csanádpalota	+1 Compressor unit 4.5MW			4	0
Total				4	

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The pipeline enables to increase capacity of Csanádpalota (RO>HU) and Csanádpalota (HU>RO).

#### Delays since last TYNDP

Grant Obtention Date	08/11/2016
Delay Since Last TYNDP	0
Delay Explanation	

## Expected Gas Sourcing

Black Sea

### Benefits

Main Driver *Market Demand*

Main Driver Explanation

Benefit Description

### Barriers

Barrier Type *Description*

Regulatory *Low rate of return*

### CBCA

Decision *Yes, we have submitted an investment request and have received a decision*

Submission Date

Decision Date *06/10/2015*

Website

Countries Affected *Hungary, Romania*

Countries Net Cost Bearer

Additional Comments

### Financial Assistance

Applied for CEF *(1) Yes, we have applied for CEF and we have received a decision*

Grants for studies *Yes*

Grants for studies amount *Mln EUR 2*

Grants for works *No*

Grants for works amount

Intention to apply for CEF *No decision yet taken*

Other Financial Assistance *No*

Comments

General Comments

## LNG terminal in northern Greece / Alexandroupolis - Pipeline Section

TRA-N-63	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Advanced
Description	<p>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.</p> <p>The project consists of an LNG offshore Floating Storage Regasification Unit, a Mooring &amp; 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 and operate a metering &amp; regulating station.</p> <p>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 up to 900.000 Nm3/h corresponding to 8.3 bcm/y.</p>		
PRJ Code - PRJ Name	PRJ-G-055 - LNG terminal in northern Greece / Alexandroupolis		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Alexandroupolis LNG	Gastrade S.A.	2020	LNG_Tk_GR	GRa	253.1 GWh/d
<i>Comment: Increment not assessed by ENTSOG: Increment already submitted via the LNG project</i>					
Alexandroupolis Amfitriti	Gastrade S.A.	2020	GRa	IB-GRk	253.1 GWh/d
<i>Comment: Increment available 100% at operation start-up.</i>					

Sponsors	General Information		NDP and PCI Information	
LNG-N-062	Promoter	Gastrade S.A.	Part of NDP	No ((5) others - please comment below)
GASTRADE S.A. 100%	Operator	Gastrade S.A.	NDP Number	
TRA-N-063	Host Country	Greece	NDP Release Date	
GASTRADE S.A. 100%	Status	Planned	NDP Website	
	Website	<a href="#">Project's URL</a>	Currently PCI	Yes (6.9.1)
			Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		12/2010	Considered TPA Regime	<i>Not Applicable</i>
Feasibility	01/2014	06/2014	Considered Tariff Regime	<i>Not Applicable</i>
FEED	03/2017	09/2017	Applied for Exemption	<i>Not Yet</i>
Permitting	12/2010	01/2015	Exemption Granted	<i>Not Yet</i>
Supply Contracts				
FID		11/2018	Exemption in entry direction	0.00%
Construction	12/2018	09/2020	Exemption in exit direction	0.00%
Commissioning	2020	2020		
Grant Obtention Date	16/04/2015	16/04/2015		

#### Enabled Projects

Project Code	Project Name
LNG-N-62	LNG terminal in northern Greece / Alexandroupolis - LNG Section

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Alexandroupolis LNG terminal - M/R Amfitriti		762	28	0	2020
<b>Total</b>			<b>28</b>	<b>0</b>	

#### Fulfilled Criteria

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



### Delays since last TYNDP

Grant Obtention Date	16/04/2015
Delay Since Last TYNDP	24 months in commissioning date / 30 months delay in FID compare to TYNDP2015 time schedule
Delay Explanation	Permitting phase completed 1Q2015 and FEED completed in September 2017. Final negotiations with Bulgarian Energy Holding (BEH) and Public Gas Corporation (DEPA) for acquiring stakes in GASTRADE is estimated to be completed by end of April 2018. GASTRADE plans to initiate a Market Test in May 2018 and critical mass terminal use agreements are anticipated by October 2018. Completion of financing agreements and EPC contract awards (subject to FID) required for FID. FID is planned for November 2018. 24 months required from FID to commercial start-up.

### Expected Gas Sourcing

LNG (WO), 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

To date the Project Promoter has not applied officialy for a TPA Exemption. The project promoter has commenced discussions with NRA regarding the procedure for granting TPA Exemption. GASTRADE plans to submit a TPA Exemption request to the NRA in order to release a Market Test in May 2018.

### Benefits

Main Driver	Regulation SoS
Main Driver Explanation	Main drivers: 1. Expressed requirement for diversification of supply sources and routes for SEE markets (Bulgaria, Serbia, FYROM, Romania, Hungary and Ukraine) enhancing security of supply, competition and pricing options potentially resulting in energy costs reduction creates market / demand opportunities for the project 2. Possible discontinuation of gas flows transmitted through Ukraine to the SEE markets. 3. Regional demand growth
Benefit Description	LNG terminal in northern Greece will: Secure new natural gas quantities for the supply of the Greek and the SEE markets, hence enhancing 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 whilst providing access to multiple sources both existing and new such as US and East Med gas 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

Barrier Type	Description
Regulatory	Tariff levels for the Project should enjoy the same structural regime as the one applied for other competitive regulated infrastructures in the area in order for the Project to be commercially attractive to potential regional offtakers and therefore financially viable. Tariff levels will determine the required financing structure (equity/grant/debt ratios)
Permit Granting	Completed
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, Bulgaria and Serbia. 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 gas infrastructures (IGB, IBS) and in the upgrade of existing ones including reverse flow availability. The most critical one is the timing of start-up of the Interconnector Greece-Bulgaria (IGB). Also, availability of capacity in the Greek, Bulgarian and Romanian Transmission Systems and reverse flow capacity in Trans Balkan enabling flows from the Project 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 potentially apply for grants for works in a future Call from CEF and the Greek structural programs (NSRF). Award of such Public financing will be critical for the Project's commercial viability.
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. Recent interconnection agreements at the border IPs between EU member states in SE Europe are enhancing Project commercialization opportunities.
Financing	The Project has been awarded with grants for studies (CEF 2014 Call). The Project will also apply for grants within the National structural funds (NSRF - National Strategic Reference Framework). Award of such Public financing will be critical for the Project's commercial viability. The company has already signed a Mandate Letter with a major commercial bank of Greece for the total amount of dept. The target is that the terms of the debt financing agreement will be finalized before FID. The debt financing will be determined by contractual agreements regarding capacity reservation at the Project.
Financing	Availability of funds and associated conditions
Market	Lack of market maturity

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	<i>CBCA is non applicable for the Project</i>

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 2</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies only</i>
Other Financial Assistance	<i>No</i>
Comments	<i>GASTRADE applied for grants for studies from CEF2017 on 10.10.2017 for a "site specific metocean study". The requested amount was: 207,500 euro. Although the study was sound and complete, it was not selected for funding due to the proposal's mature character.</i>
General Comments	

## Cornegliano UGS

UGS-F-242	Project	Storage Facility	FID
Update Date	27/03/2018		Advanced
Description	Ital Gas Storage will construct a new gas storage facility located in Lombardy (Italy). The facility will have, at regime, a working gas volume of 1.3 billion cubic meters. The maximum injection and withdrawal rate from the facility will be 27 million cubic meters per day. The project has been fully authorised in March 2011, construction is expected to end by Q3 2018; and commercial operation of the facility is expected to commence from Q4 2018.		
PRJ Code - PRJ Name	PRJ-G-056 - New UGS in Cornegliano Laudense (IT)		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Cornegliano	ITAL Gas Storage S.r.l.	2018	STcIT	IT	297.0 GWh/d
	Comment: increas of 20% of actual Italian storage injection capacity				
	ITAL Gas Storage S.r.l.	2018	IT	STcIT	297.0 GWh/d
	Comment: increas of 11% of actual Italian storage withdrawal capacity				

Sponsors		General Information		NDP and PCI Information	
Whysol Gas Storage Holding S.r.l.	100%	Promoter	ITAL Gas Storage	Part of NDP	Yes (Ten-year development plan of the natural gas transmission network 2017–2026)
		Operator	ITAL Gas Storage S.r.l.		
Default		Host Country	Italy	NDP Number	RN_10
ITAL GAS STORAGE S.P.A.	100%	Status	In Progress	NDP Release Date	02/10/2017
		Website	Project's URL	NDP Website	NDP URL
				Currently PCI	No
				Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED	<i>06/2009</i>	<i>03/2011</i>	Applied for Exemption	<i>No</i>
Permitting		<i>03/2011</i>	Exemption Granted	<i>No</i>
Supply Contracts		<i>12/2012</i>		
FID		<i>11/2015</i>	Exemption in entry direction	<i>0.00%</i>
Construction	<i>12/2015</i>	<i>11/2018</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2018</i>	<i>2018</i>		
Grant Obtention Date	<i>15/03/2011</i>	<i>15/03/2011</i>		

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commissioning Year
<i>Cornegliano UGS</i>	<i>Depleted Field</i>	<i>Yes</i>	<i>In progress</i>	<i>800</i>	<i>27.0</i>	<i>27.0</i>	<i>100</i>	<i>Commercial operation of the facility is expected to commence from Q4 2018.</i>	<i>2018</i>

### Fulfilled Criteria

Specific Criteria Fulfilled  
Specific Criteria Fulfilled Comments

### Delays since last TYNDP

Grant Obtention Date *15/03/2011*  
Delay Since Last TYNDP  
Delay Explanation

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	In the last decade Italy faced at least 4 gas crisis, not depending on any extraordinary event. In the next years, due to Regulation 2017/1938 on security of supply, Italian storages could be used to grant citizens from other UE country in case of gas supply crisis, reducing the risk of curtailment in Entsog #1 Scenario and #16 Scenario
Benefit Description	Cornegliano UGS will contribute to the development of reverse gas flow from South Europe to Central Europe and North Europe by providing shippers with an important source of flexibility and gas modulation at relatively low cost (the national tariff in Italy is the lowest among Europe).

Barriers	
Barrier Type	Description
Regulatory	Low rate of return
Financing	Amortization rates

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## Interconnection with UGS in Cornegliano Laudense

TRA-F-1228	Project	Pipeline including CS	FID
Update Date	30/03/2018		Advanced
Description	The project consists of the interconnection with a new UGS facility located in the north of Italy in Cornegliano Laudense (LO)		
PRJ Code - PRJ Name	PRJ-G-056 - New UGS in Cornegliano Laudense (IT)		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS - IT - Snam Rete Gas/Italgasstorage	Snam Rete Gas S.p.A.	2018	STclT	IT	294.3 GWh/d
	Snam Rete Gas S.p.A.	2018	IT	STclT	294.3 GWh/d

Sponsors	General Information		NDP and PCI Information	
Snam Rete Gas S.p.A. <div><div></div></div> 100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	Part of NDP	<i>Yes (TYNDP 2017-2026)</i>
	Operator	<i>Snam Rete Gas S.p.A.</i>	NDP Number	<i>RN_10</i>
	Host Country	<i>Italy</i>	NDP Release Date	<i>30/11/2017</i>
	Status	<i>In Progress</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2018	2018
Grant Obtention Date		

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

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Interconnection with UGS in Cornegliano Laudense		1,050	10		2018
Total			10		

### Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	



CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Slovenian-Hungarian interconnector

TRA-N-325

Update Date

Description

PRJ Code - PRJ Name

Project

Pipeline including CS

Non-FID

02/10/2018

Advanced

Plinovodi, Snam Retegas and FGSZ agreed to create a new bidirectional gas route in the region. Main target to ensure a new bidirectional transmission route between the three countries.

PRJ-G-060 - Hungary – Slovenia interconnection

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Pince (SI) / Tornyszentmiklos (HU)	FGSZ Ltd.	2022	HU	SI	12.8 GWh/d
				<i>Comment: phase I.</i>	
	FGSZ Ltd.	2022	SI	HU	12.8 GWh/d
				<i>Comment: phase I.</i>	
	FGSZ Ltd.	2023	HU	SI	51.2 GWh/d
				<i>Comment: phase II. total capacity up to 64 GWh/d</i>	
	FGSZ Ltd.	2023	SI	HU	51.2 GWh/d
				<i>Comment: phase II. total capacity up to 64 GWh/d</i>	

### Sponsors

FGSZ Ltd. 100%

### General Information

Promoter *FGSZ Ltd.*  
 Operator *FGSZ Ltd.*  
 Host Country *Hungary*  
 Status *Planned*  
 Website *[Project's URL](#)*

### NDP and PCI Information

Part of NDP *Yes (Hungarian TYNDP 2017)*  
 NDP Number *12.12.*  
 NDP Release Date *28/12/2017*  
 NDP Website *[NDP URL](#)*  
 Currently PCI *Yes (6.23)*  
 Priority Corridor(s) *NSIE*

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		12/2015	Considered TPA Regime	Regulated
Feasibility	05/2016	12/2017	Considered Tariff Regime	Regulated
FEED	12/2019	12/2020	Applied for Exemption	No
Permitting	11/2016	12/2019	Exemption Granted	Not Relevant
Supply Contracts				
FID		07/2019	Exemption in entry direction	0.00%
Construction	01/2020	10/2022	Exemption in exit direction	0.00%
Commissioning	2022	2023		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nagykanizsa-Kozármisleny	phase II.	600	150	12	2023
Nagykanizsa-Toronyiszentmiklós	phase I.	600	41		2022
Total			191	12	

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Infrastructure to enable reverse flow and to increase diversification of entry points and use of regional storage capacities Increase of flexibility and diversification of routes and gas sources. Infrastructure allowing the increase of security of supply for the region. Price convergence and market integration.

### Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	Time schedule in the last TYNDP was estimated according to the data from the pre-feasibility study with lower level of details. Slower progress of project as planned.

## Expected Gas Sourcing

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

## Benefits

Main Driver	Others
Main Driver Explanation	
Benefit Description	Infrastructure to enable reverse flow and to increase diversification of entry points and use of regional storage capacities Increase of flexibility and diversification of routes and gas sources. Infrastructure allowing the increase of security of supply for the region. Price convergence and market integration.

## Barriers

Barrier Type	Description
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market maturity

## CBCA

Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	Yes
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	No
Comments	
General Comments	

## R15/1 Pince - Lendava - Kidričevo

TRA-N-112

Update Date

Description

PRJ Code - PRJ Name

Project

Pipeline including CS

Non-FID

30/03/2018

Advanced

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, connection of Hungarian and Slovenian gas market and improving of N-1 infrastructure standard for SI and HU.  
PCI 6.23. Hungary – Slovenia interconnection (Nagykanizsa - Tornyiszentmiklós (HU) - Lendava (SI) - Kidričevo).

PRJ-G-060 - Hungary – Slovenia interconnection

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Pince (SI) / Tornyszentmiklos (HU)	Plinovodi d.o.o.	2022	HU	SI	12.8 GWh/d
				<i>Comment: Phase 1</i>	
	Plinovodi d.o.o.	2022	SI	HU	12.8 GWh/d
				<i>Comment: Phase 1</i>	
	Plinovodi d.o.o.	2023	HU	SI	46.6 GWh/d
				<i>Comment: Phase 2</i>	
				<i>Total capacity 59.4 GWh/d.</i>	
	Plinovodi d.o.o.	2023	SI	HU	46.6 GWh/d
				<i>Comment: Phase 2</i>	
				<i>Total capacity 59.4 GWh/d.</i>	

Sponsors	General Information	NDP and PCI Information
Plinovodi	Promoter	Part of NDP
100%	Operator	NDP Number
	Host Country	NDP Release Date
	Status	NDP Website
	Website	Currently PCI
		Priority Corridor(s)

*Plinovodi d.o.o.* Yes (TYNDP for the period 2018-2027)

*Plinovodi d.o.o.* C3

*Slovenia* 09/10/2017

*Planned* [NDP URL](#)

[Project's URL](#) Yes (6.23)

NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED	07/2019	12/2021	Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID		07/2019	Exemption in entry direction	0.00%
Construction	10/2020	12/2023	Exemption in exit direction	0.00%
Commissioning	2022	2023		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-N-92	CS Ajdovščina, 1st phase of upgrade
TRA-N-108	M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
R15/1 Pince - Lendava - Kidričevo		500	73	6	0
<b>Total</b>			<b>73</b>	<b>6</b>	

#### Fulfilled Criteria

Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project will enable a new interconnection between Slovenia and Hungary, 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, contributing to the diversification of import sources and routes and the security of supply for both countries. It will enable the connection of Hungarian and Slovenian gas market and improving of N-1 infrastructure standard for SI and HU.

#### Expected Gas Sourcing

Algeria, Caspian Region, Russia, LNG (HR,IT), UGS in Hungary

Benefits			
Main Driver	Market Demand		
Main Driver Explanation	Also essential contribution to Security of supply.		
Benefit Description	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, connection of Hungarian and Slovenian gas market and improving of N-1 infrastructure standard for SI and HU.		
Barriers			
Barrier Type	Description		
Permit Granting	Long lasting and complicated procedures of Spatial planning (National Spatial Plan, SEA and EIA procedures, Environmental consent) as well as the procedure of acquiring the Construction permit (long procedures for land acquisition, etc.)		
Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding (MOU)		Yes	27/11/2009
CBCA		Financial Assistance	
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date		Grants for studies	Yes
Decision Date		Grants for studies amount	Mln EUR 0
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

## GCA 2015/08: Entry/Exit Murfeld

TRA-N-361	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Murfeld (AT) / Ceršak (SI)	Gas Connect Austria GmbH	2022	AT	SI	105.2 GWh/d
	<i>Comment: conversion from Nm<sup>3</sup>/h to kwh/h with a GCV of 11.19</i>				
	Gas Connect Austria GmbH	2022	SI	AT	166.5 GWh/d
	<i>Comment: conversion from Nm<sup>3</sup>/h to kwh/h with a GCV of 11.19</i>				

Sponsors	General Information		NDP and PCI Information	
	Promoter	<i>GAS CONNECT AUSTRIA GmbH</i>	Part of NDP	<i>Yes (NDP 2018 - 2027)</i>
	Operator	<i>Gas Connect Austria GmbH</i>	NDP Number	<i>GCA 2015/08</i>
	Host Country	<i>Austria</i>	NDP Release Date	<i>19/01/2018</i>
	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.26.1.4)</i>
			Priority Corridor(s)	<i>NSIE</i>



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting	<i>10/2015</i>	<i>07/2019</i>	Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction		<i>06/2022</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2022</i>	<i>2022</i>		
Grant Obtention Date				

## Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Murfeld	The technical load factor of the pipeline is confidential and must not be published in the TYNDP.				0
<b>Total</b>					

## Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	This project aims at covering the projected additional demand for capacity at the IP Murfeld entry and exit points. It will enable reverse flow. This strengthens security of supply, competition and market integration. In addition, the project contributes to sustainability.

## Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## GCA Mosonmagyaróvár

TRA-N-423

Update Date

Description

PRJ Code - PRJ Name

Project

Pipeline including CS

Non-FID

28/02/2018

Advanced

Current planning based on market indications. Potential connection to new gas sources from the Black Sea. Project will enable reverse flow.

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Mosonmagyaróvár	Gas Connect Austria GmbH	2022	HU	AT	153.1 GWh/d

Sponsors	General Information		NDP and PCI Information	
Promoter	GAS CONNECT AUSTRIA GmbH		Part of NDP	Yes (NDP 2018 - 2027)
Operator	Gas Connect Austria GmbH		NDP Number	GCA 2015/05
Host Country	Austria		NDP Release Date	19/01/2018
Status	Planned		NDP Website	<a href="#">NDP URL</a>
Website	<a href="#">Project's URL</a>		Currently PCI	Yes (6.24.1.3)
			Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting	<i>10/2015</i>	<i>07/2019</i>	Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction		<i>05/2022</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2022</i>	<i>2022</i>		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Mosonmagyarovar	The technical load factor of the pipeline is confidential and must not be published in the TYNDP.				0
<b>Total</b>					

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project allows for the connection to new gas sources from the Black Sea. It will enable reverse flow and increases diversification of routes. This will strengthen market intergration, security of supply and competition. In addition, it contributes favourably to sustainability goals.

