PCI 5.1.1 Physical Reverse Flow at Moffat interconnection point (IE/UK)

TRA-N-829			Project			Pipeline including	ICS N	lon-FID	
Update Date			30/0	5/2018			A	dvanced	
Description				nterconnection point, which is currently uni-direction. The planned capacity is 176.2 GWH/d.			w only from UK to	n UK to IE, the Isle of	
PRJ Code - PRJ Nar	ne P	RJ-G-001 - Physical revers	e Flow at Moffat interconnection	point (IE/UK)					
Capacity Increment	s Variant Fo	r Modelling							
Point			Operator		Year	From Gas System	To Gas System	Capacity	
Moffat			Gas Networks Ireland		2020	IE	Y-UKm	176.2 GWh/d	
Sponsors			General Info	ormation		NDP and	PCI Information		
GNI (UK) Limited		100%	6 Promoter Operator Host Country Status Website	GNI (UK) Limited Gas Networks Ireland United Kingdom Planned <u>Project's URL</u>	NDP NDP NDP Curre	Yes Number Release Date Website ently PCI ty Corridor(s)	: (GNI, Network De	evelopment Plan 2016) PCI 5.1.1 15/12/2018 <u>NDP URL</u> Yes () NSIW	
Schedule	Start Dat	e End Date				Third-Part	y Access Regime		
Pre-Feasibility					Consi	dered TPA Regime		Regulated	
Feasibility	07/201	7 11/2018			Consi	dered Tariff Regime		Regulated	
FEED	01/201	9 12/2019			Appli	ed for Exemption		No	
Permitting Supply Contracts	01/202	0 12/2020			Exem	ption Granted		No	
FID		12/2020			Exem	ption in entry direction	n	0.00%	
Construction Commissioning	01/202 202				Exem	ption in exit direction		0.00%	

Pipelines and Compress	or Stations								
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year				
interconnector 1 & 2		914	100	40					
	Total		100	40					
	Fulfilled Criteria								
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability								
Specific Criteria Fulfilled	Comments Harket Integration: The intention of PRF is to enhance interoperability of (UK) market, in line with the goal of the European Union in achieving an E currently at the extremity of the EU gas network with no ability to export the first time, trade from Ireland/Northern Ireland (UK) to Great Britain (U Ireland and Northern Ireland which in turn would help increase trading of (UK), further enhancing market integration in these regions.	EU Single Market in Gas. I to Great Britain (UK) and I JK). This opportunity is lik	reland ar beyond. T ely to ene	nd Northern Ireland (I The PRF projects wou courage new gas sup	JK) are ld allow, for ply sources in				
	Time Schedule								
Grant Obtention Date	14/03/2017								
Delay Since Last TYNDP									
Delay Explanation									
	Benefits								
Main Driver	Market Demand								
Main Driver Explanation									
Benefit Description	tion The PCI of which this action is an element would benefit the UK through improvements in Security of Supply and would also benefit the operators of supply sources in Ireland by facilitating access to the UK and continental markets. In particular the progression of PCI 5.1.1 would be seen as a key enable for PCI 5.3 Sannnon LNG Terminal, by facilitating access to the UK market. This would help Ireland's security of supply position in terms of the N-1 standard.								

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
	not	Grants for studies	Yes
Submissin Date		Grants for studies amount	Mln EUR 1
Decision Date		Grants for works	No
Vebsite		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

			Μ	loffat Physical Rever	se Flow					
TRA-N-1064			Pro	oject			Pipeline including	g CS 🛛 🔊	Non-FID	
Update Date	pdate Date			30/05/2018				Non	Non-Advanced	
Description				nection point, which is co anned capacity is 38.5GW		ional, su	upporting forward flo	w only from UK to) IE, the Isle of	
PRJ Code - PRJ Nar	ne PR	J-G-001 - Physical rev	verse Flow at Moffat	interconnection point (IE	/UK)					
Capacity Increment	s Variant For	Modelling								
Point	A		Oper	ator		Year	From Gas System	To Gas System	Capacity	
Moffat			Natio	onal Grid Gas plc		2020	Y-UKm	UK	176.2 GWh/d	
Sponsors				General Information			NDP and	PCI Information		
GNI (UK) Limited	de la companya de la	10	00% Promoter	Nat	ional Grid Gas plc	Part c	of NDP No (((5) others - please	comment below)	
	74		Operator	Nat	ional Grid Gas plc	NDP	Number			
			Host Country	/	United Kingdom	NDP	Release Date			
			Status		Planned	NDP	Website			
			Website			Curre	ntly PCI		Yes ()	
						Priori	ty Corridor(s)		NSIW	
Schedule	Start Date	End Date					Third-Par	ty Access Regime		
Pre-Feasibility						Consi	dered TPA Regime		Regulated	
Feasibility	07/2017	11/2018				Consi	dered Tariff Regime		Regulated	
FEED	01/2019	12/2019				Applie	ed for Exemption		No	
Permitting	01/2020	12/2020				Exemp	otion Granted		No	
Supply Contracts										
FID		12/2020				Exemp	ption in entry directio	n	100.00%	
Construction	01/2021	12/2021				Exemp	ption in exit direction		0.00%	
Commissioning	2020	2020								

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	Fulfillec	Citteria	
Specific Criteria Fulfille	ed Market Integration, Security of Supply		
Specific Criteria Fulfille	ed Comments be seen as a key enabler for PCI 5.3 Shannon LNG Terposition in terms of the N-1 standard	ccess to the UK and continental markets. Ir	n particular the progression of PCI 5.1.1 would
	Time S	chedule	
Grant Obtention Date	14/03/2017		
Delay Since Last TYNE	DP		
Delay Explanation			
		efits	
Main Driver Main Driver Explanatio	for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U	tinental markets. In particular the progressi	ion of PCI 5.1.1 would be seen as a key enable
	The PCI of which this action is an element would benefit the UK t supply sources in Ireland by facilitating access to the UK and con	tinental markets. In particular the progressi	ion of PCI 5.1.1 would be seen as a key enable
Main Driver Explanatio	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U	tinental markets. In particular the progressi < market. This would help Ireland's security	ion of PCI 5.1.1 would be seen as a key enable
Main Driver Explanatio	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U standard <u>CBCA</u> No, we have not submitted an investment request yet,	tinental markets. In particular the progressi < market. This would help Ireland's security	on of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1
Main Driver Explanatio	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the UK standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	tinental markets. In particular the progressi K market. This would help Ireland's security Finan	on of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance
Main Driver Explanatio Benefit Description Decision	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U standard <u>CBCA</u> No, we have not submitted an investment request yet,	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance (3) No, we have not applied for C
Main Driver Explanation Benefit Description Decision Gubmissin Date	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the UK standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF Grants for studies	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance (3) No, we have not applied for C
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the UK standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF Grants for studies Grants for studies amount	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance (3) No, we have not applied for C
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date Vebsite	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the UK standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works Market for works Grants for works amount Intention to apply for CEF	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance (3) No, we have not applied for C
Main Driver Explanatio	The PCI of which this action is an element would benefit the UK to supply sources in Ireland by facilitating access to the UK and con- for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 ncial Assistance (3) No, we have not applied for C
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date Website Countries Affected	The PCI of which this action is an element would benefit the UK is supply sources in Ireland by facilitating access to the UK and com for PCI 5.3 Shannon LNG Terminal, by facilitating access to the U standard CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	tinental markets. In particular the progressi K market. This would help Ireland's security Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works More the progression of the progression for the progression of the progression of the progression of the progression of the progression for the progression of the p	ion of PCI 5.1.1 would be seen as a key enable of supply position in terms of the N-1 (3) No, we have not applied for C No decision yet tak

Bidirectional Austrian-Czech Interconnector (BACI)

TRA-N-21	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		Advanced
Description	The Bidirectional Austrian Czech Interconnection (BACI) will be a new infrastructure connected to the existing Czech transmission system via CS Břeclav (NET4GAS s.r.o CONNECT AUSTRIA GmbH). The project BACI will enable capacity transmission for facilitate better market integration between Austria and the Czech Republic. The pro- Austrian and also Polish system by diversification of gas supply routes and by conre-	 and to the Austrian transmission system the first time between these two EU Membroject BACI will also increase the overall fle 	via Baumgarten (GAS per States and it will xibility of the Czech,
PRJ Code - PRJ Name	PRJ-G-002 - Bidirectional Austrian - Czech Interconnection (BACI)		

Capacity Increments Variant For Modelling

Point		Opera	ator	Year	From Gas System	To Gas System	Capacity	
	Gas Connect Austria GmbH		onnect Austria GmbH	2021 AT		CZ	201.4 GWh/d	
		Comment: New bidirectional IP			P connecting the Austria and the Czech Market			
oštorná / Reintal		Gas Connect Austria GmbH		2021	CZ	AT	201.4 GWh/d	
			Comment: New bidirectional	IP conn	ecting the Austria and	l the Czech Market		
Sponsors			General Information		NDP and	PCI Information		
Pipeline on Austrian territory		Promoter	GAS CONNECT AUSTRIA GmbH	Part c	of NDP	Yes (NDP 2018-2027)	
GAS CONNECT AUSTRIA GmbH	100%	Operator	Gas Connect Austria GmbH	NDP Number		GCA 2015/010		
Pipeline on Czech territory		Host Country Aust		NDP Release Date		19/01/2018		
NET4GAS, s.r.o	100%	Status	Planned	NDP	Website		<u>NDP URL</u>	
	10070	Website	Project's URL	Curre	ently PCI		Yes ()	
				Priori	ty Corridor(s)		NSIE	

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting	10/2015	
Supply Contracts		
FID		
Construction		10/2021
Commissioning	2021	2021

Pipelines and Compressor Sta	itions					
Pipeline Section	Pipeli	ne Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Austrian Side		ersion from Nm ³ (0°) to kwh with GCV of 11.19 AT s TRA-N-021 and CZ side is TRA-N-133	800	49		
Czech Side		ersion from Nm ³ (0°) to kwh with GCV of 11.19 AT s TRA-N-021 and CZ side is TRA-N-133	800	12		
	Total			61		
		Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Se	ecurity of Supply, Sustainability				
	The BACI project entailing a direct o	connection of the Austrian and the Czech gas marke	t would ena	ble short	way access to CEGH	Hub in

Baumgarten thus facilitating better market integration and fostering competition. Positive effects on the gas prices are expected. The project supports indirectly the substitution of coal by gas also e.g. as a back-up energy source for renewables, which would have a positive impact on the environment by reducing the CO2 emissions. The project supports the diversification of gas supply sources and routes by connecting both transmission systems to LNG terminals in Poland (Świnoujście) and Croatia (Krk) and further gas sources reaching the EU via the Baltic. Calculated welfare gains for the Czech - Austrian market integration are 62 million EUR/year as it was calculated by the Austrian NRA E-Contol in a study published on its website in 2017. The payback period for the project would be approximately 3 years after its commissioning.

С

	Time S	chedule	
Grant Obtention Date	30/04/2015		
Delay Since Last TYNDP			
Delay Explanation			
		efits	
Main Driver	Others		
Main Driver Explanatior	Market Integration		
	by providing peak regulation and the flexibility of gas flow. BACI	is a key element in creating a we	5
	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of	is a key element in creating a we NG terminal in Poland and Croa	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With
	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply on CBCA	is a key element in creating a we NG terminal in Poland and Croa	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance
Decision	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet,	is a key element in creating a we NG terminal in Poland and Croa	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With
Decision	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply on CBCA	is a key element in creating a we .NG terminal in Poland and Croa disruption.	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a
	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	is a key element in creating a we .NG terminal in Poland and Croat disruption. Applied for CEF	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a decision
Decision Submissin Date Decision Date	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	is a key element in creating a we NG terminal in Poland and Croat disruption. Applied for CEF Grants for studies	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a decision
Submissin Date	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	is a key element in creating a we NG terminal in Poland and Croat disruption. Applied for CEF Grants for studies Grants for studies amount	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a decision Ye
Submissin Date Decision Date	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	is a key element in creating a we NG terminal in Poland and Croat disruption. Applied for CEF Grants for studies Grants for studies amount Grants for works	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a decision Ye
Submissin Date Decision Date Website	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	is a key element in creating a we NG terminal in Poland and Croat disruption. Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received a decision Ye No Mln EUR (
Submissin Date Decision Date Website Countries Affected	access to existing and new import infrastructures such as a new L BACI the region would become less vulnerable in case of supply of CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	is a key element in creating a we NG terminal in Poland and Croat disruption. Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	ell-functioning internal market in the CEE region due to tia, Nord Stream and unconventional gas sources. With Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio Ye N Mln EUR No, we do not plan to appl

NSIE

Bidirectional Austrian Czech Interconnection (BACI)

TRA-N-133	Project	Pipeline including CS	Non-FID
Update Date	23/03/2018		Advanced
Description	The transmission system operators of the Czech Republic (NET4GAS, s.r.o.) and of a joint project Bidirectional Austrian Czech Interconnection (BACI). The project Czech Republic and Austria. The pipeline is planned to be connected at CS Břect GmbH) to the existing transmission systems of both countries.	ct BACI aims at establishing the first direct cor	nnection between the
PRJ Code - PRJ Name	PRJ-G-002 - Bidirectional Austrian - Czech Interconnection (BACI)		

Capacity Increments Variant For Modellin	g							
Point		Operator	r		Year Fro	m Gas System	To Gas System	Capacity
		NET4GAS	5, s.r.o.		2021	AT	CZ	201.4 GWh/d
						Comment: Er	ntry from AT to CZ	
Poštorná / Reintal		NET4GAS	5, s.r.o.		2021	CZ	AT	201.4 GWh/d
						Comment:	Exit from CZ to AT	Γ
Sponsors			General Information			NDP and	PCI Information	
Austria		Promoter		NET4GAS, s.r.o.	Part of ND	P Y	es (CZ NDP 2016-	2025 (approved))
GAS CONNECT AUSTRIA GmbH	100%	Operator		NET4GAS, s.r.o.	NDP Num	ber		TRA-N-133
Czech Republic		Host Country		Czechia	NDP Relea	se Date		31/10/2015
NET4GAS, s.r.o.	100%	Status		Planned	NDP Webs	ite		<u>NDP URL</u>
	10070	Website		<u>Project's URL</u>	Currently F	PCI		Yes ()

Priority Corridor(s)

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		05/2009
Feasibility	03/2012	02/2014
FEED	03/2012	06/2018
Permitting	05/2015	11/2019
Supply Contracts		08/2019
FID		08/2019
Construction	12/2019	09/2021
Commissioning	2021	2021

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Břeclav (CZ) - Poštorná/Reintal (CZ/A	AT) CZ side	800	12	()	2021
	Total		12		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	The first direct gas transmission systems interconnection of the Czech integration and Competition: The BACI project through direct connect CEGH Hub in Baumgarten and thus facilitating better market integratio expected (identified by Austrian NRA E-Control as 62 mio EUR/year) gas also e.g. as a back-up energy source for renewables, which would emissions SoS: The project supports the diversification of gas supply terminals in PL (Świnoujście) and HR (Krk) and further gas sources reac of a North-South Corridor.	tion of the AT and CZ gas ma ion and fostering competition - Sustainability: The project su have a positive impact on th y sources and routes by conn	rket wou and pos apports ir e environ ecting bo	ld enable access on a itive effects on the g ndirectly the substitut ment by reducing th oth transmission syste	a short way to as prices are tion of coal by e CO2 ems to LNG
	Time Schedule				
	01/01/2014			11 A 11 A	

Delay Since Last TYNDP 0 Particular dates have been changed due to the fact that there is a change in permitting process caused by amendment of the Building Act valid **Delay Explanation** as of January 1, 2018.

	Ben	efits	
Main Driver	Others		
Main Driver Explanatio	n Competition, Market Integration		
Benefit Description	The BACI will ensure the first direct transmission capacity between competition. It contributes to the diversification of gas supply and SI, HR and SK and access to new and existing trading markets. The and Czech side and therefore will enhance the market development in creating a well-functioning internal market in the CEE region du Poland and Croatia, Nord Stream and unconventional gas sources through Ukraine and Belarus and therefore the region will have a	d the increased transportation of e BACI will enhance the market of ent by providing peak regulation ue to access to existing and new s. With the BACI the CEE region	oportunities to and from countries like HU, PL, DE, IT, FR, development due to access to UGSs both on the Austrian and the flexibility of gas flow. The BACI is a key element import infrastructures such as a new LNG terminal in
	Barı	riers	
Barrier Type	Description		
Permit Granting	Permitting obstacles		
Regulatory	Lack of proper transposition of EU regulation		
Regulatory	Low rate of return		
1			
	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
	not	Grants for studies	Ye
Submissin Date		Grants for studies amount	Mln EUR
Decision Date		Grants for works	N
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet take
Countries Net Cost Bea	arer	Other Financial Assistance	Ye
Additional Comments		Comments	TEN-E, 92 942 EU
		General Comments	
	Upgrade of Rogatec interconnection	on (M1A/1 Interconnection	Rogatec)

Update Date	30/03/2018	Advanced
Description	Adjustment to operating parameters of the transmission system of the Croatian TSO, increasing the transmission capacity ar operation. The project is a part of the PCI 6.26 Cluster Croatia - Slovenia - Austria at Rogatec.	nd enabling bidirectional
PRJ Code - PRJ Name	PRJ-G-003 - Interconnection Slovenia-Croatia (Gas pipeline Lučko-Zabok-Rogatec)	

Capacity Increment	ts Variant For Mod	delling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Pagatas			Plinovodi d.o.o.		2022	HR	SI	162.0 GWh/d
Rogatec			Plinovodi d.o.o.		2022	SI	HR	162.0 GWh/d
Sponsors			General I	nformation		NDP and	PCI Information	
Plinovodi		100%	Promoter	Plinovodi d.o.o.	Part c	of NDP Yes	G (TYNDP for the pe	eriod 2018-2027,
	1		Operator	Plinovodi d.o.o.	NDP	Number		C12
			Host Country	Slovenia	NDP	Release Date		09/10/2017
			Status	Planned	NDP	Website		NDP UR
			Website	Project's URL	Curre	ntly PCI		Yes (
					Priori	ty Corridor(s)		NSIE
Schedule	Start Date	End Date				Third-Par	ty Access Regime	
Pre-Feasibility					Consid	dered TPA Regime		Regulated
Feasibility					Consid	dered Tariff Regime		Regulated
FEED	07/2019	07/2021			Applie	ed for Exemption		No
Permitting					Exemp	otion Granted		No
Supply Contracts								
FID		07/2019			Exemp	otion in entry directio	n	0.00%
Construction	07/2021	12/2022			Exemp	otion in exit direction		0.00%
Commissioning	2022	2022						

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)

Upgrade of Rogatec interconection The length is 3.8 km. 600 4 Interconstruction Specific Criteria Fulfilled Specific Criteria Fulfilled Competition, Market Integration, Security of Supply 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. Specific Criteria Fulfilled A 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. Specific Criteria Fulfilled Market Demand Benefit Description Benefit Description	Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
Fulfilled Criteria Specific Criteria Fulfilled Competition, Market Integration, Security of Supply 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 Market Demand Main Driver Market Demand Also essential contribution to Security of supply.	Upgrade of Rogatec interconnecti	ion The length is 3.8 km.	800	4		
Specific Criteria Fulfilled Competition, Market Integration, Security of Supply Specific Criteria Fulfilled 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: Specific Criteria Fulfilled Competition, Market Integration, 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: Specific Criteria Fulfilled Competition, Market Integration, Security of supply and benefits of the open gas market. Specific Criteria Fulfilled Competition, Market Integration, Security of supply and benefits of the open gas market. Norway, Russia, LNG (HR) Expected Gas Sourcing Main Driver Market Demand Main Driver Explanation Also essential contribution to Security of supply.		Total		4		
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 Also essential contribution to Security of supply.		Fulfilled Criteria				
Specific Criteria Fulfilled Comments 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. Specific Criteria Fulfilled Comments Expected Gas Sourcing Norway, Russia, LNG (HR) Benefits Main Driver Market Demand Main Driver Explanation Also essential contribution to Security of supply.	Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply				
Benefits Main Driver Market Demand Main Driver Explanation Also essential contribution to Security of supply.		contributing to the security of supply and benefits of the open gas n	narket.			
Main Driver Market Demand Main Driver Explanation Also essential contribution to Security of supply.		Expected Gas Sourcing				
Main Driver Explanation Also essential contribution to Security of supply.	Norway, Russia, LNG (HR)	Expected Gas Sourcing				
	Norway, Russia, LNG (HR)					
Benefit Description		Benefits				
	Main Driver Market D	Benefits Demand				
	Main Driver Market D Main Driver Explanation Also esse	Benefits Demand				

Enabled Projects

	CBCA		Financial Assistance	ce	
Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer Additional Comments	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments General Comments		(3) No, we have not No de	applied for CE N N ecision yet take N
	LNG ter	minal Krk			
	Project		LNG Termina	I N	on-FID
LNG-N-82	FIOJECT				
LNG-N-82 Update Date		/05/2018			lvanced
Jpdate Date		be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to	d of Krk, Republic of C ninal. o 2.6 bcm/y in the firs	Ac Croatia. The project t development stag	is planned to
Jpdate Date Description PRJ Code - PRJ Name	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys	d of Krk, Republic of C minal. 5 2.6 bcm/y in the firs tem and 7 bcm/y in fi	Ac Croatia. The project t development stag	is planned to
Update Date Description PRJ Code - PRJ Name Capacity Increments Variant	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and	d of Krk, Republic of C minal. 5 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond	Ac Croatia. The project t development stag inal stage.	is planned to ge of
Jpdate Date Description PRJ Code - PRJ Name Capacity Increments Variant	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat t For Modelling Operator	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and Year	d of Krk, Republic of C ninal. 2 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond From Gas System	Ac Croatia. The project t development stag inal stage. To Gas System	is planned to ge of Capacity
Jpdate Date Description PRJ Code - PRJ Name Capacity Increments Variant	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and	d of Krk, Republic of C minal. 5 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond From Gas System LNG_Tk_HR	Ac Croatia. The project t development stag inal stage. To Gas System HR	is planned to ge of Capacity
Update Date Description PRJ Code - PRJ Name Capacity Increments Variant Point	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat t For Modelling Operator	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and Year	d of Krk, Republic of C minal. 5 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond From Gas System LNG_Tk_HR	Ac Croatia. The project t development stag inal stage. To Gas System	is planned to ge of
	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat t For Modelling Operator LNG Hrvatska d.o.o.	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and Year 2019	d of Krk, Republic of C ninal. 2 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond From Gas System LNG_Tk_HR CC LNG_Tk_HR	Ac Croatia. The project t development stag inal stage. To Gas System HR HR	is planned to ge of Capacity 82.0 GWh/d 110.0 GWh/d
Update Date Description PRJ Code - PRJ Name Capacity Increments Variant Point	22/ The import terminal for the liquefied natural gas (LNG) will be developed in two phases - in first phase as FSRU and in First phase is planned to be developed as FSRU solution, wi transmission system of Republic of Croatia, up to 3.5 bcm/y PRJ-G-004 - Krk LNG terminal with connecting and evacuat t For Modelling Operator LNG Hrvatska d.o.o.	be situated in Omišalj on the Islan second phase as onshore LNG terr ith correspondent capacity of up to y after upgrade of transmission sys ion pipelines towards Hungary and Year 2019	d of Krk, Republic of C ninal. 2 2.6 bcm/y in the firs tem and 7 bcm/y in fi d beyond From Gas System LNG_Tk_HR CC LNG_Tk_HR	Ac Croatia. The project t development stag inal stage. To Gas System HR bomment: 2.6 bcm/y HR	is planned to ge of Capacity 82.0 GWh/d 110.0 GWh/d

Current TY	'NDP :	TYNDP	2018	FINAL -	Annex A
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							1 age 15 01 57 5
Sponsors					General Information	ND	OP and PCI Information
HEP d.d.			50%	Promoter	'NG Hrvatska d.o.o. za poslovanje ukapljenim prirodnim plinom	Part of NDP	Yes (DESETOGODISNJI PLAN RAZVOJA PLINSKOG TRANSPORTNOG SUSTAVA
Plinacro d.o.o.			50%	Operator	LNG Hrvatska d.o.o.		REPUBLIKE HRVATSKE 2018 2027.)
				Host Country	Croatia	NDP Number	LNG terminal on the island of Krk
				Status	Planned	NDP Release Date	01/11/2017
				Website	Project's URL	NDP Website	NDP URL
					-	Currently PCI	Yes ()
						Priority Corridor(s)	NSIE
Schedule	Start Date	End Date				Thi	rd-Party Access Regime
Pre-Feasibility		01/2013				Considered TPA Reg	ime Not Applicable
Feasibility	07/2012	01/2014				Considered Tariff Reg	gime Not Applicable
FEED	03/2017	12/2017				Applied for Exemption	on No
Permitting	10/2013	05/2018				Exemption Granted	No
Supply Contracts							
FID		06/2018				Exemption in entry d	lirection 0.00%
Construction	06/2018	11/2019				Exemption in exit dir	rection 0.00%
Commissioning	2019	2023					

Current TYNDP : TYNDP 2018 FINAL - Annex A

			Technical Info	rmation (LN	G)				
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 Fact (%)
The import terminal for t liquefied natural gas(LNC the Island of Krk		1st phase	2.6	160,000	7.12	160,000	FSRU not determined yet	2019	100
The import terminal for t liquefied natural gas(LNC the Island of Krk		1st phase	3.5	0	2.47	0	After upgrade of transmission system network	2020	100
The import terminal for t liquefied natural gas(LNC the Island of Krk		1st phase	7.0	0	9.59	0	After upgrade of transmission system network	2023	100
			Fulfilled	Criteria					
Specific Criteria Fulfilled	Comp	etition Market Integ	ration, Security of Supply, S						
Specific Criteria Fulfilled		0							
•									
			Time Sc	hedule					
Grant Obtention Date	18/12/	2017							
Delay Since Last TYNDP	None								
Delay Explanation	In com	parison with last TYN	NDP, the project is reschedu	led with ne	w beginning of	f operation from	n year 2019.		
			Expected G	as Sourcing					
Gas sourcing will be dec	ded by LNG termin	nal capacity users, wł	no will have the freedom to	arrange gas	supplies and	gas origin			
			Ben	ofits					
			Den	anto -					
Vain Driver	Regulation SoS								
Main Driver			is in possibility of providin						
Main Driver Main Driver Explanation	Importance of LNG Austria, Italy, Gern Herzegovina, Ukra	nany, Czech Republic aine, Romania, and B	is in possibility of providing , Slovak Republic, former Y ulgaria. Gas supply in the re supply route in the region.	ugoslav Rep	ublic of Maced	donia, Albania, k	Cosovo, Serbia, Mo	ontenegro, Bosnia	and

Barriers Barrier Type Description Regulatory 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 Granting permit was approved in 09/2015. For the FSRU solution of the project permits will be modified / obtained accordingly. 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 Political documents and permits for the project implementation. Market Background Analysis was carried out and it indicated that the market has commercial potential. Open Season procedure will serve as an official Market confirmation of that analysis. The binding phase of Open Season is currently being carried out. Availability of funds and associated conditions Financing **Intergovernmental Agreements Agreement Description** Is Signed Agreement Signature Date Agreement Memorandum of Understanding **CESEC MoU** Yes 10/07/2015 **Financial Assistance CBCA** (1) Yes, we have applied for CEF and we have received a Yes, we have submitted an investment request and have Applied for CEF Decision received a decision decision Submissin Date 09/07/2016 Grants for studies Yes Decision Date 12/10/2016 Grants for studies amount Mln EUR 6 CBCA URL Website Grants for works Yes Croatia, Hungary Countries Affected Mln EUR 101 Grants for works amount Intention to apply for CEF No decision yet taken Countries Net Cost Bearer Croatia Additional Comments Other Financial Assistance Yes At European level, funding programme IPF TA (Western Balkans Investment Framework) financed – Conceptual Comments Solution, Feasibility Study, EIA/SIA and Conceptual Design in amount of 1 mil €

General Comments

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LNG Evacuation Pipeline Kozarac-Slobodnica

TRA-N-1058	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Advanced
Description	Gas pipeline Kozarac - Slobodnica jointly with gas pipeline sytem Zlobin - Main Evacuation Pipeline connecting LNG from the LNG solution on the is is a continuation of the existing Hungary – Croatia interconnection (gas pi 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.	land of Krk with Central Eastern European counties.	The pipeline system
PRJ Code - PRJ Name	PRJ-G-004 - Krk LNG terminal with connecting and evacuation pipelines to	wards 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
Deres and the her	Plinacro Ltd	2023	HR	HU	54.3 GWh/d
Dravaszerdahely	Plinacro Ltd	2023	HU	HR	135.9 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	1.32
		Host Country	Croatia	NDP Release Date	15/12/2017
		Status	Planned	NDP Website	<u>NDP URL</u>
		Website	Project's URL	Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

Irrent TYNDP : TYND	P 2018 FINAI	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	09/2015	10/2016
FEED		
Permitting	09/2014	01/2023
Supply Contracts		
FID		01/2020
Construction	01/2021	01/2023
Commissioning	2023	2023

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

Pipeline Section	Pipeline Comment	Diameter	Length	Compressor Power	Comissioning
		(mm)	(km)	(MW)	Year
Kozarac-Slobodnica		800	128		
	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 t transmission connector of great significance and is an integral part of the No Adriatic) Gas Connection. Its purpose is linking the Polish and the Croatian L all the pipelines to which it connects and the associated gas nodes) will prov transmission requirements and will maximise the value of the IAP and LNG p use of the existing system and the new interconnection with Hungary.	orth – South European NG (Liquefied Natural vide gas transmission ir	Corridor Gas) solu all direc	named as the North- tions. This gas pipelir tions, i.e. it will satisfy	-South (Baltic – ne (as well as 7 all

THEIR TIME . TIME	2018 FINAL - Annex A		Page 20 of 575
	Time S	chedule	
Grant Obtention Date	24/11/2015		
Delay Since Last TYNDP			
Delay Explanation	Project depend on LNG project		
	Expected G	Gas Sourcing	
LNG (), it will be gas fror	n Croatia transport system, Croatian UGS and all import routes (LN	NG and IAP)	
	Ber	nefits	
Main Driver	Market Demand		
Main Driver Explanation	This gas pipeline passes only through the territory of the Republic pipeline from the LNG solution on the island of Krk towards Hun with Hungary so it has influence on Hungary but also further on Bosnia and Herzegovina by constructing interconnection with the	gary and it is its main role. This g Slovakia and Ukraine. The gas pip	as pipeline increases utilisation of the interconnection
Benefit Description	the Ionian-Adriatic Pipeline , towards CEE and SEE countries. At t Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG termi secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nsmission via Ukraine after 2019 2	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the
Benefit Description	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nsmission via Ukraine after 2019 2	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance
	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nsmission via Ukraine after 2019 2	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of
	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nsmission via Ukraine after 2019 2 tiveness and lower price	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio
Pecision	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nomission via Ukraine after 2019 2 tiveness and lower price Applied for CEF Grants for studies	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio
Decision ubmissin Date	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nsmission via Ukraine after 2019 2 tiveness and lower price	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio Ye
Decision Submissin Date Decision Date	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nomission via Ukraine after 2019 2 tiveness and lower price Applied for CEF Grants for studies Grants for studies amount	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio Ye
Decision ubmissin Date Decision Date Vebsite	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nomission via Ukraine after 2019 a civeness and lower price Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decisio Ye
Decision Submissin Date Decision Date Vebsite Countries Affected	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop nomission via Ukraine after 2019 2 tiveness and lower price Applied for CEF Grants for studies Grants for studies amount Grants for works	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the Financial Assistance (1) Yes, we have applied for CEF and we have received of decision Yee No decision yet take
Benefit Description Decision Submissin Date Decision Date Vebsite Countries Affected Countries Net Cost Bear Additional Comments	Hungary, Slobodnica-Donji Miholjac-Dravaszerdahely, it presents the aim of which is to connect the Polish and Croatian LNG term secure supply of CEE and SEE countries, which are heavily depend project and the announcement regarding termination of gas tran previously mentioned threats fail to occur) and thereby competit CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	s the Croatian part of the strategi inal. The most important impacts dent on the Russian gas and jeop normission via Ukraine after 2019 2 civeness and lower price Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	ic transregional gas pipeline connection Adriatic-Baltic and benefits of this project: 1. It provides viable and bardized by the Russian giving up on the South Stream 2. It provides diversification of supply (also in case the