### 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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## TAG Reverse Flow

TRA-F-954	Project	Pipeline including CS	FID
Update Date	09/03/2018		Advanced
Description	The objective of the planning project TAG Reverse Flow is to create a reverse flow FZK capacity on the TAG GmbH pipeline system, 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 from the Slovenian to the Austrian gas transportation system. This project would grant access under all conditions from and between Italian and Slovenian gas system to the Austrian Virtual Trading Point and to improve local security of supply and liquidity through diversification of supply routes and sources of supply. By enabling additional possibilities for physical reverse flow to be offered in the south-north and south-east directions, this project is of strategic interest for the Austrian, Italian and Slovenian market area and the NSI East region.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Tarvisio (IT) / Arnoldstein (AT)	TAG GmbH	2019	IB-ITe	AT	0.0 GWh/d
	<p><i>Comment: The implementation of this project, which comprises operation in the Weitendorf and Eggendorf compressor stations and all necessary modifications to the station control systems, will guarantee physical transport of at least 17,904,000 kWh/h (1,600,000 Nm<sup>3</sup>/h, 0°C) in reverse flow along the TAG-system up to the CS station Baumgarten, i.e. at least 11,190,000 kWh/h (1,000,000 Nm<sup>3</sup>/h, 0°C); GCV 11,19 kWh/Nm<sup>3</sup>/h (0°C) at the Arnoldstein entry point on the Austrian side and supports at the same time 6,714,000 kWh/h [600,000 Nm<sup>3</sup>/h (0°C); GCV 11,19 kWh/Nm<sup>3</sup>/h (0°C)] at the Murfeld entry point of the interconnected gas transportation system of Gas Connect Austria. The project will also enable physical operation from the Murfeld entry point towards Italy or from the Arnoldstein entry point towards Slovenia, via the SOL and TAG systems, if required.</i></p>				

Sponsors

Trans Austria Gasleitung GmbH	100%
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General Information

Promoter	Trans Austria Gasleitung GmbH
Operator	TAG GmbH
Host Country	Austria
Status	Planned
Website	

NDP and PCI Information

Part of NDP	Yes (Coordinated Network Development Plan 2018-2027)
NDP Number	TAG 2016-01
NDP Release Date	19/01/2018
NDP Website	<a href="#">NDP URL</a>
Currently PCI	No
Priority Corridor(s)	

Schedule

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2019	2019
Grant Obtention Date		

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%

Benefits	
Main Driver	Others
Main Driver Explanation	The planning project is 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 Murfeld. As a consequence, TAG GmbH also assesses an upgrade of existing entry DZK capacity to entry FZK capacity at the IP Arnoldstein.
Benefit Description	This project would grant access under all conditions from and between Italian and Slovenian gas system to the Austrian Virtual Trading Point and to improve local security of supply and liquidity through diversification of supply routes and sources of supply. By enabling additional possibilities for physical reverse flow to be offered in the south-north and south-east directions, this project is of strategic interest for the Austrian, Italian and Slovenian market area and the NSI East region.

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No, we do not plan to apply</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	



## Construction of a Looping CS Provadia – Rupcha village

TRA-N-594	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

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

Sponsors	General Information		NDP and PCI Information	
Provadia - Rupcha	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
Bulgartrasngaz EAD 100%	Operator	<i>Bulgartransgaz EAD</i>	NDP Number	<i>Section 5.1. (5.1.1)</i>
Strandja-IP BG/TR	Host Country	<i>Bulgaria</i>	NDP Release Date	<i>10/04/2017</i>
Bulgartrasngaz EAD 100%	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.25.4)</i>
			Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		06/2022
Commissioning	2022	2022
Grant Obtention Date	17/05/2017	17/05/2017

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%

### Enabled Projects

Project Code	Project Name
TRA-N-592	Looping CS Valchi Dol - Line valve Novi Iskar
TRA-N-593	Varna-Oryahovo gas pipeline

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
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		0
Looping CS Provadia – Rupcha village	new looping and additional power to existing compressor station	1,200	50	10	0
Total			70	10	

## Fulfilled Criteria

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.

## Delays since last TYNDP

Grant Obtention Date	17/05/2017
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, Bosnia 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 market, 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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 1</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Expansion of the gas infrastructure between BG-TR and BG-RS borders

TRA-N-1197

Update Date

Project

30/05/2018

Pipeline including CS

Non-FID

Non-Advanced

Description

The project envisages the construction of two new sections, the use of existing infrastructure in reverse operating regime with the necessary changes, the construction of two new compressor stations and one gas metering station, namely:

- Section 1 – construction of a new gas pipeline with a length of about 9.3 km, DN 1200 and pressure 7,5 MPa and gas metering station (GMS) Strandja;
- Section 2 – existing infrastructure consisting of two gas pipelines DN1000 with a length of about 155 km and a pressure of up to 5,4 MPa, as well as one gas pipeline with a length of 93 km with looping with a length of 45 km, DN 1200 and a pressure of up 5,4 working in reverse operating regime;
- Section 3 - construction of a new gas pipeline, with a length of about 484.3 km, DN 1200 and a pressure of 7,5 MPa, CS Nova provadia and CS Rasovo.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Bolyarovo (BG) / Turkey (TR)	Bulgartransgaz EAD	2020	TRi	BGn	567.8 GWh/d
Kirevo (BG) / Serbia (RS)	Bulgartransgaz EAD	2022	BGn	RS	357.7 GWh/d

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz	100%	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP)</i>
		Operator	<i>Bulgartransgaz EAD</i>		
		Host Country	<i>Bulgaria</i>	NDP Number	
		Status	<i>Planned</i>	NDP Release Date	
		Website		NDP Website	
				Currently PCI	No
				Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction		<i>03/2022</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2020</i>	<i>2022</i>		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Strandja through CS Lozenets to CS Provadia	Use of the existing gas transmission infrastructure in reverse flow regime, nominal pressure of 5,4 MPa, after completing of necessary changes				2020
New gas pipeline from CS Provadia to the Bulgarian-Serbian border	New section from CS Provadia to the BG-RS border, nominla pressure of 7,5 MPa and 2 new CSs - CS Rasovo and CS Nova Provadia * The year indicated is the deadline for commissioning of the last of the sub-projects	1,200	484	64	2022
New gas pipeline from the Bulgarian-Turkish border to CS Strandja	Construction of new gas pipeline from the Bulgarian-Turkish border to CS Strandja, nominal pressure of 7,5 MPa and a new GMS - GMS Strandja	1,200	93	64	2020
<b>Total</b>			<b>577</b>	<b>128</b>	

### Fulfilled Criteria

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

Benefits	
Main Driver	Others
Main Driver Explanation	The realization of the project for the expansion of Bulgartransgaz EAD gas transmission infrastructure in the section from the Bulgarian-Turkish border to the Bulgarian-Serbian border will achieve: • security of natural gas supply to Bulgaria; • security of natural gas supply to the neighboring Balkan countries and the region; • market integration.
Benefit Description	

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## Interconnection Bulgaria - Serbia

TRA-F-137	Project	Pipeline including CS	FID
Update Date	31/05/2018		Advanced
Description	<p>IBS aims at connecting the national gas transmission networks of Bulgaria and Serbia. It will be implemented in 3 stages.</p> <p>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.</p> <p>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).</p> <p>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.</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector BG RS	IBS Future Operator	2022	BGn	RS	51.0 GWh/d
			Comment: Operator to be defined		
	IBS Future Operator	2022	RS	BGn	51.0 GWh/d
			Comment: Operator to be defined		



Sponsors		General Information		NDP and PCI Information	
Bulgarian section		Promoter	<i>Ministry of Energy</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
Ministry of Energy of Bulgaria	100%	Operator	<i>IBS Future Operator</i>	NDP Number	<i>Sectin 5.2 (5.2.3)</i>
Serbian section		Host Country	<i>Bulgaria</i>	NDP Release Date	<i>10/04/2017</i>
Serbijagas	100%	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.10)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date
Pre-Feasibility		<i>02/2011</i>
Feasibility	<i>12/2011</i>	<i>12/2012</i>
FEED		
Permitting	<i>06/2013</i>	<i>12/2019</i>
Supply Contracts		<i>03/2020</i>
FID		<i>12/2012</i>
Construction	<i>03/2020</i>	<i>03/2022</i>
Commissioning	<i>2022</i>	<i>2022</i>
Grant Obtention Date		

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

Pipelines and Compressor Stations						
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year	
Bulgarian territory	1.8 bcm/y maximum capacity	700	62		0	
Serbian territory	1.8 bcm/y maximum capacity	700	108		0	
Total			170			

## Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	IBS will connect networks of Bulgaria and Serbia. It is a prerequisite for development of the natural gas market, increase of market integration and boosting competition. All this involves the use of the potential and existing gas infrastructure on the territory of Bulgaria and Serbia, Chiren UGS capacity, UGS Banatski Dvor and Banatski Itebej. IBS will significantly contribute to the SoS, diversification of the supply sources and routes; increasing the transport volumes and the liquidity of the regional gas market, as well as the integration with the EU gas network under EU regulations. Bulgaria will be able to take advantage of alternative gas supplies through the Baumgarten Hub, and Serbia will have access to natural gas from the Southeast through the gas interconnections of Bulgaria with in Turkey and Greece. The connection of the gas markets of Bulgaria and Serbia will consequently contribute to the connection with the markets of the countries of Southeastern Europe.

## Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	<ul style="list-style-type: none"> <li>• Large archeological survey and researches along the route.</li> <li>• The Public procurement procedure for selection of a Contractor for the design phase, including appeal to Court, took rather long.</li> <li>• Need for amendment of the Detailed Development Plan.</li> <li>• The implementation of the project on Bulgarian territory, according to the requirements under OPIC 2014-2020 has exclusive conditionality with the Serbian section, namely the start of construction works on Serbian territory is an essential prerequisite to commission the grant under Operational Programme Innovation and Competitiveness for beginning of the construction works on the Bulgarian territory.</li> </ul>

## Expected Gas Sourcing

Caspian Region, Russia, LNG ()

## 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)

## Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding between Bulgaria and Serbia	Memorandum of Understanding signed in Sofia between Bulgaria and Serbia in 2005	Yes	08/04/2005
Memorandum of Understanding between Bulgaria and Serbia	Memorandum of Understanding signed in Brussels between Bulgaria and Serbia in 2012	Yes	14/12/2012
Memorandum of Understanding between Bulgaria and Serbia	Memorandum of Understanding between Bulgaria and Serbia	Yes	19/01/2017
Joint statement by Bulgaria and Serbia	Joint statement signed in Brussels by Bulgaria and Serbia in 2010	Yes	05/03/2010

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	No decision yet taken
Other Financial Assistance	Yes
Comments	<i>BS is developed by Ministry of Energy (ME), beneficiary of Competitiveness Operational Programme (2007-2013 and 2014-2020). The source of financing is the European Fund for Regional Development.</i>
General Comments	

## Interconnection Turkey-Bulgaria

TRA-N-140	Project	Pipeline including CS	Non-FID
Update Date	31/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector ITB (Turkey - Bulgaria) (BG>TR)	Bulgartransgaz EAD	2022	BGn	BG/ITB	97.0 GWh/d
Interconnector ITB (Turkey - Bulgaria) (TR>BG)	Bulgartransgaz EAD	2022	BG/ITB	BGn	97.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Bulgartransgaz EAD for the gas pipeline section on the territory of Bulgaria <div> <div></div> <div>100%</div> </div>	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
	Operator	<i>Bulgartransgaz EAD</i>		
	Host Country	<i>Bulgaria</i>	NDP Number	<i>ITB</i>
	Status	<i>Planned</i>	NDP Release Date	<i>10/04/2017</i>
	Website	<i><a href="#">Project's URL</a></i>	NDP Website	<i><a href="#">NDP URL</a></i>
			Currently PCI	<i>No</i>
			Priority Corridor(s)	<i>SGC</i>

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	08/2015	02/2016
FEED		
Permitting		
Supply Contracts		
FID		
Construction		12/2022
Commissioning	2022	2022
Grant Obtention Date		

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)	Comissioning Year
ITB Bulgarian Section		700	76	13	0
ITB Turkish Section			130		0
Total			206	13	

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	<p>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</p>

## Delays since last TYNDP

Grant Obtention Date

Delay Since Last TYNDP yes

Delay Explanation

## 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

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. ITB can secure access to all existing and future entry points and sources of Turkey, Azerbaijan and other natural gas and LNG spot supplies from the existing terminals in Turkey. 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.

Benefit Description

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

## Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Joint Declaration of the Minister of Energy and Natural Resources of the Republic of Turkey and the Minister of Economy, Energy and Tourism of the Republic of Bulgaria on Energy Cooperation	Declarationon Energy Cooperation	Yes	20/03/2012
Memorandum of Understanding 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
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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 0</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
	<i>On April 3, 2015 Bulgartransgaz EAD has signed a Grant Agreement No. INEA/CEF/ENER/M2014/0014 for the realization of a Feasibility study for the project Turkey – Bulgaria (ITB).</i>
Comments	
	<i>Bulgartransgaz EAD intends to apply for PCI label of ITB in the next PCI round and respectively to apply for financial support for other type of studies and for works.</i>
General Comments	

## Interconnector Greece-Bulgaria (IGB Project)

TRA-F-378	Project	Pipeline including CS	FID
Update Date	15/11/2018		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 up to 3bcm/y, capable to be increased to up to 5 bcm/y with the installation of a Compressor Station		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Komotini - TAP / IGB	ICGB a.d.	2020	GR/TAP	BG/IGB	90.0 GWh/d
	ICGB a.d.	2020	IB-GRk	BG/IGB	90.0 GWh/d
	ICGB a.d.	2025	IB-GRk	BG/IGB	60.0 GWh/d
<i>Comment: IGB will be technically ready for a forward capacity upgrade from up to 3bcm/y to up to 5 bcm/y with installation of compressor station</i>					
Komotini (DESFA) - GR / IGB	ICGB a.d.	2020	BG/IGB	BGn	90.0 GWh/d
	ICGB a.d.	2025	BG/IGB	BGn	60.0 GWh/d
	<i>Comment: IGB will be technically ready for a forward capacity upgrade from up to 3bcm/y to up to 5 bcm/y with installation of compressor station</i>				
Stara Zagora - IGB / BG	ICGB a.d.	2020	BG/IGB	BGn	90.0 GWh/d
	ICGB a.d.	2025	BG/IGB	BGn	60.0 GWh/d
	<i>Comment: IGB will be technically ready for a forward capacity upgrade from up to 3bcm/y to up to 5 bcm/y with installation of compressor station</i>				

Sponsors		General Information		NDP and PCI Information	
BEH EAD	50%	Promoter	ICGB a.d.	Part of NDP	Yes (Included in both the TYNDPs of Greece and Bulgaria)
IGI Poseidon	50%	Operator	ICGB a.d.	NDP Number	not applicable
		Host Country	Bulgaria	NDP Release Date	
		Status	In Progress	NDP Website	<a href="#">NDP URL</a>
		Website	<a href="#">Project's URL</a>	Currently PCI	Yes (6.8.1)
				Priority Corridor(s)	NSIE



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		04/2009	Considered TPA Regime	<i>Not Applicable</i>
Feasibility	05/2009	07/2009	Considered Tariff Regime	<i>Not Applicable</i>
FEED	08/2010	03/2016	Applied for Exemption	Yes
Permitting	08/2010	06/2018	Exemption Granted	<i>Not Yet</i>
Supply Contracts				
FID		12/2015	Exemption in entry direction	90.00%
Construction	09/2018	06/2020	Exemption in exit direction	90.00%
Commissioning	2020	2025		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
IGB	IGB will be technically ready for a forward capacity upgrade from up to 3bcm/y to up to 5 bcm/y with installation of compressor station. Capacity upgrade will depend on market committments and development of neighbouring systems.	813	182	12	0
Total			182	12	

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	As regional gas interconnector, IGB will bring benefits on all criteria, an in particular will secure new gas sources and market integration in a SEE region, suffering from a high level of dependency on single source of imports and lack of regional cross-border gas interconnections.

## Delays since last TYNDP

Grant Obtention Date

Delay Since Last TYNDP 1 year

Delay Explanation

Extension in permitting procedures for authorization of construction and of Exemption Procedure for new gas infrastructure. Requirement by Bulgarian authorities for conducting public procurement procedures for construction phase in accordance with Public Procurement Act (PPA) and received appeals under PPA causing delays.

## Expected Gas Sourcing

Algeria, Caspian Region, Libya, Norway, Russia, LNG (DZ,EU,GR,IT,NO,QA,TAP,TR,AE,US)

## Comments about the Third-Party Access Regime

The Exemption Application has been submitted for obtaining exemption from tariff regulation, TPA obligations and ownership unbundling. Finalization of the Exemption procedure is planned in 1st half 2018.

## Benefits

Main Driver Market Demand

Main Driver Explanation

The commitments from the market have been assessed by the signing of the Advance Reservation Capacity Agreements, proposed after the capacity allocation that was authorized by the National Regulatory Authorities in the conducted Market Test (see above information on Exemption Application). ARCAs signature will be followed by Gas Transportation Agreements execution within 2018 (as per provisions of the ARCAs).

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. The current market test outcomes confirm a commitment at least from Caucasian area and LNG. Other sources that can be served by the pipeline are expected as well, as soon as TAP and other pipelines will start to operate.

## Barriers

Barrier Type

Description

Regulatory

Regulatory approvals have to ensure more streamlined process for decisions on TPA exemption 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.

Others

Newly imposed public procurement procedures in accordance to Bulgarian Public Procurement Act ; Public procurement procedures may be significantly delayed by appeals.

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. The procedures for gaining access to transmission services in the neighbouring systems by shippers on IGB should be more streamlined and transparent.

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
	The Intergovernmental Agreement that shall be signed between Greece and Bulgaria will establish the applicable Tax Framework for the Project.	No	16/01/2019
CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	No
Decision Date		Grants for studies amount	
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	No decision yet taken
Additional Comments		Other Financial Assistance	Yes
			<i>Financial assistance has been approved for the IGB in the amount of 45 mln. EUR under the European Energy Programme for Recovery (EPR).</i>
		Comments	<i>IGB Project is applying for additional financial support from EU Structural and Investment Funds.</i>
		General Comments	

## Looping CS Valchi Dol - Line valve Novi Iskar

TRA-N-592	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Advanced
Description	Modernisation of the national gas transmission network northern 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 capacity increment in the direction to Romania (through IBR) with 30.8 GWh/d and capacity increment in GMS Chiren with 44 GWh/d In the context of the European objectives to build an interconnected and single pan-European market, 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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
GMS Chiren	Bulgartransgaz EAD	2022	STcBGn	BGn	44.0 GWh/d
	Bulgartransgaz EAD	2022	BGn	STcBGn	44.0 GWh/d
Ruse (BG) / Giurgiu (RO)	Bulgartransgaz EAD	2022	BGn	RO	30.8 GWh/d
	Bulgartransgaz EAD	2022	RO	BGn	30.8 GWh/d

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	Part of NDP	Yes (2017-2026 Ten-year network development plan of BTG)
		Operator	Bulgartransgaz EAD	NDP Number	Section 5.1. (5.1.1)
		Host Country	Bulgaria	NDP Release Date	10/04/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes (6.25.4)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		06/2022
Commissioning	2022	2022
Grant Obtention Date	17/05/2017	17/05/2017

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

Enabled Projects	
Project Code	Project Name
TRA-N-593	Varna-Oryahovo gas pipeline
TRA-N-594	Construction of a Looping CS Provadia – Rupcha village
UGS-N-138	UGS Chiren Expansion

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
CS Valchi dol - line valve Novi Iskar		700	383	2022
Total			383	

Fulfilled Criteria	
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.

## Delays since last TYNDP

Grant Obtention Date 17/05/2017

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.

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 1</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Rehabilitation, Modernization and Expansion of the NTS

TRA-F-298	Project	Pipeline including CS	FID
Update Date	31/05/2018		Advanced
Description	<p>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:</p> <p>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 and funds from the National Investment Plan.</p> <p>Phase 2: Includes actions initiated in 2016. They represent logic continuation of the overall realization of the project following the implementation of Phase 1.</p> <p>Phase 3: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector BG RS	IBS Future Operator	2024	BGn	RS	19.4 GWh/d
	<i>Comment: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.</i>				
	IBS Future Operator	2024	RS	BGn	19.4 GWh/d
	<i>Comment: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.</i>				
Kulata (BG) / Sidirokastron (GR)	Bulgartransgaz EAD	2021	BGg/BGT	GR	13.8 GWh/d
Strandzha (BG) / Malkoclar (TR)	Bulgartransgaz EAD	2021	BGg/BGT	TRe	58.1 GWh/d

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz EAD	100%	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
		Operator	<i>Bulgartransgaz EAD</i>	NDP Number	<i>Section 5.5.</i>
		Host Country	<i>Bulgaria</i>	NDP Release Date	<i>10/04/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.8.2)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date
Pre-Feasibility		<i>12/2016</i>
Feasibility	<i>08/2008</i>	<i>08/2017</i>
FEED		
Permitting	<i>09/2009</i>	<i>02/2020</i>
Supply Contracts		
FID		
Construction	<i>09/2014</i>	<i>06/2021</i>
Commissioning	<i>2021</i>	<i>2024</i>
Grant Obtention Date	<i>27/04/2016</i>	<i>27/04/2016</i>

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

Enabled Projects	
Project Code	Project Name
TRA-N-592	Looping CS Valchi Dol - Line valve Novi Iskar
TRA-N-593	Varna-Oryahovo gas pipeline
TRA-N-594	Construction of a Looping CS Provadia – Rupcha village
TRA-N-654	Eastring - Bulgaria
UGS-N-138	UGS Chiren Expansion
TRA-N-140	Interconnection Turkey-Bulgaria
TRA-F-137	Interconnection Bulgaria - Serbia



## Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Commissioning Year
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	0
Lozenets-Nedyalsko		1,000	20		0
PF Beglej - VA Dermantsi - VA Batultsi - VA Kalugeroovo		700	58		0
Valchi Dol - Preselka		700	23		0
<b>Total</b>			<b>120</b>	<b>20</b>	

## Fulfilled Criteria

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.

## Delays since last TYNDP

Grant Obtention Date	27/04/2016
Delay Since Last TYNDP	yes
Delay Explanation	Fine-tuning the schedule to reflect the degree of project implementation. An update of the Implementation Schedule has been made consequently to the technical and economic analysis of the operation of the new equipment (installed during Stage 1 of the CS modernization) in connection with the second stage of the CS modernisation (Phase 2).

## Expected Gas Sourcing

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

## Benefits

Main Driver	Others
Main Driver Explanation	<p>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.</p>
Benefit Description	<p>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), Turkey (ITB) and Serbia (IBS) as well as to the IBR (in operation already) and with the use of the UGS Chiren's capacity in relation to the project for its expansion, most of them labelled 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.</p>

CBCA		Financial Assistance	
Decision	<i>Yes, we have submitted an investment request and have received a decision</i>	Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Submission Date	<i>01/09/2017</i>	Grants for studies	<i>Yes</i>
Decision Date	<i>10/10/2017</i>	Grants for studies amount	<i>Mln EUR 1</i>
Website	<i><a href="#">CBCA URL</a></i>	Grants for works	<i>Yes</i>
Countries Affected	<i>Bulgaria</i>	Grants for works amount	<i>Mln EUR 0</i>
Countries Net Cost Bearer	<i>Bulgaria</i>	Intention to apply for CEF	<i>Yes, for studies and works</i>
Additional Comments		Other Financial Assistance	<i>Yes</i>
		Comments	<p><i>Phase 1, consisting of activities undertaken in the period 2013-2015, was funded by Bulgartransgaz EAD. Stage 1 of the modernization of compressor stations (part of Phase 1) was included in the National Investment Plan (NIP) and, in this respect, in 2017 Bulgartransgaz EAD received national funding for CS Petrich, CS Ihtiman and CS Lozenets to the total amount of EUR 26 million. For CS Strandzha, the project implementation costs of EUR 11 million were partially reimbursed. The reimbursement to the full amount of the specified in the NIP funds amounting to EUR 15 million is forthcoming.</i></p>
		General Comments	<p><i>During the 2017 CEF Energy Call for proposals Bulgartransgaz EAD submitted a project proposal for works. The proposal was not recommended for funding.</i></p>

## UGS Chiren Expansion

UGS-N-138	Project	Storage Facility	Non-FID
Update Date	22/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
GMS Chiren	Bulgartransgaz EAD	2024	STcBGn	BGn	48.9 GWh/d
	Bulgartransgaz EAD	2024	BGn	STcBGn	51.0 GWh/d
	Bulgartransgaz EAD (SSO)	2024	STcBGn	BGn	48.9 GWh/d
	Bulgartransgaz EAD (SSO)	2024	BGn	STcBGn	51.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	Part of NDP	Yes (2017-2026 Ten-year network development plan of BTG)
		Operator	Bulgartransgaz EAD	NDP Number	Section 5.3 (5.3.1)
		Host Country	Bulgaria	NDP Release Date	10/04/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes (6.20.2)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2011	Considered TPA Regime	Regulated
Feasibility	03/2015	10/2019	Considered Tariff Regime	Regulated
FEED	08/2020	11/2022	Applied for Exemption	Not Relevant
Permitting	04/2021	12/2022	Exemption Granted	Not Relevant
Supply Contracts				
FID			Exemption in entry direction	0.00%
Construction	06/2021	06/2024	Exemption in exit direction	0.00%
Commissioning	2024	2024		
Grant Obtention Date	23/10/2015	23/10/2015		

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commissioning Year
UGS Chiren	Depleted Field	Yes	UGS Chiren Expansion	450	4.6	4.8	75	The expected load factor for the first 3 years after the commissioning.	2024

Fulfilled Criteria	
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.

### Delays since last TYNDP

Grant Obtention Date	23/10/2015
Delay Since Last TYNDP	yes
Delay Explanation	Commissioning: 2024 The delay of the overall PCI implementation is due to delay in the in the implementation of 3D seismic studies. The reasons are that within the tender procedure, the Selection Decision was appealed by one of the bidders and that hindered its successful completion. In the mean time new standard templates for tender procedures were approved by the Bulgarian Ministry of Finance, which from our side let to delay in the preparation of new tender documentation for the 3D seismic studies tendering, which afterwards needed to be re-launch.

### 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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 4</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Varna-Oryahovo gas pipeline

TRA-N-593	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

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

Sponsors		General Information		NDP and PCI Information	
Bulgartransgaz EAD	100%	Promoter	<i>Bulgartransgaz EAD</i>	Part of NDP	<i>Yes (2017-2026 Ten-year network development plan of BTG)</i>
		Operator	<i>Bulgartransgaz EAD</i>	NDP Number	<i>Section 5.1. (5.1.1)</i>
		Host Country	<i>Bulgaria</i>	NDP Release Date	<i>10/04/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><u>NDP URL</u></i>
		Website	<i><u>Project's URL</u></i>	Currently PCI	<i>Yes (6.25.4)</i>
				Priority Corridor(s)	<i>NSIE</i>



Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		06/2022
Commissioning	2022	2022
Grant Obtention Date	17/05/2017	17/05/2017

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

#### Enabled Projects

Project Code	Project Name
TRA-N-592	Looping CS Valchi Dol - Line valve Novi Iskar
TRA-N-594	Construction of a Looping CS Provadia – Rupcha village

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Varna-Oryahovo gas pipeline	a new pipeline incl. 2 CS	1,200	844	265	0
<b>Total</b>			<b>844</b>	<b>265</b>	

#### Fulfilled Criteria

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.

## Delays since last TYNDP

Grant Obtention Date 17/05/2017

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.

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 1</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Compressor station at Ambelia

TRA-N-1278

Project

Pipeline including CS

Non-FID

Update Date

31/10/2018

Non-Advanced

Description

The project consists in the installation of a new compressor station at Ambelia (in Central Greece).

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kulata (BG) / Sidirokastron (GR)	DESFA S.A.	2022	GR	BGg/BGT	60.0 GWh/d
	DESFA S.A.	2022	BGg/BGT	GR	54.7 GWh/d

Sponsors	General Information		NDP and PCI Information	
DESFA S.A.	100%	Promoter	DESFA S.A.	Part of NDP
		Operator	DESFA S.A.	Yes (Draft Development Plan 2017-2026)
		Host Country	Greece	NDP Number
		Status	Planned	NDP Release Date
		Website	<a href="#">Project's URL</a>	NDP Website
			Currently PCI	<a href="#">NDP URL</a>
			Priority Corridor(s)	No

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2022</i>	<i>2022</i>		
Grant Obtention				
Date				

Fulfilled Criteria	
Specific Criteria Fulfilled	
Specific Criteria Fulfilled Comments	

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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Compressor station at Nea Messimvria

TRA-N-971	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		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".		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant 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	NDP and PCI Information
	Promoter	DESFA S.A. Part of NDP <i>No ((5) others - please comment below)</i>
	Operator	DESFA S.A. NDP Number
	Host Country	Greece NDP Release Date
	Status	Planned NDP Website
	Website	Project's URL Currently PCI Yes (7.1.3)
		Priority Corridor(s) SGC

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>Not Relevant</i>
Permitting			Exemption Granted <i>Not Relevant</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	2022	2022	
Grant Obtention Date			

Pipelines and Compressor Stations						
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nea Messimvria to TAP					27	0
		Total			27	
Fulfilled Criteria						
Specific Criteria Fulfilled		Competition, Market Integration, Security of Supply				
Specific Criteria Fulfilled Comments		The possibility to inject gas from the various sources supplying the Greek transmission network to TAP, provides increased security of supply and commercial options to the customers connected to the grids supplied by TAP.				
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.				
CBCA			Financial Assistance			
Decision		No, we have not submitted an investment request yet, and we do not plan to submit it		(3) No, we have not applied for CEF		
Submissin Date				No		
Decision Date						
Website				No		
Countries Affected						
Countries Net Cost Bearer				No decision yet taken		
Additional Comments				No		

## Compressor station at Nea Messimvria (3rd unit)

TRA-N-1276

Project

Pipeline including CS

Non-FID

Update Date

31/10/2018

Non-Advanced

Description

The project consists in the addition of a third turbocompressor unit at the existing Compressor station of Nea Messimvria in order to increase the import capacity at the Northern (Sidirokastro) and Eastern (Kipi) import points

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kulata (BG) / Sidirokastron (GR)	DESFA S.A.	2021	BGg/BGT	GR	11.4 GWh/d

Sponsors	General Information		NDP and PCI Information	
Promoter	DESFA S.A.	Part of NDP	Yes (Draft Development Plan 2017-2026)	
Operator	DESFA S.A.	NDP Number	2.1.2.9	
Host Country	Greece	NDP Release Date		
Status	Planned	NDP Website	<a href="#">NDP URL</a>	
Website	<a href="#">Project's URL</a>	Currently PCI	No	
		Priority Corridor(s)		



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility	2021	2021	Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning				
Grant Obtention				
Date				

Fulfilled Criteria	
Specific Criteria Fulfilled	
Specific Criteria Fulfilled Comments	

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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Compressor Station Kipi

TRA-N-128	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant 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
				Comment: 3 bcm/y	
Komotini (DESFA) Bottleneck	DESFA S.A.	2020	IB-GRk	GR	54.4 GWh/d
				Comment: 3 bcm/y	

### Capacity Increments Variant(s) 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
				Comment: 6 bcm/y	

Sponsors		General Information		NDP and PCI Information	
DESFA S.A.	100%	Promoter	DESFA S.A.	Part of NDP	Yes (Development Plan NNGS 2016-2025)
		Operator	DESFA S.A.	NDP Number	2.2.1.3
		Host Country	Greece	NDP Release Date	
		Status	Planned	NDP Website	<a href="#">NDP URL</a>
		Website	<a href="#">Project's URL</a>	Currently PCI	Yes (6.8.1)
				Priority Corridor(s)	NSIE
Schedule	Start Date	End Date	Third-Party Access Regime		
Pre-Feasibility			Considered TPA Regime	Regulated	
Feasibility			Considered Tariff Regime	Regulated	
FEED			Applied for Exemption	No	
Permitting			Exemption Granted	Not Relevant	
Supply Contracts					
FID			Exemption in entry direction	0.00%	
Construction			Exemption in exit direction	0.00%	
Commissioning	2020	2020			
Grant Obtention Date					

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)	Comissioning Year	
Kipi		0	0	9	0	
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)	Comissioning Year	
Kipi		0	0	18	0	
Total			0	18		
Fulfilled Criteria						
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply					
Specific Criteria Fulfilled Comments	The C/S will increase the import capacity from Turkey in order to supply both the Greek System and the those of neighbouring countries and will allow the entry of new suppliers in the market that may supply gas at higher pressures without hindering the supply from Turkey.					
Delays since last TYNDP						
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	

CBCA	Financial Assistance
Decision	Applied for CEF (3) No, we have not applied for CEF
Submissin Date	Grants for studies No
Decision Date	Grants for studies amount
Website	Grants for works No
Countries Affected	Grants for works amount
Countries Net Cost Bearer	Intention to apply for CEF No decision yet taken
Additional Comments	Other Financial Assistance No
	Comments
	General Comments

## Compressor Station Kipi Increment

TRA-N-1129	Project	Pipeline including CS	Non-FID
Update Date	31/10/2018		Non-Advanced
Description	This project represents the necessary increment for the Kipi compressor station (TRA-N-128) to reach the capacity needed to ensure the supply with gas of the Komotini-Thesprotia pipeline (TRA-N-014).		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kipi (TR) / Kipi (GR)	DESFA S.A.	2024	TRi	IB-GRk	275.2 GWh/d

Sponsors	General Information		NDP and PCI Information	
DESFA S.A. <div><div></div></div> 100%	Promoter	DESFA S.A.	Part of NDP	Yes (Development Plan NNGS 2016-2025)
	Operator	DESFA S.A.	NDP Number	2.2.1.3
	Host Country	Greece	NDP Release Date	
	Status	Planned	NDP Website	<a href="#">NDP URL</a>
	Website	<a href="#">Project's URL</a>	Currently PCI	No
			Priority Corridor(s)	SGC

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2024</i>	<i>2024</i>		
Grant Obtention				
Date				

Enabled Projects	
Project Code	Project Name
TRA-N-14	Komotini-Thesprotia pipeline

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
1				20
Total				20

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing
Caspian Region, Russia, LNG ()



Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barrier Type	Description
Market	Lack of market support

CBCA

Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance

Applied for CEF	(3) No, we have not applied for CEF
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	No decision yet taken
Other Financial Assistance	No
Comments	
General Comments	

## EastMed Pipeline

TRA-N-330

Project

Pipeline including CS

Non-FID

Update Date

29/03/2018

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.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Crete (GR)	IGI Poseidon S.A.	2025	GRc	GR/EMD	190.0 GWh/d
	IGI Poseidon S.A.	2025	GR/EMD	GRc	20.0 GWh/d
East Med / Cyprus (CY)	IGI Poseidon S.A.	2025	GR/EMD	CY	30.0 GWh/d
East Med / Cyprus/Israeli Production Field	IGI Poseidon S.A.	2025	NPcCY	GR/EMD	330.0 GWh/d
East Med / Peloponnesus (GR)	IGI Poseidon S.A.	2025	GR/EMD	GR	90.0 GWh/d
East Med / Thesprotia (Poseidon)	IGI Poseidon S.A.	2025	GR/IGI	GR/EMD	350.0 GWh/d

Sponsors	General Information	NDP and PCI Information
EastMed pipeline: from Crete to Peloponnese	Promoter <i>Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A</i> Operator <i>IGI Poseidon S.A.</i> Host Country <i>Greece</i> Status <i>Planned</i> Website <i><a href="#">Project's URL</a></i>	<i>No ((4) there is no obligation at national level for such a project to be part of the NDP)</i>
IGI Poseidon SA 100%		Part of NDP
EastMed pipeline: from Cyprus to Crete		NDP Number
IGI Poseidon SA 100%		NDP Release Date
EastMed pipeline: from Levantine Basin to Cyprus		NDP Website
IGI Poseidon SA 100%		Currently PCI Yes (7.3.1)
EastMed pipeline: from Peloponnese to West Greece		Priority Corridor(s) SGC
IGI Poseidon SA 100%		
EastMed pipeline: from West Greece to Thesprotia (tie-in with Poseidon)		
IGI Poseidon SA 100%		

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility		08/2012	Considered TPA Regime <i>Not Applicable</i>
Feasibility	05/2015	03/2018	Considered Tariff Regime <i>Not Applicable</i>
FEED	11/2018	12/2020	Applied for Exemption <i>Not Yet</i>
Permitting	06/2018	06/2021	Exemption Granted <i>No</i>
Supply Contracts			
FID		06/2021	Exemption in entry direction <i>0.00%</i>
Construction	06/2021	12/2024	Exemption in exit direction <i>0.00%</i>
Commissioning	2025	2025	
Grant Obtention Date	25/01/2018	25/01/2018	

Enabled Projects	
Project Code	Project Name
TRA-N-10	Poseidon Pipeline

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
EastMed pipeline: section from Crete to Peloponnese	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.	660	421	120	0
EastMed pipeline: section from Cyprus to Crete	This section of the project is related to the offshore pipeline between Cyprus and Crete.	660	732	100	0
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		0
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		0
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.	1,070	317		0
Total			1,871	220	
Fulfilled Criteria					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	<p>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.</p>				

### Delays since last TYNDP

Grant Obtention Date	25/01/2018
Delay Since Last TYNDP	
Delay Explanation	Thanks to the positive outcomes of the Pre-FEED activities, co-financed by European Commission through CEF program, the promoter has updated the project schedule increasing the accuracy of the next development activities.

### Expected Gas Sourcing

Cyprus resources and offshore of Crete in case relevant gas reserves will be discovered and potentially Egypt.

### 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	<p>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:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• integrate Cyprus with the European gas system, further promoting gas trading in the South Eastern Europe region;</li> <li>• 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;</li> <li>• gasify regions of Greece that currently have no access to gas, such as Crete, Peloponnese and Western Greece.</li> </ul>
Benefit Description	<p>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:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Contributes to the development of EU domestic gas resources, thus limiting the dependence on third countries</li> <li>• Secures access to gas sources strategically located for EU</li> </ul>

### Barriers

Barrier Type	Description
Political	A supportive political, fiscal and regulatory framework is necessary to secure the timely development of the EastMedProject.
Financing	It is going to be submitted a request to access CEF funds for feasibility studies

Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding on cooperation in relation to EastMed Pipeline	MoU signed by Ministers of the Republic of Cyprus, the Hellenic Republic and the State of Israel and the Ambassador of the Italian Republic to Cyprus	Yes	05/12/2017
Cyprus-Israel-Greece Trilateral Summit Declaration	Agreement to "to strengthen the cooperation between our three countries in order to promote a trilateral partnership in different fields of common interest and to work together towards promoting peace, stability, security and prosperity in the Mediterranean"	Yes	28/01/2016
Italy-Greece-Cyprus-Israel Working Group		Yes	01/12/2016

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	Yes
Grants for studies amount	Mln EUR 4
Grants for works	No
Grants for works amount	
Intention to apply for CEF	No decision yet taken
Other Financial Assistance	No
Comments	<i>The project has been awarded in 2015 with 2 M€ of CEF grants for the development activities related to Pre-FEED phase. In 2018, a second CEF grant of 34.5M€ has been awarded to the project for the development activities related to FEED Phase.</i>
General Comments	

## Komotini-Thesprotia pipeline

TRA-N-14	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	High pressure pipeline from Komotini to Thesprotia area near Ionian coast along with 2 compressor stations and 1 operation & maintenance centre.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Poseidon Greek Entry	DESFA S.A.	2024	IB-GRk	GR/IGI	275.4 GWh/d
	DESFA S.A.	2024	GR/IGI	IB-GRk	80.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
DESFA S.A.	Promoter	DESFA S.A.	Part of NDP	Yes (Development Plan NNGS 2016-2025)
100%	Operator	DESFA S.A.	NDP Number	2.2.1.6
	Host Country	Greece	NDP Release Date	
	Status	Planned	NDP Website	NDP URL
	Website	Project's URL	Currently PCI	No
			Priority Corridor(s)	SGC

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2024	2024
Grant Obtention Date		

Third-Party Access Regime	
Considered TPA Regime	<i>Regulated</i>
Considered Tariff Regime	<i>Regulated</i>
Applied for Exemption	<i>No</i>
Exemption Granted	<i>Not Relevant</i>
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)	Comissioning Year
Komotini-Thesprotia	total length of new pipes	1,067	613	58	0
<b>Total</b>			<b>613</b>	<b>58</b>	

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	

Delays since last TYNDP	
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

Barrier Type	Description
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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	Yes
Grants for studies amount	Mln EUR 0
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	No
Comments	<i>Financial support for studies was granted from Trans European Energy Networks, (TEN) in 2005 (Decision 2004 – G114/04 – TREN/05/TEN E – S07.51845).</i>
General Comments	

## Metering and Regulating Station at Alexandroupoli

TRA-N-1090

Project

Pipeline including CS

Non-FID

Update Date

29/10/2018

Non-Advanced

Description

The project consists of the implementation of one Metering and Regulating Station at Alexandroupoli (Amphitriti) for the potential interconnection of the Greek transmission system with the LNG terminal in Northern Greece.