TRA-F-918	Project	Pipeline including CS	FID
Update Date	20/03/2018		Advanced
Description	The project "Capacity4Gas – CZ/SK" is a subproject of the overall project Capacity4 the interconnection point Lanžhot between the Czech Republic and Slovakia. The of the Czech Republic (NET4GAS, s.r.o.) and Slovakia (eustream, a.s.) The project reauction in March 2017.	project is jointly coordinated by the transm	ission system operators
PRJ Code - PRJ Name	PRJ-G-005 - CZ/SK Capacity4Gas Project - Capacity increase at IP Lanžhot		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	NET4GAS, s.r.o.	2020	CZ	SK	333.0 GWh/d
Lanžhot	Comment: The incremental cap	acity represents appl	rox. exit capacity exter	nsion at the CZ/SK	
				border	•

Sponsors			General Information	ND	P and PCI Information
Czech Republic		Promoter	NET4GAS, s.r.o.	Part of NDP	Yes (CZ NDP 2018-2027 (currently
NET4GAS, s.r.o.	100%	Operator	NET4GAS, s.r.o.		under approval process))
Slovakia		Host Country	Czechia	NDP Number	TRA-F-918
	1000/	Status	Planned	NDP Release Date	31/10/2017
eustream, a.s.	100%	Website	Project's URL	NDP Website	<u>NDP URL</u>
				Currently PCI	No

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Priority Corridor(s)

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Schedule	Start Date	End Date
Pre-Feasibility		04/2017
Feasibility		
FEED	04/2017	06/2018
Permitting	03/2018	08/2018
Supply Contracts		02/2019
FID		03/2017
Construction	05/2019	09/2020
Commissioning	2020	2020

Pipelines and Compressor Stations		
Pipeline Section	Pipeline Comment	Diameter Length Compressor Power Comissioning (mm) (km) (MW) Year
Capacity4Gas - CZ/SK		2020
	Total	

		Benefits
Main Driver	Market Demand	
Main Driver Explanatio	n Result of capacity auction	

Benefit Description

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

Capacity increase at IP Lanžhot entry

TRA-F-902	Project	Pipeline including CS	FID
Update Date	27/03/2018		Advanced
Description	The goal of the project Capacity increase at IP Lanžhot (Entry - Eustream) is the upp incremental capacity will be secured by construction of a new compressor station in Republic. This solution represents prerequisite for market integration in the Centra mitigating impact on environment via utilization of existing transmission corridor.P is to provide sufficient future transit capacity for delivery of gas for the region of C marketsas well as ensuring security of supplies to Ukraine.	n the territory of western Slovakia near the I European region and requested flexibility Project is also developed in the context of I	e border with the Czech / for transmission Eastring project, the aim
PRJ Code - PRJ Name	PRJ-G-005 - CZ/SK Capacity4Gas Project - Capacity increase at IP Lanžhot		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Lanžhot	eustream, a.s.	2019	CZ	SK	884.0 GWh/d

Sponsors		Ge	General Information		NDP and PCI Information		
eustream, a.s.	100%	Promoter	eustream,a.s. (a joint-stock company)	Part of NDP	Yes (National Development Plan 2018- 2027)		
		Operator	eustream, a.s.	NDP Number	4.1.1.3. Lanžhot		
		Host Country	Slovakia	NDP Release Date	30/11/2017		
		Status	In Progress	NDP Website	NDP URL		
		Website	<u>Project's URL</u>	Currently PCI	No		
				Priority Corridor(s)	NSIE, SGC		

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		06/2015
Feasibility	06/2015	10/2015
FEED	09/2015	07/2017
Permitting	08/2017	02/2018
Supply Contracts		01/2017
FID		12/2017
Construction	02/2018	11/2019
Commissioning	2019	2019

Pipelines and Compress	or Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Capacity increase at IP L	inžhot entry			46	2019
	Total			46	
	Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP	no				
Delay Explanation					
	Expected Gas Sourcing				
Norway, Russia, Spot					
	Benefits				
Main Driver	Market Demand				
Main Driver Explanation	Capacity was auctioned via the PRISMA platform in the yearly auction in March 2017 .				
Benefit Description	Effort to utilize existing gas infrastructure at maximum mitigating environmental impacts and Czech Republic, Slovakia, Austria, Italy and other countries in the region supporting efforts of in the context of Eastring project, the aim is to provide sufficient future transit capacity for del countries, as well as ensuring security of supplies to Ukraine as well as integration of CEE/SEE	CZ and AT marke livery of gas for t	et integra he regior	ition (TRU option pro n of CEE/SEE region, r	ject). Project is

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	Barriers				
Barrier Type	Description				
Regulatory	Capacity quotas				
Regulatory	Low rate of return				

	CBCA	Finar	ncial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to apply
Countries Net Cost Bearer		Other Financial Assistance	No
	Current technical capacity at the Czech side is 913,7	Comments	
	GWh/d. Incremental capacity on the Czech side based	General Comments	
	on Capacity increase at IP Lanžhot entry realization will be 333 GWh/d		
	Current technical capacity at the Slovak side is 697		
Additional Comments	GWh/d. Incremental capacity on the Slovak side based		
	on Capacity increase at IP Lanžhot entry realization will		
	be 884 GWh/d		
	It means that incremental capacity which should be		
	taken into account for modelling is 549,7 GWh/d.		

Poland - Slovakia Gas Interconnection (PL section)

TRA-F-275	Project	Pipeline including CS	FID
Update Date	22/05/2018		Advanced
Description	The main goal of the project is to create an important part of the North-S missing interconnection between the transmission systems in Poland and Europe through the diversification of supply sources and routes, as well a functionality. The project consists of Poland-Slovakia Interconnector and functionality of the Interconnection.	d Slovakia and, thus, increase the security of gas suppli as integration of Sub-Carpathian Market Area and enh	ies in Central-Eastern ancing market

08/2016

2021

08/2018

2021

PRJ Code - PRJ Name

Permitting

Construction Commissioning

FID

Supply Contracts

PRJ-G-008 - Poland – Slovakia Gas Interconnection

0.00%

0.00%

Not Relevant

Point		Operator		Year F	rom Gas System	To Gas System	Capacity
Interconnector PL - SK		GAZ-SYSTEM S.A.		2021	PL	SK	143.9 GWh/d
		GAZ-SYSTEM S.A.		2021 SK		PL	174.5 GWh/d
Sponsors		General Info	rmation		NDP and	PCI Information	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of N	L)P	es (National Ten-Ye	
		Operator	GAZ-SYSTEM S.A.	i dit oi i i	Sys	tem Development	Plan 2018-2027)
		Host Country	Poland	NDP Nur	nber		N/A
		Status	Planned	NDP Rele	ease Date		
		Website	Project's URL	NDP We	osite		<u>NDP URL</u>
				Currently	PCI		Yes ()
				Priority C	Corridor(s)		NSIE
Schedule Start Date End Date					Third-Par	ty Access Regime	
re-Feasibility				Consider	ed TPA Regime		Regulated
easibility				Consider	ed Tariff Regime		Regulated
EED 04/2015 08/2018				Applied f	or Exemption		No

Exemption Granted

Exemption in entry direction

Exemption in exit direction

Pipelines and Compressor Stations						
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year	
CS Strachocina	up to 30 MW			30		
PL-SK Interconnection - Polish section	on	1,000	58			
Pogórka Wola - Tworzeń pipeline		1,000	160			
Strachocina - Pogórska Wola pipelir	e	1,000	98			
Tworóg - Tworzeń pipeline		1,000	56			
	Total		372	30		
	Fulfilled Criteria					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability					
Specific Criteria Fulfilled Comments	Market integration: - Creation of a well-integrated and functioning market in the CEE region. SoS: - Mitigation of exposure to supply disruptions in CEE countries; - Reduction of dependence on gas supplies from Russia in the CEE region. Competition: - Reduction of price differences between the CEE and North-West regions; - Enhanced access to new sources of supply in the CEE region (LNG, NO supplies). d) Sustainability - Reduction of emissions in the CEE region by promoting natural gas in national economies.					

	Benefits
Main Driver	Others
Main Driver Explanation	Increase of SoS in the CEE region. Integration of gas infrastructure in the CEE region by constructing a cross-border Interconnection between PL and SK that is currently missing.
Benefit Description	Implementation of PL-SK Interconnection will have an impact on: creating the cross-border capacity between Poland and Slovakia by establishing a large transportation corridor that will allow for flexible transport of gas in Central Europe within the North-South axis; increasing the security of gas supply and diversification of supply routes for the CEE region; improving European gas grid interconnection; increasing the security and reliability of the cross-border gas transmission between Slovakia and Poland (contribution to N-1 standard in Poland and Slovakia); creating a robust, well-functioning internal market in Slovakia and Poland and promote the competition.
	Barriers
Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the Project.

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

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date	31/10/2013	Grants for studies	Yes
Decision Date	28/11/2014	Grants for studies amount	
Website	<u>CBCA URL</u>	Grants for works	Yes
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	Yes
		Comments	Structural Funds (Operational Programme Infrastructure and Environment 2014-2020): - Pogórska Wola - Tworzeń; - Strachocina - Pogórska Wola; - Tworóg - Tworzeń.
		General Comments	

Poland - Slovakia interconnection

TRA-F-190	Project	Pipeline including CS	FID
Update Date	18/12/2018		Advanced
Description	Construction of a missing interconnection between Slovak and Polish transmission gas market via diversification of gas routes and sources. Security of supply will be t region.	, ,	5
PRJ Code - PRJ Name	PRJ-G-008 - Poland – Slovakia Gas Interconnection		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	eustream, a.s.	2021	PL	SK	144.0 GWh/d
Interconnector DL SK	Comment: Commissioning	has been postponed to	09/2021 based on tin	ne schedule update	>
Interconnector PL - SK	eustream, a.s.	2021	SK	PL	174.6 GWh/d

Comment: Commissioning has been postponed to 09/2021 based on time schedule update

Sponsors			General Information		NDP and PCI Information		
eustream, a.s.	100%	Promoter	eustream,a.s. (a joint-stock company)	Part of NDP	Yes (National Development Plan 2018- 2027)		
		Operator	eustream, a.s.	NDP Number	4.1.1.3PL-SK		
		Host Country	Slovakia	NDP Release Date	30/11/2017		
		Status	Planned	NDP Website	<u>NDP URL</u>		
		Website	Project's URL	Currently PCI	Yes ()		
				Priority Corridor(s)	NSIE		

Current TYNDP : TYI	NDP 2018 FINAI	- Annex A
Schedule	Start Date	End Date
Pre-Feasibility		05/2013
Feasibility	05/2011	07/2013
FEED	10/2015	04/2018
Permitting	08/2015	09/2018
Supply Contracts		10/2019
FID		03/2018
Construction	05/2018	11/2020
Commissioning	2021	2021

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment		Length (km)	Compressor Power (MW)	Comissioning Year
Slovak section	Existing compressor station at Veľké Kapušany will be modified in order to reach the most optimal technical solution without creation of stranded assets.	1,000	106	0	2021
	Total		106	0	
	Fulfilled Criteria				l.
Specific Criteria Fulfilled	Competition, inter alia through diversification of supply sources, supplying counterpart lifting the isolation of at least one Member State and reducing energy infrastructure b of Supply, inter alia through appropriate connections and diversification of supply sou inter alia through reducing emissions, supporting intermittent renewable generation a	ottlenecks; ir irces, supplyi	iteropera ng count	bility and system flex erparts and routes, Se	ibility, Security ustainability,
Specific Criteria Fulfilled Comments	Construction of new interconnection between markets enables new trade exchange b region. This will force the markets into price convergence process – its effectiveness is national consumptions and various trade barriers. Creating new transport routes and benefits all consumers on the market by lower prices. Most of the European countries gas consumption by indigenous production. There is a large historical dependence on mostly around one supply source. Considering gas as an energy source it is vitally imp security risks. Robust infrastructure helps to mitigate these risks. Gas as a clean fossil f source.	dependent o access to new are able to c Russian supp oortant to div	n the inte gas sou over only lies of ga ersify sup	erconnector's capacit rces lowers these prio a small or minimal f as which concentrates oply sources in order	y relative to ces and thus raction of thein s the risks to prevent

Current TYNDP : TYNDP 2018	3 FINAL - Annex A	Page 32 of 575						
	Time Schedule							
Grant Obtention Date	18/12/2017							
Delay Since Last TYNDP	Yes							
Delay Explanation	1)Unexpected decision of the relevant building authority to merge the localisation proceedings prior to obtain for the pipeline and the compressor station and subsequent obligation to update Zoning Plans of Košice and 2)Delay in finalization of the cross-border environmental impact assessment by the Slovak and the Polish natu authorities.3)Necessity to prolong public procurement proceeding due to the request of tenderers for extension of the initial tender bids. 4)Prolongation of the tendering process caused postponement of submission of doc bidder all caused delay of detailed engineering. 5)Request of DG ENVIRO to deliver updated appropriate envir according to the chosen final routing of the pipeline.	Prešov Self-governing Regions. Ire protection on of time period for submission umentation by the winning						

Expected Gas Sourcing

Caspian Region, Norway, LNG (QA,US), Turkish hub, Adriatic and Black sea sources, Southern Corridor,

	Benefits
Main Driver	Others
Main Driver Explanation	1, Incease of SoS in the CEE region and potentially also to the Baltic region after constructing gas infrastructure between Poland and Baltic states Integration of gas infrastructure in the CEE region by constructing a cross-border interconnection between PL and SK that is currently missing. 2, Price convergence based on new gas supply sources and routes 3. decrease of market concentration on producers side 4, Decrease of carbon emissions
Benefit Description	
	Barriers
Barrier Type	Description
Permit Granting	- Long term and difficult permitting process with regional counties - project unfriendly approach by local citizens relating to acceptance of the Project with significant impact on land acquisition in spite of many public consultations and public meetings
Regulatory	Low rate of return
Financing	Availability of funds and associated conditions
Market	Lack of market support

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Intergovernmental Agreements						
Agreement	Agreement Description		Is Signed	Agreement Signature Date		
Agreement between the Government of the Slovak Republic and the Government of the Republic of Poland for cooperation on the implementation of the project of a gas pipeline connecting the Slovak transmission system and Polish transmission system	Intergovernmental agreement		Yes	22/11/2013		

	CBCA	Financial Assistance			
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision		
Submissin Date	31/10/2013	Grants for studies	Yes		
Decision Date	28/11/2014	Grants for studies amount	Mln EUR 3		
Website	<u>CBCA URL</u>	Grants for works	Yes		
Countries Affected	Czechia, Hungary, Poland, Slovakia, Ukraine	Grants for works amount	Mln EUR 55		
Countries Net Cost Bearer		Intention to apply for CEF	No, we do not plan to apply		
	It is expected that CAPEX and OPEX will be modified	Other Financial Assistance	Yes		
Additional Comments	because of a decision (12/2017) not to contruct new compressor units at Veľké Kapušany but to technologically modify the existing compressor station at Veľké Kapušany. This will have a positive impact on CAPEX. However it will mean a slight increase of OPEX at eustream´s side. At this moment the project documents are being updated. It means that updated CAPEX and OPEX are not known.	Comments General Comments	TEN – E : EU Commission Decision C (2012)8546 granting financial aid for the project "Study : Pre – feasibility study for the Gas Interconnector Poland – Slovakia (Identification of the business case and preparation of pre- feasibility study)" (action duration: 01.03.2011 – 31.05.2013).		

TRA-N-342	Project	Pipeline including CS	Non-FID
Update Date	21/11/2018		Non-Advanced

Description	The project aims at enhancing the capacity of the gas systems interconnection Latvia-Lithuania, ensuring safe and reliable natural gas supply, and achieving a more effective use of the infrastructure and better integration of the gas markets of the Baltic States. It is beneficial and important for the creation of the regional gas market. After the implementation of the project, the bi-directional capacity between Latvia and Lithuania will be increased up to 124.8 GWh (12 MCM) per day. The project is conditional upon other projects diversifying gas flows to be carried out in the Baltic
	States.

PRJ Code - PRJ Name PRJ-G-010 - Latvia - Lithuania interconnection

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Kiemenei	AB Amber Grid	2020	LV	LT	60.0 GWh/d		
Kiemenai	AB Amber Grid	2020	LT	LV	57.4 GWh/d		

Sponsors			Gene	ral Information	NDP and PCI Information		
AB Amber Grid		100%	Promoter	AB Amber Grid	Part of NDP	Yes (Network Development Plan 2017-	
			Operator	AB Amber Grid		2026)	
			Host Country	Lithuania	NDP Number	n/a	
			Status	Planned	NDP Release Date	18/01/2018	
			Website	Project's URL	NDP Website	<u>NDP URL</u>	
					Currently PCI	Yes ()	
					Priority Corridor(s)	BEMIP	
Schedule	Start Date	End Date			Third-Party Access Regime		
Pre-Feasibility					Considered TPA Regim	ne Regulated	
Feasibility	10/2017	09/2018			Considered Tariff Regi	me Regulated	
FEED	09/2018	04/2019			Applied for Exemption	No	
Permitting	05/2019	01/2020			Exemption Granted	No	
Supply Contracts							
FID		01/2020			Exemption in entry dire	ection 0.00%	
Construction	01/2020	12/2020			Exemption in exit direc	ction 0.00%	
Commissioning	2020	2020					

Fulfilled CriteriaSpecific Criteria FulfilledCompetition, Market Integration, Security of Supply, Sustainability
The project will remove the exsisting bottleneck of supply limitations and create the adequate infrastructure to fully use the benefits of other
infrastructure as well as contribute to the implementation of internal energy market to the Baltic States and Finland. It will ensure safe and

reliable supply of gas. The project will contribute to the sustainability and increase of diversification of sources in the region.

Expected Gas Sourcing

Norway, LNG (NO)

Benefits							
Main Driver	Market Demand						
Main Driver Explanation	Main Driver Explanation Increased gas flows between Latvia and Lithuania.						
Benefit Description	The enhancement of bi-directional capacity of up to up to 124.8 GWh (12 MCM) per day between Latvia and Lithuania will increase the opportunities for a cross-border trade, higher usage of Latvia's UGS and ensure safe and reliable natural gas supply, flexibility of the transmission systems both in Lithuania and Latvia and better integration of the gas markets of the Baltic States.						

	CBCA		Financial Assistance		
Decision	No, we have not submitted an investment request yet, but we do plan to submit it	Applied for CEF	(1) Yes, we have applied for CEF	and we have received a decision	
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			
	Balticconnect	or Finnish part			
TRA-F-928	Project		Pipeline including CS	FID	
Update Date	18/	Update Date 18/12/2018			

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DescriptionNew bidirectional offshore pipeline (Inkoo-Paldiski, DN500, 80 bar) of 80 km, plus 50 km onshore pipeline in Estonia (Kiili-Paldiski pipeline, DN 700,
55 bar) and 20 km onshore pipeline in Finland (Siuntio-Inkoo pipeline, DN500, 80 bar) including metering and compressor stations at both ends with
a daily nominal capacity of 7.2 mcm/day. The power of each compressor station is about 10 MW.

PRJ Code - PRJ Name PRJ-G-011 - Interconnection Estonia – Finland

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Politiceonnector / Ciuntia (El)	Baltic Connector Oy	2019	FI	FI/BAC	80.0 GWh/d		
Balticconnector / Siuntio (FI)	Baltic Connector Oy	2019	FI/BAC	FI	80.0 GWh/d		
Politiconnector (Politicki (EE)	Baltic Connector Oy	2019	EE	FI/BAC	80.0 GWh/d		
Balticonnector / Paldiski (EE)	Baltic Connector Oy	2019	FI/BAC	EE	80.0 GWh/d		

Sponsors			General Information		NDP and PCI Information		
EE Kiili pressure reduction station		Promoter	Baltic Connector Oy	Part of NDP	No ((5) others - please comment below)		
Elering AS	100%	Operator	Baltic Connector Oy	NDP Number			
EE Kiili-Paldiski pipeline		Host Country	Finland	NDP Release Date			
Elering AS	100%	Status	In Progress	NDP Website			
		Website	<u>Project's URL</u>	Currently PCI	Yes ()		
EE Paldiski metering and Compressor station Elering AS	100%			Priority Corridor(s)	BEMIP		
FI Inkoo metering and compressor station							
Baltic Con <mark>nector O</mark> Y	100%						
FI Inkoo-Siuntio pipeline							
Baltic Connector OY	100%						
FI-EE Inkoo-Paldiski Offshore pipeline							
Elering AS	50%						
FI-EE Inkoo-Paldiski Offshore pipeline							
Baltic Connector OY	50%						

rrent TYNDP : T	NDP 2018 FINA	L - Annex A	
Schedule	Start Date	End Date	Third-Party Acce
re-Feasibility		12/2005	Considered TPA Regime
easibility	01/2006	12/2006	Considered Tariff Regime
EED	01/2016	05/2017	Applied for Exemption
ermitting	12/2012	05/2018	Exemption Granted
upply Contracts		10/2017	
ID		10/2016	Exemption in entry direction
Construction	11/2017	12/2019	Exemption in exit direction
Commissioning	2019	2019	

Pipelines and Compressor Sta	ntions					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
EE Onshore		Kiili-Paldiski onshore pipeline, Paldiski compressor station	700	50	10	
FI Onshore		Inkoo-Siuntio pipeline, Inkoo compressor station	500	20	10	
Offshore		Inkoo-Paldiski offshore pipeline	500	80		
	Total			150	20	
		Fulfilled Criteria				
Specific Criteria Fulfilled	lifting the isolation of at leas of Supply, inter alia through	gh diversification of supply sources, supplying counterp t one Member State and reducing energy infrastructure appropriate connections and diversification of supply so missions, supporting intermittent renewable generation	bottlenecks; ir ources, supplyi	nteropera ng count	bility and system flex erparts and routes, S	kibility, Security ustainability,
	and improve the energy secu	nector natural gas pipeline project is to interconnect the urity of the Baltic-Finnish region. The integration of the F	innish and Est	onian ga	s infrastructures will e	ensure a more

specific Criteria Fulfilled Comments specific Criteria Fulfilled Comments coherent and diverse natural gas transmission network in the Baltic Sea region, guarantee the security of natural gas supply for the northeastern Member States of the EU by lifting Finland out of the current energy isolation and enhance EU energy solidarity by providing needed technical implementations for energy independence. The projects also target increased regional cooperation and have a strong focus on consumers and vulnerable energy customers. The aim is to move to Finnish-Baltic single entry-exit zone, which has been identified as the best fit solution in the "Baltic regional gas market study" and is expected to increase competition in the gas market.

Current TYNDP : TYNDF	P 2018 FINAL - Annex A	Page 38 of 575
	Time Schedule	
Grant Obtention Date	21/10/2016	
Delay Since Last TYNDP		
Delay Explanation		
	Expected Gas Sourcing	
Russia, LNG (?)		
	Benefits	
Main Driver	Regulation-Interroperability	
Main Driver Explanation	Balticconnector will lift Finland out of the current energy isolation and will provide Finland an opportunity to join in the European single g terminate the derogations on the EU gas market legislation.	jas market and to
Benefit Description	Project has several qualitative and quantitative benefits, such as inccrease in energy security, price convergence in the region, development market etc.	nt of the energy

	CBCA	Financial Assistance			
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision		
Submissin Date	06/04/2016	Grants for studies	Yes		
Decision Date	22/04/2016	Grants for studies amount	Mln EUR 0		
Website	<u>CBCA URL</u>	Grants for works	Yes		
Countries Affected	Finland, Latvia	Grants for works amount	Mln EUR 0		
Countries Net Cost Bearer	Estonia	Intention to apply for CEF			
Additional Comments		Other Financial Assistance	No		
		Comments			
		General Comments			

Reverse Flow Transitgas Switzerland					
TRA-F-230	Project	Pipeline including CS	FID		
Update Date	30/03/2018		Advanced		

Modification of the compressor station at Ruswil, the valve station at Lostorf and the metering station at Wallbach to allow the reversal of the border Description interconnection points at Gries Pass, Wallbach and Oltingue and a south-north use of the Transitgas pipeline. PRJ Code - PRJ Name

PRJ-G-012 - Bidirectional flows between Italy and Germany and France through Switzerland

Capacity Increments Variant For Modelling								
Point	Operator	Year	From Gas System	To Gas System	Capacity			
Griespass (CH) / Passo Gries (IT)	FluxSwiss	2018	IB-ITe	СН	440.0 GWh/d			
Oltingue (FR) / Rodersdorf (CH)	FluxSwiss	2018	СН	IB-FR1	200.0 GWh/d			
Wallbach	FluxSwiss	2018	СН	DEn	240.0 GWh/d			

Sponsors				General Information	NDP and PCI Information		
FluxSwiss		100%	Promoter	FluxSwiss	Part of NDP	No ((2) no NDP exists in the	country)
	7		Operator	FluxSwiss	NDP Number		
			Host Country	Switzerland	NDP Release Date		
			Status	In Progress	NDP Website		
			Website	Project's URL	Currently PCI		No
					Priority Corridor(s)		
Schedule	Start Date End	l Date			Third-	Party Access Regime	
Pre-Feasibility					Considered TPA Regim	e Not Aj	oplicable
Feasibility					Considered Tariff Regir	ne Not Ap	oplicable
FEED					Applied for Exemption		No
Permitting					Exemption Granted	Not	Relevant
Supply Contracts							
FID					Exemption in entry dire	ection	0.00%
Construction					Exemption in exit direc	tion	0.00%
Commissioning	2018	2018					

Algeria,	Caspian	Region,	Libya,	Russia,	LNG	(IT)	
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		Benefits
Main Driver	Others	
Main Driver Explana	ation	
Benefit Description		

Expected Gas Sourcing

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

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TRA-F-208	Project	Pipeline including CS	FID
Update Date	30/03/2018		Advanced
Description	The project includes reversing of CS Hügelheim to allow gas coming from sout construction of a deodorisation plant near the German-Swiss border, to allow gas Additionally, an upgrading of the flow patterns of the CS Mittelbrunn and mod of the TENP-pipeline will be necessary. Fluxys TENP & Open Grid Europe will be project.	gas coming from France to be transported thr lifications to all necessary installations to ensu	rough the CBP Wallbach. re the by-directionality
PRJ Code - PRJ Name	PRJ-G-012 - Bidirectional flows between Italy and Germany and France through	h Switzerland	

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Wallbach	Fluxys TENP GmbH	2018	СН	DEn	240.0 GWh/d		

Sponsors		General Information		NDP and PCI Information	
Fluxys TENP GmbH	64%	Promoter	Fluxys TENP GmbH & Open Grid Europe GmbH	Part of NDP	Yes (Netzentwicklungsplan Gas 2016- 2026)
Open Grid Europe GmbH	35%	Operator	Fluxys TENP GmbH	NDP Number	305-02
		Host Country	Germany	NDP Release Date	16/10/2017
		Status	In Progress	NDP Website	<u>NDP URL</u>
		Website	Project's URL	Currently PCI	Yes ()
				Priority Corridor(s)	NSIW

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		01/2015
Feasibility	10/2012	01/2015
FEED	07/2016	12/2016
Permitting	12/2016	01/2018
Supply Contracts		04/2018
FID		01/2015
Construction	06/2017	06/2018
Commissioning	2018	2018

Fulfilled Criteria					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	Liquefaction of natural gas market trading points in Europe (PSV & NCG), by transforming a unidirectional route towards a bidirectionality route. All consumers on the route will have an extra source of supply improving their SoS. The project enables a maximum use of existing infrastructure in a bidirectional way. By making the markets more liquid, the shippers have more choices in supply sources and routes and profit from competition.				

Expected Gas Sourcing

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

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

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	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	Yes
Countries Affected		Grants for works amount	Mln EUR 0
Countries Net Cost Bearer		Intention to apply for CEF	
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

Reverse capacity from CH to FR at Oltingue

TRA-F-45	Project	Pipeline including CS	FID			
Update Date	29/03/2018		Advanced			
Description	This project is a section of the South North Reverse Flow project, from Italy to France, Germany and Belgium via Switzerland. It will contribute to the Corridor "North-South Gas interconnection in Western Europe" and is also related through Italy with the Southern Corridor. Developements are needed at Oltingue and Morelmaison stations to enable this reverse flow from Switzerland/Italy to France.					
PRJ Code - PRJ Name	PRJ-G-012 - Bidirectional flows between Italy and Germany and France through S	Switzerland				

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Oltingue (FR) / Rodersdorf (CH)	GRTgaz	2018	СН	IB-FR1	100.0 GWh/d		

Sponsors		General Information		NDP and PCI Information	
GRTgaz Infrastructure Projects	100%	Promoter Operator	GRTgaz GRTgaz	Part of NDP	Yes (Plan de développement du réseau de transport de GRTgaz 2017-2026)
		Host Country	Ű,	NDP Number	Création de capacités d'entrée à partir de la Suisse
		Status	In Progress	NDP Release Date	27/11/2017
		Website	<u>Project's URL</u>	NDP Website	NDP URL
				Currently PCI	No
				Priority Corridor(s)	

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		12/2010
Feasibility	10/2014	08/2015
FEED	09/2015	12/2016
Permitting		
Supply Contracts		01/2017
FID		07/2015
Construction	03/2017	11/2018
Commissioning	2018	2018

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

Expected Gas Sourcing

Algeria, Caspian Region, Libya, LNG ()

Benefits						
Main Driver	Market Demand					
Main Driver Explanation During last open season on the project, shippers have confirmed their interest for reverse capacitites at the Oltingue / Rodersdorf IP.						
Benefit Description	The project improves market integration between France, Switzerland and Italy. It creates a new entry point to the French network, giving access to new supply sources (Lybian and Azerian gas)					

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

Support to the North West market and bidirectional cross-border flows

TRA-F-214		Project		Pipeline	including CS		FID
Update Date			30/03/2018			A	dvanced
Description			w compressor stations in the nor est area of Italy and it makes ava				
PRJ Code - PRJ Name	PRJ-G-012 - Bidirectional flow	vs between Italy and Gerr	nany and France through Switzer	rland			
Capacity Increments Variant	For Modelling						
Point		Operator		Year From Ga	as System To Ga	s System	Capacity
		Snam Rete Gas	S.p.A.	2018 IB	-ITe	СН	368.0 GWh/d
Griespass (CH) / Passo Gries	(IT)	232 GWh/a	Comment: Total capacity of TR. can be booked only at the point poin	of Gries Pass, 189	,	oked at the	
		Snam Rete Gas	S.p.A.	2018	IT IB	3-ITe	421.0 GWh/d
Italy Northern Export Fork		232 GWh/a	Comment: Total capacity of TR. can be booked only at the point poir	of Gries Pass, 189		oked at the	
		Snam Rete Gas	S.p.A.	2018 IB	-ITe	AT	189.0 GWh/d
Tarvisio (IT) / Arnoldstein (AT	Τ)	232 GWh/a	Comment: Total capacity of TR can be booked only at the point poin	of Gries Pass, 189		ked at the	
Sponsors		Gener	al Information		NDP and PCI Inf	ormation	
Snam Rete Gas S.p.A.	100%	Promoter	Snam Rete Gas S.p.A.	Part of NDP	Yes (Snam Re	ete Gas TY	NDP 2017-2026)
		Operator	Snam Rete Gas S.p.A.	NDP Number			RN_01
		Host Country	Italy	NDP Release Da	ate		30/11/2017
		Status	In Progress	NDP Website			NDP URL
		Website	Project's URL	Currently PCI			Yes ()
				Priority Corrido	r(s)		NSIW

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

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Section 1		1,400	62	0	2018
Section 2		1,200	19	0	2018
Section 3		0	0	82	2018
	Total		81	82	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	The project fulfills also the criteria of reverse flows, diversification of routes, I		for renev	vables, power-to-gas,	market

integration (increase of competition), flexibility of the system and reduction of GHG emissions.