PRJ Code - PRJ Name

-

### Capacity Increments Variant 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	General Information	NDP and PCI Information
DESFA S.A. 100%	Promoter <i>DESFA S.A.</i>	Part of NDP <i>No ((5) others - please comment below)</i>
	Operator <i>DESFA S.A.</i>	NDP Number
	Host Country <i>Greece</i>	NDP Release Date
	Status <i>Planned</i>	NDP Website
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>Yes (6.9.1)</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>Not Relevant</i>
Permitting			Exemption Granted <i>Not Relevant</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	2020	2020	
Grant Obtention Date			

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	
Expected Gas Sourcing	
LNG ()	
Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	
Barriers	
Barrier Type	Description
Market	Lack of market maturity
CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	
Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	No
Comments	
General Comments	

## Metering and Regulating station at Megalopoli

TRA-N-1091

Project

Pipeline including CS

Non-FID

Update Date

29/10/2018

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.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Peloponnesus (GR)	DESFA S.A.	2025	GR/EMD	GR	90.0 GWh/d

Sponsors	General Information	NDP and PCI Information
DESFA S.A. 100%	Promoter Operator Host Country Status Website	Part of NDP NDP Number NDP Release Date NDP Website Currently PCI Priority Corridor(s)
	<i>DESFA S.A.</i> <i>DESFA S.A.</i> <i>Greece</i> <i>Planned</i> <i>Project's URL</i>	<i>No ((5) others - please comment below)</i>     <i>Yes (7.3.1)</i> <i>SGC</i>

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>Not Relevant</i>
Permitting			Exemption Granted <i>Not Relevant</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	2025	2025	
Grant Obtention Date			

Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project will allow one additional source of gas (Levantine basin) to supply the Greek transmission system

Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	Lack of market demand

Expected Gas Sourcing

Cyprus

Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	The project will add one more source of supply to the Greek market thus increasing SoS and Market integration.

Barriers

Barrier Type	Description
Market	Lack of market support

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Metering and Regulating station at Nea Messimvria

TRA-F-941	Project	Pipeline including CS	FID
Update Date	30/05/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Nea Mesimvria	DESFA S.A.	2019	GR/TAP	GR	114.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Promoter	DESFA S.A.	Part of NDP	Yes (Development Plan NNGS 2016-2025)	
Operator	DESFA S.A.	NDP Number	2.2.1.5	
Host Country	Greece	NDP Release Date	27/01/2017	
Status	Planned	NDP Website	<a href="#">NDP URL</a>	
Website	<a href="#">Project's URL</a>	Currently PCI	Yes (7.1.3)	
		Priority Corridor(s)	SGC	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED	05/2016	03/2018	Applied for Exemption	<i>Not Relevant</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	0.00%
Construction			Exemption in exit direction	0.00%
Commissioning	2019	2019		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nea-Messivria to TAP			1		0
Total			1		

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project will add one more route and source of gas supply (from TAP) to the Greek transmission system.

### 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.



CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	Yes
Grants for studies amount	<i>Mln EUR 0</i>
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	Yes
Comments	<i>DESFA has requested grants for construction from PA (Partnership Agreement for the Development Framework) 2014-2020. This programme uses resources originating from the European Structural and Investment Funds (ESIF) of the European Union. The requested amount is 5.45 million EUR.</i>
General Comments	

## Metering and Regulating Station at UGS South Kavala

TRA-N-1092

Project

Pipeline including CS

Non-FID

Update Date

29/10/2018

Non-Advanced

Description

The project consists of the implementation of one Metering and Regulating Station at Kavala for the potential interconnection of the Greek transmission system with the UGS in South Kavala.

PRJ Code - PRJ Name

-

### Capacity Increments Variant 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
			<i>Comment: from storage to grid</i>		
	DESFA S.A.	2023	IB-GRk	STcGR	55.0 GWh/d
			<i>Comment: From grid to storage</i>		

Sponsors	General Information		NDP and PCI Information	
DESFA S.A.	Promoter	DESFA S.A.	Part of NDP	No ((5) others - please comment below)
100%	Operator	DESFA S.A.	NDP Number	
	Host Country	Greece	NDP Release Date	
	Status	Planned	NDP Website	
	Website	Project's URL	Currently PCI	Yes (6.20.3)
			Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2023</i>	<i>2023</i>		
Grant Obtention Date				

Fulfilled Criteria	
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project is a needed part of the Greek transmission system to allow its connection to the UGS of South Kavala promoted by others (Hellenic Republic Assets Development Fund - HRADF)

Delays since last TYNDP	
Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	The project schedule depends on the implementation of the UGS of South Kavala, promoted by others (HRADF). Therefore the completion date is indicative.

Expected Gas Sourcing
All sources of gas comprised in the Greek supply mix.

Benefits	
Main Driver	Regulation SoS
Main Driver Explanation	The UGS projects will enhance SoS
Benefit Description	The enhancement of SoS will become more important as the penetration of natural gas in the residential sector of the still immature Greek gas market will increase.

Barriers		
Barrier Type	Description	
Others	The implementation of the project depends on the implementation of the UGS South Kavala.	

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No decision yet taken</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## Nea-Messimvria to FYRoM pipeline

TRA-N-967	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		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		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Stojakovo village (MK) / Pontoiraklia (GR)	DESFA S.A.	2021	GR	MK	76.5 GWh/d

Sponsors	General Information	NDP and PCI Information
DESFA S.A. 100%	Promoter <i>DESFA S.A.</i>	Part of NDP <i>Yes (Draft NDP 2017-2026)</i>
	Operator <i>DESFA S.A.</i>	NDP Number <i>2.1.2.2</i>
	Host Country <i>Greece</i>	NDP Release Date
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>No</i>
Permitting			Exemption Granted <i>No</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	<i>2021</i>	<i>2021</i>	
Grant Obtention Date			

Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nea-Messimvria to Pontoiraklia/Stojakovo		700	50		0
Total			50		

Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	

Expected Gas Sourcing

Caspian Region, LNG (DZ,WO)
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Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

Barriers

Barrier Type	Description
Market	Lack of market maturity

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	Yes
	<i>DESFA has requested grants for construction from PA (Partnership Agreement for the Development Framework) 2014-2020. This programme uses resources originating from the European Structural and Investment Funds (ESIF) of the European Union. The requested amount is 14.48 million EUR. The decision from the competent authorities is pending.</i>
Comments	
General Comments	

## Poseidon Pipeline

TRA-N-10	Project	Pipeline including CS	Non-FID
Update Date	26/02/2018		Advanced
Description	<p>The Poseidon Pipeline project represents a valid “multi-source” option to complete the Southern Gas Corridor aiming to increase the EU security of supply.</p> <p>The current configuration of the project includes 2 sections entirely within the EU territory: i) 770km onshore crossing Greece from the border with Turkey to Thesprotia and ii) 210 offshore crossing the Ionian Sea up to the Italian landfall in Otranto.</p> <p>In its first phase, Poseidon pipeline would transport 10-12 Bcm/y of the available gas volumes at Turkish/Greek border, towards Italy and the southern Balkans. In its second development phase, the project capacity will be increased up to 20 Bcm/y allowing the flow of gas coming from Eastern Mediterranean region through EastMed pipeline, to which Poseidon pipeline will be connected in Thesprotia.</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
East Med / Thesprotia (Poseidon)	IGI Poseidon S.A.	2025	GR/EMD	GR/IGI	320.0 GWh/d
				<i>Comment: 2nd phase</i>	
Kipi (TR) / Kipi (GR)	IGI Poseidon S.A.	2022	TRi	IB-GRk	480.0 GWh/d
	IGI Poseidon S.A.	2025	TRi	IB-GRk	160.0 GWh/d
				<i>Comment: 2nd phase</i>	
Komotini (DESFA) - GR / IGB	IGI Poseidon S.A.	2022	IB-GRk	BG/IGB	95.0 GWh/d
	IGI Poseidon S.A.	2025	IB-GRk	BG/IGB	65.0 GWh/d
				<i>Comment: 2nd phase</i>	
Otranto - IT / IGI Poseidon	IGI Poseidon S.A.	2022	IB-ITs	GR/IGI	160.0 GWh/d
	IGI Poseidon S.A.	2022	GR/IGI	IB-ITs	380.0 GWh/d
	IGI Poseidon S.A.	2025	GR/IGI	IB-ITs	250.0 GWh/d
				<i>Comment: 2nd phase</i>	



Sponsors		General Information		NDP and PCI Information	
IGI POSEIDON S.A. <div><div></div></div> 100%	Promoter	Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A	Part of NDP	Yes (Piano decennale di sviluppo delle reti di trasporto di gas naturale 2017-2026 (pag. 55, 56, 98))	
	Operator	IGI Poseidon S.A.	NDP Number	n.a.	
	Host Country	Greece	NDP Release Date	30/11/2017	
	Status	Planned	NDP Website	NDP URL	
	Website	Project's URL	Currently PCI	Yes (7.3.3)	
			Priority Corridor(s)	SGC	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Not Applicable</i>
Feasibility			Considered Tariff Regime	<i>Not Applicable</i>
FEED	08/2017	01/2019	Applied for Exemption	<i>Not Yet</i>
Permitting	08/2017	06/2019	Exemption Granted	<i>Not Yet</i>
Supply Contracts				
FID		06/2019	Exemption in entry direction	0.00%
Construction	09/2019	09/2022	Exemption in exit direction	0.00%
Commissioning	2022	2025		
Grant Obtention Date				

Enabled Projects	
Project Code	Project Name
TRA-N-330	EastMed Pipeline

## Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Poseidon offshore section		915	210	75	2022
Poseidon onshore section		1,220	770	75	2022
<b>Total</b>			<b>980</b>	<b>150</b>	

## Fulfilled Criteria

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.

## Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	As a result of project promoter decision to extend Poseidon pipeline up to the Turkish-Greek border, the project development timeline has been rescheduled.

## Expected Gas Sourcing

Caspian Region, Russia, Cyprus and offshore Crete resources, coming through the EastMed pipeline.

## Comments about the Third-Party Access Regime

The promoter has obtained for the initial configuration of Poseidon Project (offshore section), a TPA exemption for 89% of 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.

## Intergovernmental Agreements

Agreement	Agreement Description	Is Signed	Agreement Signature Date
Protocol of Cooperation between Italy and Azerbaijan		Yes	01/12/2007
Italy-Greece-Turkey Intergovernmental Agreement		Yes	01/07/2007
Memorandum of Understanding between Greece and Turkey		Yes	01/05/2010
Joint statement of the Italian Minister of Economic Development and the Turkish Minister of Energy and Natural Resources		Yes	01/11/2009
Italy-Greece Intergovernmental Agreement		Yes	01/11/2005

CBCA

Decision *No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not*

Submissin Date

Decision Date

Website

Countries Affected

Countries Net Cost Bearer

Additional Comments

Financial Assistance

Applied for CEF *(3) No, we have not applied for CEF*

Grants for studies *No*

Grants for studies amount

Grants for works *No*

Grants for works amount

Intention to apply for CEF *No decision yet taken*

Other Financial Assistance *Yes*

*The Poseidon project has been awarded in 2010 with c.a. 5.5 M€ of EU grants through EEPR program (EEPR-2009-INTg-Poseidon), mainly for the technical development activities as Front-End-Engineering-Design and Design Appraisal and Certification for the project offshore section.*

Comments

General Comments

## Revythoussa (2nd upgrade)

LNG-F-147	Project	LNG Terminal	FID
Update Date	28/03/2018		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		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Agia Triada	DESFA S.A.	2018	LNG_Tk_GR	GR	80.4 GWh/d
	DESFA S.A. (LSO)	2018	LNG_Tk_GR	GR	80.4 GWh/d

Sponsors	General Information		NDP and PCI Information	
	Promoter	DESFA S.A.	Part of NDP	Yes (Development Plan NNGS 2016-2025)
	Operator	DESFA S.A.		
	Host Country	Greece	NDP Number	2.2.1.7
	Status	In Progress	NDP Release Date	
	Website	<a href="#">Project's URL</a>	NDP Website	<a href="#">NDP URL</a>
			Currently PCI	No
			Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction		<i>08/2018</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2018</i>	<i>2018</i>		
Grant Obtention Date				

Technical Information (LNG)									
Regasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Factor (%)
<i>Revythoussa LNG Terminal</i>	<i>No</i>								

Delays since last TYNDP		
Grant Obtention Date		
Delay Since Last TYNDP	<i>two quarters</i>	
Delay Explanation	<i>Delays in the contract award procedure Delays due to the capital controls imposed in Greece in July 2015 Delays due to the need to shut down the terminal in order to perform the tie-ins, in a low demand season.</i>	

Expected Gas Sourcing
LNG (DZ,WO)

## Benefits

Main Driver	Regulation SoS
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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>Yes</i>
Comments	<i>Total amount from ERDF funds 45.904 million Euro</i>
General Comments	

## South Kavala Underground Gas Storage facility

UGS-N-385

Project

Storage Facility

Non-FID

Update Date

29/10/2018

Non-Advanced

Description

The projects consists in converting the offshore depleted gas field of South Kavala to an Underground Gas Storage Facility.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS South Kavala (GR)	Hellenic Republic Asset Management Fund	2023	STcGR	IB-GRk	44.0 GWh/d
			<i>Comment: from storage to grid</i>		
	Hellenic Republic Asset Management Fund	2023	IB-GRk	STcGR	55.0 GWh/d
			<i>Comment: from grid to storage</i>		

Sponsors		General Information		NDP and PCI Information	
Hellenic Republic Asset Development Fund (HRADF)	100%	Promoter	Hellenic Republic Asset anagement Fund	Part of NDP	No ((3) the operators are not required to prepare and publish a NDP)
		Operator	Hellenic Republic Asset Management Fund	NDP Number	
		Host Country	Greece	NDP Release Date	
		Status	Planned	NDP Website	
		Website	Project's URL	Currently PCI	Yes (6.20.3)
				Priority Corridor(s)	NSIE



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2023</i>	<i>2023</i>		
Grant Obtention Date				

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commisioning Year
<i>South Kavala</i>	<i>Depleted Field</i>	<i>Yes</i>							

Fulfilled Criteria	
Specific Criteria Fulfilled	<i>Competition, Security of Supply, Sustainability</i>
Specific Criteria Fulfilled Comments	

Delays since last TYNDP	
Grant Obtention Date	
Delay Since Last TYNDP	<i>2 years</i>
Delay Explanation	<i>Decision on the procedure to select the project promoter and time needed to prepare the relevant tender procedure.</i>

Expected Gas Sourcing
<i>Caspian Region, Russia, LNG (?), The project may source gas from all gas sources supplying or transitting Greece</i>

## 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 negotiated 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 opportunities, especially in the LNG market. Given the proximity of the project location to the TAP route the benefits might also reach Italy.

### Barriers

Barrier Type	Description
Market	Lack of market maturity

### CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

### Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Trans Adriatic Pipeline

TRA-F-51	Project	Pipeline including CS	FID
Update Date	31/05/2018		Advanced
Description	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 the province of Lecce. 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 ties into Italy's gas transportation grid operated by Snam Rete Gas in the province of Lecce. TAP's initial capacity is 10 bcm/a and it can expand its capacity up to 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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Kipi (TR) / Kipi (TAP)	Trans-Adriatic Pipeline AG	2019	TR/TNP	GR/TAP	350.0 GWh/d
	Comment: 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
	Comment: GCV used for capacity calculations: 11.071 kWh/Sm3.				
Melendugno - IT / TAP	Trans-Adriatic Pipeline AG	2019	AL/TAP	IB-ITs	291.0 GWh/d
	Comment: GCV used for capacity calculations: 11.071 kWh/Sm3.				
Nea Mesimvria	Trans-Adriatic Pipeline AG	2019	GR	GR/TAP	142.0 GWh/d
	Comment: GCV used for capacity calculations: 11.071 kWh/Sm3.				
	This entry point is subject to the development of required facilities by the adjacent TSO.				
	Trans-Adriatic Pipeline AG	2019	GR/TAP	GR	142.0 GWh/d
	Comment: 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		General Information		NDP and PCI Information	
Snam	20%	Promoter	<i>Trans Adriatic Pipeline AG</i>	Part of NDP	<i>No ((5) others - please comment below)</i>
BP	20%	Operator	<i>Trans-Adriatic Pipeline AG</i>	NDP Number	
SOCAR	20%	Host Country	<i>Greece</i>	NDP Release Date	
Fluxys	19%	Status	<i>In Progress</i>	NDP Website	
Enagas	16%	Website	<a href="#"><i>Project's URL</i></a>	Currently PCI	<i>Yes (7.1.3)</i>
Axpo	5%			Priority Corridor(s)	<i>SGC</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Negotiated</i>
Feasibility			Considered Tariff Regime	<i>Negotiated</i>
FEED	<i>01/2008</i>	<i>03/2013</i>	Applied for Exemption	<i>Yes</i>
Permitting	<i>09/2011</i>	<i>05/2018</i>	Exemption Granted	<i>Yes</i>
Supply Contracts		<i>04/2015</i>		
FID		<i>12/2013</i>		
Construction	<i>05/2016</i>	<i>12/2019</i>	Exemption in entry direction	<i>100.00%</i>
Commissioning	<i>2019</i>	<i>2019</i>	Exemption in exit direction	<i>100.00%</i>
Grant Obtention Date	<i>02/08/2017</i>	<i>02/08/2017</i>		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Main onshore section	90MW=45MW Kipoi+45MW Fier	1,200	773	90	0
Offshore section		900	105		0
Total			878	90	

## Fulfilled Criteria

Specific Criteria Fulfilled Competition, Market Integration, Security of Supply

Specific Criteria Fulfilled Comments Explanations enclosed.

## Delays since last TYNDP

Grant Obtention Date 02/08/2017

Delay Since Last TYNDP

Delay Explanation N/A

## Expected Gas Sourcing

Caspian Region

## Comments about the Third-Party Access Regime

The initial capacity is exempted from TPA. Expansion capacity is subject to TPA and will be offered to the market via market tests, from no later than start of operations and subsequently every two years. In this regard, please note enclosed Annexes.

## 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.

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-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
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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Submissin Date		Grants for studies	<i>Yes</i>
Decision Date		Grants for studies amount	<i>Mln EUR 3</i>
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	<i>Regarding CEF, TAP project requested EUR 14 018 347 in 2016, amount which was granted. In 2017, TAP requested EUR 3 314 317, amount which was not granted. EIB funding does not qualify as a 'funding programme'.</i>

## Compressor station 1 at the Croatian gas transmission system

TRA-F-334	Project	Pipeline including CS	FID
Update Date	22/02/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Dravaszerdahely	Plinacro Ltd	2019	HR	HU	13.6 GWh/d

Sponsors		General Information		NDP and PCI Information	
Plinacro	100%	Promoter	Plinacro Ltd	Part of NDP	Yes (2018-2027)
		Operator	Plinacro Ltd	NDP Number	5.1
		Host Country	Croatia	NDP Release Date	15/12/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes (6.5.5)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	11/2014	03/2015
FEED		
Permitting	06/2015	05/2018
Supply Contracts		01/2018
FID		12/2017
Construction	01/2018	03/2019
Commissioning	2019	2019
Grant Obtention Date		

Third-Party Access Regime	
Considered TPA Regime	<i>Not Applicable</i>
Considered Tariff Regime	<i>Not Applicable</i>
Applied for Exemption	No
Exemption Granted	No
Exemption in entry direction	0.00%
Exemption in exit direction	0.00%

### Enabled Projects

Project Code	Project Name
TRA-N-86	Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)
TRA-N-90	LNG evacuation pipeline Omišalj - Zlobin (Croatia)
TRA-N-75	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac
TRA-N-66	Interconnection Croatia -Bosnia and Herzegovina (Slobodnica- Bosanski Brod)
TRA-N-70	Interconnection Croatia/Serbia (Slobdnica-Sotin-Bačko Novo Selo)
TRA-N-1058	LNG Evacuation Pipeline Kozarac-Slobodnica

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS 1				4	
Total				4	



Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Construction of such facilities is necessary due to the opening of the gas market, which will have an influence on the market integration. It will provide sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries which will have an influence on the Security of supply. 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.