Benefits					
wables, power-to-gas, market integration (increase of					

				1	uge +5 01 575
	CBCA		Financial Assistanc	e	
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have no	t applied for CE
	and we do not plan to submit it	Grants for studies			N
Submissin Date		Grants for studies amount			
Decision Date		Grants for works			\wedge
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF		No, we do l	not plan to appl
Countries Net Cost Bearer		Other Financial Assistance			Ye
Additional Comments		Comments			
		General Comments			
TRA-N-224	Project	Brod - Zenica	Pipeline including	J CS N	lon-FID
Update Date	29/	/03/2018		Non	-Advanced
Description	The starting point of Brod - Zenica gas pipeline is in close v - Brod (TSO – Plinacro) in the Republic of Croatia. Point of i Brod/Slavonski Brod. The gas pipeline is planned to be bi- Ring.	nterconnection between Croatia	n and BiH natural gas tra	ansmission netwo	rk is
PRJ Code - PRJ Name	PRJ-G-013 - North Interconnection of BiH and Croatia				
Capacity Increments Varian	t For Modelling				
Point	Operator	Yea	From Gas System	To Gas System	Capacity
	BH Gas d.o.o.	2023	B HR	BA	44.0 GWh/d

Slobodnica- Bosanski Brod-Zenica

Comment: Technical entry capacity from Croatia to BiH is 44 GWh/day. Technical exit from BiH to Croatia is 35 GWh/day.

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Sponsors				General Information	ND	P and PCI Information
BH-Gas d.o.o.		100%	Promoter Operator	BH-Gas d.o.o. BH Gas d.o.o.	Part of NDP	Yes (SPP-Strategic plan and programm of FBI
			Host Country	Bosnia Herzegovina	NDP Number	PTC
			Status	Planned	NDP Release Date	30/09/200
			Website	Project's URL	NDP Website	NDP UI
					Currently PCI	٢
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third	d-Party Access Regime
Pre-Feasibility		02/2006			Considered TPA Regin	me Not Applicab
easibility	11/2017	04/2019			Considered Tariff Reg	jime Regulate
EED	12/2019	04/2021			Applied for Exemptio	n A
Permitting	01/2020	05/2021			Exemption Granted	٨
Supply Contracts		05/2022				
FID		11/2019			Exemption in entry di	rection 0.00
Construction	06/2022	09/2023			Exemption in exit dire	ection 0.00
Commissioning	2023	2023				

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Brod-Zenica (section through FBiH and RS)		500	140	0	
	Total		140	0	
	Fulfilled Criteria				
Specific Criteria Fulfilled					
Specific Criteria Fulfilled Comments					

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urrent TYNDP : TYNDF	P 2018 FINAL - Annex A	Page 51 of 575
	Time Schedule	
Grant Obtention Date		
Delay Since Last TYNDP	YES	
Delay Explanation	Regarding the fact that the part of this project runs through Republic of Srpska Entity, the main obstacl official representatives, as well as lack of primary gas legislation at the state level in accordance with the natural gas market is not able to cover assessed project cost related to preliminary activities.	
	Expected Gas Sourcing	
Algeria, Caspian Region,	, Norway, Russia, LNG (HR), UGS in neigboring countries	
	Comments about the Third-Party Access Regime	
It is expected that TPA r	egime and Tariff methodology will be covered by gas primary legislation, all in accordance with Third Package.	
	Benefits	
Main Driver	Regulation SoS	
Main Driver Explanation	Project will directly increase N-1 for Bosnia and Herzegovina and enable flexibility of the natural gas system in BiH that currently BiH gas system is isolated and depending of one supply route.	in case of disruptions, having in mind
Benefit Description	Project will enable route and supply source diversification for BiH as well as development of natural gas market and gas network. Project will increase SoS for BiH (currently N-1=0). Project will enable introducing gas in energy consuland specially existing Oil rafinery in Brod). Switching from traditional fuels to using natural gas means significant re-	umption sector (residential, industrial
	Barriers	
Barrier Type	Description	
Permit Granting	Projects runs through the two BiH entities and procedures of providing neccessary consents and permits could nee Competent authority did in BiH not formed yet.	ed much time, having in mind that
Political	Lack of primary gas legislation in accordance with Third Energy Package, as well as conensus at the state level.	
Market	Lack of market support	

Financing Availability of funds and associated conditions Regulatory Lack of proper transposition of EU regulation

not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for C
	Applied for CEI	(3) iso, we have not applied for C
not yet decided whether we will submit or	Grants for studies	Ι
not	Grants for studies amount	
	Grants for works	
	Grants for works amount	
	Intention to apply for CEF	
	Other Financial Assistance	Ι
	Comments	Grant of 1 MEUR for FS, EIA, SIA and CBA was approved WBIF round 6, Dec. 2011, but this grant was not relize but it was withdrawn because of subsequent lack of th entity of Republic of Srpska support. Due to Measure Imposed to BiH by EnC Ministerial Council in Oct 201 BH-Gas projects are not eligible for applying to WB
	General Comments	Having in mind that BiH is not MS, but Energy Community Contracting Party, BH-Gas is not in possition to apply to CEF. Once if this criterium will be changed, w will use this opportunity. Project was listed at PECI 201 and it is submitted for PECI 201
	not	not Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments

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

TRA-N-66				Projec	ct			Pipeline including	y CS N	lon-FID
Update Date		1	-		26/02/2018				A	dvanced
Description		•			osnia and Herzegovina an oss the Sava river to Bosai					0
PRJ Code - PRJ Name	PRJ-G	-013 - North In	iterconne	ection of BiH and O	Croatia					
Capacity Increments ^v	Variant For Mo	delling								
Point				Operato	r		Year	From Gas System	To Gas System	Capacity
Slobodnica- Bosanski	Prod Zonica			Plinacro	Ltd		2020	BA	HR	162.0 GWh/d
Siobournea- Bosariski	i biou-zenica			Plinacro	Ltd		2020	HR	BA	162.0 GWh/d
Sponsors					General Information			NDP and	PCI Information	
B&H, Bosanski Brod	- Zenica			Promoter		Plinacro Ltd	Part	of NDP		Yes (2018-2027
BH Gas			100%	Operator		Plinacro Ltd	NDP	Number		1.1.
Croatia, Slobodnica-I	Bosanski Brod	(border)		Host Country		Croatia	NDP	Release Date		15/12/201
Plinacro		()	100%	Status		Planned	NDP	Website		<u>NDP UR</u>
				Website		<u>Project's URL</u>	Curre	ently PCI		N
							Priori	ty Corridor(s)		
Schedule	Start Date	End Date						Third-Part	ty Access Regime	
Pre-Feasibility							Consi	dered TPA Regime		Regulate
easibility							Consi	dered Tariff Regime		Regulated
EED							Appli	ed for Exemption		Ν
Permitting	01/2011	01/2019					Exem	ption Granted		No

Supply Contracts			
FID		11/2018	Exemption in entry direction
Construction	12/2019	12/2020	Exemption in exit direction
Commissioning	2020	2020	

Pipelines and Compressor Stations		
Pipeline Section	Pipeline Comment	Diameter Length Compressor Power Comissioning (mm) (km) (MW) Year
Slobodnica - Bosanski Brod		700 6
	Total	6
	Time Schedule	
Grant Obtention Date		

Delay Since Last TYNDP Delay Explanation The start of the construction has been postponed until 2020.

Expected Gas Sourcing

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

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

		Bar	riers					
Barrier Type	Description							
Political	This project is GasRES)	politicaly very sensitive and depends on the agree	ment with Republika Srpska and	agremments within B&H and	its TSOs (BH Gas and			
		Intergovernme	ntal Agreements					
Agreement		Agreement Description		Is Signed	Agreement Signature Dat			
Letter of Intent		between Plinacro and BH Gas for all projects	of interconnection	Yes	06/04/2011			
Memorandum of underst	tanding	signed between Plinacro and BH Gas		Yes	26/06/2006			
		CBCA		Financial Assistance				
	No, we	e have not submitted an investment request yet,	Applied for CEF	(3) N	o, we have not applied for CE			
Decision	and we	have not yet decided whether we will submit or	Grants for studies					
		not	Grants for studies amount					
Submissin Date			Grants for works					
Decision Date			Grants for works amount					
Website			Intention to apply for CEF					
Countries Affected			Other Financial Assistance		٨			
Countries Net Cost Beare	er		Comments					
Additional Comments			General Comments					
		Southern Interconnec	ction pipeline BiH/CRO					
TRA-N-851		Project		Pipeline including CS	Non-FID			
Update Date		29,	/03/2018		Non-Advanced			
Description	receiving	n Interconnection pipeline BIH/CRO (Zagvozd-Post g gas from Croatian gas transmission system which . Project will be bi-directional and together with ga	will enable it to get gas supply f	rom other markets (LNG, Cas				

PRJ Code - PRJ Name PRJ-G-014 - South Interconnection of BiH and Croatia

Capacity Increments Variant For Modellin	g							
Point	Operator	Year	From Gas System	To Gas System	Capacity			
	BH Gas d.o.o.	2023	HR/IAP	BA	73.0 GWh/d			
Posušje	Comment: Technical entry capacity from	m Croatia to Bil	H is 73 GWh/day, Tech	lay, Technical exit capacity				
		from BiH to Croatia is 38 GWh/day						

Sponsors					General Information	ND	P and PCI Information
BH-Gas d.o.o.			100%	Promoter	BH-GAS d.o.o.	Part of NDP	Yes (SPP-Strategic plan and programm
		1		Operator	BH Gas d.o.o.		of FBi
				Host Country	Bosnia Herzegovina	NDP Number	PTC
				Status	Planned	NDP Release Date	30/09/200
				Website	Project's URL	NDP Website	NDP UI
						Currently PCI	Λ
						Priority Corridor(s)	NSI
Schedule	Start Date	End Date				Third	d-Party Access Regime
Pre-Feasibility		10/2013				Considered TPA Regin	me Not Applicab
Feasibility	04/2017	04/2018				Considered Tariff Reg	jime Regulate
FEED	07/2018	09/2019				Applied for Exemption	n N
Permitting	07/2018	09/2019				Exemption Granted	Λ
Supply Contracts		08/2020					
FID		06/2018				Exemption in entry di	rection 0.00
Construction	09/2020	12/2021				Exemption in exit dire	ection 0.009
Commissioning	2023	2023					

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Posusje-Travnik with branch to Mostar		500	165	0	2023
	Total		165	0	

Expected Gas Sourcing Algeria, Caspian Region, Norway, Russia, LNG (HR), UGS in neighboring countries **Comments about the Third-Party Access Regime** It is expected that TPA regime and Tariff methodology will be covered by gas primary legislation in accordance with Third Package at least up to the end of 2018. Benefits Main Driver Others Currently BiH gas system is isolated and depending of one supply route. Project is to interconnect natural gas systems of BiH and Croatia. Main goal is to establish new supply route for BiH providing reliable and diversified natural gas supply increasing security of supply. Having in mind limited capacity and Main Driver Explanation age of the existing supply route, South Interconnector in the near future could become the only supply route for Federation of BiH. Because of the urgency of realization of this project, Government of Federation of BiH issued Conclusion V. No. 853/2017 on Strategic importance of the Project. Project is contained in Comprehensive Energy Strategy BiH 2035 which is in adoption process. Capacity of the existing system is jeopardise by intetion to connect a new consumers in RS reducing gas quantities for FBiH. In this case consumers in Federation of BiH will directly depend on the realization of this project. Project will improve import route and supply source diversification. Lower usage of **Benefit Description** traditional fuels in energy consumption sectors (residential and industrial) means significant protection of BiH forestry and decreasing CO2, SO2 and NOx emissions. **Barriers** Barrier Type Description Lack of primary gas legislation in accordance with Third Energy Package, as well as energy policy at the state level. Political Market Lack of market maturity Regulatory Lack of proper transposition of EU regulation Financing Availability of funds and associated conditions

	CBCA		Financial Assistanc	e	
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 Grants for studies Grants for studies amount	((3) No, we have nc	t applied for CE N
Submissin Date Decision Date Website Countries Affected		Grants for works Grants for works amount Intention to apply for CEF			Ν
		Other Financial Assistance			Ye
Countries Net Cost Bearer Additional Comments		Comments	0,40 Million EUR fr 2013; 0,141 Million EUR	R from CONNECTA	
		General Comments			
	West Interconn	ection BiH/CRO			
TRA-N-910	Project		Pipeline including	j CS N	Non-FID
Update Date	29/	03/2018		Non	-Advanced
Description	Western interconnection BiH/CRO (Licka Jesenica - Trzac-Bo Croatian gas transmission system and enable gasification of			roject will connect	BiH with
PRJ Code - PRJ Name	PRJ-G-015 - West Interconnection of BiH and Croatia				
Capacity Increments Variant	t For Modelling				
	Operator	Yea	r From Gas System	To Gas System	Capacity
Point			-	-	
Point Rakovica (HR) / Trzac (BA)	BH Gas d.o.o.	2020	5 HR	BA	73.0 GWh/d

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						Tuge 55 of 5
Sponsors				General Information	NDF	P and PCI Information
3H-Gas d.o.o.		100	0% Promoter	BH-Gas d.o.o.	Part of NDP	Yes (SPP-Strategic plan and program
			Operator	BH Gas d.o.o.		of FL
			Host Country	Bosnia Herzegovina	NDP Number	P
			Status	Planned	NDP Release Date	30/09/2
			Website	Project's URL	NDP Website	NDP
				-	Currently PCI	
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thirc	d-Party Access Regime
re-Feasibility		06/2008			Considered TPA Regin	me Not Applica
easibility	01/2018	04/2019			Considered Tariff Regi	ime Regula
EED	04/2019	12/2024			Applied for Exemption	n
ermitting	01/2025	06/2025			Exemption Granted	
upply Contracts		05/2024				
ID		10/2024			Exemption in entry dir	rection 0.0
onstruction	06/2025	06/2026			Exemption in exit dire	action 0.0
ommissioning	2026	2026				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Licka Jesenica - Trzac - Bos.Krupa	Additionally, branches to Bihac and Velika Kladusa are 45 km length both, diameter 250 mm.	500	35	0	
	Total		35	0	
	Expected Gas Sourcing				
Algeria, Caspian Region, Norway, Russia, LNG (HF	R), UGS in neighboring countries				

Comments about the Third-Party Access Regime

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

Benefits							
Main Driver	Market Demand						
Main Driver Explanation	Project will enable development of natural gas market in the western part of BiH.						
Benefit Description	Project will enable development of the natural gas market in BiH. Lower usage of firewood in the energy consumption sector (residential and industrial) means significant protection of BiH forestry. Project will decrease CO2 emissions. Project will not cause any damaging environmental impact.						
	Barriers						
Barrier Type	Description						
Political	Lack of primary gas legislation in accordance with Third Energy Package, as well as energy policy at the state level.						
Regulatory	Lack of proper transposition of EU regulation						
Market	Lack of market support						
Financing	Availability of funds and associated conditions						

	CBCA		Financial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Submissin Date	not	Grants for studies amount	
		Grants for works	No
Decision Date		Grants for works amount	
Website		Intention to apply for CEF	
Countries Affected		Other Financial Assistance	No
Countries Net Cost Bearer		Commente	BH-Gas financed by its own funds Pre-fesibility Study
Additional Comments		Comments	developed in 2008.
		General Comments	

Construction

Commissioning

04/2026

2027

11/2027

2027

Interconnection Croatia-Bosnia and Herzegovina (west)

			Inte	erconnection Croatia-Bosnia and	Herzegovina (west)			
TRA-N-303				Project			Pipeline including	J CS N	lon-FID
Update Date		1		26/02/2018				Non	-Advanced
Description				a and Herzegovina on route Licka Jeseni with branches to Bihać and Velika Kladu		oatia t	o border with Bosnia	and Herzegovina.	Bosnian part is
PRJ Code - PRJ Name	PRJ-G-	015 - West Inter	connec	ction of BiH and Croatia					
Capacity Increments Var	iant For Mod	delling							
Point				Operator		Year	From Gas System	To Gas System	Capacity
Rakovica (HR) / Trzac (B	A)			Plinacro Ltd		2027	BA	HR	81.0 GWh/d
	A)			Plinacro Ltd		2027 HR BA		BA	81.0 GWh/d
Sponsors				General Information			NDP and	PCI Information	
Croatian part				Promoter	Plinacro Ltd	Part	of NDP		Yes (2018-2027
Plinacro d.o.o.		1	100%	Operator	Plinacro Ltd	NDP	Number		1.35 and 1.36
part in B&H				Host Country	Croatia	NDP	Release Date		15/12/2018
BH Gas		1	100%	Status	Planned	NDP	Website		NDP UR
				Website	<u>Project's URL</u>	Curre	ently PCI		No
						Prior	ity Corridor(s)		
Schedule St	tart Date	End Date					Third-Part	ty Access Regime	
Pre-Feasibility						Consi	dered TPA Regime		Regulated
easibility						Consi	dered Tariff Regime		Regulated
EED						Appli	ed for Exemption		No
Permitting Supply Contracts	12/2012	09/2026				Exem	ption Granted		No
FID		12/2025				Exem	ption in entry directio	n	0.00%

0.00%

Exemption in exit direction

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diam (mi	-	Compressor Power (MW)	Comissioning Year
Lička Jesenica-Rakovica		50) 20		
Rakovica-Bihać		50) 10		
	Total		30		

Expected Gas Sourcing

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

	Benefits					
Main Driver	Market Demand					
Main Driver Explanation	on For the western part of Bosnia and Herzegovina					
Benefit Description	The aim of the project is to assess the feasibility of providing gas supply to the Una-Sana Canton in BiH from the Croatian gas transmission system. It will be from the Lička Jesenica gas transmission node in Croatia via Lika to the HR/BiH border and from there to Bosanska Krupa with brances to Bihać and velika Kladuša in Una-Sana Canton. The extension of the gas transmission in Croatia to the border with BiH will allow additional gasification in the part of Croatia along the pipeline route.					
	Barriers					
Barrier Type	Description					
Market	Lack of market support					
Market	Lack of market maturity					
	Intergovernmental Agreements					
Agreement	Agreement Description	Is Signed	Agreement Signature Date			
Letter of Intent	between Plinacro and BH Gas for all projects of interconnection	Yes	06/04/2011			

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

Gas Interconnection Poland-Lithuania (GIPL) (Lithuania's section)

TRA-F-341	Project	Pipeline including CS	FID			
Update Date	30/05/2018		Advanced			
Description	The project is aimed to establish a well-functioning new bidirectional interconnection between the Polish and Lithuanian gas transmission systems to integrate the isolated gas markets of the Baltic States into the EU gas grid, by introducing an alternative gas supply route to the Baltic States. By implementing the project a 165 km-long and 700 mm-diameter pipeline and gas pressure reduction and metering station will be constructed on Lithuania's side.					
PRJ Code - PRJ Name	PRJ-G-017 - Gas Interconnection Poland-Lithuania (GIPL)					

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector DL LT	AB Amber Grid	2021	LT	PL	58.3 GWh/d
Interconnector PL-LT	AB Amber Grid	2021	PL	LT	73.9 GWh/d

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						ruge or or or or
Sponsors			General	Information	NDP and PCI Information	
AB Amber Grid		1009	6 Promoter	AB Amber Grid	Part of NDP	Yes (Network Development Plan 2017-
			Operator	AB Amber Grid		2026)
			Host Country	Lithuania	NDP Number	n/a
			Status	In Progress	NDP Release Date	18/01/2018
			Website	Project's URL	NDP Website	NDP URL
					Currently PCI	Yes ()
					Priority Corridor(s)	BEMIF
Schedule	Start Date	End Date			Third-F	Party Access Regime
Pre-Feasibility		12/2012			Considered TPA Regime	e Regulated
Feasibility	02/2012	02/2013			Considered Tariff Regim	e Regulated
FEED	05/2015	09/2016			Applied for Exemption	No
Permitting	07/2016	09/2016			Exemption Granted	No
Supply Contracts						
FID		03/2018			Exemption in entry direc	ction 0.00%
Construction	03/2018	06/2021			Exemption in exit directi	ion 0.00%
Commissioning	2021	2021				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Border PL/LT - Jauniunai		700	165		
	Total		165		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Sharitir i ritaria filitilari i ommante	It is one of the key projects in the area of infrastructure providing security of the EU. The project will contribute to the sustainability and increase of the div				ergy security of

urrent TYNDP : TYNDP	2018 FINAL - Annex A		Page 65 of 575
		Time Schedule	
Grant Obtention Date	15/10/2015		
Delay Since Last TYNDP			
Delay Explanation			
		Benefits	
Main Driver	Market Demand		
Main Driver Explanation			
Benefit Description			

	СВСА	Financial Assistance		
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision	
Submissin Date	31/10/2013	Grants for studies	Yes	
Decision Date	11/08/2014	Grants for studies amount	Mln EUR 0	
Website	<u>CBCA URL</u>	Grants for works	Yes	
Countries Affected		Grants for works amount	Mln EUR 0	
Countries Net Cost Bearer	Estonia;#Latvia;#Lithuania	Intention to apply for CEF		
Additional Comments		Other Financial Assistance	Yes	
		Comments		
		General Comments		

Gas Interconnection Poland-Lithuania (GIPL) - PL section

TRA-F-212	Project	Pipeline including CS	FID
Update Date	30/05/2018		Advanced
Description	GIPL aims to connect the gas transmission systems in Poland and Lithuania and, co the Baltic States (and Finland) with the Polish and EU gas markets. This will contribu competition and the security of gas supply. The project will also provide an access t in Świnoujście. The construction of GIPL, except the above benefits for security and to connect the Baltic States with the CEE countries, thus providing strategic link bet scope of the project on the Polish side covers Hołowczyce - PL-LT border pipeline, the	ite to the creation of a regional gas marke to the global LNG market for the Baltic Sta diversification of gas supplies in the Balti ween the BEMIP and North-South East pr	et, enhancement of ates via the LNG terminal c region, will also allow riority corridors. The
PRJ Code - PRJ Name	PRJ-G-017 - Gas Interconnection Poland-Lithuania (GIPL)		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Interconnector DL LT	GAZ-SYSTEM S.A.	2021	LT	PL	58.3 GWh/d
Interconnector PL-LT	GAZ-SYSTEM S.A.	2021	PL	LT	73.9 GWh/d

Sponsors	General Information		NDP and PCI Information		
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
		Operator	GAZ-SYSTEM S.A.		System Development Plan 2018-2027)
		Host Country	Poland	NDP Number	N/A
		Status	Planned	NDP Release Date	
		Website	Project's URL	NDP Website	<u>NDP URL</u>
			-	Currently PCI	Yes ()
				Priority Corridor(s)	BEMIP

rrent TYNDP : TY	NDP 2018 FINAI	- Annex A	
Schedule	Start Date	End Date	Third-Party Access Re
re-Feasibility			Considered TPA Regime
easibility			Considered Tariff Regime
EED	06/2015	10/2019	Applied for Exemption
ermitting	12/2015	10/2019	Exemption Granted
pply Contracts			
D			Exemption in entry direction
onstruction			Exemption in exit direction
ommissioning	2021	2021	

Pipelines and Compressor Sta	tions				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Gustorzyn				30	
CS Hołowczyce - modernizatic	n				
GIPL - Polish section		700	357		
	Total		357	30	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				

Market integration: - Completing a missing interconnection between PL and LT; - Connection of the gas markets in the East Baltic region with the continental gas market, lifting the isolation of the East Baltic region; - Creation of a well-integrated and functioning market in the East Baltic region. SoS: - Access to new sources of supply in the Baltic States and FI; - Mitigation of exposure to supply disruption via BY in the Baltic Specific Criteria Fulfilled Comments States; - Diversification of supply sources, routes and counterparts by bringing EU spot gas and NO supplies to the Baltic States and FI; -

Reduction of dependence on gas supplies from RU in the Baltic States and FI. Competition: - Reduction of price differences between the East Baltic region and North-West regions. Sustainability: - Reduction of emissions in PL and the East Baltic region by promoting natural gas in national economies.

	Time Schedule
Grant Obtention Date	
Delay Since Last TYNDP	Yes
Delay Explanation	
	Benefits
Main Driver	Others
	Regulation SoS, market integration
Benefit Description	The objective of the project is the integration of the isolated gas markets of the Baltic States into the EU gas grid by introducing an alternative gas supply route to the Baltic States. This interconnection will diversify the gas supply sources, increase the security of supply and enhance competition on the gas market in the Baltic States. For the Baltic States, GIPL will provide the access both to EU gas spot market and to the global LNG market via LNG terminal in Świnoujście. The implementation of the project will also contribute to creating better conditions for the use of the Latvian Inčukalns UGS for Lithuania's and, in future, for Poland's gas market participants. Also through GIPL, gas could be supplied to currently non-gasified areas in Poland and Lithuania.
	Barriers
Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.
Political	Lack of guarantees of covering entire project costs when the project is not commercially viable in all market scenarios (SoS project).
Ithore	Lack of guarantees of covering entire project costs when the project is not commercially viable in all market scenarios (SoS project). Risk of the lack of interest in capacity booking in the first period of operation due to unmaturity of the gas markets in the Baltic States.
Market	Lack of market maturity

	CBCA		Financial Assistance	
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CE	and we have received decision
Submissin Date	31/10/2013	Grants for studies		Ye
Decision Date	11/08/2014	Grants for studies amount		
Vebsite	<u>CBCA URL</u>	Grants for works		Y
Countries Affected	Estonia, Latvia, Lithuania	Grants for works amount		
Countries Net Cost Bearer	Poland	Intention to apply for CEF		
dditional Comments		Other Financial Assistance		Y
		Comments	TEN-E: Study: Identification feasibility study for the Gas TEN-E: Environmental Impact As up to environmental decision	s Interconnection Polan Lithuan sessment documentatio
		General Comments		ection Poland - Lithuani
	Transport of gas volun	General Comments		
-RA-N-808	Transport of gas volun Project			
	Project		Interconne	ection Poland - Lithuani
FRA-N-808 Jpdate Date Description	Project	nes to the Netherlands 03/2018 ng in an acities, which are provided at th	Pipeline including CS	ection Poland - Lithuani Non-FID Non-Advanced
pdate Date	Project 24/0 This Project builds a new IP towards the Netherlands resultin Exit Zone towards the NLs. In the first expansion step this IP will only take over the capa	nes to the Netherlands 03/2018 ng in an acities, which are provided at th	Pipeline including CS	ection Poland - Lithuand Non-FID Non-Advanced

urrent TYNDP : TYNDP 2018 FINAL - Annex A				P	age 70 of 575
Capacity Increments Variant For Modelling					
Variant : GUD OSZ-H 2. Offer Level	INC CAP: 2. Offer Level				
Point	Operator	Year	From Gas System	To Gas System	Capacity
Zone Oude Statenzijl H	Gasunie Deutschland Transport Services GmbH	2025	DEg	IB-NLg	285.6 GWh/d
Capacity Increments Variant(s) For Information Only					
Variant : GUD OSZ-H 1. Offer Level	INC CAP: 1. Offer Level				
Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2025	DEg	IB-NLg	-55.7 GWh/d
Zone Oude Statenzijl H	Gasunie Deutschland Transport Services GmbH	2025	DEg	IB-NLg	230.9 GWh/d
Capacity Increments Variant(s) For Information Only					
Variant : GUD OSZ-H Base	Base Case: Optimization - Replacing CS Bund	der Tief			
Point	Operator	Year	From Gas System	To Gas System	Capacity
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2023	DEg	IB-NLg	-55.7 GWh/d
Zone Oude Statenzijl H	Gasunie Deutschland Transport Services GmbH	2023	DEg	IB-NLg	55.7 GWh/d

Sponsors	(General Information	NI	DP and PCI Information	
	Promoter	Gasunie Deutschland Transport Services GmbH	Part of NDP	No ((1) the NDP was prepared at an earlier date and the project will be	
	Operator	Gasunie Deutschland Transport		proposed for inclusion in the next NDF	
	Operator	Services GmbH	NDP Number	ID 504-01a; ID 504-01b; ID 504-01c	
	Host Country	Germany	NDP Release Date	01/04/2018	
	Status	Planned	NDP Website	NDP URL	
	Website		Currently PCI	No	
			Priority Corridor(s)		

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

	Benefits
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

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

Additional capacity at OSZ from Germany to the Netherlands

TRA-N-873		Proje	oct.		Pipeline including		lon-FID
Update Date		Troje	27/03/2018				-Advanced
	This projects anables addition	al flow at the inte	erconnection point between GTS and Ga		t Oudo Statonziil Mar		
Description			declining indigenous production is an im				
PRJ Code - PRJ Name	PRJ-G-018 - Additional capac	ity at Oude State	nzijl from Germany to the Netherlands				
Capacity Increments Variant F	or Modelling						
Point		Operato	or	Year	From Gas System	To Gas System	Capacity
Virtual Ips (GTS) NL-DE (Gasp	ool)	Gasunie	Transport Services B.V.	2025	IB-NLg	NL	288.0 GWh/d
Zone Oude Statenzijl H		Gasunie	Transport Services B.V.	2025	DEg	IB-NLg	288.0 GWh/d
Sponsors			General Information		NDP and	PCI Information	
Gasunie Transport Services B.V	/. 100%	Promoter	Gasunie Transport Services B.V.	Part c	of NDP Yes	(Netwerk Ontwikk	elingsplan 2017)
		Operator	Gasunie Transport Services B.V.	NDP	Number		6.5.4
		Host Country	Netherlands	NDP	Release Date		
		Status	Planned	NDP	Website		NDP URL
		Website		Curre	ntly PCI		No
				Priori	ty Corridor(s)		
Schedule Start D	ate End Date				Third-Part	y Access Regime	
Pre-Feasibility				Consi	dered TPA Regime	, ,	Regulatea
Feasibility					dered Tariff Regime		Regulatea
FEED				Applie	ed for Exemption		No
Permitting				Exem	otion Granted		Not Relevant
Supply Contracts							
FID				Exemp	otion in entry directior	n	0.00%
Construction				Exemp	otion in exit direction		0.00%
Commissioning 20	2025 2025						

		Benefits
Main Driver	Market Demand	
Main Driver Explana	ation	
Benefit Description		

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

Poland - Denmark interconnection (Baltic Pipe) - offshore section

TRA-N-271	Project	Pipeline including CS	Non-FID
Jpdate Date	30/03/2018		Advanced
Description	The projects in the group aim at connecting the gas transmission system countries in the Baltic Sea region and Central-Eastern Europe. The proje diversify their supply potential (deliveries of LNG from the terminal in Św North Sea. The project is composed of the following investments that are mutually Baltic Pipe project: Baltic Pipe (offshore section); onshore receiving term transmission system.	ect will also bring the opportunity for the Danish and S winoujście) in the context of declining production in the dependent and hence each necessary for the benefits	wedish markets to ne Danish part of the s and realization of the

PRJ Code - PRJ Name PRJ-

PRJ-G-021 - Baltic Pipe Project

Point			Operator		Year F	rom Gas Systen	n To Gas System	Capacity
Interconnector PL-I			GAZ-SYSTEM S.A.		2022	DK	PL	306.8 GWh/d
			GAZ-SYSTEM S.A.		2022	PL	DK	91.1 GWh/d
Sponsors			General Infor	mation		NDP a	nd PCI Information	
GAZ-SYSTEM S.A.		100%	6 Promoter	GAZ-SYSTEM S.A.	Part of N	112	Yes (National Ten-Ye	
	1. 1.		Operator	GAZ-SYSTEM S.A.		2	ystem Development	
			Host Country	Poland	NDP Nur			N/A
			Status	Planned	NDP Rele			
			Website	<u>Project's URL</u>	NDP Wel			<u>NDP URL</u>
					Currently			Yes ()
					Priority C	Corridor(s)		BEMIP
Schedule	Start Date	End Date				Third-P	arty Access Regime	
Pre-Feasibility					Considere	ed TPA Regime		Regulated
Feasibility					Consider	ed Tariff Regime	2 2	Regulated
FEED	08/2017				Applied f	or Exemption		No
Permitting					Exemptio	n Granted		Not Relevant
Supply Contracts								
FID					Exemptio	n in entry direc	ion	0.00%
Construction					Exemptio	n in exit direction	on	0.00%
Commissioning	2022	2022						

Pipelines and Compressor Sta	ations						
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year		
Baltic Pipe (offshore section)	The length ie estiamated between 260 -3	310km 900	280				
Onshore pipeline connecting ogrid	1,000	40					
Onshore receiving terminal in	Poland						
	Total		320				
	Fulfilled Criteria						
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability						
	Market integration: - Creation of a well-integrated and functioning ma between PL and DK. SoS: - Diversification of supply sources, routes and	d counterparts by bringing N	Norwegiar	n gas to the West Balt			

Specific Criteria Fulfilled Comments

between PL and DK. SoS: - Diversification of supply sources, routes and counterparts by bringing Norwegian gas to the West Baltic and CEE regions and by allowing to import gas from the LNG terminal in Świnoujście in DK and SE; - Reduction of dependence on a single supply source in the CEE region; - Mitigation of exposure to supply disruption in the West Baltic and CEE regions; - Mitigation of negative impact linked to decreasing indigenous production in DK. Competition: - Reduction of price differences between the BEMIP and North-West regions. Sustainability: - Reduction of emissions in the BEMIP and CEE regions by promoting natural gas in national economies.

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

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date	27/10/2016	Grants for studies	Yes
Decision Date	12/03/2018	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	Yes
		Comments	TEN-E: "Baltic Pipe - Gas pipeline from Denmark to Poland - Pre-investment studies and authority process" TEN-E: "Baltic Pipe - Gas pipeline from Denmark to Poland – Geotechnical offshore survey, environmental monitoring programme and onshore gas quality study and receiving terminal in Poland"
		General Comments	

Poland - Denmark interconnection (Baltic Pipe) - onshore section in Poland

TRA-N-1173			Project			Pipeline includin	g CS N	Ion-FID
Update Date			30/0	3/2018			A	dvanced
The project aims at connecting the Baltic Sea region and Cen supply potential (deliveries of The project is composed of the		ig the gas transmission systems tral-Eastern Europe. The project LNG from the terminal in Świng ne following investments that ar – Lwówek pipeline, CS Gustorzy	will also bring the oppor oujście) in the context of c e mutually dependent and	tunity fo declinin d hence	or the Danish and Sw g production in the D	edish markets to d Danish part of the N	iversify their Jorth Sea.	
PRJ Code - PRJ Name	PRJ-G-021 - Baltic	Pipe Proje	ct					
Capacity Increments Variant	For Modelling							
Point			Operator		Year	From Gas System	To Gas System	Capacity
Aggregated Distribution (PL)		GAZ-SYSTEM S.A.		2022	DScPL	PL	0.0 GWh/d	
Sponsors			General Info	rmation		NDP and	PCI Information	
Gas Transmission Operator G	GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.		of NU P	es (National Ten-Ye	
			Operator	GAZ-SYSTEM S.A.		Number	stem Development	N/A
			Host Country	Poland		Release Date		11/7
			Status	Planned		Website		NDP UR
			Website	<u>Project's URL</u>	-	ently PCI		Yes (
					Priori	ity Corridor(s)		BEMI

Schedule	Start Date	End Date	Third-Party Access Regi
Pre-Feasibility			Considered TPA Regime
easibility			Considered Tariff Regime
EED	11/2017		Applied for Exemption
ermitting			Exemption Granted
upply Contracts			
ID			Exemption in entry direction
Construction			Exemption in exit direction

Commissioning

Project Code

TRA-N-271

2022

Project Name

2022

Poland - Denmark interconnection (Baltic Pipe) - offshore section

Pipelines and Compressor Stations Length Compressor Power Comissioning Diameter **Pipeline Section Pipeline Comment** (mm) (km) (MW) Year CS Goleniów 12 CS Gustorzyn 15 CS Odolanów 14 Goleniów – Lwówek pipeline 1,000 188 Total 188 41

Enabled Projects

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	The project is an internal enabler for the Baltic Pipe project - offshore section. The implementation of the project will have an impact on: Market integration: - Creation of a well-integrated and functioning market in the West Baltic region; - Completing a missing interconnection between PL and DK. SoS: - Diversification of supply sources, routes and counterparts by bringing Norwegian gas to the West Baltic and CEE regions and by allowing to import gas from the LNG terminal in Świnoujście in DK and SE; - Reduction of dependence on a single supply source in the CEE region; - Mitigation of exposure to supply disruption in the West Baltic and CEE regions; - Mitigation of negative impact linked to decreasing indigenous production in DK. Competition: - Reduction of price differences between the BEMIP and North-West regions Sustainability: - Reduction of emissions in the BEMIP and CEE regions by promoting natural gas in national economies.

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Regulated Regulated

Not Relevant

No

0.00%

0.00%

	Ben			
Main Driver	Others			
Main Driver Explanation	Regulation SoS, market integration and competition			
Benefit Description	Baltic Pipe will have a significant impact on: increasing security of counterparts; creating well-interconnected gas infrastructure in the region); promoting natural gas as a reliable, competitive and enviorability and enviorability of the CZ, SK and UA (via the North-South correction of GIPL to the East Baltic region). Since the project is bidirectional it	ne Baltic Sea region; enhancing c ronmentally-friendly source of e prridors, as the project will allow idor in Poland, PL-CZ, PL-SK and	ompetition on the regional markets (CEE and nergy e.g. in the power generation and trans to transport gas from North Sea deposits to PL-UA interconnections) and to the Baltic re	d the Baltic sport sectors the CEE egion (via
	Barr	riers		
Barrier Type	Description			
Permit Granting Efficient permitting procedures are necessary for timely implementation of the project.				
	СВСА		Financial Assistance	
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we he	ave received decisio
Submissin Date	27/10/2016	Grants for studies		Y
Decision Date	12/03/2018	Grants for studies amount		
Website		Grants for works		٨
Countries Affected		Grants for works amount		
Countries Net Cost Bear	er	Intention to apply for CEF		
Additional Comments		Other Financial Assistance		٨
		Comments		
		General Comments		
	Czech-Polish Gas I	nterconnector (CPI)		
FRA-N-136	Project		Pipeline including CS No	n-FID
		03/2018	A	vanced

	The subject of the project (Czech part) is the construction of the DN 1000 gas pipeline from Tvrdonice to Hat which will connect the existing Czech and Polish transmission systems. It also includes upgrade of the existing compressor station Břeclav on the Czech side. The aim of the project is to construct the robust bidirectional interconnector between Poland and the Czech Republic. Project is jointly coordinated by the transmission system operators of the Czech Republic (NET4GAS s.r.o.) and Poland (GAZ-SYSTEM S.A.)
	The Czech part of CPI consists of the following subprojects:
	1) Poland-Czech Republic interconnector (STORK II; PCI project No. 6.2.10), and
	2) Tvrdonice-Libhošť pipeline, including upgrade of CS Břeclav (PCI project No. 6.2.12)

 PRJ Code - PRJ Name
 PRJ-G-022 - Poland - Czech Republic Interconnection

Capacity Increments Variant For Modelli	ing				
Point	Operator	Year	From Gas System	To Gas System	Capacity
	NET4GAS, s.r.o.	2022	CZ	PL	219.1 GWh/d
11-2			Comment:	Exit from CZ to PL	
Hať	NET4GAS, s.r.o.	2022	PL	CZ	153.2 GWh/d
			Comment: E	ntry from PL to CZ	

Sponsors		General Information		NDP and PCI Information		
Czech Republic		Promoter	NET4GAS, s.r.o.	Part of NDP	Yes (CZ NDP 2016-2025 (approved))	
NET4GAS, s.r.o.	100%	Operator	NET4GAS, s.r.o.	NDP Number	TRA-N-136	
Poland		Host Country	Czechia	NDP Release Date	31/10/2015	
Operator Gazociągów Przesyłowych GAZ-SYSTEM		Status	Planned	NDP Website	<u>NDP URL</u>	
S.A.	100%	Website	Project's URL	Currently PCI	Yes ()	
				Priority Corridor(s)	NSIE	

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		08/2011
Feasibility	01/2009	12/2012
FEED	11/2014	10/2017
Permitting	02/2016	11/2019
Supply Contracts		11/2020
FID		12/2019
Construction	07/2021	12/2022
Commissioning	2022	2022

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Tvrdonice (CZ) - Hať (CZ/PL)	The pipeline length at CZ side is approx. 207.4 km (Tvrdonice-Hat). Upgrade of the existing compressor	1,000	207	24	2022
	station Břeclav (CZ) is needed.	1,000	207		2022
	Total		207	24	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	Competition, Market Integration, Security of Supply, Sustainability The Poland-Czech Republic Interconnector meets following criteria: - Market integrat and PL markets Competition by connecting Poland to CEGH hub in Baumgarten an emission reduction Diversification of sources of gas supply through connection to terminals in Croatia and Poland and therefore completing the North-South Gas Corri supply from non-Russian sources and thus supporting increase of security of supply	d NCG hub in the Adriatic, B dor Security	Germany altic and of suppl	y Sustainability thr Black Seas as well as y by keeping the po	ough CO2 the LNG
	The Poland-Czech Republic Interconnector meets following criteria: - Market integrate and PL markets Competition by connecting Poland to CEGH hub in Baumgarten an emission reduction Diversification of sources of gas supply through connection to terminals in Croatia and Poland and therefore completing the North-South Gas Corri	d NCG hub in the Adriatic, B dor Security	Germany altic and of suppl	y Sustainability thr Black Seas as well as y by keeping the po	ough CO2 the LNG
Specific Criteria Fulfilled Comm	The Poland-Czech Republic Interconnector meets following criteria: - Market integrat and PL markets Competition by connecting Poland to CEGH hub in Baumgarten an emission reduction Diversification of sources of gas supply through connection to terminals in Croatia and Poland and therefore completing the North-South Gas Corri supply from non-Russian sources and thus supporting increase of security of supply	d NCG hub in the Adriatic, B dor Security	Germany altic and of suppl	y Sustainability thr Black Seas as well as y by keeping the po	ough CO2 the LNG
	The Poland-Czech Republic Interconnector meets following criteria: - Market integrat and PL markets Competition by connecting Poland to CEGH hub in Baumgarten an nents emission reduction Diversification of sources of gas supply through connection to terminals in Croatia and Poland and therefore completing the North-South Gas Corri supply from non-Russian sources and thus supporting increase of security of supply Time Schedule	d NCG hub in the Adriatic, B dor Security	Germany altic and of suppl	y Sustainability thr Black Seas as well as y by keeping the po	ough CO2 the LNG

urrent TYNDP : TYND	DP 2018 FINAL	- Annex A	Page 82 of 575
			Benefits
Main Driver	Others		
Main Driver Explanatio	n Competition, I	Market Intergration	
Benefit Description	transportation increase the se European gas (e) Create a ro	corridor that will allow for flexible transpecurity of gas supply and provide the over grid interconnection; (d) Increase the sec	e the cross-border capacity between Poland and the Czech Republic by establishing a large bort of gas in Central Europe in direction North-South; (b) Implementation of the Project will erall flexibility for the CEE region and diversify the supply routes for the CEE region; (c) Improve curity and reliability of the cross-border gas transmission between the Czech Republic and Poland; the Czech Republic and Poland and promote the competition; (f) Contribute to the creation of the nd thus decrease gas prices.
			Barriers
Barrier Type	Description		
Permit Granting	Large delays in	n process at the Ministry of Regional Dev	elopment.
Political	Change of pol	litical decisions.	
Regulatory	Lack of proper	r transposition of EU regulation	
Regulatory	Low rate of re	turn	
		Interg	governmental Agreements
Agreement		Agreement Description	Is Signed Agreement Signature Date
Memorandum of unde	erstanding	On the cooperation in the natural of Poland Interconnection Project	gas sector aimed at implementation of the Czech Republic- Yes 20/04/2015

	CBCA	Financial Assistance		
Decision Yes, we have submitted an investment request and have received a decision		Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision;#(2) Yes, we have applied for CEF, but we have	
Submissin Date	31/10/2013		not received a decision yet	
Decision Date	17/10/2014	Grants for studies	Yes	
Website	<u>CBCA URL</u>	Grants for studies amount	Mln EUR 0	
Countries Affected	Czechia, Poland	Grants for works	No	
Countries Net Cost Bearer	Czechia;#Poland	Grants for works amount		
Additional Comments		Intention to apply for CEF	No decision yet taken	
		Other Financial Assistance	Yes	
		Comments	TEN-E, 371 622 EUR	
		General Comments	Decision of CEF grant for CS Břeclav has been taken. The Grant Agreement is now under development.	

Poland - Czech Republic Gas Interconnection (PL section)

TRA-N-273	Project Pipeline including C		Non-FID
Update Date	30/03/2018		Advanced
Description	The project aims to increase the cross-border capacity between Poland and the will allow flexible transport of gas in Central-Eastern Europe within the North-So reinforcement of the effective operation of the gas transmission systems, efficie security of supply not only for Poland and the Czech Republic, but also for the C terminal in Świnoujście and Norwegian gas via the Baltic Pipe project.	outh corridor. The development of the project ent gas exchange between the markets, as well	will contribute to as increase of the
PRJ Code - PRJ Name	PRJ-G-022 - Poland - Czech Republic Interconnection		

Capacity Increments Var	iant For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
11-2	GAZ-SYSTEM S.A.	2022	CZ	PL	219.1 GWh/d
Hať	GAZ-SYSTEM S.A.	2022	PL	CZ	153.2 GWh/d

Sponsors		General I	nformation	ND	P and PCI Information
Gas Transmission Operator GAZ-SYSTEM S.A.	100% Prom	oter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
	Opera	ator	GAZ-SYSTEM S.A.		System Development Plan 2018-2027)
	Host	Country	Poland	NDP Number	N/A
	Statu	S	Planned	NDP Release Date	
	Webs	site	<u>Project's URL</u>	NDP Website	<u>NDP URL</u>
				Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

rrent TYNDP : TY	NDP 2018 FINA	- Annex A	
Schedule	Start Date	End Date	Third-Party Access
re-Feasibility			Considered TPA Regime
easibility			Considered Tariff Regime
EED	07/2015	12/2017	Applied for Exemption
Permitting	07/2016	12/2017	Exemption Granted
upply Contracts			
ID			Exemption in entry direction
onstruction			Exemption in exit direction
Commissioning	2022	2022	

Pipelines and Compressor Stations			
Pipeline Section	Pipeline Comment	Diameter Length Co (mm) (km)	mpressor Power Comissioning (MW) Year
PL-CZ Interconnection - Polish section		1,000 54	
	Total	54	

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Market integration: - Creation of a well-integrated and functioning market in the CEE region. SoS: - Mitigation of effects resulting from supply disruptions in the CEE countries; - Reduction of dependence on gas supplies from Russia in the CEE region; - Enhanced security of supply with an improved supply link in the CEE region to the European gas market, global LNG supplies, deliveries of gas from Norway. Competition: - Reduction of price differences between the CEE and North-West regions; - Enhanced access to new sources of supply in the CEE region (LNG, Norway, supplies from the EU market) that improves competition not only in PL but also in the whole CEE region. Sustainability - Reduction of emissions in the CEE region by promoting natural gas in national economies.

	Benefits
Main Driver	Others
Main Driver Explanatio	n Regulation SoS and market integration
Benefit Description	Implementation of Poland-Czech Republic Interconnection will have an impact on: providing overall flexibility for the CEE region, diversifying the supply sources and routes for the CEE region; increasing the security and reliability of the cross-border gas transmission between the Czech Republic and Poland; creating a robust, well-functioning internal market in the Czech Republic and Poland and promoting the competition.

Page	86	of	57	75
	~ ~	<u> </u>	<u> </u>	-

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

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date	31/10/2013	Grants for studies	Yes
Decision Date	24/06/2014	Grants for studies amount	
Website	<u>CBCA URL</u>	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	

LNG Terminal Brunsbuettel

LNG-N-1198	Project	LNG Terminal	Non-FID
Update Date	22/05/2018		Non-Advanced
Description	Construction of the first German LNG Terminal in Brunsbuettel (Hamburg Area) The Terminal project is currently running an open-season market survey to dete		
	The connencting projects are part of the Draft NDP 2018 of the German Gas TS	SOs.	
PRJ Code - PRJ Name	PRJ-G-023 - LNG Terminal Brunsbuettel		

Capacity Increments Variant For Modelling					
Point	Operator		Year From Gas Sy	stem To Gas System	Capacity
Brunsbuettel (DE)	Gasunie Deuts GmbH	schland Transport Services	2021 DEg	LNG_Tk_DEg	208.8 GWh/d
Sponsors	Gen	eral Information	NE	OP and PCI Information	
	Promoter	Gasunie Deutschland Transport Service GmbH	Part of NDP	No ((4) there is no obligo level for such a project	to be part of the
	Operator	Gasunie Deutschland Transport Services GmbH	NDP Number		NDP)
	Host Country	Germany	NDP Release Date		
	Status	Planned	NDP Website		
	Website	<u>Project's URL</u>	Currently PCI		No
			Priority Corridor(s)		
Schedule Start Date End	Date		Thi	rd-Party Access Regime	
Pre-Feasibility			Considered TPA Reg	ime	Negotiated
Feasibility			Considered Tariff Re	gime	Negotiated
FEED			Applied for Exemption	on	No
Permitting			Exemption Granted		No
Supply Contracts					
FID			Exemption in entry d		0.00%
Construction			Exemption in exit dir	rection	0.00%
Commissioning 2021	2021				
	Technic	al Information (LNG)			
Regasification Facility Reloading Ability Pr	oject Phase Expected Incr (bcm/y	rement Ship Size) (m3) Send-out capacity (mcm/d)	Storage capacity (m3 Comr LNG)	nents Commission Year	ing Load Factor (%)
LNG Terminal Brunsbüttel No (German LNG)					

Expected Gas Sourcing

LNG ()

Comments about the Third-Party Access Regime

German LNG Terminal GmbH is going to apply for an exemption in 2018

	Benefits
Main Driver	Market Demand
Main Driver Explanation	1
Benefit Description	

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



LNG Terminal Brunsbuettel - Grid Integration

TRA-N-1199		Project			Pipeline includin	g CS	lon-FID
Update Date			29/03/2018			Non	-Advanced
Description	Construction of the first Gern The Terminal project is curren The connencting projects are	ntly running an open-s	eason market survey to determine	the mar	ket for the project.		
PRJ Code - PRJ Name	PRJ-G-023 - LNG Terminal Br	runsbuettel					
Capacity Increments Varia	nt For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Brunsbuettel (DE)		Gasunie Deu GmbH	tschland Transport Services	2021	LNG_Tk_DEg	DEg	208.8 GWh/d
Sponsors		Ger	neral Information		NDP and	d PCI Information	
		Promoter	Gasunie Deutschland Transport Service GmbH	Part c	of NDP	No ((1) the NDP wa earlier date and ti	he project will be
		Operator	Gasunie Deutschland Transport Services GmbH	NDP		posed for inclusion ID 502	in the next NDP) -01a; ID 502-01b
		Host Country	Germany	NDP	Release Date		01/04/2018
		Status	Planned	NDP	Website		<u>NDP URL</u>
		Website	<u>Project's URL</u>	-	5		No
				Priori	ty Corridor(s)		

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2021	2021

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Brunsbuettel-Hetlingen		800	50		2021
	Total		50		

Evnected	Gas Sourcing	
LAPECIEU	Gas Sourcing	

LNG ()

	Benefits
Main Driver	Market Demand
Main Driver Explan	nation
Benefit Description	n

inent finde . finde 2				ſ	
	CBCA		Financial Assistanc	e	
	No, we have not submitted an investment request yet,	Applied for CEF	(′3) No, we have no	t applied for C
Decision	and we have not yet decided whether we will submit or	Grants for studies			
Submissin Date	not	Grants for studies amount			
Decision Date		Grants for works			
Vebsite		Grants for works amount			
Countries Affected		Intention to apply for CEF			
Countries Net Cost Bearer		Other Financial Assistance			
Additional Comments		Comments			
Additional Comments		General Comments			
Update Date	30	/03/2018		A	lvanced
Update Date Description	The objective of the project is to create a large transportat the construction of a new gas pipeline between the Herma of the Project on the Polish side: Hermanowice-PL/UA born transmission system development in Poland: Hermanowice	ion corridor between Poland and L nowice gas node on the Polish sid der pipeline; Metering station in Po	e and Bliche Volytsia U land; Extenstion of CS	ne Gas Interconne GS on the Ukraini Strachocina; Nece	an side. Scope ssary addition
	pipeline; Tworóg-Tworzeń pipeline.				
PRJ Code - PRJ Name					
	PRJ-G-028 - Poland - Ukraine Gas Interconnection				
_					
Capacity Increments Varia	nt For Modelling	Voor	From Gas System	To Gas System	Canacity
Capacity Increments Varia Point	nt For Modelling Operator	Year 2020	From Gas System	To Gas System	Capacity
Capacity Increments Varia	nt For Modelling	Year 2020 2020	From Gas System PL UA	To Gas System UAe PL	Capacity 153.2 GWh/ 153.2 GWh/

urrent TYNDP : TY	NDP 2018 FINAL	- Annex A				Page 92 of 575
Sponsors				General Information	NDP and PCI Information	
Gas Transmission O	perator GAZ-SYS	ΓΕΜ S.A. 1	00% Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission System Development Plan 2018-2027
			Operator Host Country	GAZ-SYSTEM S.A. Poland	NDP Number NDP Release Date	N//
			Status Website	Planned <u>Project's URL</u>	NDP Website	NDP UR
					Currently PCI Priority Corridor(s)	N NSI.
Schedule	Start Date	End Date			Thirc	d-Party Access Regime
Pre-Feasibility					Considered TPA Regir	me Regulated
Feasibility					Considered Tariff Reg	ime Regulated
FEED	09/2016	09/2018			Applied for Exemption	n <i>N</i> a
Permitting Supply Contracts	10/2016	09/2018			Exemption Granted	Not Relevan
FID					Exemption in entry di	rection 0.00%
Construction					Exemption in exit dire	ction 0.00%
Commissioning	2020	2020				

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Hermanowice Node - PL/UA border pipeline	The exact length - 1,5km	1,000	2		
	Total		2		

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		Benefits
Main Driver	Others	
Main Driver Explanation		
	The project will contribute towards: establish	shment of a well-integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MD); diversification of gas routes

Benefit Description

The project will contribute towards: establishment of a well-integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MD); diversification of gas routes and sources for Ukraine; enhancement of security of gas supply for Ukraine; reducing dependency on single gas supplier for Ukraine; strengthening energy solidarity between EU Energy Community and EU contracting countries; access to the gas storages in Ukraine for Poland and EU countries.

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

Poland-Ukraine Interconnector (Ukrainian section)

TRA-N-561	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Advanced
Description	The objective of the project is to create a large transportation corridor between P the construction of a new gas pipeline between the Hermanowice gas node on th of the Project on the Polish side: Pipeline Hermanowice-PL/UA border; Metering transmission system development in Poland: Pipeline Hermanowice-Strachocina; Tworzeń; Pipeline Tworóg-Tworzeń. Scope of the project on the Ukrainian side: P	he Polish side and Bliche Volytsia UGS on the station in Poland; Extenstion of CS Strachoci Pipeline Strachocina-Pogórska Wola; Pipelin	e Ukrainian side. Scope na; Necessary additional e Pogórska Wola-
PRJ Code - PRJ Name	PRJ-G-028 - Poland - Ukraine Gas Interconnection		

Capacity Increments Variant For Modelling								
Point	Operator	Year	From Gas System	To Gas System	Capacity			
PL>UA Interconnector	Ukrtransgaz	2020	PL	UAe	245.0 GWh/d			
UA>PL Interconnector	Ukrtransgaz	2020	UA	PL	215.0 GWh/d			

Sponsors			General Information		NDP and PCI Information		
Ukrtransgaz	100%	Promoter	PJSC UKRTRANSGAZ	Part of NDP	No ((2) no NDP exists in the country)		
		Operator	Ukrtransgaz	NDP Number			
		Host Country	Ukraine	NDP Release Date			
		Status	Planned	NDP Website			
		Website		Currently PCI	No		
				Priority Corridor(s)			

rrent TYNDP : TY	NDP 2018 FINA	L - Annex A	
Schedule	Start Date	End Date	Third-Party Access
re-Feasibility		02/2016	Considered TPA Regime
asibility	01/2015	12/2016	Considered Tariff Regime
EED	12/2016	07/2018	Applied for Exemption
ermitting	12/2016	09/2018	Exemption Granted
pply Contracts			
D			Exemption in entry direction
Construction	08/2018	03/2020	Exemption in exit direction
ommissioning	2020	2020	

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Drozdovychi - Bilche Volytsya		1,000	99	0	2020
	Total		99	0	

	~	~	
Expected	(₁ 25	SOL	ircino
Expected	Cub	500	

Norway, LNG (PL)

	Benefits
Main Driver	Regulation SoS
Main Driver Explanation	on Competition, Market Integration, Security of Supply, Sustainability
Benefit Description	The project will contribute towards: establishment of a well integrated gas market in the region (PL, UA, CZ, SK, HU, RO, MD); diversification of gas routes and sources for Ukraine; enhancement of security of gas supply for Ukraine; reducing dependency on single gas supplier for Ukraine; strengthening energy solidarity between the EU and Energy Community contracting countries; access to the gas storages in Ukraine for Poland and EU countries.

	СВСА	Financial	Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	but we do plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to apply
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	
	Oude(NL)-Bund	le(DE) GTG H-Gas	

TRA-N-949	Project	Pipeline including CS	Non-FID
Update Date	01/03/2018		Non-Advanced
Description	This projects creates a new interconnection point for H-Gas between the Netherlands an conversion in Germany	d Germany. The new H-Gas-capaciti	es helps for the L-H-Gas
PRJ Code - PRJ Name	PRJ-G-030 - Transferring L-gas infrastructure to H-gas		

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
	Gastransport Nord GmbH	2024	IB-NLg	DEg	59.3 GWh/d		
Runda (DE) (Quida Statageiil (II) (NII) (CTC Nand)	Gastransport Nord GmbH	2025	IB-NLg	DEg	59.3 GWh/d		
Bunde (DE) / Oude Statenzijl (H) (NL) (GTG Nord)	Gastransport Nord GmbH	2026	IB-NLg	DEg	59.3 GWh/d		
	Gastransport Nord GmbH	2027	IB-NLg	DEg	118.7 GWh/d		

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urrent IYNDP : IYNI	DP 2018 FINA	L - Annex A				Page 97 of 575
Sponsors				General Information	NDP and PCI Info	rmation
			Promoter	Gastransport Nord GmbH	Part of NDP Yes (Netzentwi	icklungsplan Entwurf 20
			Operator	Gastransport Nord GmbH		-202
			Host Country	Germany	NDP Number	432-0
			Status	Planned	NDP Release Date	16/10/201
			Website		NDP Website	NDP UF
					Currently PCI	٨
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-Party Access	Regime
re-Feasibility					Considered TPA Regime	Regulate
easibility					Considered Tariff Regime	Regulate
EED					Applied for Exemption	Ye
ermitting					Exemption Granted	Ye
upply Contracts						
ID					Exemption in entry direction	0.009
Construction					Exemption in exit direction	0.009
Commissioning	2024	2027				
				Expected Gas Sourcing		
Norway, Russia						
				Benefits		
Main Driver	Market Dem	and				
Main Driver Explanatio	on					
Benefit Description						0

	CBCA	Financial Assistance			
Decision	No, we have submitted an investment request, but not	Applied for CEF	(3) No, we have not applied for CEF		
Decision	received a decision yet	Grants for studies	No		
Submissin Date	30/03/2018	Grants for studies amount			
Decision Date		Grants for works	No		
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF			
Countries Net Cost Bearer		Other Financial Assistance	No		
Additional Comments		Comments			
		General Comments			

Embedding CS Folmhusen in H-Gas

TRA-N-951	Project	Pipeline including CS	Non-FID
Update Date	29/03/2018		Non-Advanced
Description	Embedding of the Compressor Station Folmhusen in H-Gas. This project is linked to the GTS project "TRA-N-882".	the L- to H-Gas conversion in Germany.	The project is linked to
PRJ Code - PRJ Name	PRJ-G-030 - Transferring L-gas infrastructure to H-gas		

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

Sponsors	General Information		NDP and PCI Information	
	Promoter	Gasunie Deutschland Transport Services GmbH	Part of NDP	Yes (NEP Gas 2015; NEP Gas 2016- 2026)
	Operator	Gasunie Deutschland Transport		ID 300-02
	operator	Services GmbH	NDP Release Date	16/10/2017
	Host Country	Germany	NDP Website	<u>NDP URL</u>
	Status	Planned	Currently PCI	No
	Website		Priority Corridor(s)	

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hedule	Start Date	End Date
asibility		
ility		
ting		
Contracts		
ruction		
issioning	2020	2020
	2020	

	Benefits					
Main Driver	Others					
Main Driver Explanation	Main Driver Explanation					
Benefit Description						

CBCA	Financial Assistance			
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
-	Grants for studies	No		
not	Grants for studies amount			
	Grants for works	No		
	Grants for works amount			
	Intention to apply for CEF			
		No		
parer				
	General Comments			
	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not harer No, we have not yet decided whether we will submit or not Applied for CEF Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments		

GUD: Complete conversion to H-gas

TRA-N-955	Project	Pipeline including CS	Non-FID
Update Date	24/03/2018		Non-Advanced
Description	Complete conversion of the grid from L- to H-gas in the year 2030. Use of the e project "H-Gas conversion of L-Gas export boarder point (TRA-N-882)". On the excisting infrastructure will be used. This project does not cover the conversion of the appliances.		
PRJ Code - PRJ Name	PRJ-G-030 - Transferring L-gas infrastructure to H-gas		

Capacity Increments Variant For Modelling						
Point	Operator	Year	From Gas System	To Gas System	Capacity	
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2030	IB-NLg	DEg	137.5 GWh/d	
Bunde (DE) / Oude Statenzijl (L) (NL) (GUD)	Gasunie Deutschland Transport Services GmbH	2030	IB-NLg	DEgL	-137.5 GWh/c	
UGS Lesum	Gasunie Deutschland Transport Services GmbH	2021	STcDEgL	DEgL	-48.9 GWh/d	
	Gasunie Deutschland Transport Services GmbH	2021	DEgL	STcDEgL	-10.7 GWh/d	
	Gasunie Deutschland Transport Services GmbH	2018	DEgL	DEnL	0.0 GWh/d	
Zone L-Gas GUD/OGE	Comment: Interruptable capacity according to NEP 2018					
	Gasunie Deutschland Transport Services GmbH	2027	DEgL	DEnL	-42.0 GWh/d	