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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submission Date		Grants for studies	No
Decision Date		Grants for studies amount	
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

## Compressor stations 2 and 3 at the Croatian gas transmission system

TRA-N-1057

Update Date

Project

22/05/2018

Pipeline including CS

Non-FID

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.

PRJ Code - PRJ Name

-

### Sponsors

Plinacro

100%

### General Information

Promoter

*Plinacro Ltd*

Operator

*Plinacro Ltd*

Host Country

*Croatia*

Status

*Planned*

Website

[\*Project's URL\*](#)

### NDP and PCI Information

Part of NDP

*Yes (2018-2027)*

NDP Number

*5.3 and 5.4*

NDP Release Date

*15/12/2017*

NDP Website

[\*NDP URL\*](#)

Currently PCI

*Yes (6.26.1.3)*

Priority Corridor(s)

*NSIE*

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Not Applicable</i>
Feasibility			Considered Tariff Regime	<i>Not Applicable</i>
FEED			Applied for Exemption	<i>Not Relevant</i>
Permitting	09/2018	01/2020	Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID		10/2019	Exemption in entry direction	0.00%
Construction	03/2020	12/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date	25/04/2016	25/04/2016		

#### Enabled Projects

Project Code	Project Name
TRA-N-86	Interconnection Croatia/Slovenia (Lučko - Zabok - Rogatec)
TRA-N-75	LNG evacuation pipeline Zlobin-Bosiljevo-Sisak-Kozarac
TRA-N-66	Interconnection Croatia -Bosnia and Herzegovina (Slobodnica- Bosanski Brod)
TRA-N-70	Interconnection Croatia/Serbia (Slobdnica-Sotin-Bačko Novo Selo)
TRA-F-334	Compressor station 1 at the Croatian gas transmission system

#### Fulfilled Criteria

Specific Criteria Fulfilled	<p>Competition, Market Integration, Security of Supply, Sustainability</p> <p>Construction of such facilities is necessary due to the opening of the gas market, wich will have an influence on the market integration. It will provide sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries wich will have an influence on the Security of supply. Compressor stations will significantly increase efficiency of the</p>
Specific Criteria Fulfilled Comments	<p>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.</p>

## Delays since last TYNDP

Grant Obtention Date 25/04/2016

Delay Since Last TYNDP

Delay Explanation

## Benefits

Main Driver Market Demand

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

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

## CBCA

Decision *No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not*

Submissin Date

Decision Date

Website

Countries Affected

Countries Net Cost Bearer

Additional Comments

## Financial Assistance

Applied for CEF *(1) Yes, we have applied for CEF and we have received a decision*

Grants for studies *Yes*

Grants for studies amount *Mln EUR 4*

Grants for works *No*

Grants for works amount

Intention to apply for CEF

Other Financial Assistance *No*

Comments

General Comments

## Interconnection Croatia/Slovenia (Umag-Koper)

TRA-N-336

Project

Pipeline including CS

Non-FID

Update Date

23/02/2018

Non-Advanced

Description

This pipeline is a regional link to Croatian and Slovenian system. Relevant gas pipeline is significant for the regional security of supply, especially in the light of the fact that these parts of Croatian and Slovenian markets are allocated at the ends of the associated gas transportation systems. It is also important for the competitiveness and market competition.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sečovelje (SI) / Plovanija (HR)	Plinacro Ltd	2027	HR	SI	16.2 GWh/d
	Plinacro Ltd	2027	SI	HR	162.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Plinacro	100%	Promoter	Plinacro Ltd	Part of NDP	Yes (2018-2027)
		Operator	Plinacro Ltd	NDP Number	1.37
		Host Country	Croatia	NDP Release Date	15/12/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	No
				Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction	<i>04/2027</i>	<i>11/2027</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2027</i>	<i>2027</i>		
Grant Obtention Date				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Umag - Plovanija (HR)- Koper (SI)	Croatian part is 8 km	300	8		0
Total			8		

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

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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Ionian Adriatic Pipeline

TRA-N-68	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		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 will have an influence on the gasification for the entire region. 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 to Bosnia and Herzegovina is planned. Plinacro is the project promoter for submitting the project to TYNDP on behalf of Plinacro, Montenegro Bonus and Albgaz.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

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

Sponsors	General Information		NDP and PCI Information	
Albania	Promoter	<i>Plinacro Ltd</i>	Part of NDP	<i>Yes (2018-2027)</i>
Albgaz 100%	Operator	<i>Plinacro Ltd</i>	NDP Number	<i>1.12, 1.25-1.27, 5.5</i>
Croatia	Host Country	<i>Croatia</i>	NDP Release Date	<i>15/12/2017</i>
Plinacro 100%	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
Montenegro	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
Montenegro Bonus 100%			Priority Corridor(s)	<i>NSIW, SGC</i>



Schedule	Start Date	End Date
Pre-Feasibility		01/2008
Feasibility	05/2012	02/2014
FEED		
Permitting	07/2009	01/2023
Supply Contracts		
FID		01/2019
Construction	01/2020	01/2023
Commissioning	2022	2023
Grant Obtention Date		

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)	Comissioning Year
IAP - Croatian part	2.5 billion m3 yearly	800	250	1	0
IAP- Albanian part	1 billion m3 yearly	800	180		0
IAP- Montenegro part	0.5 billion m3 yearly	800	110		0
Total			540	1	

### Pipelines and Compressor Stations - Alternative Variant

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Shannon Pipeline	The pipeline is part of the core project and will connect the LNG terminal to the National Gas Grid.				
Total					

Fulfilled Criteria	
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
Delays since last TYNDP	
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, 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
Barriers	
Barrier Type	Description
Regulatory	Tariffs 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
Ministerial declaration	signed by the Ministries of energy of Albania, Montenegro and Croatia, from december 2008, Bosnia and Herzegovina signed as well	Yes	27/09/2007
Agreement to extend the Memorandum of Understanding	Signed between Plinacro and TAP	Yes	25/02/2014
Letter of Itent	Signed by Plinacro, Montenegro Bonus and Albgaz	Yes	15/02/2018
Memorandum of Understanding	Signed between Plinacro and TAP	Yes	05/02/2011
Memorandum of Understanding and Cooperation	signed by the Ministry of Energy and Industry of Republic of Albania, Ministry Foreign Trade and Economic Relations of Bosnia and Herzegovina, Ministry of Economy of the Republic of Croatia and Ministry of Economy of Montenegro	Yes	26/08/2016

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	No
Decision Date		Grants for studies amount	
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

## Városföld CS

TRA-N-123	Project	Pipeline including CS	Non-FID
Update Date	02/10/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Vecsés MGT / FGSZ	FGSZ Ltd.	2022	HU	HUi	102.9 GWh/d
	Comment: The increment subject to ROHU Open season final result.				
	FGSZ Ltd.	2022	HUi	HU	25.9 GWh/d
	Comment: The increment subject to ROHU Open season final result.				

Sponsors	General Information	NDP and PCI Information
FGSZ Ltd. 100%	Promoter <i>FGSZ Ltd.</i>	Part of NDP <i>Yes (Hungarian TYNDP 2017)</i>
	Operator <i>FGSZ Ltd.</i>	NDP Number <i>12.2.</i>
	Host Country <i>Hungary</i>	NDP Release Date <i>28/12/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>Yes (6.24.4.3)</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
Feasibility	09/2016	07/2017	Considered Tariff Regime	Regulated
FEED	01/2019	01/2020	Applied for Exemption	No
Permitting	10/2019	04/2020	Exemption Granted	No
Supply Contracts		05/2020		
FID		03/2019	Exemption in entry direction	0.00%
Construction	05/2020	10/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date	14/10/2015	14/10/2015		

#### Enabled Projects

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

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Városföld CS				6	0
Total				6	

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The compressor help to increase capacity of Vecsés 4 (MGT>FGSZ), Vecsés 4 (FGSZ>MGT, Balassagyarmat (SK>HU) and Balassagyarmat (HU>SK).

#### Delays since last TYNDP

Grant Obtention Date	14/10/2015
Delay Since Last TYNDP	0
Delay Explanation	

## Expected Gas Sourcing

Black Sea

### 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.

### CBCA

Decision	<i>Yes, we have submitted an investment request and have received a decision</i>
Submissin Date	
Decision Date	<i>06/10/2015</i>
Website	
Countries Affected	<i>Hungary, Romania</i>
Countries Net Cost Bearer	
Additional Comments	

### Financial Assistance

Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Grants for studies	<i>Yes</i>
Grants for studies amount	<i>Mln EUR 2</i>
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Vecsés-Városföld gas transit pipeline

TRA-N-831	Project	Pipeline including CS	Non-FID
Update Date	26/03/2018		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.		
PRJ Code - PRJ Name	-		

Sponsors	General Information	NDP and PCI Information
Magyar Gáz Tranzit ZRt. 100%	Promoter <i>Magyar Gáz Tranzit Zrt.</i>	Part of NDP <i>Yes (National Development Plan - MGT 10 Year Development Plan)</i>
	Operator <i>MGT Hungarian Gas Transit Ltd.</i>	NDP Number <i>TRA-N-831</i>
	Host Country <i>Hungary</i>	NDP Release Date
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>Yes (6.2.14)</i>
		Priority Corridor(s) <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>Yes</i>
Permitting			Exemption Granted <i>Yes</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction	<i>03/2020</i>	<i>03/2022</i>	Exemption in exit direction <i>0.00%</i>
Commissioning	<i>2022</i>	<i>2022</i>	
Grant Obtention Date			

## Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Vecsés-Városföld	Pressure regulator at Vecsés node, hub and metering station at Városföld.,	800	80		0
Total			80		

## Fulfilled Criteria

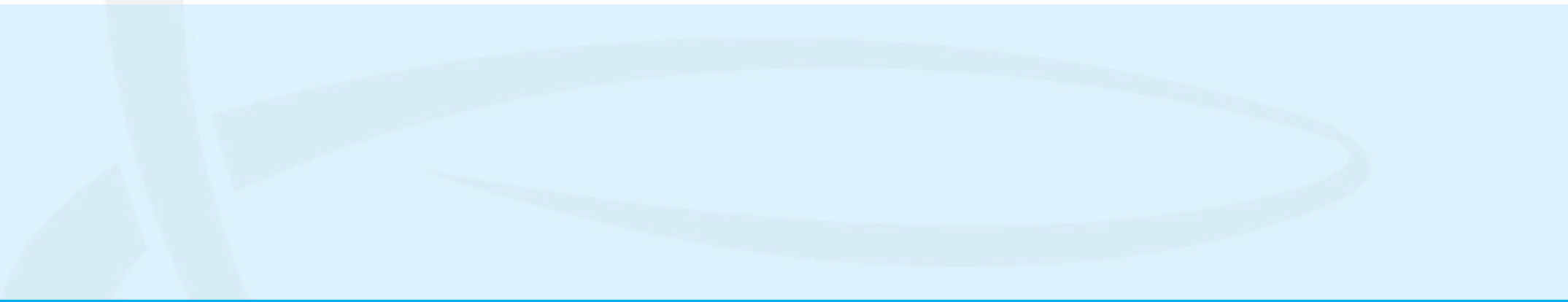
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	This capacity project is to promote the diversified procurement of gas and the security of supply the member states of the EU. The project will increase price convergence of the HU gas market to the EU markets. As part of the north-south axis it will contribute also to handling of the SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the existing assets of the domestic natural gas system and to improve the transit routes in order to improve transit services, while providing for the expected quality of the natural gas on the connecting systems. The project shall result in the operational efficiencies -linking of the 75 bar transit systems (RO-HU, HR-HU, Srb-HU, SK-HU, Ukr-HU, AT-HU).

## Expected Gas Sourcing

Norway, Russia, LNG (), Romania

## 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	





CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Additional Southern developments

TRA-N-9	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant 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
	Comment: Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSG 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
	Comment: Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSG considers the capacity increment as relevant for modelling purposes in the final year of the publication (2035).				

Sponsors	General Information	NDP and PCI Information
Snam Rete Gas s.p.a. 100%	Promoter Snam Rete Gas S.p.A.	Part of NDP Yes (Snam Rete Gas TYNDP 2017-2026)
	Operator Snam Rete Gas S.p.A.	NDP Number RN_07
	Host Country Italy	NDP Release Date
	Status Planned	NDP Website <a href="#">NDP URL</a>
	Website <a href="#">Project's URL</a>	Currently PCI No
		Priority Corridor(s)

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2034	2034
Grant Obtention Date		

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

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Section 1		800	255	0	0
Section 2		1,050	115	0	0
Section 3		1,200	590	0	0
Section 4		0	0	60	0
Total			960	60	

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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Biomethane productions interconnection

TRA-N-1265

Project

Pipeline including CS

Non-FID

Update Date

27/03/2018

Non-Advanced

Description

The project consists of the interconnections of the new biomethane productions to existing Snam Rete Gas network that will be commissioned until 2022.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Forecast Production Italia	Snam Rete Gas S.p.A.	2022	NPcIT	IT	39.6 GWh/d

Sponsors	General Information		NDP and PCI Information	
Snam Rete Gas S.p.A. 100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	Part of NDP	<i>No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP)</i>
	Operator	<i>Snam Rete Gas S.p.A.</i>		
	Host Country	<i>Italy</i>	NDP Number	
	Status	<i>Planned</i>	NDP Release Date	
	Website		NDP Website	
			Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2022	2022
Grant Obtention Date		

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

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
All the project	The present information represent the aggregate of all the interconnections that compose the project	100	21		2022
<b>Total</b>			<b>21</b>		

### Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Bordolano Second phase

UGS-F-1045

Project

Storage Facility

FID

Update Date

28/02/2018

Advanced

Description

The project is related to the conversion of the depleted reservoir of Bordolano, into a reservoir for the storage of methane gas

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
	STOGIT	2020	STclT	IT	177.1 GWh/d
	STOGIT	2020	IT	STclT	103.4 GWh/d

UGS - IT - Snam Rete Gas/STOGIT

*Comment: 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	NDP and PCI Information
STOGIT 100%	Promoter <i>STOGIT S.p.A.</i>	Part of NDP <i>Yes (Snam Rete Gas TYNDP 2017/2026)</i>
	Operator <i>STOGIT</i>	NDP Number <i>NA</i>
	Host Country <i>Italy</i>	NDP Release Date <i>30/11/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)



Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2020</i>	<i>2020</i>		
Grant Obtention Date				

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commissioning Year
<i>Bordolano</i>	<i>Depleted Field</i>	<i>No</i>	<i>Bordolano 2nd phase</i>	<i>757</i>	<i>16.2</i>	<i>9.5</i>	<i>90</i>	<i>NA</i>	<i>2020</i>

Benefits	
Main Driver	<u>Market Demand</u>
Main Driver Explanation	
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Development for new import from the South (Adriatica Line)

TRA-N-7	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Italy Mezzogiorno Import Fork	Snam Rete Gas S.p.A.	2025	IB-ITs	IT	264.0 GWh/d

Sponsors	General Information	NDP and PCI Information
Snam Rete Gas s.p.a. 100%	Promoter <i>Snam Rete Gas S.p.A.</i>	Part of NDP <i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
	Operator <i>Snam Rete Gas S.p.A.</i>	NDP Number <i>RN_04</i>
	Host Country <i>Italy</i>	NDP Release Date <i>30/11/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>Yes (7.3.4)</i>
		Priority Corridor(s) <i>SGC</i>

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2025	2025
Grant Obtention Date		

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

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)
Adriatica Line		1,200	430	33
Total			430	33

Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
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.

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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>Yes</i>
Comments	
General Comments	

## Gorizia plant upgrade

TRA-N-1227

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

Non-Advanced

Description

The project consists of the upgrading of Gorizia plant in order to increment the firm bidirectional capacity of the point up to 6 MScm/day (64.74 Gwh/day).

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI)	Snam Rete Gas S.p.A.	2022	IT	SI	17.3 GWh/d
	Snam Rete Gas S.p.A.	2022	SI	IT	44.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Snam Rete Gas S.p.A.	100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	<i>No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP)</i>
		Operator	<i>Snam Rete Gas S.p.A.</i>	
		Host Country	<i>Italy</i>	<i>No</i>
		Status	<i>Planned</i>	
		Website		
			NDP Number	
			NDP Release Date	
			NDP Website	
			Currently PCI	
			Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2022</i>	<i>2022</i>		
Grant Obtention				
Date				

Fulfilled Criteria	
Specific Criteria Fulfilled	
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	<u>Market Demand</u>
Main Driver Explanation	
Benefit Description	The project Increases the flexibility and diversification of routes and gas sources and increment the SOS of region and Italian system (N-1).

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	



## Greece - Italy interconnection

TRA-N-1246

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

Non-Advanced

Description

The project is the result of the incremental capacity cycle started in 2017 and consists of the interconnection from Greece to Italy through an offshore infrastructure.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
IP Greece - Italy	Snam Rete Gas S.p.A.	2025	GR	IB-ITs	357.7 GWh/d

Sponsors	General Information	NDP and PCI Information
Snam Rete Gas S.p.A. 100%	Promoter <i>Snam Rete Gas S.p.A.</i>	Part of NDP <i>No ((5) others - please comment below)</i>
	Operator <i>Snam Rete Gas S.p.A.</i>	NDP Number
	Host Country <i>Italy</i>	NDP Release Date
	Status <i>Planned</i>	NDP Website
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>No</i>
Permitting			Exemption Granted <i>No</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	2025	2025	
Grant Obtention Date			

Pipelines and Compressor Stations							
Pipeline Section		Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
All the project		The specific information are still to be defined at this stage					2025
Total							

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No decision yet taken</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## Import developments from North-East

TRA-N-8	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
	Snam Rete Gas S.p.A.	2034	IB-ITn	IT	340.0 GWh/d
<b>New IP North-East Italy</b>	<i>Comment: Considering that the promoter submitted the project as relevant for TYNDP according to its national development plan, ENTSOE considers the capacity increment as relevant for modelling purposes in the final year of the publication (2035).</i>				

Sponsors	General Information	NDP and PCI Information
Snam Rete Gas s.p.a. 100%	Promoter <i>Snam Rete Gas S.p.A.</i>	Part of NDP <i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
	Operator <i>Snam Rete Gas S.p.A.</i>	NDP Number <i>RN_06</i>
	Host Country <i>Italy</i>	NDP Release Date <i>30/11/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	2034	2034		
Grant Obtention				
Date				

Pipelines and Compressor Stations							
Pipeline Section		Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Section 1				1,050	15	0	0
Section 2				1,400	119	0	0
Section 3				0	0	75	0
Total					134	75	

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.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Interconnection with production in Gela

TRA-F-1241	Project	Pipeline including CS	FID
Update Date	27/03/2018		Advanced
Description	The project consists of a pipeline that will allow the interconnection of a new indigenous production in Sicily near Gela.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
IT - Indigenous Production	Snam Rete Gas S.p.A.	2020	NPciT	IT	45.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Snam Rete Gas S.p.A. 100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP)	
	Operator	<i>Snam Rete Gas S.p.A.</i>		
	Host Country	<i>Italy</i>	Part of NDP	
	Status	<i>In Progress</i>	NDP Number	
	Website		NDP Release Date	
			NDP Website	
			Currently PCI	No
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2020	2020
Grant Obtention Date		

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

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
all the project	The project consists of the realization of 500 meter pipeline	500	1	0	2020
<b>Total</b>			<b>1</b>	<b>0</b>	

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

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2020	2020
Grant Obtention Date		

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

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
all the project	The project consists of the realization of 500 meter pipeline	500	1	0	2020
<b>Total</b>			<b>1</b>	<b>0</b>	

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



## Interconnection with Slovenia

TRA-N-354

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

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.

PRJ Code - PRJ Name

-

### Capacity Increments Variant 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	General Information	NDP and PCI Information
Snam Rete Gas s.p.a. 100%	Promoter <i>Snam Rete Gas S.p.A.</i>	Part of NDP <i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
	Operator <i>Snam Rete Gas S.p.A.</i>	NDP Number <i>RN_03</i>
	Host Country <i>Italy</i>	NDP Release Date <i>30/11/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>No</i>
Permitting			Exemption Granted <i>No</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	2023	2023	
Grant Obtention Date			

Pipelines and Compressor Stations							
Pipeline Section		Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
all the project				250	6	0	2023
Total					6	0	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No decision yet taken</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## LARINO - RECANATI Adriatic coast backbone

TRA-N-974	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Advanced
Description	<p>Complete the realisation of a Gas Transportation system on Adriatic coast.  The project foresees 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.</p> <ul style="list-style-type: none"> <li>- 1 Construction of 113 km 24" LARINO-CHIETI</li> <li>- 55 km 20" CHIETI - CELLINO (already completed and running)</li> <li>- 90 km 20" CELLINO - SAN MARCO (15 km completed and 75 km under construction)</li> <li>- Construction of 35 km 24" SAN MARCO Recanati</li> <li>- Construction 3 MW compression station SAN MARCO</li> </ul>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Larino (IT)	Società Gasdotti Italia	2022	IT	ITg	53.0 GWh/d
	Comment: Capacity values refer to the whole completed project				
	Società Gasdotti Italia	2022	ITg	IT	53.0 GWh/d
Recanati (IT)	Comment: Capacity values refer to the whole completed project				
	Società Gasdotti Italia	2022	IT	ITg	53.0 GWh/d
	Società Gasdotti Italia	2022	ITg	IT	53.0 GWh/d
Comment: Capacity values refer to the whole completed project					

Sponsors	General Information		NDP and PCI Information	
	Promoter	<i>Società Gasdotti Italia</i>	Part of NDP	<i>Yes (Piano Decennale di sviluppo delle reti di trasporto gas naturale 2017-2026)</i>
	Operator	<i>Società Gasdotti Italia</i>	NDP Number	<i>Dorsale Larino Recanati</i>
	Host Country	<i>Italy</i>	NDP Release Date	
	Status	<i>In Progress</i>	NDP Website	<a href="#"><u>NDP URL</u></a>
	Website		Currently PCI	<i>No</i>
			Priority Corridor(s)	<i>SGC</i>

Schedule	Start Date	End Date
Pre-Feasibility		<i>12/2013</i>
Feasibility	<i>01/2014</i>	<i>12/2014</i>
FEED	<i>01/2015</i>	<i>01/2015</i>
Permitting	<i>01/2015</i>	<i>12/2019</i>
Supply Contracts		<i>06/2019</i>
FID		<i>12/2018</i>
Construction	<i>03/2019</i>	<i>12/2022</i>
Commissioning	<i>2022</i>	<i>2022</i>
Grant Obtention Date		

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

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Cellino-San Marco	15 km completed, 75 km under construction	500	90		0
Chieti-Cellino	already completed and running	500	55		0
Larino - Chieti		600	113		0
San Marco-Recanati	Construction 3 MW compression station SAN MARCO	600	35	3	0
Total			293	3	

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 facility 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.

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## Matagiola - Massafra pipeline

TRA-N-1195

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

Non-Advanced

Description

The new Matagiola - Massafra pipeline will allow the increment of the maximum capacity of the Puglia entry points up to 74 MScm/d without increasing the overall capacity of the system from the South.

PRJ Code - PRJ Name

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### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Melendugno - IT / TAP	Snam Rete Gas S.p.A.	2025	AL/TAP	IB-ITs	310.0 GWh/d
Otranto - IT / IGI Poseidon	Snam Rete Gas S.p.A.	2025	GR/IGI	IB-ITs	310.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Snam Rete Gas S.p.A.	100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	Part of NDP	<i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
		Operator	<i>Snam Rete Gas S.p.A.</i>	NDP Number	<i>RN_05</i>
		Host Country	<i>Italy</i>	NDP Release Date	<i>30/11/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><u><a href="#">NDP URL</a></u></i>
		Website	<i><u><a href="#">Project's URL</a></u></i>	Currently PCI	<i>No</i>
				Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	2025	2025		
Grant Obtention Date				

Pipelines and Compressor Stations							
Pipeline Section		Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Matagiola - Massafra				1,400	80		2025
Total					80		

Fulfilled Criteria	
Specific Criteria Fulfilled	
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	Security of supply, competitiveness, Flexibility of the system.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	



## Porto Empedocle LNG

LNG-N-198	Project	LNG Terminal	Non-FID
Update Date	15/11/2018		Advanced
Description	<p>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<sup>3</sup> of capacity each, vaporiser pumps and other treatment facilities required to process LNG and a breakwater with mooring jetty and unloading arms.</p> <p>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.</p> <p>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.</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant 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		General Information		NDP and PCI Information	
Nuove Energie Srl	100%	Promoter	Nuove Energie S.r.l.	Part of NDP	Yes (Piano decennale di sviluppo SNAM 2017-2026)
		Operator	Nuove Energie S.r.l.	NDP Number	RN_12
		Host Country	Italy	NDP Release Date	30/11/2017
		Status	Planned	NDP Website	NDP URL
		Website		Currently PCI	No
				Priority Corridor(s)	NSIW

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		01/2006	Considered TPA Regime	Negotiated
Feasibility	01/2006		Considered Tariff Regime	Negotiated
FEED	03/2006	09/2006	Applied for Exemption	Yes
Permitting	01/2009	10/2009	Exemption Granted	Yes
Supply Contracts				
FID		10/2017	Exemption in entry direction	0.00%
Construction	12/2018	12/2021	Exemption in exit direction	0.00%
Commissioning	2021	2021		
Grant Obtention Date				

#### Technical Information (LNG)

Regasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Factor (%)
Porto Empedocle LNG	No								

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	<p>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 Transitlegas, with positive impact on prices, gas flows, diversification, flexibility and price convergence.</p> <p>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 generation operational flexibility required by the growing intermittent renewables generation; building a terminal in Southern Italy (Sicily) would help to create new local and sustainable jobs in the area. Competition: it provides additional competitive pressure to traditional import sources (Algeria, Norway, Libya, Russia) which are becoming more important because of the indigenous production depletion</p>

#### Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	about 2 years
Delay Explanation	After the issues of the National Energy Strategy (SEN) in October 2017, Nuove Energie is reconsidering and reevaluating the project.

### Expected Gas Sourcing

Algeria, LNG (DZ,QA,US), Nigeria, Trinidad and Tobago, Equatorial Guinea, United States

### 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 for 5 years . TPA exemption expired the 7.5.2017.

### Benefits

Main Driver	Regulation SoS
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

Barrier Type	Description
Permit Granting	The terminal is fully authorized
Financing	in the current italian market context, the PCI project status would help to finance the project
Regulatory	Low rate of return
Market	Lack of market support

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Sardinia Gas Transportation Network

TRA-N-975	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Advanced
Description	<p>Construction of an onshore Gas Transportation 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 foresees the development of the main backbone of the national gas transmission grid (national line) and the parallel connection of the regional lines:</p> <ul style="list-style-type: none"> <li>- Construction of 292,4 km of 16" national backbone</li> <li>- Additional 657 km of regional primary and secondary connections with diameter ranging from 4" to 16"</li> </ul>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Cagliari (IT)	Società Gasdotti Italia	2020	LNG_Tk_ITs	ITs	17.0 GWh/d
Oristano (IT)	Società Gasdotti Italia	2021	LNG_Tk_ITs	ITs	7.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
	Promoter	<i>Società Gasdotti Italia</i>	Part of NDP	<i>Yes (Piano decennale di sviluppo delle reti di trasporto gas naturale 2017-2026)</i>
	Operator	<i>Società Gasdotti Italia</i>		
	Host Country	<i>Italy</i>	NDP Number	<i>Metanizzazione della regione Sardegna</i>
	Status	<i>Planned</i>	NDP Release Date	<i>31/10/2017</i>
	Website		NDP Website	<a href="#"><i>NDP URL</i></a>
			Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		06/2015
Feasibility	07/2015	07/2015
FEED	08/2015	12/2015
Permitting	03/2016	
Supply Contracts		
FID		
Construction		
Commissioning	2020	2021
Grant Obtention Date		

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)	Comissioning Year
National Network backbone		400	400		0
Regional Network		250	200		0
Total			600		

#### Expected Gas Sourcing

LNG ()

## Sardinia Methanization

TRA-N-1194

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

Non-Advanced

Description

The project includes the activities aimed at the realization of natural gas transport facilities interconnected with the supply points of new LNG plants in the region of Sardinia that is not even methanized.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sardinia LNG	Snam Rete Gas S.p.A.	2020	LNG_Tk_ITs	ITs	17.0 GWh/d
	Snam Rete Gas S.p.A.	2025	LNG_Tk_ITs	ITs	11.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Snam Rete Gas S.p.A.	100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	Part of NDP	<i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
		Operator	<i>Snam Rete Gas S.p.A.</i>	NDP Number	<i>RN_09</i>
		Host Country	<i>Italy</i>	NDP Release Date	<i>30/11/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
				Priority Corridor(s)	

## Sardinia Methanization

TRA-N-1194

Project

Pipeline including CS

Non-FID

Update Date

30/03/2018

Non-Advanced

Description

The project includes the activities aimed at the realization of natural gas transport facilities interconnected with the supply points of new LNG plants in the region of Sardinia that is not even methanized.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Sardinia LNG	Snam Rete Gas S.p.A.	2020	LNG_Tk_ITs	ITs	17.0 GWh/d
	Snam Rete Gas S.p.A.	2025	LNG_Tk_ITs	ITs	11.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Snam Rete Gas S.p.A.	100%	Promoter	<i>Snam Rete Gas S.p.A.</i>	Part of NDP	<i>Yes (Snam Rete Gas TYNDP 2017-2026)</i>
		Operator	<i>Snam Rete Gas S.p.A.</i>	NDP Number	<i>RN_09</i>
		Host Country	<i>Italy</i>	NDP Release Date	<i>30/11/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><u>NDP URL</u></i>
		Website	<i><u>Project's URL</u></i>	Currently PCI	<i>No</i>
				Priority Corridor(s)	



Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2020	2025
Grant Obtention Date		

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

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
phase 1		1,300	92		2020
phase 2		800	104		2021
phase 3		1,050	104		2022
phase 4		1,000	85		2022
phase 5		400	34		2025
phase 6		350	23		2025
phase 7		550	131		2025
Total			573		

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Project has been developed with reference to the "Environmental Energy Plan of Sardinia Region 2015-2030" (PEARS), that hypothesizes that the supply to cover Sardinia Demand is guaranteed by LNG facilities.
Benefit Description	Competition: The Sardinian methanization project, introducing gas as the most competitive element in the energy mix of the region, will increase the competitiveness of the Sardinian market. Sustainability: The Sardinian methanization project could cause the substitution of source that cause an high production of CO2 with Natural Gas, leading to a reduction in the production of the pollutant.

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No decision yet taken</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

## System Enhancements - Stogit - on-shore gas fields

UGS-F-260	Project	Storage Facility	FID
Update Date	27/03/2018		Advanced
Description	The project envisages the development of the following depleted on-shore gas fields: Fiume Treste - Minerbio - Ripalta - Sabbioncello - Sergnano - Alfonsine		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
	STOGIT	2027	STclT	IT	104.3 GWh/d
	Comment: nterconnection 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.				
UGS - IT - Snam Rete Gas/STOGIT	STOGIT	2027	IT	STclT	20.9 GWh/d
	Comment: 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	NDP and PCI Information
Stogit	Promoter	Part of NDP
100%	Operator	NDP Number
	Host Country	NDP Release Date
	Status	NDP Website
	Website	Currently PCI
		Priority Corridor(s)

Yes (Snam Rete Gas TYNDP 2017-2026)

NA

[NDP URL](#)

No

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility	01/2025		Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID	2027	2027	Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning				
Grant Obtention Date				

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commisioning Year
<i>Stogit Enhancements and New Developments</i>	<i>Depleted Field</i>	<i>No</i>	<i>System Enhancements - Stogit - on-shore gas fields</i>	<i>588</i>	<i>2.0</i>	<i>9.5</i>	<i>90</i>	<i>NA</i>	<i>2027</i>

Benefits	
Main Driver	<u>Regulation SoS</u>
Main Driver Explanation	
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## TAP interconnection

TRA-F-1193

Update Date

Description

PRJ Code - PRJ Name

Project

Pipeline including CS

FID

31/05/2018

Advanced

The project is functional to connect the new TAP import infrastructure, scheduled to arrive in Melendugno, with the existing national network near Brindisi.

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Melendugno - IT / TAP	Snam Rete Gas S.p.A.	2019	AL/TAP	IB-ITs	509.0 GWh/d
Comment: This project enables the connection of the TAP entry point to the transmission network.					

Sponsors	General Information	NDP and PCI Information
Snam Rete Gas s.p.a. 100%	Promoter Snam Rete Gas S.p.A.	Part of NDP Yes (Snam Rete Gas TYNDP 2017-2026)
	Operator Snam Rete Gas S.p.A.	NDP Number RN_02
	Host Country Italy	NDP Release Date 30/11/2017
	Status Planned	NDP Website <a href="#">NDP URL</a>
	Website <a href="#">Project's URL</a>	Currently PCI No
		Priority Corridor(s)

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2019	2019
Grant Obtention Date		

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

Pipelines and Compressor Stations							
Pipeline Section		Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Tap Interconnection				1,400	55		2019
		Total			55		

Fulfilled Criteria	
Specific Criteria Fulfilled	
Specific Criteria Fulfilled Comments	

Benefits	
Main Driver	Market Demand
Main Driver Explanation	Snam rete gas received a First Request for access to the National Gas Pipeline Network in accordance with Resolution ARG/Gas 2/10 of the Italian Autorità di Regolazione per Energia Reti e Ambiente and with paragraph 8 of Chapter 5 of the Snam Rete Gas Network Code (Open season).
Benefit Description	Security of supply, diversification of sources, diversification of routes, back-up for renewables, power-to-gas, market Integration (Increase of competition) and flexibility of the system.

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	



## Interconnection Macedonia-Bulgaria

TRA-N-976	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Non-Advanced
Description	<p>Main gas pipeline section Hamzali – Novo Selo (border with Bulgaria).            Within this section the following objects and systems are included:</p> <ul style="list-style-type: none"> <li>-Line part in length of 25 km with pipe diameter DN 700 (28”),</li> <li>-Valve stations with nominal diameter DN700, 3 pcs.</li> <li>-Pig Launching-Receiving station DN700, 2 pcs.</li> <li>-Main Measuring station Novo Selo,</li> <li>-System for automatic operating with the technological process for natural gas transport (DCS/SCADA);</li> <li>- Line for connection with optic fibres;</li> <li>-Power supply system</li> <li>-Cathodic protection system</li> <li>-Security Signaling System and fire signalization</li> </ul> <p>working (operating) pressure <math>p = 40</math> bars;            maximum pressure (projected) <math>p_{max} = 54</math> bars            minimum pressure <math>p_{min} = 25</math> bars            -Capacity 326.000 m<sup>3</sup>/h (76,4 GWh/d)</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
<b>Novo Selo (MK) / Samuilova Krepost (BG)</b>	MER JSC Skopje	2021	BGg/BGT	MK	1.0 GWh/d

Sponsors	General Information		NDP and PCI Information	
Hamzali-Novoselo	Promoter	MER JSC Skopje	Part of NDP	Yes (Work Program of the Government of R.Macedonia)
MER JSC Skopje 100%	Operator	MER JSC Skopje	NDP Number	N/A
section Hamzali – Novo Selo (border with Bulgaria)	Host Country	North Macedonia	NDP Release Date	
Bulgartransgaz 100%	Status	Planned	NDP Website	<a href="#">NDP URL</a>
	Website		Currently PCI	No
			Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility	04/2009	07/2010	Considered Tariff Regime	<i>Regulated</i>
FEED		07/2010	Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>Not Relevant</i>
Supply Contracts				
FID			Exemption in entry direction	0.00%
Construction			Exemption in exit direction	0.00%
Commissioning	2021	2021		
Grant Obtention Date				

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Main gas pipeline section Hamzali – Novo Selo (border with Bulgaria)		700	25		0
<b>Total</b>			<b>25</b>		

#### Delays since last TYNDP

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

Barrier Type	Description
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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	No
Comments	
General Comments	

## Interconnection Macedonia-Greece

TRA-N-980	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Non-Advanced
Description	<p>The project will ensure supply of additional quantities of natural gas from Greece and other sources that will be available through Greece, direct connection to the existing LNG Terminal Revithoussa and transit of additional quantities of natural gas intended for Serbia.</p> <p>Main gas pipeline section Stip-Hamzali-Stojakovo (border with Greece)</p> <p>Within this section the following objects and systems are included:</p> <ul style="list-style-type: none"> <li>- Line part in length of 110 km with pipe diameter DN 700 (28"),</li> <li>- Valve stations</li> <li>- Pig Launching-Receiving Station DN700,</li> <li>-System for automatic operating with the technological process for natural gas transport (DCS/SCADA);</li> <li>-Line for connection with optic fibres;</li> <li>-Power supply system</li> <li>-Cathodic protection system</li> <li>- Security Signaling System and fire signalization.</li> </ul> <p>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)</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Stojakovo village (MK) / Pontoiraklia (GR)	MER JSC Skopje	2020	GR	MK	76.5 GWh/d

Sponsors		General Information		NDP and PCI Information	
DESFA	100%	Promoter	<i>MER JSC Skopje</i>	Part of NDP	<i>Yes (Work Program of the Government of R.Macedonia)</i>
		Operator	<i>MER JSC Skopje</i>	NDP Number	<i>N/A</i>
		Host Country	<i>North Macedonia</i>	NDP Release Date	
		Status	<i>Planned</i>	NDP Website	<a href="#"><i>NDP URL</i></a>
		Website		Currently PCI	<i>No</i>
				Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED			Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID			Exemption in entry direction	<i>0.00%</i>
Construction			Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2020</i>	<i>2020</i>		
Grant Obtention Date				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)
Stip-Hamzali-Stojakovo (border with Greece)					0
Total					

## Benefits

Main Driver Market Demand

Main Driver Explanation

Benefit Description

## 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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	No
Comments	
General Comments	

## Azerbaijan, Georgia, Romania Interconnector - AGRI

LNG-N-376

Update Date

Project

26/03/2018

LNG Terminal

Non-FID

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;

Romania and Hungary as EU Member State Support this project being involved as shareholder in the project company (the promoter of this project).