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Promoter Operator Host Country Status Website	Gasunie Deutschland Transport Services GmbH Gasunie Deutschland Transport Services GmbH Germany Planned	NDP Number ID 221- NDP Release Date NDP Website Currently PCI Priority Corridor(s) Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	s 2014; NEP Gas 2015; NEP Gas 2016-2026, 01 ID; ID 222-02; ID 223-01 17/10/2017 <u>NDP URI</u> No ess Regime Regulated Not Relevant Not Relevant 0.00%
Host Country Status Website Schedule Start Date End Date Pre-Feasibility Feasibility FEED Permitting Supply Contracts FID Construction	Services GmbH Germany	NDP Release Date NDP Website Currently PCI Priority Corridor(s) Third-Party Acce Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	17/10/2017 <u>NDP URI</u> No ess Regime Regulated Regulated Not Relevant Not Relevant
Status Status Website Website Pre-Feasibility Easibility Seasibility EED Permitting Supply Contracts FID Supply Contracts Supply Contracts Supply Contracts Supply Contracts	Germany	NDP Website Currently PCI Priority Corridor(s) Third-Party Acce Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	<u>NDP URI</u> No ess Regime Regulated Regulated Not Relevant Not Relevant
Status Status Website Website Pre-Feasibility Easibility Feasibility Feasibility Feasibility Feasibility <		Currently PCI Priority Corridor(s) Third-Party Acce Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	ess Regime Regulated Regulated Not Relevant Not Relevant
ScheduleStart DateEnd DatePre-FeasibilityeasibilityEEDPermittingupply ContractsIDConstruction		Priority Corridor(s) Third-Party Acce Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	ess Regime Regulated Regulated Not Relevan Not Relevan
Pre-Feasibility easibility EED Permitting Supply Contracts ID Construction		Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	Regulated Regulated Not Relevan Not Relevan
easibility EED ermitting upply Contracts ID Construction		Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction	Regulated Not Relevant Not Relevant
EED ermitting upply Contracts ID Construction		Applied for Exemption Exemption Granted Exemption in entry direction	Not Relevan Not Relevan
ermitting upply Contracts ID Construction		Exemption Granted Exemption in entry direction	Not Relevant
upply Contracts ID Construction		Exemption in entry direction	
ID Construction			0.00%
onstruction			0.00%
Commissioning 2018 2030		Exemption in exit direction	0.00%
	Enabled Projects		
Project Code Project Name			
TRA-N-951 Embedding CS Folmhusen in H-Gas			
	Benefits		
Main Driver Others			
Main Driver Explanation			
Benefit Description			

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

Transferring L-gas infrastructure to H-gas

TRA-N-882	Project	Pipeline including CS	Non-FID
Update Date	27/02/2018		Non-Advanced
Description	Due to the of production of the Groningen field, L-gas export from the Netherlands to C via the existing L-gas border station, the first ones being Oude Statenzijl and Zevenaar. The first project is linked to initiatives of Gasunie Deutschland and GTG Nord.		ables the flow of H-gas
PRJ Code - PRJ Name	PRJ-G-030 - Transferring L-gas infrastructure to H-gas		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Runda (DE) (Oude Statemail (II) (NII) (CTC Nerd)	Gasunie Transport Services B.V.	2022	IB-NLg	DEg	72.0 GWh/d
Bunde (DE) / Oude Statenzijl (H) (NL) (GTG Nord)	Gasunie Transport Services B.V.	2026	IB-NLg	DEg	45.0 GWh/d
Runda (DE) (Oude Statemail (U) (NU) (CUD)	Gasunie Transport Services B.V.	2020	IB-NLg	DEg	72.4 GWh/d
Bunde (DE) / Oude Statenzijl (H) (NL) (GUD)	Gasunie Transport Services B.V.	2030	IB-NLg	DEg	137.5 GWh/d
	Gasunie Transport Services B.V.	2020	NL	IB-NLg	72.4 GWh/d
Virtual Ips (GTS) NL-DE (Gaspool)	Gasunie Transport Services B.V.	2022	NL	IB-NLg	72.0 GWh/d
	Gasunie Transport Services B.V.	2026	NL	IB-NLg	45.0 GWh/d
	Gasunie Transport Services B.V.	2030	NL	IB-NLg	137.5 GWh/d

Sponsors		General Information		NDP and PCI Information		
Gasunie Transport Services	100%	Promoter	Gasunie Transport Services B.V.	Part of NDP	Yes (Netwerk Ontwikkelingsplan 2017)	
		Operator	Gasunie Transport Services B.V.	NDP Number	6.5.1	
		Host Country	Netherlands	NDP Release Date		
		Status	Planned	NDP Website	NDP URL	
		Website		Currently PCI	No	
				Priority Corridor(s)		

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	Date	End Date
re-Feasibility		
easibility		
EED		
ermitting		
upply Contracts		
ID		
Construction		
Commissioning	020	2030

	Benefits
Main Driver	Market Demand
Main Driver Explanation	
Benefit Description	

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

Current TVNDD · TVNDD 2018 EINAL - Annov A

urrent IYNDP : IYNDP 2	2018 FINAL - Annex A		Page 106 of 575
TRA-F-752	Project	Pipeline including CS	FID
Update Date	31/05/2018		Advanced
Description	The project "Capacity4Gas – DE/CZ" is a subproject of the overall project Capacitization of an additional regulated entry capacity into the Czech gas transminiterconnection point at the German-Czech border, upgrade of existing completing infrastructure. The project is jointly coordinated by the transmission states (EUGAL shareholders). The project results from capacity bookings resulting from	nission system. Those measures are in particular: pressor stations, building a new compressor stations system operators of the Czech Republic (NET4GA	establishing a new on and extending the
DDI Code DDI Nome	PPLC 024 More canadity _ PE/CZ Canadity/Cas Project		

PRJ-G-034 - More capacity – DE/CZ Capacity4Gas Project PRJ Code - PRJ Name

Capacity Increments Variant For Modelling							
Point		Operator		Year	From Gas System	To Gas System	Capacity
		NET4GAS, s.r.o.		2019	DEg	CZ	665.0 GWh/d
Brandov-EUGAL (CZ) / Deutschneudorf-EUGAL (DE)		Comment: The incre	emental capacity represent	ts appro	x. entry capacity exte market areas of DI		
		NET4GAS, s.r.o.	NET4GAS, s.r.o. 20			CZ	454.0 GWh/d
					Comr	ment: Second phase	2
Prondou (DE)		NET4GAS, s.r.o.		2019	Y-CZb	CZ/GZL	-204.9 GWh/c
Brandov-OPAL (DE)					Comment: co	apacity reallocatior	1
lora Svaté Kateřiny (CZ) / Deutschneudorf (Sayda) (DE)		NET4GAS, s.r.o.		2019	DEg	CZ	15.6 GWh/d
				Comment: capacity reallocation			
Waidhaus		NET4GAS, s.r.o.		2019	IB-CZw	CZ	-241.4 GWh/d
waiunaus					Comment: co	apacity reallocatior	1
Sponsors		General Info	rmation		NDP and	PCI Information	
Czech Republic		Promoter	NET4GAS, s.r.o.	Part o	f NDP	Yes (CZ NDP 2018	-2027 (currently
NET4GAS, s.r.o.	100%	Operator	NET4GAS, s.r.o.	i art o		under a	pproval process)
Germany		Host Country	Czechia	NDP	Number		TRA-F-752
EUGAL (shareholders: GASCADE, Fluxys DE,		Status	Planned	NDP F	Release Date		31/10/2017
Gasunie DE, ONTRAS)	100%	Website	Project's URL	NDP \	Website		<u>NDP URI</u>
				~	IL DOL		

No

Currently PCI

Priority Corridor(s)

Pre-Feasibility Feasibility 03/2017 FEED 07/2017	End Date 03/2017 10/2017 06/2019	Third-Party Access Re Considered TPA Regime Considered Tariff Regime	Regu Regu Regu
Feasibility 03/2017 FEED 07/2017	10/2017	Considered Tariff Regime	-
	06/2019		
07/2017		Applied for Exemption	
Permitting 07/2017	12/2019	Exemption Granted	Not Rel
Supply Contracts	01/2020		
FID	03/2017	Exemption in entry direction	(
Construction 06/2018	09/2021	Exemption in exit direction	(
Commissioning 2019	2021		

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
HSK-Přimda	The project comprises several technical measures, which factually leads to increase of entry capacity between DE (Gaspool) and CZ.			25	2019
Total				25	

Benefits						
Main Driver	Market Demand					
Main Driver Explanat	tion Result of capacity auction					
Benefit Description						

CBCA	Financial Assistance		
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF	
and we do not plan to submit it	Grants for studies	No	
	Grants for studies amount		
	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		
		No, we have not submitted an investment request yet, and we do not plan to submit itApplied for CEFGrants for studiesGrants for studies amountGrants for worksGrants for worksGrants for works amountIntention to apply for CEFOther Financial AssistanceOther Financial Assistance	

EUGAL - Europaeische Gasanbindungsleitung (European Gaslink)

TRA-N-763	Project	Pipeline including CS	Non-FID
Update Date	26/03/2018		Advanced
	This project includes the Receiving Terminal Lubmin II, the pipeline EUGAL, regulation and measuring), a compressor station near Radeland, and a static Deutschneudorf.		
Description	EUGAL will extend the German network by 480 km, running from the Baltic southern Saxony and from there over the border to the Czech Republic. A p EUGAL through new connections in order to supply Germany and Western I	part of the transported gas enters the existing Gern	0
PRJ Code - PRJ Name	PRJ-G-034 - More capacity – DE/CZ Capacity4Gas Project		

Capacity Increments Variant For Modelling						
Point	Operator	Year	From Gas System	To Gas System	Capacity	
	GASCADE Gastransport GmbH	2019	DEg	CZ	664.8 GWh/d	
President FLICAL (CZ) (Deutechneuderf FLICAL (DE)				Comment: Level 1	1	
Brandov-EUGAL (CZ) / Deutschneudorf-EUGAL (DE)	GASCADE Gastransport GmbH	2020	DEg	CZ	454.4 GWh/d	
	Com	nment: Level 2, or	2, on top of Level 1 - in total 1119.23 GWh/d			
	GASCADE Gastransport GmbH	2019	RU/NO2	DEg	962.4 GWh/d	
Laboration II				Comment: Level 1	1	
Lubmin II	GASCADE Gastransport GmbH	2020	RU/NO2	DEg	778.9 GWh/d	
	Com	nment: Level 2, or	n top of Level 1 - in tot	tal 1741.38 GWh/d	1	

P and PCI Information	N	General Information				Sponsors
No ((1) the NDP was prepared at an earlier date and the project will be	Part of NDP	GASCADE GmbH / Fluxys Deutschland GmbH / GUD	Promoter	50% 16%		GASCADE Gastransp Fluxys Deutschland
proposed for inclusion in the next NDP)		GmbH&Co.KG / ONTRAS GmbH				
		GASCADE Gastransport GmbH		16%	nd GmbH & Co. KG	Gasunie Deutschlan
	NDP Release Date	Germany	Host Country	16%	ort GmbH	ONTRAS Gastranspo
	NDP Website	Planned	Status			
No	Currently PCI	Project's URL	Website			
	Priority Corridor(s)					
d-Party Access Regime	Thi			End Date	Start Date	Schedule
me Regulated	Considered TPA Reg					Pre-Feasibility
ime <i>Regulated</i>	Considered Tariff Re					Feasibility
n <i>No</i>	Applied for Exemption					FEED
Not Relevant	Exemption Granted			01/2018	01/2017	Permitting
						Supply Contracts
rection 0.00%	Exemption in entry of					FID
ection 0.00%	Exemption in exit dir					Construction
				2020	2019	Commissioning

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
AL NEL	the following project is related to it: - Gas press control and measuring station Lubmin-NEL	ure 1,000	1		2019
EUGAL	the following projects are related to it: - Gas pre control and measuring stations Radeland II, and Deutschneudorf-EUGAL - CS Radeland II - Recei Terminal Lubmin II ; Partially commissioning yea	l 1,400 iving	484	75	2019
	Total		485	75	

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Expected Gas Sourcing

Russia, VHP GASPOOL

	Benefits
Main Driver	Market Demand
Main Driver Explanation	The project will satisfy market demand that was expressed through binding capacity bookings in the context of "more capacity". The market demand is proven by the successful auctioning of the new capacities in the yearly auctions of 2017 that also proves the economic viability of the project.
Benefit Description	The "more capacity" projects - especially in combination with the other projects within PRJ group "More capacity - DE/CZ Capacity4Gas Project" - will enhance market integration, security of supply, sustainability, and competition within Europe.

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

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Additional East-West transport

TRA-N-809	Project	Pipeline including CS	Non-FID
Update Date	29/03/2018		Non-Advanced
Description	Additional East-West transport of gas volumes - for example to the Netherlands. The project is part of the projects related to the Euope-wide "more-capacity" market survey.		
PRJ Code - PRJ Name	PRJ-G-034 - More capacity – DE/CZ Capacity4Gas Project		

Sponsors				General Information	ND	P and PCI Information
			Promoter	Gasunie Deutschland Transport Services GmbH	Part of NDP	No ((1) the NDP was prepared at an earlier date and the project will be
			Operator	Gasunie Deutschland Transport		proposed for inclusion in the next NDP)
			operator	Services GmbH	NDP Number	ID 507-01l
			Host Country	Germany	NDP Release Date	01/04/2018
			Status	Planned	NDP Website	<u>NDP URL</u>
			Website	<u>Project's URL</u>	Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thir	d-Party Access Regime
Pre-Feasibility					Considered TPA Regi	me Regulated
Feasibility					Considered Tariff Reg	gime Regulated
FEED					Applied for Exemption	n <i>No</i>
Permitting	01/2018				Exemption Granted	Not Relevant
Supply Contracts						
FID					Exemption in entry d	irection 0.00%
Construction					Exemption in exit dire	ection 0.00%
Commissioning	2020	2020				

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Decision Date

Countries Affected

Countries Net Cost Bearer

Additional Comments

Website

No

No

No decision yet taken

urrent IYNDP : IYN	IDP 2018 FINAL - Annex A				Pag	ge 113 of 575
Pipelines and Compr	essor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Reversion Holtum	Reversing of the compr	essor station Holtum				2020
	Total					
	Ber	efits				
Main Driver	Market Demand					
Main Driver Explanati	on					
Benefit Description	PRJ-G-034 [More Capacity – DE/CZ Capacity4Gas Project] The air strengthen the supply of natural gas to Germany, the Czech Repu and cost-efficient access to gas supplies via additional pipeline c be made available to all interested market participants on a fully from producing countries. The market demand is proven by the the economic viability of the project.	ublic and other European countri apacities, especially in the Baltic transparent and non-discriminat	ies. The proje Sea. Simultar tory basis for	ect is part neously, tl the trans	of a larger initiative t ne newly-created infr portation of any kinc	to have secure rastructure will I of natural gas
	СВСА		Financi	al Assista	nce	
Decision	No, we have not submitted an investment request yet,	Applied for CEF			(3) No, we have not	applied for CEF
	and we do not plan to submit it	Grants for studies				No
Submissin Date		Grants for studies amount				

Grants for works

Comments

General Comments

Grants for works amount

Intention to apply for CEF

Other Financial Assistance

Upgrade for IP Deutschneudorf et al. for More Capacity

TRA-N-814	Project	Pipeline including CS	Non-FID
Update Date	29/03/2018		Non-Advanced
Description	 New PRMS Kienbaum II incl. connection to EUGAL pipeline with two meterin gas from EUGAL pipeline; due Dec. 2019. Upgrade of pressure security system at Börnicke PRMS by installing a second downstream grid for increasing transit from East (Kienbaum) to West, due end 3. Upgrade of PRMS at Steinitz with an additional metering/control system for interconnector, due Dec. 2019. Upgrade of Groß Köris PRMS with new metering/control system for gas transit 5. Renewal of Sayda compressor station to ensure increasing transit and pressure 	d control system to ensure operating pressure of 2019. gas transmission from FGL 302 pipeline towar smission to IP Deutschneudorf, due Dec. 2019	level of max. 84 bar in rds NETRA).
PRJ Code - PRJ Name	PRJ-G-034 - More capacity – DE/CZ Capacity4Gas Project		

Sponsors			General Information	N	DP and PCI Information
Compressor station Sayda ONTRAS Gastransport GmbH	100%	Promoter Operator	ONTRAS Gastransport GmbH ONTRAS Gastransport GmbH	Part of NDP	No ((1) the NDP was prepared at an earlier date and the project will be
Pressure reduction & metering station at Börnicke ONTRAS Gastransport GmbH	100%	Host Country Status	Germany Planned	NDP Number	proposed for inclusion in the next NDP) ID 507-01g, ID 507-01h, ID 507-01i, ID 507-1j, ID 507-01m
Pressure reduction & metering station at Groß Kö ONTRAS Gastransport GmbH	ris 100%	Website		NDP Release Date NDP Website Currently PCI	01/04/2018 <u>NDP URL</u> No
Pressure reduction & metering station at Kienbau connection to EUGAL	m with			Priority Corridor(s)	140
ONTRAS Gastransport GmbH Pressure reduction & metering station at Steinitz ONTRAS Gastransport GmbH	100% 50%				

urrent TYNDP : T	YNDP 2018 FINA	L - Annex A	
Schedule	Start Date	End Date	Third-Party Acces
re-Feasibility		03/2016	Considered TPA Regime
asibility	07/2017	10/2017	Considered Tariff Regime
EED	10/2017	12/2017	Applied for Exemption
ermitting	01/2018		Exemption Granted
upply Contracts			
ID			Exemption in entry direction
onstruction			Exemption in exit direction
ommissioning	2019	2019	

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter ((mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Connection Kienbaum-EUGAL	Pipeline length 0.1 km	700			2019
	Total				

Expected Gas Sourcing

Russia

	Benefit	its
Main Driver	Market Demand	
Main Driver Explan	ation see Market Survey "More Capacity" (see https://www.more-capacity.	<i>r</i> .eu)
Benefit Description		

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

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

TRA-N-168	Project	Pipeline including CS	Non-FID
Update Date	09/11/2018		Non-Advanced
Description	This projects consist on: - a pipeline from Zamora to the Portuguese border - an expansion of the compressor station in Zamora (Spain)		
PRJ Code - PRJ Name	PRJ-G-036 - Interconnection ES-PT (3rd interconnection)		

Point	Operator	Year	From Gas System	To Gas System	Capacity
	Enagas Transporte S.A.U.	2024	PT	ES	70.0 GWh/c
VIP IBERICO	Comment: According to the best ava Enagás and REN Gasodutos the comm on the Spanish side	on capacity value		PT-ES. Capacities	
VII IDEINICO	Enagas Transporte S.A.U.	2024	ES	PT	70.0 GWh/d
				eing developed by	

		741110277				i ugi
Sponsors			Gen	eral Information	NDP and PCI Inform	ation
CS Zamora			Promoter	Enagás Transporte, S.A.U.	Part of NDP No ((5) others -	please co
nagás Transporte	, S.A.U.	100	% Operator	Enagas Transporte S.A.U.	NDP Number	
Zamora - Portugu	ese Border		Host Country	Spain	NDP Release Date	
nagás Transporte		100	% Status	Planned	NDP Website	
5 1			Website		Currently PCI	
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-Party Access R	egime
re-Feasibility					Considered TPA Regime	
easibility	01/2019	05/2020			Considered Tariff Regime	
EED	01/2019	05/2020			Applied for Exemption	
Permitting	09/2019	12/2021			Exemption Granted	
Supply Contracts						
ID		05/2020			Exemption in entry direction	
Construction	04/2022	12/2023			Exemption in exit direction	
Commissioning	2024	2024				

Current TYNDF):	TYNDP	2018	FINAL -	Annex A
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Pipeline Section		Pipeline Comment		Length (km)	Compressor Power (MW)	-
CS Zamora		According to the best available data of the reassess that is being developed by Enagás and REN Gasodut the common capacity value is 70 ES-PT & 70 GWh P Capacities on the Spanish side before applying the le rule: 70 ES-PT & 70 GWh PT-ES	s ES.	(km)	4	Year 2023
Zamora - Portuguese Bo	order	According to the best available data of the reassessn that is being developed by Enagás and REN Gasodut the common capacity value is 70 ES-PT & 70 GWh P Capacities on the Spanish side before applying the le rule: 70 ES-PT & 70 GWh PT-ES	s ES. 700	86		2023
		Total		86	4	
		Fulfilled Criteria				
	The proj shippers	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit	of supply, the	3rd Inter	connection Portugal-	Spain is
	The proj shippers Comments necessar failure o	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
	The proj shippers Comments necessar failure o	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
	The proj shippers Comments necessar failure o	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
Specific Criteria Fulfilled	The proj shippers Comments necessar failure o	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
Specific Criteria Fulfilled Algeria, LNG ()	The proj shippers Comments necessar failure o	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula Expected Gas Sourcing	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
Specific Criteria Fulfilled Algeria, LNG () Main Driver	Comments The proj shippers necessar failure or occurring	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula Expected Gas Sourcing	of supply, the the Portugues al in Sines - de	3rd Inter e natural	connection Portugal- gas system, consider	Spain is ng the total
Specific Criteria Fulfilled Algeria, LNG () Main Driver	Comments The proj shippers necessar failure of occurring Others Integration of the lb	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula <u>Expected Gas Sourcing</u> Benefits	of supply, the the Portugues al in Sines - de on.	3rd Inter- e natural uring a da	connection Portugal- gas system, consider y of exceptionally hig	Spain is ng the total h gas demand
Specific Criteria Fulfilled Algeria, LNG () Main Driver Main Driver Explanation	Comments The proj shippers necessar failure of occurring Others Integration of the lb	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula Expected Gas Sourcing Benefits erian Peninsula gas market with the rest of Europe	of supply, the the Portugues al in Sines - de on.	3rd Inter- e natural uring a da	connection Portugal- gas system, consider y of exceptionally hig	Spain is ng the total h gas demanc
Specific Criteria Fulfilled Algeria, LNG () Main Driver Main Driver Explanation	Comments The proj shippers necessar failure of occurring Others Integration of the lb	ntegration, Security of Supply ect is important for the integration of the Portuguese market at Iberian an with access to alternative balancing gas. From the point of view of securit y to improve the N-1 criterion fulfilment (Regulation (EC) N° 994/2010) fo the most important supply infrastructure of the network - the LNG Termi g with a statistical probability of once in 20 years, as defined in the Regula Expected Gas Sourcing Benefits erian Peninsula gas market with the rest of Europe	of supply, the the Portugues al in Sines - de on.	3rd Inter- e natural uring a da	connection Portugal- gas system, consider y of exceptionally hig	Spain is ng the total h gas demand

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	Bai	rriers		
Barrier Type	Description			
Regulatory	It would be difficult to carry out an Open Season due to the size term binding commitments from network users cannot guarantee	J J		Portugal. The lack of lon
Others	It would be difficult to carry out an Open Season due to the size term binding commitments from network users cannot guarantee	5		Portugal. The lack of lon
Market	Lack of market support			
Regulatory	Low rate of return			
	Intergovernme	ental Agreements		
Agreement	Agreement Description		Is Signed Ag	greement Signature Dat
Lisbon Declaration	European Commission, France, Portugal and July at the Second Energy Interconnections s	Spain signed Lisbon Declaration on Friday 27th summit.	Yes	27/07/2018
Madrid Declaration	Commission, France, Portugal and Spain sign barriers	n High Level Group agreement to break energy	Yes	04/03/2015
	CBCA	Financial As	ssistance	
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, w	e have not applied for CE
Decision	and we have not yet decided whether we will submit or	Grants for studies		Ν
Submissin Date	not	Grants for studies amount		
Decision Date		Grants for works		٨
Vebsite		Grants for works amount		
Countries Affected		Intention to apply for CEF		
Countries Net Cost Bear	rer	Other Financial Assistance		٨
contries net cost bear		Comments		
Additional Comments				

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

TRA-N-729	Project	Pipeline including CS	Non-FID
Update Date	09/11/2018		Non-Advanced
Description	The second phase of the third interconnection between Spain and Portugal consist	s on a pipeline from Guitiriz-Zamora-Adra	adas
PRJ Code - PRJ Name	PRJ-G-036 - Interconnection ES-PT (3rd interconnection)		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Enagas Transporte S.A.U.	2028	PT	ES	72.0 GWh/d
	Comment: According to the best av Enagás and REN Gasodutos th Capacities on the Spanish side b	ne common capaci	ty value is 139 ES-PT a	& 126 GWh PT-ES.	
VIP IBERICO	Enagas Transporte S.A.U.	2028	ES	РТ	72.0 GWh/d
	Comment: According to the best ave Enagás and REN Gasodutos th Capacities on the Spanish side b	ne common capaci	ty value is 139 ES-PT a	& 126 GWh PT-ES.	

ponsors		General Information		NDP and PCI Information		
Castropodame - Zamora		Promoter	Enagás Transporte, S.A.U.	Part of NDP	Yes (Guitiriz-Lugo-Zamora-Adradas	
Enagás Transporte, S.A.U.	100%	Operator	Enagas Transporte S.A.U.		pipeline)	
Guitiriz - Lugo		Host Country	Spain	NDP Number	No code in the NDP	
Enagás Transporte, S.A.U.	100%	Status	Planned	NDP Release Date	01/05/2018	
enagas transporte, S.A.O.	100%	Website		NDP Website	<u>NDP URL</u>	
Lugo - Villafranca del Bierzo				Currently PCI	Yes ()	
Enagás Transporte, S.A.U.	100%			Priority Corridor(s)	NSIW	
Villafranca del Bierzo - Castropodame						
Enagás Transporte, S.A.U.	100%					
Zamora - La Barbolla - Adradas						
Enagás Transporte, S.A.U.	100%					

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2028	2028

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Castropodame - Zamora		600	170		2028
Guitiriz - Lugo		740	28		2028
Lugo - Villafranca del Bierzo		740	90		2028
Villafranca del Bierzo - Castropodame		740	30		2028
Zamora - La Barbolla - Adradas		800	307		2028
	Total		625		

Specific Criteria Fulfilled

Fulfilled Criteria

Market Integration, Security of Supply, Sustainability

Specific Criteria Fulfilled Comments This project has been included in the PCI list in 2013, 2015 and 2017.

Expected Gas Sourcing

Algeria, LNG ()

		Ben	efits		
Main Driver	Others				
Main Driver Explanation	Integration of the I	lberian Peninsula gas market with the rest of E	urope		
Benefit Description	The development of	of this project is linked to the development of	a new interconnection between France and Spain	by Spanish infr	astructure promoters.
		Bar	riers		
Barrier Type	Description				
Regulatory			of the Portuguese market and the lack of long-ter e the return of the investment to the Spanish syste		Portugal. The lack of long
Market			of the Portuguese market and the lack of long-ter e the return of the investment to the Spanish syste		Portugal. The lack of long
Regulatory	Low rate of return				
		Intergovernmei	ntal Agreements		
Agreement	1	Agreement Description	5	Is Signed A	greement Signature Dat
Lisbon Declaration		European Commission, France, Portugal and July at the Second Energy Interconnections so	Spain signed Lisbon Declaration on Friday 27th ummit.	Yes	27/07/2018
Madrid Declaration		Commission, France, Portugal and Spain sign barriers	High Level Group agreement to break energy	Yes	04/03/2015
	CBC	CA	Financial As	sistance	
		e not submitted an investment request yet,	Applied for CEF	(3) No, w	e have not applied for CE
Decision	and we have	e not yet decided whether we will submit or	Grants for studies		٨
Submissin Date		not	Grants for studies amount		
			Grants for works		٨
Decision Date			Grants for works amount		
Website			Intention to apply for CEF		
Countries Affected			Other Financial Assistance		٨
Countries Net Cost Bear	er		Comments		
Additional Comments			General Comments		

3rd IP between Portugal and Spain (pipeline Celorico-Spanish border)

TRA-N-283		Project		Pipeline includin	g CS N	Ion-FID
Update Date		09/11/	/2018		A	dvanced
Description	Spain by crossing the border This project will connect both This project enables the proje	nt (IP) PORTUGAL-SPAIN is locate between both Member States. gas systems between Celorico d cts TRA-N- 284 3rd IP between P Mangualde) and TRA-N-320 Carre	a Beira (Portugal) and Sp Portugal and Spain (Comp	anish border, through a pip pressor Station), TRA-N-285	eline with 162 km	of length.
PRJ Code - PRJ Name	PRJ-G-036 - Interconnection	ES-PT (3rd interconnection)				
Capacity Increments Varia	ant For Modelling					
Point	1	Operator		Year From Gas System	To Gas System	Capacity
		REN - Gasodutos, S.A.		2024 PT	ES	70.0 GWh/d
VIP IBERICO		Com	ment: First Step of the 3R	D Interconnection Point (IP)	PORTUGAL-SPAIN.	
VIP IDENICO		REN - Gasodutos, S.A.		2024 ES	PT	85.0 GWh/d
		Сот	ment: First Step of the 3R	D Interconnection Point (IP)	PORTUGAL-SPAIN	
Sponsors		General Infor	mation	NDP and	d PCI Information	
REN Gasodutos	100%	Promoter	REN-Gasodutos, S.A.	Part of NDP	Ye	s (PDIRGN 2017
		Operator	REN - Gasodutos, S.A.	NDP Number		
		Host Country	Portugal	NDP Release Date		
		Status	Planned	NDP Website		NDP UR
		Website	Project's URL	Currently PCI		Yes (
				Priority Corridor(s)		NSIM

urrent TYNDP : TYND	P 2018 FINA	- Annex A	
Schedule	Start Date	End Date	Third-Party Access
Pre-Feasibility		12/2014	Considered TPA Regime
easibility	01/2015	03/2015	Considered Tariff Regime
FEED	07/2015		Applied for Exemption
Permitting			Exemption Granted
Supply Contracts			
FID			Exemption in entry direction
Construction		12/2022	Exemption in exit direction
Commissioning	2024	2024	

	Enabled Projects						
Project Code	Project Name						
TRA-N-320	Carregado Compressor Station						
TRA-N-284	3rd IP between Portugal and Spain (Compressor Station)						
TRA-N-285	3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)						

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Celorico-Spanish border	First Step of the 3RD Interconnection Point (IP) PORTUGAL-SPAIN.	700	162	(10100)	rear
	Total		162		
	Fulfilled Criteria				l.
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	The project increases the security of supply in the Portuguese gas system and guara N° 994/2010. It facilitates the integration of the Portuguese market at Iberian and E shippers with access to alternative balancing gas enhancing transmission fluidity. It as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the indexes measured both on capacity and on supply sources, than most of the Europe Commission on the selection process for the second List of PCI, identified a high an criterions' of the Regulation n° 347/2013: market integration, security of supply and	uropean level, i also contribute moment, Portu ean countries. T d balanced con	mproving s to the E guese NC he assess	g competition and pro- uropean gas sources S system has lower dist ment carried out by	oviding diversification iversification the

	Time Schedule
Grant Obtention Date	14/07/2015
Delay Since Last TYNDP	3 years In the last edition of the TYNDP, REN was in the permitting process phase, waiting for the Environmental Impact Declaration to be issued by
Delay Explanation	the Competent Authorities. At this moment, REN already received the declaration with a unfavorable decision. As a consequence, it will be necessary to make an adjustment to the initial route, maintaining the same point of interconnection with Spain. Furthermore, the project of the 3rd Interconnection between Portugal and Spain was rescheduled due to the activities that are being developed in the High Level Group for the development of the interconnections between France, Spain and Portugal. It's important to notice that the Portuguese project has its decision dependent on the STEP project's decision.