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.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
AGRI / Constanta (RO)	AGRI	2026	GEa	RO	240.0 GWh/d
<i>Comment: Regazification terminal</i>					
AGRI / Poti (GE)	AGRI	2026	TM/SCP	GEa	240.0 GWh/d
<i>Comment: Liquefaction terminal</i>					

Sponsors		General Information		NDP and PCI Information	
GOGC (GE)	25%	Promoter	AGRI LNG Project Company SRL (RO)	Part of NDP	No ((4) there is no obligation at national level for such a project to be part of the NDP)
SOCAR (AZ)	25%	Operator	AGRI	NDP Number	
MVM (HU)	25%	Host Country	Romania	NDP Release Date	
ROMGAZ (RO)	25%	Status	Planned	NDP Website	
		Website	<a href="#">Project's URL</a>	Currently PCI	No
				Priority Corridor(s)	NSIE, SGC

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	Not Applicable
Feasibility	06/2012	04/2015	Considered Tariff Regime	Not Applicable
FEED	01/2019	04/2020	Applied for Exemption	Not Relevant
Permitting	01/2018	09/2019	Exemption Granted	Not Relevant
Supply Contracts		10/2022		
FID		11/2020	Exemption in entry direction	0.00%
Construction	06/2022	08/2026	Exemption in exit direction	0.00%
Commissioning	2026	2026		
Grant Obtention Date				

Technical Information (LNG)									
Regasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Factor (%)
AGRI - Regazification Terminal	No	AGRI	8.0	280,000	22.00	160,000	2 ships of 140000	2026	80



## Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Diversification of supply sources

## Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	
Delay Explanation	longer process for deciding the next steps of the Project

## Expected Gas Sourcing

Caspian Region, LNG (GE)

## Benefits

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

## Barriers

Barrier Type	Description
Permit Granting	long duration for obtaining permits
Market	market further integration with the local Project is required
Financing	Availability of funds and associated conditions
Market	Lack of market support

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>Yes, for studies and works</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Depomures

UGS-N-233

Update Date

28/03/2018

Project

Storage Facility

Non-FID

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 finalized in Q1 2018, while the FID for the entire phase I of the development project is expected in 2018.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Targu Mures	Depomures	2020	STcRO	RO	18.9 GWh/d
	Depomures	2020	RO	STcRO	18.9 GWh/d
	Depomures	2023	STcRO	RO	15.8 GWh/d
	Depomures	2023	RO	STcRO	15.8 GWh/d

Sponsors		General Information		NDP and PCI Information	
GDF International	59%	Promoter	<i>Engie Romania SA</i>	Part of NDP	<i>No ((2) no NDP exists in the country)</i>
		Operator	<i>Depomures</i>	NDP Number	
		Host Country	<i>Romania</i>	NDP Release Date	
		Status	<i>In Progress</i>	NDP Website	
		Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.20.4)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2004	Considered TPA Regime	Regulated
Feasibility	06/2008	06/2009	Considered Tariff Regime	Regulated
FEED	06/2011	06/2012	Applied for Exemption	No
Permitting	06/2012	09/2017	Exemption Granted	Not Relevant
Supply Contracts		12/2018		
FID		06/2018	Exemption in entry direction	0.00%
Construction	07/2015	03/2023	Exemption in exit direction	0.00%
Commissioning	2020	2023		
Grant Obtention Date				

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commissioning Year
Targu Mures	Depleted Field	No	Phase 1	100	1.8	1.8	100	N/A	2020
Targu Mures	Depleted Field	No	Phase 2	200	1.5	1.5	100	N/A	2023

Fulfilled Criteria	
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.

## Delays since last TYNDP

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 was 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). The permit was eventually obtained at the end of 2017.

## 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 both in Romania and the neighboring countries, particularly during the periods with high / peak demands.
Benefit Description	Market Integration The Project successfully contributes to increasing resilience in case of additional demand in almost all disruption scenarios with positive impact on Romania, Bulgaria, Hungary, Italy, Greece and Croatia. Thus, indirectly it contributes to a more integrated gas market. Sustainability It replaces existing rather obsolete gas compression facilities with modern and high-efficiency technology (new electro-compressors etc.) which will reduce emissions currently generated by the compression services supplied by the third party. Competition The implementation of this project would also increase the competition on the Romanian storage market considering that currently there are only 2 players: Depomures, the private operator with ~10% market share and Romgaz, state owned, with ~90% market share. After project COD, the market share of the private sector would increase proportionally.

## Barriers

Barrier Type	Description
Permit Granting	The permit granting process has been delayed due to difficulties in obtaining the building permit from local administration for the last section of the main collector pipeline, which eventually delayed 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

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Development on the Romanian territory of the NTS (BG–RO–HU–AT)-Phase I

TRA-F-358	Project	Pipeline including CS	FID
Update Date	15/11/2018		Advanced
Description	<p>The project consists in the building of a gas transmission pipeline connecting the Podișor Technological Node and the Recas Technological Node and the construction of three gas compressor stations along the pipeline route (Jupa CS, Bibești CS and Podișor CS) as follows:</p> <ul style="list-style-type: none"> <li>• Podișor – Recaş 32" x 63 bar gas transmission pipeline approximately 479 km long;</li> <li>• three gas compressor stations (Podișor CS, Bibești CS and Jupa CS), each station being equipped with two compressors, with the possibility to ensure bi-directional gas flow.</li> </ul> <p>After the implementation of the project the following transmission capacities will be ensured:</p> <ul style="list-style-type: none"> <li>• towards Hungary: 1.75 bcm/year;</li> <li>• towards Bulgaria: 1.5 bcm/year.</li> </ul>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	SNTGN Transgaz S.A.	2019	RO	HU	50.6 GWh/d
Ruse (BG) / Giurgiu (RO)	SNTGN Transgaz S.A.	2019	RO	BGn	29.6 GWh/d

Sponsors	General Information	NDP and PCI Information
SNTGN Transgaz S.A.	Promoter	Part of NDP
100%	Operator	Yes (Development Plan for the National GTS 2017-2026)
	Host Country	NDP Number
	Status	NDP Release Date
	Website	NDP Website
		Currently PCI
		Priority Corridor(s)
		7.1
		22/06/2017
		<a href="#">NDP URL</a>
		Yes (6.24.1.2)
		NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		12/2013	Considered TPA Regime	Regulated
Feasibility	01/2014	12/2014	Considered Tariff Regime	Regulated
FEED	07/2015	02/2017	Applied for Exemption	No
Permitting	01/2014	02/2018	Exemption Granted	Not Relevant
Supply Contracts		08/2017		
FID		11/2016	Exemption in entry direction	0.00%
Construction	12/2017	12/2019	Exemption in exit direction	0.00%
Commissioning	2019	2019		
Grant Obtention Date	09/09/2016	09/09/2016		

#### Enabled Projects

Project Code	Project Name
TRA-N-362	Development on the Romanian territory of the Southern Transmission Corridor

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Phase I: Podisor-Recas		800	479	28	2019
Podisor - Horia		1,626	1,056	100	
Total			1,535	128	

#### Fulfilled Criteria

Specific Criteria Fulfilled	Security of Supply
Specific Criteria Fulfilled Comments	Phase I – Security of supply

#### Delays since last TYNDP

Grant Obtention Date	09/09/2016
Delay Since Last TYNDP	Stage 1- 9 months delay in commissioning Stage 2 – 21 months in commissioning
Delay Explanation	Phase I – on time. FID taken in November 2016. Comissioning in 2019



## Expected Gas Sourcing

Caspian Region, LNG (), Black Sea

## Benefits

Main Driver [Regulation SoS](#)

Main Driver Explanation

Benefit Description

## Barriers

Barrier Type [Description](#)

Regulatory [The Competent Authority to coordinate all permit granting processes is not yet functional in Romania.](#)

## CBCA

Decision [Yes, we have submitted an investment request and have received a decision](#)

Submissin Date [12/10/2015](#)

Decision Date [06/10/2015](#)

Website [CBCA URL](#)

Countries Affected [Hungary, Romania](#)

Countries Net Cost Bearer [Hungary;#Romania](#)

Additional Comments

## Financial Assistance

Applied for CEF [\(1\) Yes, we have applied for CEF and we have received a decision](#)

Grants for studies [Yes](#)

Grants for studies amount [Mln EUR 2](#)

Grants for works [Yes](#)

Grants for works amount [Mln EUR 179](#)

Intention to apply for CEF

Other Financial Assistance [No](#)

Comments

General Comments

## Development on the Romanian territory of the NTS (BG–RO–HU–AT)-Phase II

TRA-N-1322

Update Date

Project

Pipeline including CS

Non-FID

21/06/2018

Advanced

Description

The project consists in the extension of the gas transmission pipeline constructed in Phase 1, between the Podișor Technological Node and the Horia GMS and the extension of the compressor stations, as follows:

- Podișor – Recaș 32" x 63 bar gas transmission pipeline approximately 50 km long;
- extension of the three gas compressor stations (Podișor CS, Bibești CS and Jupa CS) by mounting an additional compressor in each station;
- extension of the Horia GMS .

After the implementation of the project the following transmission capacities will be ensured:

- towards Hungary: 4.4 bcm/year;
- towards Bulgaria: 1.5 bcm/year.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Csanadpalota	SNTGN Transgaz S.A.	2022	HU	RO	78.1 GWh/d
	SNTGN Transgaz S.A.	2022	RO	HU	75.9 GWh/d

Sponsors		General Information		NDP and PCI Information	
SNTGN Transgaz SA	100%	Promoter	<i>SNTGN Transgaz SA</i>	Part of NDP	<i>Yes (2017- 2026 TYNDP)</i>
		Operator	<i>SNTGN Transgaz S.A.</i>	NDP Number	<i>7.1</i>
		Host Country	<i>Romania</i>	NDP Release Date	<i>22/06/2017</i>
		Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
		Website		Currently PCI	<i>Yes (6.24.4.4)</i>
				Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		12/2013	Considered TPA Regime	Regulated
Feasibility	01/2014	09/2015	Considered Tariff Regime	Regulated
FEED	07/2015	03/2018	Applied for Exemption	No
Permitting	01/2016		Exemption Granted	No
Supply Contracts				
FID		12/2018	Exemption in entry direction	0.00%
Construction	01/2021	12/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date	18/05/2015	18/05/2015		

#### Enabled Projects

Project Code	Project Name
TRA-N-362	Development on the Romanian territory of the Southern Transmission Corridor
TRA-N-1268	Romania-Serbia Interconnection

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Recaş - Horia		800	50	14	2022
Total			50	14	

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Sustainability
Specific Criteria Fulfilled Comments	Market integration, Sustainability, Competition

#### Delays since last TYNDP

Grant Obtention Date	18/05/2015
Delay Since Last TYNDP	
Delay Explanation	Due to the calendar of the Open Season procedure for IP Csandodpalota

## Expected Gas Sourcing

Caspian Region, LNG (), Black Sea

### Benefits

Main Driver Market Demand

Main Driver Explanation

Benefit Description

### CBCA

Decision *No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not*

Submissin Date

Decision Date

Website

Countries Affected

Countries Net Cost Bearer

Additional Comments

### Financial Assistance

Applied for CEF *(1) Yes, we have applied for CEF and we have received a decision*

Grants for studies *Yes*

Grants for studies amount *Mln EUR 2*

Grants for works *No*

Grants for works amount

Intention to apply for CEF

Other Financial Assistance *No*

Comments

General Comments

## Development on the Romanian territory of the Southern Transmission Corridor

TRA-N-362	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		Advanced
Description	<p>The pipeline with a total length of approximately 308,2 km, is a telescopic pipeline made up of two sections and designed to transmit gas at a pressure of 63 bar. The two pipeline sections are:</p> <ul style="list-style-type: none"> <li>• Section I, Black Sea shore – Amzacea, with a length of 32,5 km, will have a diameter of Ø 48" (Dn1200);</li> <li>• Section II, Amzacea – Podișor, with a length of 275,7 km, will have a diameter of Ø 40" (Dn1000);</li> </ul>		
PRJ Code - PRJ Name	-		

Sponsors		General Information	NDP and PCI Information
A		Promoter	<i>SNTGN Transgaz SA</i>
SNTGN Transgaz SA	100%	Operator	<i>SNTGN Transgaz S.A.</i>
Default		Host Country	<i>Romania</i>
ROMGAZ (RO)	25%	Status	<i>Planned</i>
GOGC (GE)	25%	Website	<a href="#"><u>Project's URL</u></a>
MVM (HU)	25%		Part of NDP
SOCAR (AZ)	25%		NDP Number
			NDP Release Date
			NDP Website
			Currently PCI
			Priority Corridor(s)

*Yes (The National Gas Transmission System Development Plan 2017-2026)*

7.2

22/06/2017

[NDP URL](#)

Yes (6.24.4.5)

NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2014	Considered TPA Regime	Regulated
Feasibility	07/2014	01/2016	Considered Tariff Regime	Regulated
FEED	06/2016	02/2018	Applied for Exemption	No
Permitting	01/2015	05/2018	Exemption Granted	Not Relevant
Supply Contracts				
FID		06/2018	Exemption in entry direction	0.00%
Construction	01/2019	10/2020	Exemption in exit direction	0.00%
Commissioning	2020	2020		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-F-358	Development on the Romanian territory of the NTS (BG-RO-HU-AT)-Phase I

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Black Sea shore - Podișor	The pipeline is telescopic, the diameter is reduced to 1,000 mm	1,200	308		2020
Total			308		

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Security of supply, Market Integration, Sustainability, Competition

#### Expected Gas Sourcing

Black Sea

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

Barriers	
Barrier Type	Description
Regulatory	Changes in national/EU legislation which 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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submission Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

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

TRA-N-959	Project	Pipeline including CS	Non-FID
Update Date	15/11/2018		Non-Advanced
Description	<p>Development of gas transmission capacity on the Onești – Coroi – Hațeg – Nădlac corridor depending on the available gas quantities at the Black Sea shore or from other on-shore blocks.</p> <p>The development of this gas transmission corridor requires:</p> <ul style="list-style-type: none"> <li>□ the rehabilitation of some of the NTS existing pipelines;</li> <li>□ replacement of some of the NTS existing pipelines with new pipelines or the building of new pipelines installed in parallel with the existing ones;</li> <li>□ development of 4 or 5 new compressor stations having a total installed power of approximately 66- 82.5MW.</li> </ul>		
PRJ Code - PRJ Name	-		

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

Sponsors		General Information		NDP and PCI Information	
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA	Part of NDP	Yes (The National Gas Transmission System Development Plan 2017-2026)
		Operator	SNTGN Transgaz S.A.	NDP Number	7.5
		Host Country	Romania	NDP Release Date	22/06/2017
		Status	Planned	NDP Website	NDP URL
		Website		Currently PCI	Yes (6.24.10.2)
				Priority Corridor(s)	NSIE



Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2023	2023
Grant Obtention Date		

Third-Party Access Regime	
Considered TPA Regime	<i>Regulated</i>
Considered Tariff Regime	<i>Regulated</i>
Applied for Exemption	<i>No</i>
Exemption Granted	<i>Not Relevant</i>
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)	Comissioning Year
Onesti - Nadlac	existing pipelines + rehabilitation + new pipelines	813	843	82	2023
<b>Total</b>			<b>843</b>	<b>82</b>	

### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Market Integration, Security of Supply, Sustainability, Competition

### Expected Gas Sourcing

Caspian Region, LNG (), Black Sea or other on-shore blocks

### Benefits

Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

CBCA	
Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

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

TRA-N-139	Project	Pipeline including CS	Non-FID
Update Date	19/03/2018		Advanced
Description	<p>The project consists in the following:</p> <ul style="list-style-type: none"> <li>• Phase I: <ul style="list-style-type: none"> <li>- NTS Interconnection with the international gas transmission pipeline Transit 1, in the area of the Isaccea metering station;</li> <li>- Repair works to the Dn 800 mm Cosmești - Onești pipeline (66,0 km).</li> </ul> </li> <li>• Phase II: <ul style="list-style-type: none"> <li>- Upgrading and extension of the gas compressor station Siliștea;</li> <li>- Upgrading the Gas compressor station Onești;</li> <li>- Modifications inside the TN Siliștea and TN Onești</li> <li>- Works in the TN Șendreni.</li> </ul> </li> </ul>		
PRJ Code - PRJ Name	-		

Sponsors	General Information		NDP and PCI Information	
Transgaz	Promoter	<i>SNTGN Transgaz SA</i>	Part of NDP	<i>Yes (The National Gas Transmission System Development Plan 2017-2026)</i>
100%	Operator	<i>SNTGN Transgaz S.A.</i>	NDP Number	<i>7.3</i>
	Host Country	<i>Romania</i>	NDP Release Date	<i>22/06/2017</i>
	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>Yes (6.24.10.1)</i>
			Priority Corridor(s)	<i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		12/2013	Considered TPA Regime	Regulated
Feasibility	12/2016	04/2017	Considered Tariff Regime	Regulated
FEED	05/2017	06/2018	Applied for Exemption	No
Permitting	03/2017	07/2018	Exemption Granted	Not Relevant
Supply Contracts				
FID		06/2018	Exemption in entry direction	0.00%
Construction	12/2018	12/2019	Exemption in exit direction	0.00%
Commissioning	2019	2019		
Grant Obtention Date				

#### Enabled Projects

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

#### Fulfilled Criteria

Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Security of supply, Market Integration, Sustainability

#### Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	12 months
Delay Explanation	

#### Expected Gas Sourcing

Black Sea

Benefits	
Main Driver	Regulation-Interoperability
Main Driver Explanation	
Benefit Description	

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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>	Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Submissin Date		Grants for studies	<i>No</i>
Decision Date		Grants for studies amount	
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>No decision yet taken</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	

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

TRA-N-964	Project	Pipeline including CS	Non-FID
Update Date	09/03/2018		Advanced
Description	The project consists in the construction of a new 25 km pipeline from the Black Sea shore up to the international transit pipeline T1 with a diameter of DN 500 and a design pressure of 55 bar.		
PRJ Code - PRJ Name	-		

Sponsors	General Information	NDP and PCI Information
SNTGN Transgaz SA	Promoter	Part of NDP
100%	Operator	Yes ( <i>The National Gas Transmission System Development Plan 2017-2026</i> )
	Host Country	NDP Number
	Status	NDP Release Date
	Website	NDP Website
		Currently PCI
		Priority Corridor(s)
		7.6
		22/06/2017
		<a href="#">NDP URL</a>
		Yes (6.24.10.3)
		NSIE

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility		09/2016	Considered TPA Regime
Feasibility	10/2016	05/2017	Considered Tariff Regime
FEED	08/2017	01/2018	Applied for Exemption
Permitting	03/2017	12/2017	Exemption Granted
Supply Contracts		10/2018	
FID			Exemption in entry direction
Construction	11/2018	07/2019	Exemption in exit direction
Commissioning	2019	2019	
Grant Obtention Date			
			0.00%
			0.00%

Enabled Projects								
Project Code	Project Name							
TRA-N-139	Interconnection of the NTS with the DTS and reverse flow at Isaccea							
TRA-N-357	NTS developments in North-East Romania							
TRA-N-959	Further enlargement of the BG—RO—HU—AT transmission corridor (BRUA) phase 3							
Pipelines and Compressor Stations								
Pipeline Section		Pipeline Comment			Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Vadu-Gradina					508	25		2019
		Total				25		
Fulfilled Criteria								
Specific Criteria Fulfilled		Competition, Market Integration, Security of Supply, Sustainability						
Specific Criteria Fulfilled Comments		Market integration, SoS, Sustainability, Competition						
Expected Gas Sourcing								
Black Sea								
Benefits								
Main Driver		Market Demand						
Main Driver Explanation								
Benefit Description								

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	



## NTS developments in North-East Romania

TRA-N-357	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		Advanced
Description	<p>The Project „NTS development in the North East area of Romania in order to improve gas supply in the area as well as to ensure transmission capacities to the Republic of Moldova” consists in the construction of a new gas transmission pipeline to connect the Technological Node Onești with the Technological Node Lețcani in the Onești – Gherăești – Lețcani direction.</p> <p>The project implies the construction of new objectives and the construction of two pipeline sections with a total length of 165,150 km from the Technological Node Onești and up to the Technological Node Lețcani and of two gas compressor stations.</p>		
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Ungheni	SNTGN Transgaz S.A.	2019	RO	MD	42.1 GWh/d

Sponsors	General Information		NDP and PCI Information	
SNTGN Transgaz S.A.	Promoter	<i>SNTGN Transgaz SA</i>	Part of NDP	<i>Yes (The National Gas Transmission System Development Plan 2017 - 2026)</i>
100%	Operator	<i>SNTGN Transgaz S.A.</i>	NDP Number	<i>7.4</i>
	Host Country	<i>Romania</i>	NDP Release Date	<i>22/06/2017</i>
	Status	<i>Planned</i>	NDP Website	<i><a href="#">NDP URL</a></i>
	Website	<i><a href="#">Project's URL</a></i>	Currently PCI	<i>No</i>
			Priority Corridor(s)	

Schedule	Start Date	End Date
Pre-Feasibility		02/2014
Feasibility	02/2014	01/2018
FEED	01/2016	01/2018
Permitting	01/2016	01/2018
Supply Contracts		
FID		04/2018
Construction	06/2018	10/2019
Commissioning	2019	2019
Grant Obtention Date		

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)	Comissioning Year
Onesti - Gheraesti - Letcani		711	165	18	2019
Total			165	18	

#### Delays since last TYNDP

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation Delays in obtaining the necessary approvals, permits and authorizations

#### Expected Gas Sourcing

European gas market, Black Sea

Benefits			
Main Driver	Others		
Main Driver Explanation	To improve gas supply in the area, as well as to ensure transmission capacities to the Republic of Moldova		
Benefit Description	By the completion of this project a constant gas flow is ensured to the consumers in the North-Eastern area of Romania, creating the possibility to deliver additional gas quantities, wich may contribute to the development of the area from an economic an social point of view. Creates the possibility to ensure security of supply of the Republic of Moldova.		
Barriers			
Barrier Type	Description		
Permit Granting	The permitting process is long and complicated		
Political	Area with potential conflicts Requires the conclusion of an Intergovernmental Agreement		
Financing	Availability of funds and associated conditions		
Intergovernmental Agreements			
Agreement	Agreement Description	Is Signed	Agreement Signature Date
Memorandum of Understanding	Memorandum of understanding between the Ministry of Economy, Commerce and Business Environment in Romania and the Ministry of Economy from the Republic of Moldova related to preparing the conditions for the construction of the high pressure gas transmissi	Yes	21/05/2015
CBCA		Financial Assistance	
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF	(3) No, we have not applied for CEF
Submissin Date		Grants for studies	No
Decision Date		Grants for studies amount	
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	No, we do not plan to apply
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

## Romania-Serbia Interconnection

TRA-N-1268

Project

Pipeline including CS

Non-FID

Update Date

15/11/2018

Non-Advanced

Description

The project implies the construction of a 97 km long gas transmission pipeline DN 600 x 63 bar with the connection point from the BRUA pipeline in the area of Petrovaselo, the county of Timiș. In the connection point a pig launching/receiving station will be installed. On the territory of Romania the pipeline is 84,6 km long, a Gas Metering Station, 18 block valves and two pig launching/receiving stations, one in the Petrovaselo direction and on in the Mokrin direction.