Expected Gas Sourcing

Norway, Russia, Other LNG sources from the diversification of supply are expected, namely from the result of the integration of the Iberian m

	Benefits
Main Driver	Market Demand
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between Portugal and Spain, it should be noticed their planning shall be adjusted according to the real evolution of gas demand and market development in the Iberian Peninsula.
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidity between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the security of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems; Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European gas infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.

	Barr	riers				
Barrier Type De	scription					
Regulatory con	simple terms and according to the current Portuguese regulationsumers (after the CBCA decision by the regulators of Portugal pject plus the amortization recovery and the opex cost recovery tice that it is not possible to predict if, when and to what extended	and Spain) will be obtained by t / (subject to a mix of price cap ar	he remuneration of revenue cap reg	of the net inve	sted capital of the	
Permit Granting fro	N submitted the project of the 3rd IP PT-ES to the Environment m APA - Agência Portuguesa do Ambiente (Competent Environ nsequence, it will be necessary to make an adjustment to the in	nmental Authority), the Environm	nental Impact Declaration with unfavorable decision. As			
Market dei	garding the market survey, the 3rd interconnection between th monstrated by the responses of the stakeholders to the public s specific project, meaning that its potential users are not willin	consultation process on the gas	sector TYNDP for	Portugal held	in 2015 in what concerns	
	Intergovernmer	ntal Agreements				
Agreement	Agreement Description			Is Signed A	greement Signature Date	
Lisbon Declaration	European Commission, France, Portugal and S July at the Second Energy Interconnections su		on Friday 27th	Yes	27/07/2018	
Madrid Declaration	European Comission, Portugal, France and Sp	ain		Yes	04/03/2015	
	CBCA		Financial Ass	istance		
Decision	No, we have not submitted an investment request yet, but we do plan to submit it	Applied for CEF	(1) Yes, we have	e applied for Cl	EF and we have received o decisio	
Submissin Date		Grants for studies			Ye	
Decision Date		Grants for studies amount			Mln EUR	
Website		Grants for works			N	
Countries Affected		Grants for works amount				
Countries Net Cost Bearer		Intention to apply for CEF			Yes, for studies and work	
Additional Comments		Other Financial Assistance			Λ	
		Comments				

3rd IP between Portugal and Spain (Compressor Station)

TRA-N-284	Project	Pipeline including CS	Non-FID			
Update Date	09/11/2018		Non-Advanced			
Description	The 3RD Interconnection Point (IP) PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and Spain by crossing the border between both Member States. This project will contain a compressor station in the already existing pipeline Cantanhede-Mangualde.					
	This project enables the project TRA-N-285 3rd IP between Portugal and Spain S	pain (pipeline Cantanhede-Mangualde).				
PRJ Code - PRJ Name	PRJ-G-036 - Interconnection ES-PT (3rd interconnection)					

Capacity Increments Variant For Modelling

Point	Operator	Year	From Gas System	To Gas System	Capacity
	REN - Gasodutos, S.A.	2028	PT	ES	27.0 GWh/d
	Comment: Second Step. of the	3RD Interconnee	ction Point (IP) betwee	en Portugal and SP.	
VIP IBERICO	REN - Gasodutos, S.A.	2028	ES	РТ	22.0 GWh/d
	Comment: Second Step. of the	3RD Interconne	ction Point (IP) betwee	en Portugal and SP.	

Comment: Second Step	. of the 3RD Interco	nnection Point (IP)	between Portugal and SP
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Sponsors		Ger	neral Information	NDP and PC	I Information
REN Gasodutos	100%	Promoter	REN-Gasodutos, S.A.	Part of NDP	Yes (PDIRGN 2017)
		Operator	REN - Gasodutos, S.A.	NDP Number	-
		Host Country	Portugal	NDP Release Date	
		Status	Planned	NDP Website	<u>NDP URL</u>
		Website	<u>Project's URL</u>	Currently PCI	Yes ()
				Priority Corridor(s)	NSIW

Schedule	Start Date	End Date			Third-P	arty Access Regime	<i>y</i>
Pre-Feasibility				Considered TPA	Regime		Regulate
Feasibility				Considered Tari	ff Regime	2	Regulate
FEED				Applied for Exer	mption		Ν
Permitting				Exemption Gran	nted		N
Supply Contracts							
FID				Exemption in er	ntry direct	ion	0.00%
Construction				Exemption in ex	it directio	on	0.00%
Commissioning	2028	2028					
			Enabled Projects				
	oject Name						
TRA-N-285 3r	d IP between Portu	ıgal and Spain (pipelin	e Cantanhede-Mangualde)				
Pipelines and Con	npressor Stations						
Pipeline Section			Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Cantanhede Comr	prossor Station		Second Step of the 3RD Interconnection Point (IP)			12	

Cantanhede Compressor Station

E. 1611	
FUITULAC	d Criteria
- i unnec	

between Portugal and Spain.

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

Total

The project increases the security of supply in the Portuguese gas system and guarantees the fulfilment of the N-1 criterion of the Regulation N° 994/2010. It facilitates the integration of the Portuguese market at Iberian and European level, improving competition and providing shippers with access to alternative balancing gas enhancing transmission fluidity. It also contributes to the European gas sources diversification, as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the moment, Portuguese NG system has lower diversification indexes measured both on capacity and on supply sources, than most of the European countries. The assessment carried out by the Commission on the selection process for the second List of PCI, identified a high and balanced contribution of the project, between the criterions' of the Regulation n° 347/2013: market integration, security of supply and competition.

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	Time Schedule
Grant Obtention Date	
Delay Since Last TYNDP	4 years
Delay Explanation	This phase of the project is dependent on the 1st phase of the 3rd IP PT-ES (pipeline Celorico-Spanish border).
	Expected Gas Sourcing
Norway, Russia, LNG ()	
	Benefits
Main Driver	Market Demand
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between Portugal and Spain, it should be noticed their planning shall be adjusted according to the real evolution of gas demand and market development in the Iberian Peninsula.
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidity between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the security of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems; Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European gas infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.
	Barriers
Barrier Type	Description
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream respecting the part of the project allocated to Portuguese consumers (after the CBCA decision by the regulators of Portugal and Spain) will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.
Market	Regarding the market survey, the 3rd interconnection between the gas systems of Portugal and Spain is regarded as commercially non-viable as has been demonstrated by the responses of the stakeholders to the public consultation process on the gas sector TYNDP for Portugal held in 2015 in what concerns this specific project, meaning that its potential users are not willing to make any prior commitments in terms of capacity booking.
Market	Lack of market support

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	Intergovernmer	tal Agreements		
Agreement	Agreement Description		Is Signed	Agreement Signature Date
Lisbon Declaration	European Commission, France, Portugal and S July at the Second Energy Interconnections su	Spain signed Lisbon Declaration on Friday 27th Immit.	Yes	27/07/2018
Madrid Declaration	European Comission, Portugal, France and Sp	ain	Yes	04/03/2015
	СВСА	Financial As	sistance	
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No	, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies		No
Culturizzia Data	not	Grants for studies amount		
Submissin Date		Grants for works		No
Decision Date		Grants for works amount		
Website		Intention to apply for CEF		No decision yet taker
Countries Affected		Other Financial Assistance		No
Countries Net Cost Bearer		Comments		
Additional Comments		General Comments		

3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)

RA-N-285		Project		Pip	eline including	J CS N	on-FID	
Ipdate Date	09/11/2018		09/11/2018			Non	Non-Advanced	
Description	TThe 3RD Interconnection Point (IP) PORTUGAL-SPAIN is located in the priority corridor North-South in Western Europe, and involves Portugal a Spain by crossing the border between both Member States. This project corresponds to a second pipeline parallel to the already existing pipeline between Cantanhede and Mangualde.							
RJ Code - PRJ Name	PRJ-G-036 - Interconnection E	ES-PT (3rd interconnection))					
apacity Increments Varia	ant For Modelling							
oint		Operator		Year Fr	om Gas System	To Gas System	Capacity	
		REN - Gasodutos,	S.A.	2028	PT	ES	29.0 GWh/d	
IP IBERICO		Comm	ent: Second Step of the 3RD Inte	rconnection	n Point between P	Portugal and Spain.		
IF IDERICO		REN - Gasodutos,	S.A.	2028	ES	PT	32.0 GWh/d	
		Comm	ent: Second Step of the 3RD Inte	erconnection	n Point between P	Portugal and Spain.		
Sponsors		General	Information		NDP and	PCI Information		
REN Gasodutos	100%	Promoter	REN-Gasodutos, S.A.	Part of NI	DP	Yes	s (PDIRGN 2017	
		Operator	REN - Gasodutos, S.A.	NDP Nun	nber			
		Host Country		NDP Rele				
		Status	Planned	NDP Web	osite		NDP UR	
		Website	<u>Project's URL</u>				Yes (
				Priority C	orridor(s)		NSIW	

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2028	2028

Pipeline Section	eline Section Pipeline Comment			Compressor Power (MW)	Comissioning Year
Pipeline Cantanhede-Mangualde	Second Step of the 3RD Interconnection Point between Portugal and Spain.	500	67		
	Total		67		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comme	The project increases the security of supply in the Portuguese gas system and guarante N° 994/2010. It facilitates the integration of the Portuguese market at Iberian and Euror shippers with access to alternative balancing gas enhancing transmission fluidity. It als as pointed out in the EC COM (2904)330 European Energy Security Strategy. At the mo- indexes measured both on capacity and on supply sources, than most of the European Commission on the selection process for the second List of PCI, identified a high and b criterions' of the Regulation n° 347/2013: market integration, security of supply and co	opean level, i o contribute oment, Portu i countries. T palanced con	mproving s to the E guese No he assess	g competition and pre European gas sources G system has lower di sment carried out by	oviding diversification iversification the

	Time Schedule
Grant Obtention Date	
Delay Since Last TYNDP	2 years
Delay Explanation	This phase of the project is dependent on the 1st phase of the 3rd IP PT-ES (pipeline Celorico-Spanish border).

Current	TYNDP	: TYNDP	2018	FINAL -	Annex A
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Expected Gas Sourcing

	Benefits					
Main Driver	Market Demand					
Main Driver Explanation	Despite the mentioned start up dates of both the third and the fourth phases of the 3rd interconnection between their planning shall be adjusted according to the real evolution of gas demand and market development in the lbe					
Benefit Description	This PCI will contribute to the implementation of the internal energy market and it will also bring other benefits, particularly: increase NG market liquidit between Portugal and Spain systems, by providing new infrastructure access alternatives to market players in the Iberian Peninsula; Reinforce the securit of supply in case of failure in any one of the two gas systems, given the total reversibility of the new interconnection; Allow operational integration between the underground storage facilities of Carriço (Portugal) and Yela (Spain), by increasing storage capacity accessibility between both gas systems Increase the flexibility and support of gas infrastructure to gas fired power generation in both countries; Step towards the integration of the European g infrastructures in the context of the Gas Regional Initiative – South, by providing increased interconnection capacity and diversification of supply sources on an Internal Gas Market perspective.					
	Barriers					
Barrier Type	Description					
Regulatory	In simple terms and according to the current Portuguese regulation, the revenue stream respecting the part of the project allocated to Portuguese consumers (after the CBCA decision by the regulators of Portugal and Spain) will be obtained by the remuneration of the net invested capital of the project plus the amortization recovery and the opex cost recovery (subject to a mix of price cap and revenue cap regimes). Nevertheless, it's important to notice that it is not possible to predict if, when and to what extent any changes to this model may occur.					
Market	Regarding the market survey, the 3rd interconnection between the gas systems of Portugal and Spain is regarded demonstrated by the responses of the stakeholders to the public consultation process on the gas sector TYNDP for this specific project, meaning that its potential users are not willing to make any prior commitments in terms of ca	r Portugal h	eld in 2015 in what concerns			
	Intergovernmental Agreements					
Agreement	Agreement Description	Is Signed	Agreement Signature Date			
Lisbon Declaration	European Commission, France, Portugal and Spain signed Lisbon Declaration on Friday 27th July at the Second Energy Interconnections summit.	Yes	27/07/2018			
	European Comission, Portugal, France and Spain	Yes	04/03/2015			

Description

	CBCA		Financial Assistance	
Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer Additional Comments	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	 Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments General Comments 	(3) No, we	e have not applied for CEF No No No decision yet taken No
	South Transit East Pyre	enees (STEP) - ENAGAS		
TRA-N-161	Project		Pipeline including CS	Non-FID
Update Date	09/ This project consists of (Spain, Enagas zone)	/11/2018		Advanced

- A pipeline from Hostalrich to Figueras

- A pipeline from Figueras to French Border

- A compressor station in Martorell

PRJ Code - PRJ Name PRJ-G-039 - STEP (South Transit East Pyrenees)

Point	Operator	Year	From Gas System	To Gas System	Capacity
	Enagas Transporte S.A.U.	2022	IB-FR4	ES	110.0 GWh/d
	Comment: These are the capacities of	btained from the s	ubsequent probabilist	ic study developed	
	by Enagás. For further explanations,	see the comment of	on the project for the o	current publication.	
VIP PIRINEOS	by Enagás. For further explanations, Enagas Transporte S.A.U.	see the comment of 2022	on the project for the o ES	current publication. IB-FR4	120.0 GWh/d

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Sponsors				General Information	NDP a	nd PCI Information
CS Martorell			Promoter	Enagás Transporte, S.A.U.	Part of NDP Yes	(Conexión internacional con Francia
Enagas Transport	e, S.A.U.	100	0% Operator	Enagas Transporte S.A.U.		por Cataluña)
Figueras - French	Border		Host Country	Spain	NDP Number	No code in the NDP
0		10	0% Status	Planned	NDP Release Date	01/05/2008
Enagas Transport	e, s.a.o.	100	Website	Project's URL	NDP Website	<u>NDP URL</u>
Hostalrich - Figue	eras				Currently PCI	Yes ()
Enagas Transport	e, S.A.U.	100	0%		Priority Corridor(s)	NSIW
Schedule	Start Date	End Date	_		Third-P	arty Access Regime
Pre-Feasibility	1	01/2009			Considered TPA Regime	Regulated
Feasibility	01/2009	01/2009			Considered Tariff Regime	e Regulated
FEED	01/2016	12/2016			Applied for Exemption	No
Permitting	05/2019	11/2020			Exemption Granted	No
Supply Contracts						
FID		06/2019			Exemption in entry direct	tion 0.00%
Construction	04/2021	12/2022			Exemption in exit direction	on 0.00%
Commissioning	2022	2022				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Martorell	Date of Comissioning: December 2022			36	
Hostalrich - Figueras	Date of Comissioning: December 2022	900	79		
Pipeline Figueras - French Border	Date of Comissioning: December 2022	900	28		
	Total		107	36	

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	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled	In the context of the High Level Group for Interconnections in South-West Europe, the European Commission gave the mandate to Pöyry to Comments produce a Project Specific CBA for STEP project. This CBA has been complemented with additional studies, carried out by Frontier, TIGF and Enagás. STEP provides benefits, among others, such as Security of Supply, increased liquidity and increased market competition.
	Time Schedule
Grant Obtention Date	25/01/2018
elay Since Last TYNDP	1 year
Delay Explanation	
	Expected Gas Sourcing
Algeria, LNG ()	
3	
	Benefits
Main Driver	Others
Main Driver Explanation	This project was part of the "Iberian-French corridor-Eastern Axis-Midcat Project" which was included in the 2nd PCI list (adopted by the European Commission the 18th of November 2015), and was seleected as PCI in 2017 (adopted by the European Commission the 24th November 2017). This project will clearly improve the integration of the Iberian Peninsula with the rest of EU reducing its isolation from the EU gas markets, and helping to the price convergence of Iberian and EU gas markets.
Benefit Description	According to the conclusions of the study developed by Ramboll, requested by the European Commission within the High Level Group on Interconnections for South-West Europe, MidCat is justified as it will integrate the Iberian gas market with the rest of the EU. In this study, it is also concluded that a stepwise implementation of the interconnector is possible, when accepting that mostly interrumptible capacity will be available after the first stage.

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	Barriers					
Barrier Type	Description					
Regulatory	In 2010, Enagás, TIGF and GRTgaz carried out an OS to ask for binding commitments for capacities provided by M North-South link. Concerning MidCat, none of the three proposed infrastructure scenarios received enough bids to latest call made to the market regarding MidCat.However, MidCat has demonstrated benefits in terms of market in of supply and diversification of supply.Taking into account that the OS2015 was carried out in a context of econom current situation jointly with the new endency in contracting capacity (from long term to short term) well as the de foreseen that network users would make enough long-term commitments in order to fully cover the investment. B regulatory framework would not contribute to have an appropriate rate of return of the investments	b be triggerentegration (p nic prosperity prease in ga	d. This OS is currently the rice convergence), security y in comparison with the s consumption, it is not			
Market	In the Open Season launched in 2010 between Spain and France MidCat didn't obtain enough market support .					
Regulatory	Low rate of return					
Market	Lack of market support					
	Intergovernmental Agreements					
Agreement	Agreement Description	Is Signed	Agreement Signature Date			
Lisbon Declaration	European Commission, France, Portugal and Spain signed Lisbon Declaration on Friday 27th July at the Second Energy Interconnections summit.	Yes	27/07/2018			
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes	04/03/2015			

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Current TYNDP : TYNDP 2018 FINAL - Annex A

	CBCA		Financial Assistance
cision	No, we have not submitted an investment request yet, but we do plan to submit it	Applied for CEF	(1) Yes, we have applied for CEF and we have received of decision
omissin Date	28/03/2018	Grants for studies	Ye
cision Date		Grants for studies amount	Mln EUR
bsite		Grants for works	N
untries Affected		Grants for works amount	
untries Net Cost Bearer		Intention to apply for CEF	
ditional Comments		Other Financial Assistance	N
		Comments	
			In January 2016, Enagás Transporte SAU received a CEF-I grant for MidCat project to carry out the engineering studies of Martorell compressor station and the engineering studies of the pipeline from Figueras to the French border. These infrastructures are now included within STEP project. In January 2018, Enagás Transporte SAU received a CEF-I grant for studiers for permit granting process of STEP
		General Comments	INEA webpage on CEF-E grants for MidCa https://ec.europa.eu/inea/en/connecting-europe facility/cef-energy/projects-by-country/spain/5.5-0054 esfr-s-m-15
			List of actions selected for receiving financial assistance under the 2017 CEF Energy Call for Proposals (January 2018,
			https://ec.europa.eu/energy/sites/ener/files/documents/li t_of_actions_selected_for_receiving_financial_assistance_u nder_the_2017_cef_energy_call_for_proposals.pdg

South Transit East Pyrenees (STEP) - TEREGA

TRA-N-252	Project	Pipeline including CS	Non-FID
Update Date	15/11/2018		Advanced
Description	On the French side, it is composed by a 120 km long pipeline between the frem Barbaira, close to Carcassonne.	nch-spanish border (near Le Perthus) and the co	ompressor station of
PRJ Code - PRJ Name	PRJ-G-039 - STEP (South Transit East Pyrenees)		

Point	Operator	Year	From Gas System	To Gas System	Capacity
	TERÉGA	2022	IB-FR4	ES	0.0 GWh/d
	Comment: On the French si		ruptible, until 230 GW th, and 180 GWh/d fro		
VIP PIRINEOS	TERÉGA	2022	ES	IB-FR4	0.0 GWh/d

Sponsors		G	eneral Information	NDP and	PCI Information
TEREGA	100%	Promoter	TEREGA	Part of NDP	Yes (2017 TEREGA NDP)
		Operator	TERÉGA	NDP Number	No number
		Host Country	France	NDP Release Date	
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	Yes ()
				Priority Corridor(s)	NSIW

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	01/2016	01/2017
FEED	01/2016	06/2019
Permitting	02/2019	12/2020
Supply Contracts		
FID		04/2019
Construction	12/2020	10/2022
Commissioning	2022	2022

Pipeline Section	Pipeline Comment	Diameter	9	Compressor Power	
		(mm)	(km)	(MW)	Year
Pipeline Spanish Border-Barbaira	French side	900	120		
	Total		120		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	In the context of the High Level Group for Interconnections in South- s produce a Project Specific CBA for STEP project. This CBA has been c			-	
Specific Criteria Fulfilled Comment	s produce a Project Specific CBA for STEP project. This CBA has been c Enagás. STEP provides benefits, among others, such as Security of Su	omplemented with additiona	l studies, o	carried out by Frontie	
	s produce a Project Specific CBA for STEP project. This CBA has been c Enagás. STEP provides benefits, among others, such as Security of Su Time Schedule	omplemented with additiona	l studies, o	carried out by Frontie	
Grant Obtention Date	s produce a Project Specific CBA for STEP project. This CBA has been c Enagás. STEP provides benefits, among others, such as Security of Su	omplemented with additiona	l studies, o	carried out by Frontie	
	s produce a Project Specific CBA for STEP project. This CBA has been c Enagás. STEP provides benefits, among others, such as Security of Su Time Schedule	omplemented with additiona	l studies, o	carried out by Frontie	
Grant Obtention Date Delay Since Last TYNDP	s produce a Project Specific CBA for STEP project. This CBA has been c Enagás. STEP provides benefits, among others, such as Security of Su Time Schedule	omplemented with additiona	l studies, o	carried out by Frontie	

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	Bene	efits				
Main Driver	Others					
	The project aims at lifting the isolation of the iberian peninsula and create market integration. The project can also be seen as a security of supply tool at european level as it reduces the dependance to russian gas, and creat access to LNG terminals in Spain and Algerian gas. Local security of supply can also be considered.					
Benefit Description						
	Barr	iers				
Barrier Type	Description					
Political	French regulator questions the interest of the project and request	a cost / benefit analysys before ta	king any decisi	on		
Market	Lack of market support					
	Intergovernmen	tal Agreements				
Agreement	Agreement Description			Is Signed Ag	reement Signature Date	
Lisbon Declaration	European Commission, France, Portugal and S July at the Second Energy Interconnections su		n Friday 27th	Yes	27/07/2018	
Madrid Declaration	Energy Interconnections Links Summit			Yes	04/03/2015	
	CBCA		Financial Ass	sistance		
Decision	No, we have not submitted an investment request yet, but we do plan to submit it	Applied for CEF	(1) Yes, we have	e applied for CE	F and we have received a decision	
Submissin Date	09/04/2018	Grants for studies			Ye	
Decision Date		Grants for studies amount			Mln EUR	
Website		Grants for works			Ye	
Countries Affected		Grants for works amount				
Countries Net Cost Beare	er	Intention to apply for CEF				
Additional Comments		Other Financial Assistance			N	
		Comments				
		General Comments			<u>}</u>	
	Eastring -	Bulgaria				
TRA-N-654	Project		Pipeline incl	uding CS	Non-FID	

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		5
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, whic Kapušany / Veľké Zlievce in the territory of Slovakia with a new IP at an external border of the EU in the territory of Bulgaria Turkey). The project would (i) secure supplies in case of RU disruption and therefore it will increase gas SoS in the broader C region, (ii) allow access to alternative gas sources for Central, Western & Southern Europe and (iii) mean step towards EU sin	(Black Sea coast or entral-South-East EU
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		
Fort	Bulgartransgaz EAD	2023	BGn	BG/EAR	200.0 GWh/d		
	Comment: ntry/Exit capacity at d all Exit capacities from domestic sy	omestic points may g	o up to the level of 20	0 GWh/d if sum of	200.0 GWH/C		
Eastring BG Domestic Point	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 G all Exit capacities from domestic system to adjacent networks (or vice versa) is ab						
	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		
Eastring Cross-Border BG/EAR <> RO/EAR	Comment: Phase I New IP, New	capacity increment fr	om Q4 2028 to the le	vel of 1140 GWh/d			
castring cross-border bd/EAR <> KO/EAR	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		
Eastring Cross-Border BG/EAR>TR	Comment: Transmission betwe New	• •	and Turkey via new II om Q4 2028 to the le				
	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

			New capacity increment from Q4 2028 to the level of 1140 GWh/d					
Eastring Cross-Bord	er TR>BG/EAR		Bulgartransgaz EAD		2028 TR	Ri	BG/EAR	570.0 GWh/d
						Comr	nent: Phase	11
Sponsors			General In	formation	NDP and PCI Information			١
Bulgartransgaz EAD		100%	Promoter	Bulgartransgaz EAD	Part of NDP	Yes (Ten-year network
	/		Operator	Bulgartransgaz EAD			development plan of BT	
			Host Country	Bulgaria	NDP Number			Section 5.1(5.1,2)
			Status	Planned	NDP Release Dat	te		10/04/2017
			Website	Project's URL	NDP Website			<u>NDP URL</u>
					Currently PCI			Yes ()
					Priority Corridor((S)		NSIE
Schedule	Start Date	End Date				Third-Party Aco	ess Regim	e
Pre-Feasibility		08/2016			Considered TPA F	Regime		Not Applicable
Feasibility	09/2017	06/2018			Considered Tariff	f Regime		Not Applicable
FEED	10/2018	02/2020			Applied for Exem	ption		Not Relevant
Permitting	03/2020	12/2020			Exemption Grante	ed		Not Relevant
Supply Contracts		01/2020						
FID					Exemption in entr	ry direction		0.00%
	01 (0001	00/2022			Exemption in exit	t direction		0.00%
Construction	01/2021	09/2023			Exemption in exit	lunection		0.00%

Pipelines and Compressor Stations			
Pipeline Section	Pipeline Comment	Diameter Lengtl (mm) (km)	Compressor Power Comissioning (MW) Year
Eastring-BG-2	Data refers to the first stage - capacity case of increase of capacity up to 1140 compressor power at level of 374 MW	0 GWh/d in 2028, 1,400 257	88
	Total	257	88

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	Fulfilled Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability	
Specific Criteria Fulfilled	The Project is located in one of the least developed gas market regions. The Project Comments Based on the latest stress tests it is one of the most vulnerable region regarding the region.	
	Time Schedule	
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 a	vailable 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 source Central and Western Europe, while further enhancing the market integration of the affected cou	
Benefit Description	- Physical alternative for providing 100% of all Balkan countries' consumption; enhancing markers security of supply for 100% of all Balkan countries' consumption; - Additional utilization for CZ, Western shippers with possibility to supply Balkan countries and even Turkey from NCG/Gaspo Europe from alternative sources – AGRI, TANAP, Caspian, Iran, Iraq, Egypt, Israel, Cyprus, Turkey Decrease of market concentration on producers side	SK, PL, UA, RO, BG transit and storage assets; - Providing ol/Baumgarten; - Corridor ready for future gas imports to
	Intergovernmental Agreements	
Agreement	Agreement Description	Is Signed Agreement Signature Date
Declaration	Governmental declaration	No 21/05/2015

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

Eastring - Hungary							
TRA-N-656	Project	Pipeline including CS	Non-FID				
Update Date	14/09/2018		Non-Advanced				
Description	A Eastring-HU is subproject located in Hungary and is essential part of the East following routing options: via HU, (new pipeline) from RO-HU border (Csenger factor is estimated at 0% by all Project Promoters because of the low project m the feasibility study, results of which could be basis for further assessments.	rsima) to HU/SK border (Zemplénagárd). At t	his moment the load				
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slovak	ia [currently known as "Eastring"					

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

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	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
			Com	ment: II.phase; total	
				incremental	
				capacity	
				I.+II.phase is	
Eastring Cross-Border RO/EAR <> HU/EAR				at the level of	
Lusting cross border Ko/LAK <> ho/LAK				1140 Gwh/d	
	FGSZ Ltd.	2028	RO/EAR	HU/EAR	570.0 GWh/d
			Com	ment: 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

Sponsors		General Information		NDP and PCI Information	
FGSZ Ltd.	100%	Promoter	FGSZ Ltd.	Part of NDP	Yes (National Development Plan 2017)
		Operator	FGSZ Ltd.	NDP Number	12.13.
		Host Country	Hungary	NDP Release Date	28/12/2017
		Status	Planned	NDP Website	<u>NDP URL</u>
		Website	Project's URL	Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		08/2016
Feasibility	09/2017	06/2018
FEED	10/2018	02/2020
Permitting	03/2020	12/2020
Supply Contracts		01/2020
FID		
Construction	01/2021	09/2023
Commissioning	2023	2028

ipeline Section Pipeline Comment			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 Comme	The Project is located in one of the least developed gas market regions. The Project n ents Based on the latest stress tests it is one of the most vulnerable region regarding the S				
Specific Criteria Fulfilled Comme					
Specific Criteria Fulfilled Comme Grant Obtention Date	ents Based on the latest stress tests it is one of the most vulnerable region regarding the S region.				
	ents Based on the latest stress tests it is one of the most vulnerable region regarding the S region. Time Schedule				
Grant Obtention Date	ents Based on the latest stress tests it is one of the most vulnerable region regarding the S region. Time Schedule	oS. The Proje	ect will en	hance overall develo	
Grant Obtention Date Delay Since Last TYNDP	ents Based on the latest stress tests it is one of the most vulnerable region regarding the S region. Time Schedule 12/05/2017	oS. The Proje	ect will en	hance overall develo	

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		Benefits				
Main Driver	Others					
Main Driver Explanation	Central and We	ngs significant benefits to the SoS of Europe, bringing the increasing estern Europe, while further enhancing the market integration of the a vergence; 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' c Additional utilization for CZ, SK, PL, UA, RO, BG transit and storage assets; - Providing Western shippers with possibility to supply Balkan cour even Turkey from NCG/Gaspool/Baumgarten; - Corridor ready for future gas imports to Europe from alternative sources - TANAP, Caspian, Iran Egypt, Israel, Cyprus. Most of them from perspective Turkish natural gas hub/border Turkey/BG; 					
		Barriers				
Barrier Type	Description					
Regulatory	Low rate of retu	urn				
Regulatory	Capacity quota	IS				
Financing	Availability of f	unds and associated conditions				
Market	Lack of market	maturity				
		Intergovernmental Agreements				
Agreement		Agreement Description	Is Signed	greement Signature Dat		
Declaration		Goverment declaration	No	21/05/2015		
Memorandum of Under	standing	Memorandum of Understanding	Yes	13/07/2016		

	СВСА	Financial Assistance		
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF	
Decision	but we do plan to submit it	Grants for studies	No	
Submissin Date		Grants for studies amount		
Decision Date		Grants for works	No	
Website		Grants for works amount		
Countries Affected		Intention to apply for CEF	No decision yet taken	
Countries Net Cost Bearer		Other Financial Assistance	No	
Additional Comments		Comments	Eustream received 1,000,000 EUR financial support for feasibility study for execution the whole SK-HU-RO-BG route from CEF.	
		General Comments		

Eastring - Romania

TRA-N-655	Project	Pipeline including CS	Non-FID
Update Date	23/03/2018		Non-Advanced
Description	Eastring-RO, located in Romania is an essential part of the Eastring project with IP at the BG/TR border. Eastring is a natural gas pipeline project. It will offered to any shipper on non-discriminatory basis respecting all EU rules a gas infrastructure between Slovakia, Hungary, Romania and Bulgaria in a b gas market situation in each of the respective countries. Maximum daily bi (Stage II). The project would secure supplies in case of RU disruption and therefore it as will allow access to alternative gas sources for Central, Western & South	I not own or sell any natural gas and once availabl and laws (Directives and Regulations). Eastring will idirectional conjunction bringing a new transit pot -directional capacity will be of 20 bcm/year (Stage t will increase gas SoS in the broader Central-Sout	e, all its capacity will be connect the existing tential and improving e I) and 40 bcm/year
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slo	ovakia [currently known as "Eastring"	

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	SNTGN Transgaz S.A.	2023	BG/EAR	RO/EAR	570.0 GWh/d
Fosting Cross Parley PC (FAD (), PO (FAD	SNTGN Transgaz S.A.	2023	RO/EAR	BG/EAR	570.0 GWh/d
Eastring Cross-Border BG/EAR <> RO/EAR	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
	SNTGN Transgaz S.A.	2023	HU/EAR	RO/EAR	570.0 GWh/d
Eastring Cross Bouder DO/EAD () 111/EAD	SNTGN Transgaz S.A.	2023	RO/EAR	HU/EAR	570.0 GWh/d
Eastring Cross-Border RO/EAR <> HU/EAR	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
Factorian DO Domestic Paint	SNTGN Transgaz S.A.	2023	RO	RO/EAR	150.0 GWh/d
Eastring RO Domestic Point	SNTGN Transgaz S.A.	2023	RO/EAR	RO	150.0 GWh/d

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						Tage TSE OF STS
Sponsors				General Information	ND	P and PCI Information
Transgaz S.A.		100	0% Promoter	SNTGN Transgaz SA		No ((1) the NDP was prepared at an
			Operator	SNTGN Transgaz S.A.	Part of NDP	earlier date and the project will be
			Host Country	Romania	NEEN	proposed for inclusion in the next NDP)
			Status	Planned	NDP Number	
			Website	<u>Project's URL</u>	NDP Release Date	
				-	NDP Website	
					Currently PCI	Yes ()
					Priority Corridor(s)	NSIE
Schedule	Start Date	End Date			Thir	d-Party Access Regime
Pre-Feasibility		08/2016			Considered TPA Regi	me Regulated
Feasibility	09/2017	06/2019			Considered Tariff Reg	jime Regulated
FEED	10/2018	02/2019			Applied for Exemptio	n No
Permitting	03/2020	12/2020			Exemption Granted	Not Relevant
Supply Contracts		01/2020				
FID					Exemption in entry di	rection 0.00%
Construction	01/2021	09/2023			Exemption in exit dire	ection 0.00%
Commissioning	2023	2028				

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Eastring-RO-2		1,400	651		2023
	Total		651		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	Market Integration, SoS, Sustainability, Competition				

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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

Time Schedule

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	Finan	cial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Culorizzia Data	not	Grants for studies amount	
Submissin Date		Grants for works	No
Decision Date		Grants for works amount	
Website		Intention to apply for CEF	No decision yet taken
Countries Affected		Other Financial Assistance	No
Countries Net Cost Bear	er	Comments	
Additional Comments		General Comments	

TRA-N-628	Project	Pipeline including CS	Non-FID
Update Date	18/12/2018		Advanced
Description	Eastring-SK is subproject located in Slovakia and is essential part of the Eas Kapušany / Veľké Zlievce in the territory of Slovakia with a new IP at an exter Turkey). The project would (i) secure supplies in case of RU disruption and t region, (ii) allow access to alternative gas sources for Central, Western & Sc	ernal border of the EU in the territory of Bulgaria (Bl therefore it will increase gas SoS in the broader Cen	lack Sea coast or htral-South-East EU
PRJ Code - PRJ Name	PRJ-G-041 - Pipeline system from Bulgaria via Romania and Hungary to Slo	ovakia [currently known as "Eastring"	

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

Eastring SK/EAR <-> Veľké Kapušany

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

Sponsors				eneral Information	NDP a	and PCI Information
Eastring B.V.		100%	Promoter	eustream, a.s. (a joint stock company)	Part of NDP	Yes (National Development Plan 201 202
			Operator	eustream, a.s.	NDP Number	4.1.1.3. Eastrir
			Host Country	Slovakia	NDP Release Date	30/11/201
			Status	Planned	NDP Website	<u>NDP UF</u>
			Website	Project's URL	Currently PCI	Yes
					Priority Corridor(s)	NSI
Schedule	Start Date	End Date			Third-I	Party Access Regime
Pre-Feasibility		08/2016			Considered TPA Regime	e Regulate
Feasibility	09/2017	06/2018			Considered Tariff Regim	ne Regulate
FEED	10/2018	02/2020			Applied for Exemption	N
Permitting	03/2020	12/2020			Exemption Granted	Not Relevan
Supply Contracts		01/2020				
FID					Exemption in entry direc	ction 0.009
Construction	01/2021	09/2023			Exemption in exit direct	ion 0.009
Commissioning	2023	2028				

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/o 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 r	1,400	19	52	2023
	Total		19	52	

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, inter alia through diversification of supply sources, supplying counterparts and routes, Market Integration, inter alia through lifting the isolation of at least one Member State and reducing energy infrastructure bottlenecks; interoperability and system flexibility, Security of Supply, inter alia through appropriate connections and diversification of supply sources, supplying counterparts and routes, Sustainability, inter alia through reducing emissions, supporting intermittent renewable generation and enhancing deployment of renewable gas
Specific Criteria Fulfilled	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.
	Time Schedule
Grant Obtention Date	12/05/2017
Delay Since Last TYND	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, Norwa	y, 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

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 Main Driver Explanation 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

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	

urrent TYNDP : TYNDP 2018 FINA	AL - Annex A		Page 157 of 575
	Intergovernme	ntal Agreements	
Agreement	Agreement Description		Is Signed Agreement Signature Date
Declaration	Governmental declaration		Yes 21/05/2015
Memorandum of Understanding	Memorandum of Understanding		Yes 13/07/2016
	СВСА		Financial Assistance
Decision No,	we have not submitted an investment request yet, but we do plan to submit it	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 1
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	Yes, for studies and works
Additional Comments		Other Financial Assistance	Yes
		Comments	Financial support for feasibility study execution from CEF
		General Comments	

Iberian-French corridor: Eastern Axis - Midcat Project

TRA-N-727	Project	Pipeline including CS	Non-FID
Update Date	09/11/2018		Advanced
Description	 MidCat consist of (Spain, Enagas zone), in addition to the infrastructures in the CS in Martorell): A pipeline (loop) from Castelnou to Villar de Arnedo A pipeline (loop) form Tivissa to Arbós New filter in CS Tivissa A increment in CS Arbós An increment in CS Zaragoza 	cluded in STEP project (pipeline Hostalrich-Figueras	-French border and
PRJ Code - PRJ Name	PRJ-G-044 - MidCat (Iberian-French corridor, Eastern Axis – MidCat project	t)	

Capacity Increments Variant For Modelling							
Point		Operator		Year	From Gas System	To Gas System	Capacity
		Enagas Tra	nsporte S.A.U.	2024	IB-FR4	ES	135.0 GWh/d
		new	In 2015 Enagás,TIGF&GRTgaz develo IP between FR & ES. Common capaci ies on the Spanish side before applyir	ity value v	would be 230 ES-FR	& 160 GWh FR-ES.	
VIP PIRINEOS		Enagas Tra	nsporte S.A.U.	2024	ES	IB-FR4	110.0 GWh/d
		new	In 2015 Enagás,TIGF&GRTgaz develo IP between FR & ES. Common capaci ies on the Spanish side before applyir	ity value v	vould be 230 ES-FR	& 160 GWh FR-ES.	
Sponsors		G	eneral Information		NDP and	d PCI Information	
CS Martorell		Promoter	Enagás Transporte, S.A.U	Part of	Yes (Conexión internacio	onal con Francia
Enagas Transporte, S.A.U.	100%	Operator	Enagas Transporte S.A.U		NDI		por Cataluño
Figueras - French Border		Host Country	Spair			No	code in the ND
Enagás Transporte, S.A.U.	100%	Status	Planned	<i>A</i>	elease Date		01/05/200
	10070	Website	<u>Project's URI</u>				<u>NDP UR</u>
Hostalrich - Figueras				Curren	5		Yes
Enagás Tr <mark>ansporte,</mark> S.A.U.	100%			Priority	y Corridor(s)		NSIV
Loop Castelnou – Villar de Arnedo + CS Zaragoza (increment)							
Enagás Transporte, S.A.U.	100%						
Loop Tivissa – Arbós + CS Tivissa filters + CS Arb (increment)	ós						
Enagás Transporte, S.A.U.	100%						

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Martorell				36	2024
Hostalrich - Figueras		900	79		2024
Loop Castelnou – Villar de Arnedo -	+ CS Zaragoza (increment)	640	214	5	2024
Loop Tivissa – Arbós + CS Tivissa fil	ters + CS Arbós (increment)	740	114	21	2024
Pipeline Figueras - French Border		900	28		2024
	Total		435	62	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	ENTSOG PS-CBA runr for TYNDP 2017 demonstrates visible benefits for MidCat increases the number of significant supply sources that ES and PT has access to - access to gas from Algeria, and could increase their ability to benefit from low LN by STEP (based on the PS-CBA developed by Poyry, validated within the High Lev	- For other europe NG prices. These b	ean count enefits ar	ries, it could provide re additional to the or	significant nes provided
	Time Schedule				
Grant Obtention Date	19/01/2016				
Delay Since Last TYNDP					
Delay Explanation					

Expected Gas Sourcing

Algeria, LNG ()		
	Benefits	
Main Driver	Others	
Main Driver Explanation	The "Iberian-French corridor - Eastern Axis - Midcat" was included in the list of Projects of Common Interest (PCI) a the 18th of November 2015. This project will clearly improve the integration of the Iberian Peninsula with the rest of European gas markets, and helping to the price convergence of Iberian and European gas markets. Due to the lack there is a price differential between Spain and France. This price differential has been steadily maintained since rec consumers, both domestic and industrial, to access to energy under the same conditions as their European counter for the Spanish economy.	of Europe reducing its isolation from the c of enough interconnection capacity, cent years, preventing the Spanish
Benefit Description		
	Barriers	
Barrier Type	Description	
Regulatory	In 2010, Enagás, TIGF and GRTgaz carried out an OS to ask for binding commitments for capacities provided by Mi North-South link. Concerning MidCat, none of the three proposed infrastructure scenarios received enough bids to latest call made to the market regarding MidCat.However, MidCat has demonstrated benefits in terms of market in of supply and diversification of supply.Taking into account that the OS2015 was carried out in a context of econom current situation jointly with the new tendency in contracting capacity (from long term to short term) well as the de foreseen that network users would make enough long-term commitments in order to fully cover the investment. B regulatory framework would not contribute to have an appropriate rate of return of the investment	o be triggered. This OS is currently the ntegration (price convergence), security nic prosperity in comparison with the ecrease in gas consumption, it is not
Market	In the Open Season launched in 2010 between Spain and France MidCat didn't obtain enough market support .	
Market	Lack of market support	
Regulatory	Low rate of return	
	Intergovernmental Agreements	
Agreement	Agreement Description	Is Signed Agreement Signature Date
Lisbon Declaration	European Commission, France, Portugal and Spain signed Lisbon Declaration on Friday 27th July at the Second Energy Interconnections summit.	Yes 27/07/2018
Madrid Declaration	Commission, France, Portugal and Spain sign High Level Group agreement to break energy barriers	Yes 04/03/2015

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Current TYNDP : TYNDP 2018 FINAL - Annex A

CEF and we have received decisi
١
Mln EUF
sporte SAU received a CEF to carry out the engineerir l compressor station and the pipeline from Figueras to the astructures are now include within STEP project sporte SAU received a CEF nit granting process of STE e on CEF-E grants for MidC /inea/en/connecting-europ -by-country/spain/5.5-005 esfr-s-m-1 receiving financial assistant y Call for Proposals (Janua 201 sites/ener/files/documents/ eiving_financial_assistance energy_call_for_proposals.p

Iberian-French corridor: Eastern Axis-Midcat Project

TRA-N-256		Project		Pip	beline including	g CS N	lon-FID
Jpdate Date		and the second se	09/11/2018			A	dvanced
Description - th - ne It co	project covers both: e specific TIGF investme w infrastructure in the pontributes to the Priori	ent related to the creation of core of GRTgaz network nece ty corridor "North-South gas	city at the VIP Pireneos through a new physical interconnection essary to offer capacity on a firm interconnections in Western Eur	n basis	on of an Eastern a	xis.	
RJ Code - PRJ Name PRJ	-G-044 - MidCat (Iberia	an-French corridor, Eastern Ax	xis – MidCat project)				
Capacity Increments Variant For N	/lodelling						
Point		Operator		Year F	rom Gas System	To Gas System	Capacity
		TERÉGA		2024	IB-FR4	ES	160.0 GWh/c
		Comment: Comn	nissioning year based on a FID in	n 2016 and		ity study lead time re du Midi" looping	
IP PIRINEOS		TERÉGA		2024	ES	IB-FR4	230.0 GWh/
		Comment: Comn	nissioning year based on a FID in	1 2016 and		ity study lead time re du Midi" looping	
Sponsors		Genera	I Information		NDP and	PCI Information	
GRTgaz section - Specific develop	oments	Promoter	GRTgaz and TIGF	Part of N	ΙΟΡ	es (GRTgaz and TI	
GRTgaz	85%	6 Operator	GRTgaz	i dit oi iv			plans 2017
TIGF section - Specific developme	ents	Host Country	France			9	on des capacités
TIGF	15%	Status	Planned	NDP Nu	mber	d'interconnexion e	ntre la France e l'Espagr
	137	Website	<u>Project's URL</u>	NDP Rel	ease Date		27/11/201
				NDP We			NDP UF
				Currently			Yes
				,	Corridor(s)		NSIV
				. money c			, , , , , , , , , , , , , , , , , , , ,

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		06/2012
Feasibility	03/2007	12/2019
FEED	09/2012	12/2021
Permitting	09/2012	12/2021
Supply Contracts		
FID		
Construction	03/2022	11/2024
Commissioning	2024	2024

Enabled Projects

Project Code Project Name

TRA-N-269 Developments for Fosmax (Cavaou) LNG 8.25 bcm expansion

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

urrent TYNDP : TYNI	DP 2018 FINA	L - Annex A		Page 164 of 575
		Fulfilled Criteria		
Specific Criteria Fulfille	ed	Competition, Market Integration, Security of Supply, Sustainability		
Specific Criteria Fulfille	ed Comments	Project changes the capability to transmit gas across the borders of the member states concerned by at prior to the commissioning of the project According the PS-CBA from TYNDP2017, the project improves LNG dependency for the Iberian Peninsula.		
		Time Schedule		
Grant Obtention Date		19/01/2016		
Delay Since Last TYND	OP	2 years		
Delay Explanation				
		Expected Gas Sourcing		
Algeria, Norway, Russi	ia, LNG ()			
		Demofite		
Main Driver	Others	Benefits		
		-French Corridor aims to further interconnect the Iberian peninsula with the rest of Europe.		
		· · ·		
Benefit Description	of TYNDP 2 significant s	previous CBA (TYNDP 2017) will have to be updated on the basis of TYNDP 2018 new set of assumptions 2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide signif ase their ability to benefit from low LNG prices.	G and could incre	ase the number of
Benefit Description	of TYNDP 2 significant s	017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LN supply sources that both countries have access to For other European countries, it could provide signif	G and could incre	ase the number of
Benefit Description Barrier Type	of TYNDP 2 significant s	2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide signif ase their ability to benefit from low LNG prices. Barriers	G and could incre	ase the number of
Barrier Type	of TYNDP 2 significant s could increa Description	2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide signif ase their ability to benefit from low LNG prices. Barriers	G and could incre	ase the number of
Barrier Type	of TYNDP 2 significant s could increa Description	2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide signif ase their ability to benefit from low LNG prices. Barriers	G and could incre	ase the number of
	of TYNDP 2 significant s could increa Description	2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide signif ase their ability to benefit from low LNG prices. Barriers n rket support	G and could incre ficant access to g	ase the number of
Barrier Type Market	of TYNDP 2 significant s could increa Description	2017, MidCat has the following benefits: - For Spain and Portugal, it could reduce the dependency to LNG supply sources that both countries have access to For other European countries, it could provide significate their ability to benefit from low LNG prices. Barriers n rket support Intergovernmental Agreements	G and could incre ficant access to g	ease the number of as from Algeria, and

	CBCA	-	Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
	not	Grants for studies	Yes
Submissin Date		Grants for studies amount	Mln EUR 0
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		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 e in SK>HU direction at Balassagyarmat with new compressors on Szada Compressor stat 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	
	MGT Hungarian Gas Transit Ltd.	2022	HUi	SK	102.0 GWh/d	
Balassagyarmat (HU) / Velké Zlievce (SK)	MGT Hungarian Gas Transit Ltd.	2022	SK	HUi	26.0 GWh/d	
Martin MCT / FCC7	MGT Hungarian Gas Transit Ltd.	2022	HU	HUi	102.0 GWh/d	
Vecsés MGT / FGSZ	MGT Hungarian Gas Transit Ltd.	2022	HUi	HU	26.0 GWh/d	

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Sponsors			G	General Information	N	IDP and PCI Information
Magyar Gáz Tranzit Zr	rt.	100%	Promoter Operator	Magyar Gáz Tranzit Zrt. MGT Hungarian Gas Transit Ltd.	Part of NDP	Yes (National Development Plan- MGT 10 Year Development Plan)
			Host Country Status Website		NDP Number NDP Release Date	TRA-N-524 (new nr will be received once project is approved)
					NDP Website	<u>NDP URL</u>
					Currently PCI Priority Corridor(s)	Yes () NSIE
Schedule	Start Date	End Date			Tł	nird-Party Access Regime
Pre-Feasibility					Considered TPA Re	gime Regulated
Feasibility					Considered Tariff R	egime Regulated
FEED					Applied for Exempt	tion Yes
Permitting					Exemption Granted	No No
Supply Contracts						
FID					Exemption in entry	direction 0.00%
Construction	03/2020	03/2022			Exemption in exit d	lirection 0.00%
Commissioning	2022	2022				

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

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

Development of Transmission Capacity at Slovak-Hungarian interconnector

TRA-N-636		Project				Pipeline includ	ling CS	Non-FID
Update Date			21/11/2018				N	on-Advanced
Description	Reducing the flow direction so to non-interruptible (firm) cap		Developing the transmiss	ion capacit	ty in HU	J>SK and SK>HU	direction from inte	rruptible capacity
PRJ Code - PRJ Name	PRJ-G-045 - Enhancement of	the capacity at SK-HI	J interconnector					
Capacity Increments Varia	nt For Modelling							
Point		Operator			Year	From Gas Syste	m To Gas Syste	m Capacity
Balassagyarmat (HU) / Vel	ká Zliovco (SK)	MGT Hunga	arian Gas Transit Ltd.		2022	HUi	SK	102.0 GWh/d
Dalassagyarmat (HO) / Ver		MGT Hunga	arian Gas Transit Ltd.		2022	SK	HUi	26.0 GWh/d
Sponsors		Ge	eneral Information			NDP a	and PCI Informatio	on
Magyar Gáz Tranzit ZRt.	100%	Promoter Operator Host Country Status Website	Magyar Gáz 1 MGT Hungarian Gas 1		NDP I NDP I NDP V Curre	y Number Release Date Website ntly PCI ty Corridor(s)		opment Plan - MGT [.] Development Plan) TRA-N-636 <u>NDP URL</u> Yes () NSIE

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

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

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Hungarian section		800	92		
Slovak section		800	18		
	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 sec increase price convergence of the HU gas market to the EU markets. As part of the SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the improve the transit routes in order to improve transit services, while providing for systems. The project shall result in the operational efficiencies -linking of the 75 b AT-HU).	e north-south axi existing assets of the expected qu	s it will co the dom ality of th	ontribute also to han estic natural gas syste e natural gas on the	dling of the em and to connecting

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.

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

Firm transmission capacity increase at the IP Veľké Zlievce

TRA-N-1235		Project		Pipeline including	g CS N	Ion-FID
Update Date		18/12/2018			Non	-Advanced
Description	interruptible capacity to no direction switch operation	Expansion of the capacity at the SK-HU interconnection point developing the transmission capacity in HU>SK and SK>HU direction from interruptible capacity to non-interruptible (firm) capacity in order to enhance flexibility, interoperability, operational efficiency reducing the flow direction switch operation time, security of gas supplies in the affected countries in the CEE and SEE region. Moreover price convergence is expected as a complementary effect.				
PRJ Code - PRJ Name	PRJ-G-045 - Enhancement	PRJ-G-045 - Enhancement of the capacity at SK-HU interconnector				
Capacity Increments \	Variant For Modelling					
	Variant : Variant SK-1	Pipeline section - Border delive Agreement in force	ry pressure at current	level without Extra P	ressure	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Delegen weren et (UUU)		eustream, a.s.	2022	HUi	SK	153.0 GWh/d
Balassagyarmat (HU)	/ Velke Zllevce (SK)	eustream, a.s.	2022	SK	HUi	25.4 GWh/d
Capacity Increments \	/ariant(s) For Information Only					
	Variant : Variant SK-2	Pipeline section-Border delivery force	/ pressure at current le	evel with Extra Pressu	re Agreement in	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Delesson of (UU)		eustream, a.s.	2022	HUi	SK	153.0 GWh/d
Balassagyarmat (HU) / Velké Zlievce (SK)		eustream, a.s.	2022	SK	HUi	25.4 GWh/d

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Sponsors			Gei	neral Information	ND	P and PCI Information
ustream,a.s.		100%	Promoter	eustream,a.s. (a joint-stock company)	Part of NDP	Yes (National Development Plan 2018 202
			Operator Host Country	eustream, a.s. Slovakia	NDP Number	4.1.1.3 Firm transmission capacit increase at the IP Veľké Zliev
			Status	Planned	NDP Release Date	30/11/201
			Website	Project's URL	NDP Website	<u>NDP U</u>
			Website .	<u></u>	Currently PCI	1
					Priority Corridor(s)	NS
Schedule	Start Date	End Date			Thir	d-Party Access Regime
e-Feasibility					Considered TPA Regi	me Regulat
easibility					Considered Tariff Reg	gime Regulat
ED					Applied for Exemptio	in /
rmitting					Exemption Granted	
pply Contracts						
D					Exemption in entry di	irection 0.00
onstruction	10/2020	06/2022			Exemption in exit dire	ection 0.00
ommissioning	2022	2022				
				Fulfilled Criteria		
			-	of supply sources, supplying counter		
pecific Criteria Ful	Tilled	of Supply, inter alia thr	ough appropriate conn		v sources, supplying co	perability and system flexibility, Securit punterparts and routes, Sustainability, ployment of renewable gas
pecific Criteria Ful						, and the second se

Update Date

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	Ben	efits			
Main Driver	Market Demand				
Main Driver Explanation	Increase of interoperability and flexibility of the system between Slovakia and Hungary in order to ensure prerequisite for security of supply enhancement in the region and to increase capacities to the level of the expected market demand.				
Benefit Description	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 improvements 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).				
	Barı	iers			
Barrier Type	Description				
Regulatory	Low rate of return				
Regulatory	Capacity quotas				
_	CBCA		Financial Assistance		
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(3) No, we have not applied for CEI		
Submissin Date		Grants for studies	N		
Decision Date		Grants for studies amount			
Website		Grants for works	N		
Countries Affected		Grants for works amount			
Countries Net Cost Bear		Intention to apply for CEF	Yes, for studies and work		
Additional Comments	er	Other Financial Assistance	N		
Additional Comments		Comments			
		General Comments			
	Val de Saĉ	ne project			
TRA-F-43	Project	Pip	peline including CS FID		

30/05/2018

Advanced

	This reinforcement of the French Network consists in the looping of the Bourgogne pipeline (between Etrez and Voisines). In addition to the projetcs Arc de Dierrey in the North and Gascogne Midi in the South, this project is needed to merge GRTgaz's North and South market zones. It will contribute to the priority corridor "North South gas interconnections in Western Europe".
PRJ Code - PRJ Name	PRJ-G-046 - Creation of a single gas market area in France

Sponsors				General Information	NDP	and PCI Information
GRTgaz		100%	6 Promoter	GRTgaz	Part of NDP	Yes (Plan décennal de développement
	10 10		Operator	GRTgaz		du réseau de GRTgaz 2017-2026)
			Host Country	France	NDP Number	Fusion des zones
			Status	In Progress	NDP Release Date	29/11/2017
			Website	Project's URL	NDP Website	<u>NDP URL</u>
					Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-	Party Access Regime
Pre-Feasibility	12	07/2012			Considered TPA Regime	e Regulated
Feasibility	09/2012	07/2013			Considered Tariff Regin	ne Regulated
FEED	07/2013	07/2014			Applied for Exemption	No
Permitting	10/2014	06/2016			Exemption Granted	Not Relevant
Supply Contracts		08/2016				
FID		09/2015			Exemption in entry dire	ction 0.00%
Construction	06/2016	11/2018			Exemption in exit direct	tion 0.00%
Commissioning	2018	2018				

Enabled Projects

TRA-F-45 Reverse capacity from CH to FR at Oltingue

TRA-N-47 Reverse capacity from France to Germany at Obergailbach

TRA-F-391 Gascogne-Midi : adaptation of stations in Cruzy and St Martin

Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Bourgogne	Looping of Artère de Bo	urgogne pipeline	1,200	189		
Etrez CS					9	
Palleau CS	Adaptation of station fu	nctionalities			0	
Voisines CS	Adaptation of station fu	nctionalities			0	
	Total			189	9	

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

Expected Gas Sourcing

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

	Benefits					
Main Driver	Market Demand					
Main Driver Explanation	Interview of the Val de Saône project (along with the Gascogne-Midi project) is to remove the constraints on North to South gas flows in France, thus enabling to increase the potential share of gas imported by pipelines from the North of Europe within the South-Western part of the European market. In terms of market design, the Val de Saône project allows the creation of a single market area in France. This will bring a final solution to higher prices of gas in South of France and Iberian Peninsula.					
Benefit Description By facilitating the flow of gas from North-West Europe to Spain, the project will give Iberian Peninsula access to gas priced more extensively according north west Europe price references. By creating a single French market place, current spread between PEG Nord and PEG South will disappear, and the Iberian peninsula will also benefit from the direct proximity of this large and liquid market place.						
	Intergovernmental Agreements					
Agreement	Agreement Description	Is Signed	Agreement Signature Date			
Cross border cost alloca	ion Decision from CRE and CNMC on the request for cross order cost allocation between France and Spain for the project of common interest Val de Saône	Yes	10/04/2014			

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date	31/10/2013	Grants for studies	No
Decision Date	10/04/2014	Grants for studies amount	
Website	<u>CBCA URL</u>	Grants for works	Yes
Countries Affected	France, Spain	Grants for works amount	
Countries Net Cost Bearer	France	Intention to apply for CEF	
Additional Comments		Other Financial Assistance	Yes
		Comments	EEPR programm: Pipeline purchase covered by a EEPR grant for a maximum amount of 74 M€
		General Comments	

Gascogne Midi

TRA-F-331	Project		Pipeline including CS	FID
Update Date		15/11/2018		Advanced
Description	TEREGA :60 kms pipeline with 5,5 M/h compressio areas. GRTgaz : adaptation of stations in Cruzy and St Ma		ine should reduce bottlenecks between nor	th and south french
PRJ Code - PRJ Name	PRJ-G-046 - Creation of a single gas market area in	n France		

Sponsors				General Information	NDP	and PCI Information
Adaptation of sta	ations in Cruz and S	St Martin	Promoter	TEREGA - GRTgaz	Part of NDP	Yes (2015 NDP of GRTgaz and TEREGA)
GRTgaz			100% Operator	TERÉGA	NDP Number	No number
Artere Gascogne	Midi		Host Country	France	NDP Release Date	
TEREGA			100% 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 Regim	ne Regulated
Feasibility					Considered Tariff Regir	me Regulated
FEED	03/2015	06/2016			Applied for Exemption	No
Permitting	02/2016	07/2017			Exemption Granted	Not Relevant
Supply Contracts						
FID		09/2014			Exemption in entry dire	ection 0.00%
Construction	06/2017	07/2018			Exemption in exit direc	tion 0.00%
Commissioning	2018	2018				

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

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

	СВСА	Finan	cial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		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) - nec 1.75 bcm/a from and towards Romania.	essary to create pressure conditions for the transp	ortation capacity of
PRJ Code - PRJ Name	PRJ-G-047 - RO-HU Transmission Corridor		

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							1 4	ge 175 01 575
Capacity Increment	ts Variant For Mo	delling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Csanadpalota			FGSZ Ltd.		2019	RO	HU	48.9 GWh/d
Sponsors			General Informa	ation		NDP and	PCI Information	
FGSZ Ltd.		100%	Promoter	FGSZ Ltd.	Part of	f NDP	Yes (Hungaria	an TYNDP 2016)
			Operator	FGSZ Ltd.	NDP N	lumber		12.1.
			Host Country	Hungary	NDP R	Release Date		21/12/2016
			Status	Planned	NDP V	Vebsite		<u>NDP URL</u>
			Website	<u>Project's URL</u>	Currer	ntly PCI		Yes ()
					Priorit	y Corridor(s)		NSIE
Schedule	Start Date	End Date				Third-Part	ty Access Regime	
Pre-Feasibility		06/2014			Consid	lered TPA Regime		Regulated
Feasibility	09/2016	07/2017			Consid	lered Tariff Regime		Regulated
FEED	07/2018	10/2018			Applie	d for Exemption		No
Permitting	07/2018	09/2018			Exemp	tion Granted		No
Supply Contracts		12/2018						
FID		06/2017			Exemp	tion in entry directio	n	0.00%
Construction	10/2018	12/2019			Exemp	tion in exit direction		0.00%
Commissioning	2019	2019						

	(mm) (km) (MW) Year
Csanadpalota	9
Total	9

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Constitution Cultured		d Criteria	
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply,		
Specific Criteria Fulfilled Co	omments The pipeline enables to increase capacity of Csanádp	alota (RO>HO) and Csanadpalota	I (HU>RU).
	Time S	chedule	
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	<u> </u>	
		nefits	
	thers		
Main Driver Explanation			
Main Driver Explanation Benefit Description			
	СВСА		Financial Assistance
Benefit Description	CBCA Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received
Benefit Description	Yes, we have submitted an investment request and have	Applied for CEF Grants for studies	(1) Yes, we have applied for CEF and we have received decisi
Benefit Description Decision Submissin Date	Yes, we have submitted an investment request and have		(1) Yes, we have applied for CEF and we have received decisi
Benefit Description Decision Submissin Date Decision Date	Yes, we have submitted an investment request and have received a decision	Grants for studies	(1) Yes, we have applied for CEF and we have received decisi ۱ Mln EUF
Benefit Description Decision Submissin Date Decision Date Website	Yes, we have submitted an investment request and have received a decision	Grants for studies Grants for studies amount	(1) Yes, we have applied for CEF and we have received decisi ۱ Mln EUF
Benefit Description Decision Submissin Date Decision Date Website Countries Affected	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works	(1) Yes, we have applied for CEF and we have received decisi Mln EUI
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works Grants for works amount	(1) Yes, we have applied for CEF and we have received decis Mln EU No, we do not plan to ap
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	(1) Yes, we have applied for CEF and we have received decisi Mln EUI No, we do not plan to app
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance	(1) Yes, we have applied for CEF and we have received decisi MIn EUF No, we do not plan to app
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bearer	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments	(1) Yes, we have applied for CEF and we have received decisi Mln EUF No, we do not plan to app
	Yes, we have submitted an investment request and have received a decision 06/10/2015	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments	Financial Assistance (1) Yes, we have applied for CEF and we have received decisi Min EUF No, we do not plan to app

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Romanian-Hungarian reverse flow Hungarian section 2nd stage