PRJ Code - PRJ Name

-

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
RO/SB IP	SNTGN Transgaz S.A.	2020	RO	RS	46.3 GWh/d
	SNTGN Transgaz S.A.	2020	RS	RO	46.3 GWh/d

Sponsors	General Information	NDP and PCI Information
<div> <div>SNTGN Transgaz SA</div> <div>100%</div> </div>	<div>Promoter</div> <div>Operator</div> <div>Host Country</div> <div>Status</div> <div>Website</div>	<div> <div>SNTGN Tranzgaz SA</div> <div>SNTGN Transgaz S.A.</div> <div>Romania</div> <div>Planned</div> </div> <div> <div>Part of NDP</div> <div>NDP Number</div> <div>NDP Release Date</div> <div>NDP Website</div> <div>Currently PCI</div> <div>Priority Corridor(s)</div> </div> <div> <div>Yes (THE NATIONAL GAS TRANSMISSION SYSTEM DEVELOPMENT PLAN 2017-2026)</div> <div>7.7</div> <div>22/06/2017</div> <div><a href="#">NDP URL</a></div> <div>No</div> </div>

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		02/2018	Considered TPA Regime	Regulated
Feasibility	02/2018	08/2018	Considered Tariff Regime	Regulated
FEED	03/2018	12/2018	Applied for Exemption	No
Permitting	03/2018	12/2018	Exemption Granted	No
Supply Contracts				
FID		10/2018	Exemption in entry direction	0.00%
Construction	10/2018	04/2019	Exemption in exit direction	0.00%
Commissioning	2020	2020		
Grant Obtention Date				

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
PETROVASELO-COMLOȘU MARE	Romanian section of the interconnection pipeline	600	85		2020
Total			85		

#### Benefits

Main Driver [Regulation SoS](#)

Main Driver Explanation

Benefit Description

#### Barriers

Barrier Type [Description](#)

Permit Granting [The permitting process is long and complicated](#)

Financing [Availability of funds and associated conditions](#)

CBCA	
Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance	
Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Sarmasel underground gas storage in Romania

UGS-N-371	Project	Storage Facility	Non-FID
Update Date	01/08/2018		Non-Advanced
Description	<p>Sarmasel Underground Storage in Romania consists in the increase of working capacity up to 1.55 BCM/cycle, resulting in a capacity increment of 0.65 Bcm/cycle, an enhanced withdrawal capacity of up to 10 million cm/day and an increased injection rate of up to 10 million cm/day.</p> <p>The required investment consists of:</p> <ul style="list-style-type: none"> <li>- construction of one more compressor module,</li> <li>- refurbishment of surface infrastructure for all injection-withdrawal wells;</li> <li>- recompletion of all wells and installation of safety devices for each of them;</li> <li>- drilling new additional wells;</li> <li>- increasing the cushion gas.</li> </ul> <p>The geological suitability is backed up by existing reservoir studies.</p> <p>The rationale of the project is to: (a) decongest existing storage capacities in South Romania which may become available for neighboring countries, (b) increase the flexibility of the storage system, contribute to the sustainability and flexibility of the transmission system , (d) reduce dependency on Russian gas etc.</p>		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
UGS Sarmasel	S.N.G.N. Romgaz S.A.	2024	STcRO	RO	34.0 GWh/d
	S.N.G.N. Romgaz S.A.	2024	RO	STcRO	42.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
SNGN ROMGAZ S.A.	100%	Promoter	Societatea Națională de Gaze Naturale ROMGAZ S.A.	Part of NDP	No ((5) others - please comment below)
		Operator	S.N.G.N. Romgaz S.A.	NDP Number	
		Host Country	Romania	NDP Release Date	
		Status	Planned	NDP Website	
		Website	Project's URL	Currently PCI	Yes (6.20.6)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2016	Considered TPA Regime	Regulated
Feasibility	05/2018	05/2019	Considered Tariff Regime	Regulated
FEED	08/2019	06/2020	Applied for Exemption	No
Permitting	06/2019	08/2020	Exemption Granted	No
Supply Contracts		12/2020		
FID		10/2020	Exemption in entry direction	0.00%
Construction	02/2021	10/2024	Exemption in exit direction	0.00%
Commissioning	2024	2024		
Grant Obtention Date				

Technical Information (UGS)									
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	Load Factor (%)	Comments	Commissioning Year
UGS SARMASEL	Depleted Field	No	Sarmasel underground gas storage in Romania	650	3.2	4.0	70	This is a one phase project. Expected Load Factor to be updated by the Feasibility Study	2024



## Fulfilled Criteria

Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	TYNDP views RO as gas source during 2020-2030, but afterwards there is major impact on RO: (1) Disruption Rate doubling from 10% to 20% in case of UA import route disruption, and (2) N-1 which cannot be fulfilled anymore, dropping to 83% for Low Infrastructure and to 85% for Adv. Infra. CBA assessment shows cross-border impact of the Sarmasel storage on SE Europe in terms of security of supply, in case of UA route disruption for all neighbouring countries: BG, HU, RS. CBA results show that irrespective of the geographical location of the storage or the distance to transit lines or the interconnection systems between countries, there is an impact on neighbouring countries through the transmission system in case of UA disruption. There is an impact of the project between 2 and 4 % on DR for all scenarios and type of infrastructure. On N-1 the project impact varies between 3-4 % in 2030. It provides stability and flexibility to the entire transmission system, as shown in RO TSO NTS Dev Pl.

## Delays since last TYNDP

Grant Obtention Date	
Delay Since Last TYNDP	FID has changed from Q1 2018 to 01/01/2019
Delay Explanation	The commissioning deadline was changed to 2024. The change occurred due to: (a) the need to correlate the development of storage system with NTS development directions (stages of NTS and interconnections HU, BG and RS, changes in the status of transit lines, clarifications on gas sources for the entire NTS), (b) upcoming monetisation of Black Sea developments, (c) the impact on the financial results generated from the evolution of the gas price on the market which caused a drop in storage services demand..

## Expected Gas Sourcing

Romania

## Benefits

Main Driver	Regulation SoS
Main Driver Explanation	The project aims at supplying directly or indirectly at least two Member States and although it meets the competition, market integration, security of supply and sustainability criteria, the project's main contribution is to the European security of supply, given its complementarity to future major pipeline projects in Romania developed by SNTGN Transgaz S.A creating on one hand interconnections with the NTS of neighboring Member States (HU and BG) and on the other hand access to the newly discovered gas resources in the Black Sea, which are expected to be monetized soon.
Benefit Description	Its main regional benefits are: (a) decongestion of existing storage capacities in South Romania which may become available for neighboring countries, (b) increase the flexibility of the storage system, (c) contribution to the sustainability and flexibility of the transmission system especially of high pressure pipelines, (d) reduction of dependency on Russian gas, and (e) support for Romania's gas export potential.

Barriers	
Barrier Type	Description
Regulatory	- no negotiated tariffs - no daily/weekly balance reports - Under the current regulation the project could increase the storage tariffs at a level which make the storage business less attractive in reality actual regulatory tariffs don't respond to the increasing demand of multiple types of tariffs and / or missing of price mobility and negotiation possibilities.
Market	Reduced market demand from the companies acting on the gas market due to a reduced price of import gas price.
Financing	Due to the lack of market and the characteristics of the storage business financial institution are not interested to support such project.
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

CBCA		Financial Assistance	
Decision	<i>No, we have not submitted an investment request yet, but we do plan to submit it</i>	Applied for CEF	<i>(1) Yes, we have applied for CEF and we have received a decision</i>
Submission Date		Grants for studies	<i>Yes</i>
Decision Date		Grants for studies amount	<i>Mln EUR 1</i>
Website		Grants for works	<i>No</i>
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	<i>Yes, for studies and works</i>
Additional Comments		Other Financial Assistance	<i>No</i>
		Comments	
		General Comments	<i>We have applied for CEF grant for studies but it was not approved,</i>

## Upgrading GMS Isaccea 1 and GMS Negru Voda 1

TRA-N-1277	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		Advanced
Description	The project "Upgrading GMS Isaccea 1 and GMS Negru Vodă 1" consists in the construction of two new gas metering stations on the existing locations of the Metering Stations		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Isaccea (RO) - Orlovka (UA) I	SNTGN Transgaz S.A.	2019	RO/TBP	UA	28.9 GWh/d

Sponsors	General Information		NDP and PCI Information	
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA	
		Operator	SNTGN Transgaz S.A.	
		Host Country	Romania	
		Status	Planned	
		Website		
			Part of NDP	Yes (The National Gas Transmission System development Plan 2017 - 2026)
			NDP Number	7.8
			NDP Release Date	22/06/2017
			NDP Website	<a href="#">NDP URL</a>
			Currently PCI	No
			Priority Corridor(s)	

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility	01/2018	08/2018	Considered Tariff Regime	<i>Regulated</i>
FEED	01/2018	08/2018	Applied for Exemption	<i>No</i>
Permitting	01/2018	08/2018	Exemption Granted	<i>No</i>
Supply Contracts				
FID		08/2018	Exemption in entry direction	0.00%
Construction	08/2018	12/2019	Exemption in exit direction	0.00%
Commissioning	2019	2019		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
A	The project refers only to the upgrading of the two Gas Metering Stations				2019
Total					

### Expected Gas Sourcing

Caspian Region, Russia

### Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	

### Barriers

Barrier Type	Description
Financing	Availability of funds and associated conditions

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility	<i>01/2018</i>	<i>08/2018</i>	Considered Tariff Regime	<i>Regulated</i>
FEED	<i>01/2018</i>	<i>08/2018</i>	Applied for Exemption	<i>No</i>
Permitting	<i>01/2018</i>	<i>08/2018</i>	Exemption Granted	<i>No</i>
Supply Contracts				
FID		<i>08/2018</i>	Exemption in entry direction	<i>0.00%</i>
Construction	<i>08/2018</i>	<i>12/2019</i>	Exemption in exit direction	<i>0.00%</i>
Commissioning	<i>2019</i>	<i>2019</i>		
Grant Obtention Date				

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
A	The project refers only to the upgrading of the two Gas Metering Stations				2019
Total					

### Expected Gas Sourcing

Caspian Region, Russia

### Benefits

Main Driver	Regulation SoS
Main Driver Explanation	
Benefit Description	

### Barriers

Barrier Type	Description
Financing	Availability of funds and associated conditions

## CS Kidričevo, 2nd phase of upgrade

TRA-N-94	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Advanced
Description	Upgrade of CS for higher operational pressure in the 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.		
PRJ Code - PRJ Name	-		

Sponsors	General Information	NDP and PCI Information
Plinovodi 100%	Promoter Operator Host Country Status Website	Part of NDP NDP Number NDP Release Date NDP Website Currently PCI Priority Corridor(s)
	<i>Plinovodi d.o.o.</i> <i>Plinovodi d.o.o.</i> <i>Slovenia</i> <i>Planned</i> <a href="#">Project's URL</a>	<i>Yes (TYNDP for the period 2018-2027)</i> <i>C5</i> <i>09/10/2017</i> <a href="#">NDP URL</a> <i>Yes (6.26.1.2)</i> <i>NSIE</i>

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime
Feasibility			Considered Tariff Regime
FEED	07/2019	07/2021	Applied for Exemption
Permitting			Exemption Granted
Supply Contracts			
FID		07/2019	Exemption in entry direction
Construction	07/2021	12/2022	Exemption in exit direction
Commissioning	2022	2022	
Grant Obtention Date			

## 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)

## Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Commissioning Year
CS Kidričevo, 2nd phase of upgrade	Up to three compressor units with total power of up to 30 MW.			30	0
<b>Total</b>				<b>30</b>	

## Fulfilled Criteria

Specific Criteria Fulfilled	Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The project will contribute to the facilitation of market integration and provide infrastructure allowing the increase of security of supply for the region. Upgrade of CS for higher operational pressure in the 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.

## Expected Gas Sourcing

Norway, Russia, LNG (HR)

## Benefits

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

## M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

TRA-N-108	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	Interconnector with the Italian TSO. Adjustment to operating parameters of the transmission system of the Italian TSO.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI)	Plinovodi d.o.o.	2022	IT	SI	36.6 GWh/d
	Plinovodi d.o.o.	2022	SI	IT	39.2 GWh/d

Sponsors	General Information	NDP and PCI Information
Plinovodi 100%	Promoter <i>Plinovodi d.o.o.</i>	Part of NDP <i>Yes (TYNDP for the period 2018-2027)</i>
	Operator <i>Plinovodi d.o.o.</i>	NDP Number <i>C2</i>
	Host Country <i>Slovenia</i>	NDP Release Date <i>09/10/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)



## M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

TRA-N-108	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	Interconnector with the Italian TSO. Adjustment to operating parameters of the transmission system of the Italian TSO.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Gorizia (IT) /Šempeter (SI)	Plinovodi d.o.o.	2022	IT	SI	36.6 GWh/d
	Plinovodi d.o.o.	2022	SI	IT	39.2 GWh/d

Sponsors	General Information	NDP and PCI Information
Plinovodi 100%	Promoter <i>Plinovodi d.o.o.</i>	Part of NDP <i>Yes (TYNDP for the period 2018-2027)</i>
	Operator <i>Plinovodi d.o.o.</i>	NDP Number <i>C2</i>
	Host Country <i>Slovenia</i>	NDP Release Date <i>09/10/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)

Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2022	2022
Grant Obtention Date		

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

### Enabled Projects

Project Code	Project Name
TRA-N-92	CS Ajdovščina, 1st phase of upgrade

### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia		500	12		0
Total			12		

### Fulfilled Criteria

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

### Benefits

Main Driver	Others
Main Driver Explanation	Adjustment of IP boundary conditions (pressure).
Benefit Description	

CBCA
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Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submissin Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

Financial Assistance
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Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	

## Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)

TRA-N-389	Project	Pipeline including CS	Non-FID
Update Date	15/11/2018		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.		
PRJ Code - PRJ Name	-		

### Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
Murfeld (AT) / Ceršak (SI)	Plinovodi d.o.o.	2022	AT	SI	78.7 GWh/d
	Plinovodi d.o.o.	2022	SI	AT	162.0 GWh/d

Sponsors		General Information		NDP and PCI Information	
Plinovodi	100%	Promoter	Plinovodi d.o.o.	Part of NDP	Yes (TYNDP for the period 2018-2027)
		Operator	Plinovodi d.o.o.	NDP Number	C4
		Host Country	Slovenia	NDP Release Date	09/10/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes (6.26.1.5)
				Priority Corridor(s)	NSIE

Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility			Considered TPA Regime	<i>Regulated</i>
Feasibility			Considered Tariff Regime	<i>Regulated</i>
FEED	07/2019	07/2021	Applied for Exemption	<i>No</i>
Permitting			Exemption Granted	<i>No</i>
Supply Contracts				
FID		07/2019	Exemption in entry direction	0.00%
Construction	07/2021	12/2022	Exemption in exit direction	0.00%
Commissioning	2022	2022		
Grant Obtention Date				

#### Enabled Projects

Project Code	Project Name
TRA-N-94	CS Kidričevo, 2nd phase of upgrade
TRA-N-390	Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)

#### Pipelines and Compressor Stations

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Upgrade of Murfeld/Ceršak interconnection	Pipeline length: 160m.	800	0		0
<b>Total</b>			<b>0</b>		

#### Fulfilled Criteria

Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply
Specific Criteria Fulfilled Comments	The Project enables incremental capacity at the IP Murfeld/Ceršak in both directions (from AT to SI and from SI to AT) and contributes to the common benefits of removing bottlenecks, improving N-1 for the Slovenian TSO, improving SoS for Austria, Slovenia and Croatia and will serve as a base for future gas evacuation for Croatia through Slovenia to Austria.

#### Expected Gas Sourcing

Norway, Russia, LNG (HR)

## Benefits

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

## CBCA

Decision	<i>No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

## Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	No
Grants for studies amount	
Grants for works	No
Grants for works amount	
Intention to apply for CEF	<i>No decision yet taken</i>
Other Financial Assistance	No
Comments	
General Comments	

## System Enhancements - Eustream

TRA-N-17	Project	Pipeline including CS	Non-FID
Update Date	15/11/2018		Non-Advanced
Description	Modernization and Upgrade of the Network and Replacement of Technologies due to new Environmental Norms. This Project consists of several projects rolling in a time period such as : enhancement of key technology accessibility, improvement/ upgrade of pipelines integrity,complet overhaul of compressor technology, - redesign of compressor stations,enhancement of transmission system flexibility .		
PRJ Code - PRJ Name	-		

Sponsors	General Information	NDP and PCI Information
eustream, a.s. 100%	Promoter <i>eustream, a.s.</i>	Part of NDP <i>Yes (National Development Plan 2018-2027)</i>
	Operator <i>eustream, a.s.</i>	NDP Number <i>4.2.1</i>
	Host Country <i>Slovakia</i>	NDP Release Date <i>30/11/2017</i>
	Status <i>Planned</i>	NDP Website <i><a href="#">NDP URL</a></i>
	Website <i><a href="#">Project's URL</a></i>	Currently PCI <i>No</i>
		Priority Corridor(s)

Schedule	Start Date	End Date	Third-Party Access Regime
Pre-Feasibility			Considered TPA Regime <i>Regulated</i>
Feasibility			Considered Tariff Regime <i>Regulated</i>
FEED			Applied for Exemption <i>No</i>
Permitting			Exemption Granted <i>No</i>
Supply Contracts			
FID			Exemption in entry direction <i>0.00%</i>
Construction			Exemption in exit direction <i>0.00%</i>
Commissioning	<i>2027</i>	<i>2027</i>	
Grant Obtention Date			

### Comments about the Third-Party Access Regime

The map is not uploaded as the Project consists of several different projects focused on modernization and upgrade of the network and replacement of technologies due to new environmental standards.

### Benefits

Main Driver	Others
Main Driver Explanation	Enhancement of internal operational efficiency of the transmission system.
Benefit Description	Modernization and upgrade of the network and replacement of technologies due to new environmental standards.

### CBCA

Decision	<i>No, we have not submitted an investment request yet, and we do not plan to submit it</i>
Submission Date	
Decision Date	
Website	
Countries Affected	
Countries Net Cost Bearer	
Additional Comments	

### Financial Assistance

Applied for CEF	<i>(3) No, we have not applied for CEF</i>
Grants for studies	<i>No</i>
Grants for studies amount	
Grants for works	<i>No</i>
Grants for works amount	
Intention to apply for CEF	<i>No, we do not plan to apply</i>
Other Financial Assistance	<i>No</i>
Comments	
General Comments	





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