TRA-N-377			Project			Pipeline including	g CS N	Ion-FID
Update Date				30/05/2018			A	dvanced
Description	A third	compressor unit (4.5 l	MW) is needed at Csanádp	alota to reach the increased 4.4	bcm/a	capacity of the corric	lor at the RO/HU l	oorder.
PRJ Code - PRJ Name	PRJ-G-	047 - RO-HU Transmis	ssion Corridor					
Capacity Increments Va	ariant For Moc	lelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Csanadpalota			FGSZ Ltd.		2022	HU	RO	76.5 GWh/d
Csanaupaiota			FGSZ Ltd.		2022	RO	HU	76.5 GWh/d
Sponsors			Genera	Information		NDP and	PCI Information	
FGSZ Ltd.		100%	Promoter	FGSZ Ltd.	Part o	of NDP	Yes (Hungari	an TYNDP 2017)
			Operator	FGSZ Ltd.	NDP	Number		12.1.
			Host Country	Hungary	NDP	Release Date		28/12/2017
			Status	Planned	NDP	Website		NDP URL
			Website	<u>Project's URL</u>	Curre	ntly PCI		Yes ()
					Priori	ty Corridor(s)		NSIE
Schedule	Start Date	End Date				Third-Par	ty Access Regime	
Pre-Feasibility		06/2014			Consi	dered TPA Regime		Regulatea
Feasibility	09/2016	07/2017			Consi	dered Tariff Regime		Regulatea
FEED	01/2019	01/2020			Appli	ed for Exemption		No
Permitting	10/2019	04/2020			Exem	otion Granted		No
Supply Contracts		05/2020						
FID		03/2019			Exem	ption in entry directio	n	0.00%
Construction	05/2020	12/2022			Exem	ption in exit direction		0.00%
Commissioning	2022	2022						

Project Code Project Name

TRA-N-123 Városföld CS

Pipelines and Compresso	or Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Csanádpalota	+1 Compressor unit 4.5MW			4	
	Total			4	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled C	Comments The pipeline enables to increase capacity of Csanádpalota (RO>HU) and	d Csanádpalota (HU>RO).			
	Time Schedule				
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				

Enabled Projects

Irrent TYNDP : TYNDP 20	18 FINAL - Annex A			Pa	ige 183 of 575
	CBCA		Financial Assistan	ce	
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have appl	lied for CEF and we	have received a decision
Submissin Date		Grants for studies			Ye
Decision Date	06/10/2015	Grants for studies amount			Mln EUR .
Website		Grants for works			No
Countries Affected	Hungary, Romania	Grants for works amount			
Countries Net Cost Bearer		Intention to apply for CEF		No a	lecision yet take
Additional Comments		Other Financial Assistance			N
		Comments			
		General Comments			
LNG-N-227	Project		LNG Termina	I N	lon-FID
Update Date		/02/2018			-Advanced
Description	The project aims to expand the LNG terminal capacity from		ith an intermediate ster		
PRJ Code - PRJ Name	PRJ-G-049 - Fos Cavaou LNG Terminal Expansion				
Capacity Increments Varian	nt For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Fosmax LNG	2021	LNG_Tk_FRs	IB-FR4	110.0 GWh/d
Fos (Tonkin/Cavaou)			Comment: intermediate	phase at 11 bcm/y (i.e. +2,75 bcm/y,	
	Fosmax LNG	2023	LNG_Tk_FRs	IB-FR4	330.0 GWh/d
		Comment: co	rresponds to 16.5 bcm:y	/ (i.e. + 8,25 bcm/y,)

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Sponsors				General Information		Ν	IDP and PCI Information
osmax LNG		100%	Promoter		Fosmax LNG	Part of NDP	Yes (GRTgaz Ten Year Development plan 2015-2024
			Operator		Fosmax LNG	NDP Number	Fos Cavaou Extensio
			Host Country		France		Fos Cavada Extensio
			Status		Planned	NDP Release Date	
			Website		<u>Project's URL</u>	NDP Website	<u>NDP UR</u>
						Currently PCI	N
						Priority Corridor(s)	
Schedule	Start Date	End Date				Tł	nird-Party Access Regime
e-Feasibility						Considered TPA Re	gime Regulate
easibility						Considered Tariff R	egime Regulated
EED						Applied for Exempt	tion No
ermitting		06/2019				Exemption Granted	Not Relevan
upply Contracts							
D		06/2019				Exemption in entry	direction 0.009
onstruction	06/2019	06/2023				Exemption in exit d	lirection 0.009
ommissioning	2021	2023					
				Fechnical Information (LN	IG)		
egasification Facility	Reloa Abi			ted Increment Ship Size (bcm/y) (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Con LNG)	nments Commissioning Load Factor Year (%)
os Cavaou LNG Termir	nal N	0					
	_						
				Time Schedule			
Frant Obtention Date							
Pelay Since Last TYNDF	D .						
Delay Explanation		arket was not yet the					

Expected Gas Sourcing

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

	Ber	efits	
Main Driver	Market Demand		
Main Driver Explanation	Market based investments avoid future stranded assets and thus	ensure the best use of money, in particular	r public money
Benefit Description	Forecasts indicate that LNG's role in Europe will increase in the c Australia, in particular). If there is a need to develop new infrastru as to improve the LNG contribution to security of supply, the ext efficient alternative to a third gas pipeline through the Pyrenean exports from Spain). Fos Cavaou is the best entry gate for LNG fr market. Expansion of the Fos Cavaou will strongly contribute to r	actures in Europe to allow the access of larg ension of Fos Cavaou LNG terminal, thanks s (note: the existing gas pipelines have heav om Mediterranean, Middle East and Atlanti	ger LNG quantities to where it is needed as well to its location and its marginal cost, is an high vily been used to compensate for LNG re- c toward the core of European mainland gas
	Bar	riers	
Barrier Type	Description		
Barrier Type Political	Description Discrimination aiming at preventing the project to be recognized	as an efficient alternative to a third gas pip	peline through the Pyreneans.
			peline through the Pyreneans. Incial Assistance
	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet,		ncial Assistance
Political	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Finan	ncial Assistance (3) No, we have not applied for CE
olitical	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet,	Finan Applied for CEF	ncial Assistance (3) No, we have not applied for CE
olitical Decision ubmissin Date	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Finan Applied for CEF Grants for studies	ncial Assistance (3) No, we have not applied for CE N
olitical Decision ubmissin Date Decision Date	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Finan Applied for CEF Grants for studies Grants for studies amount	ncial Assistance (3) No, we have not applied for CE N
Political Decision Submissin Date Decision Date Vebsite	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works	ncial Assistance (3) No, we have not applied for CE N
olitical Decision ubmissin Date Decision Date Vebsite Countries Affected	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	ncial Assistance (3) No, we have not applied for CE N N No decision yet take
	Discrimination aiming at preventing the project to be recognized CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	

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Developments for Fosmax (Cavaou) LNG 8.25 bcm expansion

TRA-N-269		Project		Pipeline in	cluding CS	Non-FID
Update Date		28/02/2018				Non-Advanced
Description	station already fits the potent	nts are needed to offer firm capacity for th ial extension. nd the Fos Cavaou terminal expansion are	·			St-Martin de Crau
PRJ Code - PRJ Name	PRJ-G-049 - Fos Cavaou LNG	Terminal Expansion				
Capacity Increments Varia	nt For Modelling					
Point		Operator		Year From Gas S	System To Gas	System Capacity
Fos (Tonkin/Cavaou)		GRTgaz	Ĩ	2023 LNG_Tk_ Comme	FRs IB-F nt: for a 8.5 bcm e	
Sponsors		General Information		Ν	IDP and PCI Infor	rmation
GRTgaz	100%	Promoter	GRTgaz		Yes (Plan déc	cennal de développement
		Operator	GRTgaz	Part of NDP	du réseau de tr	ansport de GRTgaz 2017-
		Host Country	France		Extension du t	,2026 erminal de Fos Cavaou à
		Status	Planned	NDP Number	Extension du t	16,5 Gm ³ /ar
		Website	<u>Project's URL</u>	NDP Release Date		27/11/2017
				NDP Website		<u>NDP URL</u>
				Currently PCI		No
				Priority Corridor(s)		

NDP 2018 FINAI	- Annex A		Page 187 of 5
Start Date	End Date	Third-Party Access Reg	jime
	06/2012	Considered TPA Regime	Regula
03/2007		Considered Tariff Regime	Regula
		Applied for Exemption	
		Exemption Granted	Not Relev
		Exemption in entry direction	0.0
	11/2023	Exemption in exit direction	0.0
2023	2023		
	Start Date 03/2007	06/2012 03/2007 11/2023	Start Date End Date 06/2012 Considered TPA Regime 03/2007 Considered Tariff Regime Applied for Exemption Exemption Granted 11/2023 Exemption in exit direction

Enabled Projects

Project CodeProject NameTRA-N-256Iberian-French corridor: Eastern Axis-Midcat Project

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Arc Lyonnais		1,200	150		
Eridan		1,200	220		
Palleau CS				50	
Perche		900	63		
St-Avit CS				15	
St-Martin de Crau CS				30	
	Total		433	95	

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

LNG ()

	Benefits
Main Driver	Others
Main Driver Explan	ation This project enables to offer firm capcity to meet the developments planned by Fosmax at the LNG terminal of Fos Cavaou
Benefit Description	
	Barriers
Barrier Type	Description
Others	The current context of LNG in Europe isn't favorable to the developements of LNG capacities
Market	Lack of market support

Expected Gas Sourcing

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

Montoir LNG Terminal Expansion

Project	LNG Terminal Non-FID
28/02/2018	Non-Advanced
The project aims to expand the Montoir de Bretagne LNG terminal capacity LNG storage capacity.	by 2.5 bcm/y, from 10 bcm/y to 12.5 bcm/y, and possibly to increase the
	28/02/2018 The project aims to expand the Montoir de Bretagne LNG terminal capacity

PRJ Code - PRJ Name

PRJ-G-050 - Montoir LNG Terminal Expansion

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Mantair de Protonna	Elengy	2021	LNG_Tk_FRn	IB-FR3	100.0 GWh/d
Montoir de Bretagne		Comme	ent: commissioning ye	ar for storage 2023	}

Sponsors				General Information	N	DP and PCI Information
Elengy		1009	6 Promoter	Elengy	Part of NDP	Yes (GRTgaz Ten Year Development plan
	1. 1.		Operator	Elengy		2015-2024)
			Host Country	France	NDP Number	Montoir Extension
			Status	Planned	NDP Release Date	27/11/2017
			Website	<u>Project's URL</u>	NDP Website	<u>NDP URL</u>
				-	Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thi	ird-Party Access Regime
Pre-Feasibility					Considered TPA Reg	gime Regulated
Feasibility					Considered Tariff Re	egime Regulated
FEED					Applied for Exempti	on No
Permitting					Exemption Granted	Not Relevant
Supply Contracts						
FID		06/2019			Exemption in entry	direction 0.00%
Construction	06/2019	06/2021			Exemption in exit di	rection 0.00%
Commissioning	2021	2021				
_				huisel lufermetics (INC)		
			lec	hnical Information (LNG)	Storage	

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

		liedule			
Grant Obtention Date					
Delay Since Last TYNDP					
Delay Explanation	market was not yet there				
	Expected G	as Sourcing			
LNG (DZ,CA,CY,LNG,NO,	QA,RU,US,WO,YE), LNG diverted from, or reloaded in other Europe	ean LNG terminals (Spain for example).			
	Ben	efits			
Main Driver	Market Demand				
Main Driver Explanation	Market based investments avoid future stranded assets and thus	ensure the best use of money, in particu	ılar public money.		
Benefit Description	Forecasts indicate that LNG's role in Europe will increase in the coming years following the commissioning of new LNG production capacities (in USA and Australia, in particular). If there is a need to develop new infrastructures in Europe to allow the access of larger LNG quantities to where it is needed as w as to improve the LNG contribution to security of supply, the extension of Montoir LNG terminal, thanks to its location and its marginal cost, is an high efficient alternative to a third gas pipeline through the Pyreneans (note: the existing gas pipelines have heavily been used to compensate for LNG re-exports from Spain). Montoir is one of the best entry gates for LNG from all over the world, in particular from USA, toward the core of European mainlan gas market. Expansion of Montoir will strongly contribute to market integration, competition, SoS and sustainability in the NSW corridor.				
	Barı	riers			
Barrier Type	Description				
Political	Discrimination aiming at preventing the project to be recognized	as an efficient alternative to a third gas	pipeline through the Pyreneans.		
	CBCA	Fir	nancial Assistance		
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
Decision	and we have not yet decided whether we will submit or	Grants for studies	No		
	not	Grants for studies amount			
Submissin Date		Grants for works	No		
Decision Date		Grants for works amount			
Website		Intention to apply for CEF	No decision yet taken		
Countries Affected		Other Financial Assistance	Yes		
Countries Net Cost Bear	er	Comments	small scale studies or work		
Additional Comments		General Comments			

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Developments for Montoir LNG terminal 2.5 bcm expansion

TRA-N-258	Project	Pipeline including CS	Non-FID
Update Date	28/02/2018		Non-Advanced
Description	This entry capacity increase at Montoir needs specific developments and core sys	stem developments (Looping of Artère du P	erche).
PRJ Code - PRJ Name	PRJ-G-050 - Montoir LNG Terminal Expansion		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Montoir de Bretagne	GRTgaz	2023	LNG_Tk_FRn	IB-FR3	100.0 GWh/d

Sponsors			General Information	Ν	DP and PCI Information
GRTgaz	100%	Promoter	GRTgaz		Yes (Plan décennal de développement
		Operator	GRTgaz	Part of NDP	du réseau de transport de GRTgaz 2017-
		Host Country	France		2026)
		Status	Planned	NDP Number	Augmentation des capacités d'entrée à partir du terminal de Montoir de 10 à
		Website	Project's URL		12,5 Gm³/an
				NDP Release Date	27/11/2017
				NDP Website	<u>NDP URL</u>
				Currently PCI	No
				Priority Corridor(s)	

Current TYNDP : TYNDP 2018	FINAL - Annex A	
Schedule Start Da	ate End Date	Third-Party Access Re
Pre-Feasibility	12/2011	Considered TPA Regime
Feasibility		Considered Tariff Regime
FEED		Applied for Exemption
Permitting		Exemption Granted
Supply Contracts		
FID		Exemption in entry direction
Construction	12/2023	Exemption in exit direction
Commissioning 20	2023 2023	

Enabled Projects

Project Code Project Name

TRA-N-257 New line Between Chemery and Dierrey

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Artère du Maine	Ending the looping of the pipeline	1,050	200		
Artère du Perche	Ending the looping of the pipeline	900	63		
Auvers-le-Hamon CS	Station adaptation			0	
	Total		263	0	
Grant Obtention Date	Time Schedule				
Delay Since Last TYNDP	2 years				
Delay Explanation	Waiting for terminal promoter decision				
	Expected Gas Sourcing	J			
LNG ()			_		

	Ве	enefits			
Main Driver	Others				
Main Driver Explanatio	n Developments of GRTgaz network required to offer firm capacit	y to the planned expansion of the L	NG terminal at Monto	oir de Bretagne	
Benefit Description					
	Ba	arriers			
Barrier Type	Description				
Market	Lack of market support				
	CBCA		Financial Assistan	ce	
Decision	No, we have not submitted an investment request yet,	Applied for CEF		(3) No, we have no	t applied for CEF
	and we do not plan to submit it	Grants for studies			No
Submissin Date		Grants for studies amount			
Decision Date		Grants for works			No
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF			
Countries Net Cost Bea	arer	Other Financial Assistance			No
Additional Comments		Comments			
		General Comments			
	Gate term	ninal phase 3			
LNG-N-50	Project		LNG Termina	I N	on-FID
Update Date	30	0/05/2018		Non	Advanced
Description	Increase the capacity by 4 billion cubic meters per year fro	om the current value of 12 BCM p.a.	to 16 BCM p.a		
PRJ Code - PRJ Name	PRJ-G-054 - LNG Gate				
Capacity Increments V	ariant For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
Gate Terminal (I)	Gate Terminal B.V.	2020	LNG_Tk_NL	NL	121.0 GWh/d
		Commer	nt: additional 11 (in mi	illion Nm3 per day)	

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Sponsors		Gener	al Information		NDP and PC	CI Information
NV Nederlandse Gasunie	50%	Promoter		Gate	Part of NDP	Yes (GTS
Royal Vopak NV	50%	Operator	Gate	e Terminal B.V.	NDP Number	unknown see GTS
		Host Country		Netherlands	NDP Release Date	01/03/2018
	0%	Status		Planned	NDP Website	NDP URI
OMV	0%	Website		<u>Project's URL</u>	Currently PCI	No
					Priority Corridor(s)	
Schedule Start Date End D	Date				Third-Party /	Access Regime
e-Feasibility					Considered TPA Regime	Not Applicable
asibility					Considered Tariff Regime	Not Applicable
ED					Applied for Exemption	Yes
ermitting					Exemption Granted	Yes
pply Contracts						
					Exemption in entry direction	0.00%
onstruction					Exemption in exit direction	100.00%
ommissioning 2020 2	2020					
		Technical	Information (LN	G)		
egasification Facility Ability Pro	oject Phase	Technical Expected Increr (bcm/y)		G) Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)
	oject Phase	Expected Increr	ment Ship Size	Send-out capacity	capacity (m3 Comments	0
Ability Ability	oject Phase	Expected Increr	ment Ship Size	Send-out capacity	capacity (m3 Comments	0
Ability Ability	oject Phase	Expected Increr (bcm/y)	ment Ship Size	Send-out capacity	capacity (m3 Comments	0
ate terminal Rotterdam No		Expected Increr (bcm/y)	ment Ship Size (m3)	Send-out capacity	capacity (m3 Comments	8
ate terminal Rotterdam No		Expected Increr (bcm/y)	ment Ship Size (m3)	Send-out capacity	capacity (m3 Comments	0

LNG ()

Comments about the Third-Party Access Regime

Expected Gas Sourcing

The exemption was applied for in March 2006; the exemption has been granted by the Dutch Minister on 14 July 2007; the EC gave its approval on 2 October 2007. Was not sure what to fill in regulated or negotiated. It is exempted

	Benefits
Main Driver	Market Demand
Main Driver Explanatio	n
Benefit Description	o SoS o Market Integration (Increase of competition) Gate terminal obtained an exempted ex Art 22 Gas Directive 2003/55/EC. In order to obtain an exemption it needed to be demonstrated that Gate terminal enhanced both security of supply and the competition on the gas market.

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

Entry capacity expansion GATE terminal

TRA-N-192			Project			Pipeline including	g CS N	Ion-FID
Update Date				29/03/2018			Non	-Advanced
Description	Expansion of entry capao The project consists of a Wijngaarden			ection of the existing route betwee	en the G	ATE terminal and the	compressor statio	n at
PRJ Code - PRJ Name	PRJ-G-054 - LNG Gate							
Capacity Increments Varia	nt For Modelling							
Point			Operator		Year	From Gas System	To Gas System	Capacity
Gate Terminal (I)			Gasunie Trar	nsport Services B.V.	2020	LNG_Tk_NL	NL Comment: Plannea	230.0 GWh/d
Sponsors			Ge	neral Information		NDP and	PCI Information	
Gas Transport Services	10	0% Pror	noter	Gasunie Transport Services B.V	. Part o	of NDP Yes	(Netwerk Ontwikk	elingsplan 2017)
		Оре	erator	Gasunie Transport Services B.V	. NDP	Number		6.5.2
		Hos	t Country	Netherland	s NDP	Release Date		
		Stat	us	Planned	NDP	Website		<u>NDP URL</u>
		Web	osite		Curre	ently PCI		No
					Prior	ity Corridor(s)		
Schedule Sta	rt Date End Date					Third-Par	ty Access Regime	
Pre-Feasibility					Consi	dered TPA Regime		Regulated
Feasibility					Consi	dered Tariff Regime		Regulated
FEED					Appli	ed for Exemption		No
Permitting Supply Contracts					Exem	ption Granted		Not Relevant
FID					Exem	ption in entry directio	n	0.00%
Construction					Exem	ption in exit direction		0.00%
Commissioning	2020 2020							

Pipelines and Compressor Stations		
Pipeline Section	Pipeline Comment	DiameterLengthCompressor PowerComissioning(mm)(km)(MW)Year
Maasvlakte - Wijngaarden		1,200 25
	Total	25

		Benefits
Main Driver	Market Demand	
Main Driver Explanation	on	
Benefit Description		

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

LNG terminal in northern Greece / Alexandroupolis - LNG Section

LNG-N-62	Project	LNG Terminal	Non-FID
Update Date	22/05/2018		Advanced

Description	Please note that this part refers only to LNG section of the Project, i.e. the floating terminal and its Mooring system. The Pipeline section of the Project is addressed in TRA-N-063. The project consists of an LNG offshore Floating Storage Regasification Unit, a Mooring & a Pipeline system (24km Subsea and 4km Onshore), connecting the floating unit to the Greek National Natural Gas System at the area of Amfitriti, 5.5km NE of Alexandroupolis where, DESFA, the NNGS TSO, will build and operate a metering & regulating station. The floating unit, will be stationed in the sea of Thrace, 17.6km SW of Alexandroupolis in NE Greece, at an offshore distance of 5.4 n.m. from the nearest shore. It will have up to 170.000m3 LNG storage capacity and a gas send out capacity of up to 900.000 Nm3/h corresponding to 8.3 bcm/y.
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	
Alexandropoulis LNG	Gastrade S.A.	2020	LNG_Tk_GR	GRa	253.1 GWh/d	
	Comment: Increment available 100% at operation start-up.					
	Gastrade S.A.	2020	GRa	IB-GRk	253.1 GWh/d	
Alexandroupolis Amphitriti	Comment: Increment not	assessed by ENTSOG: Incre	ment already submitt	ed via the Pipeline project		

Sponsors			General Information	ND	PP 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	Project's URL	Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

		- Annex A						Page	199 of 575
Schedule	Start Date	End Date					Third-Party A	ccess Regime	
Pre-Feasibility		12/2010				Considered T	0	Λ	lot Applica
easibility	01/2014	06/2014				Considered T	ariff Regime		Regulat
EED	03/2017	09/2017				Applied for Ex	kemption		Not Y
Permitting	12/2010	01/2015				Exemption Gr	anted		Not
Supply Contracts									
ID		11/2018					entry direction		0.00
Construction	12/2018	09/2020				Exemption in	exit direction		0.00
Commissioning	2020	2020							
			Enabled	Drojecto					
Project Code Proje	ect Name		LINDIEU	riojecis					
			Technical Info	rmation (Li	NG) Send-out	Cto ve ve			
Regasification Facility	, Reload	Project Phase	Expected Increment		capacity	Storage capacity (m3	Comments	Commissioning Year	
Regasification Facility	, Reload Abili	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)		-		Commissioning Year	Load Fact (%)
	Abili	ty Project Phase	(bcm/y)	(m3)	capacity (mcm/d)	capacity (m3 LNG)	The increments	Year	(%)
Regasification Facility LNG terminal in north Greece / Alexandroup	Abili nern Ves	ty Project Phase			capacity	capacity (m3	The increments correspond to the maximum	0	
LNG terminal in north	Abili nern Ves	ty Project Phase	(bcm/y)	(m3)	capacity (mcm/d)	capacity (m3 LNG)	The increments correspond to	Year	(%)
LNG terminal in north	Abili nern Ves	ty Project Phase	(bcm/y)	(m3) 170,000	capacity (mcm/d)	capacity (m3 LNG)	The increments correspond to the maximum	Year	(%)
LNG terminal in north	Abili nern Yes olis	s LNG terminal	(bcm/y) <i>8.3</i>	(m3) 170,000 Criteria	capacity (mcm/d) 22,680,000.00	capacity (m3 LNG)	The increments correspond to the maximum	Year	(%)
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern Yes olis Co led Co Ma	bompetition, Market Integration - Region	(bcm/y) <i>8.3</i> Fulfilled ration, Security of Supply, S nal (SEE + Serbia + FYROM	(m3) 170,000 Criteria ustainabilit) and beyo	capacity (mcm/d) <i>22,680,000.00</i> y nd (e.g. Hungary	capacity (m3 LNG) <i>170,000</i> and through a	The increments correspond to the maximum flowrates cross the NSI gas	Year 2020 corridor) Security	(%) <i>40</i> / of Supply
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern olis ed Co Ma ed Comments thr	bompetition, Market Integra rough inter alia source ar	(bcm/y) <i>8.3</i> ration, Security of Supply, S nal (SEE + Serbia + FYROM) nd route diversification- Gree	(m3) <i>170,000</i> Criteria ustainabilit) and beyo eece, Bulga	capacity (mcm/d) <i>22,680,000.00</i> :y nd (e.g. Hungary ria, Serbia, FYRO	capacity (m3 LNG) <i>170,000</i> and through a M, Hungary, Ul	The increments correspond to the maximum flowrates cross the NSI gas kraine, Turkey Enh	Year 2020 corridor) Security nances competitic	(%) <i>40</i> / of Supply
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern olis ed Co Ma ed Comments thr	bompetition, Market Integra rough inter alia source ar	(bcm/y) <i>8.3</i> Fulfilled ration, Security of Supply, S nal (SEE + Serbia + FYROM	(m3) <i>170,000</i> Criteria ustainabilit) and beyo eece, Bulga	capacity (mcm/d) <i>22,680,000.00</i> :y nd (e.g. Hungary ria, Serbia, FYRO	capacity (m3 LNG) <i>170,000</i> and through a M, Hungary, Ul	The increments correspond to the maximum flowrates cross the NSI gas kraine, Turkey Enh	Year 2020 corridor) Security nances competitic	(%) <i>40</i> / of Supply
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern olis ed Co Ma ed Comments thr	bompetition, Market Integra rough inter alia source ar	(bcm/y) <i>8.3</i> ration, Security of Supply, S nal (SEE + Serbia + FYROM) nd route diversification- Gree	(m3) <i>170,000</i> Criteria ustainabilit) and beyo eece, Bulga	capacity (mcm/d) <i>22,680,000.00</i> :y nd (e.g. Hungary ria, Serbia, FYRO	capacity (m3 LNG) <i>170,000</i> and through a M, Hungary, Ul	The increments correspond to the maximum flowrates cross the NSI gas kraine, Turkey Enh	Year 2020 corridor) Security nances competitic	(%) <i>40</i> / of Supply
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern olis ed Co Ma ed Comments thr	bompetition, Market Integra rough inter alia source ar	(bcm/y) <i>8.3</i> ration, Security of Supply, S nal (SEE + Serbia + FYROM) nd route diversification- Gree	(m3) <i>170,000</i> Criteria ustainabilit) and beyo eece, Bulga	capacity (mcm/d) <i>22,680,000.00</i> :y nd (e.g. Hungary ria, Serbia, FYRO	capacity (m3 LNG) <i>170,000</i> and through a M, Hungary, Ul	The increments correspond to the maximum flowrates cross the NSI gas kraine, Turkey Enh	Year 2020 corridor) Security nances competitic	(%) <i>40</i> / of Supply
LNG terminal in north Greece / Alexandroup Specific Criteria Fulfill	Abili nern olis ed Co Ma ed Comments thr	bompetition, Market Integra rough inter alia source ar	(bcm/y) <i>8.3</i> ration, Security of Supply, S nal (SEE + Serbia + FYROM) nd route diversification- Gree	(m3) <i>170,000</i> Criteria ustainabilit) and beyo eece, Bulga	capacity (mcm/d) <i>22,680,000.00</i> :y nd (e.g. Hungary ria, Serbia, FYRO	capacity (m3 LNG) <i>170,000</i> and through a M, Hungary, Ul	The increments correspond to the maximum flowrates cross the NSI gas kraine, Turkey Enh	Year 2020 corridor) Security nances competitic	(%) <i>40</i> / of Supply

	Time Schedule
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), Multi-source	d supply including new sources (e.g. U.S., East Med, Mozambique)
	Comments about the Third-Party Access Regime
5	noter has not applied officialy for a TPA Exemption. The project promoter has commenced discussions with NRA regarding the procedure for granting TPA 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.

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 1s 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.
Market	Lack of market maturity
Financing	Availability of funds and associated conditions

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	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 2
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	Yes, for studies only
Additional Comments	CBCA is non applicable for the Project	Other Financial Assistance	No
		Comments	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.
		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	Please note that this part refers only to the pipeline section of the Project. The project consists of an LNG offshore Floating Storage Regasification Unit, connecting the floating unit to the Greek National Natural Gas System at the TSO, will build and operate a metering & regulating station. The floating unit, will be stationed in the sea of Thrace, 17.6km SW of Alexan nearest shore. It will have up to 170.000m3 LNG storage capacity and a gas s	a Mooring & a Pipeline system (24km Subsea ar area of Amfitriti, 5.5km NE of Alexandroupolis w droupolis in NE Greece, at an offshore distance of	nd 4km Onshore), rhere, DESFA, the NNGS of 5.4 n.m. from the
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	
	Gastrade S.A.	2020	LNG_Tk_GR	GRa	253.1 GWh/d	
Alexandropoulis LNG	Comment: Increment not assessed by ENTSOG: Increment already submitted via the LNG project					
	Gastrade S.A.	2020	GRa	IB-GRk	253.1 GWh/d	
Alexandroupolis Amphitriti		6				

Comment: Increment available 100% at operation start-up.

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	Project's URL	Currently PCI	Yes ()	
				Priority Corridor(s)	NSIE	

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Schedule Start	Date End Date			Third-Pa	arty Access Regime	
Pre-Feasibility	12/2010		Considered TPA	Regime		Not Applicable
Feasibility 01/	/2014 06/2014		Considered Tarif	f Regime		Not Applicable
FEED 03/	/2017 09/2017		Applied for Exen	nption		Not Ye
Permitting 12/	/2010 01/2015		Exemption Gran	Exemption Granted		
Supply Contracts						
FID	11/2018		Exemption in en	Exemption in entry direction		
Construction 12/	/2018 09/2020		Exemption in exi	t directio	n	0.00%
Commissioning	2020 2020					
		Enabled Projects				
Pipelines and Compressor S	Stations					
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
1		Pipeline Comment		-		-
Pipeline Section		Pipeline Comment Total	(mm)	(km)	(MW)	Year
Pipeline Section			(mm)	(km) 28	(MW) 0	Year
Pipeline Section	nal - M/R Amfitriti	Total	(mm)	(km) 28	(MW) 0	Year
Pipeline Section Alexandroupolis LNG termin	nal - M/R Amfitriti Competition, Market Market Integration mments through inter alia so	Total Fulfilled Criteria	(mm) 762 e.g. Hungary and through acro Serbia, FYROM, Hungary, Ukra	(km) 28 28 28 oss the NS ine, Turke	(MW) 0 0 SI gas corridor) Secu	Year 2020 rity of Supply
Pipeline Section Alexandroupolis LNG termin Specific Criteria Fulfilled	nal - M/R Amfitriti Competition, Market Market Integration mments through inter alia so	Total Fulfilled Criteria et Integration, Security of Supply, Sustainability - Regional (SEE + Serbia + FYROM) and beyond (ource and route diversification- Greece, Bulgaria,	(mm) 762 e.g. Hungary and through acro Serbia, FYROM, Hungary, Ukra	(km) 28 28 28 oss the NS ine, Turke	(MW) 0 0 SI gas corridor) Secu	Year 2020 rity of Supply
Pipeline Section Alexandroupolis LNG termin Specific Criteria Fulfilled	nal - M/R Amfitriti Competition, Market Market Integration mments through inter alia so	Total Fulfilled Criteria et Integration, Security of Supply, Sustainability - Regional (SEE + Serbia + FYROM) and beyond (ource and route diversification- Greece, Bulgaria,	(mm) 762 e.g. Hungary and through acro Serbia, FYROM, Hungary, Ukra	(km) 28 28 28 oss the NS ine, Turke	(MW) 0 0 SI gas corridor) Secu	Year 2020
Pipeline Section Alexandroupolis LNG termin Specific Criteria Fulfilled	nal - M/R Amfitriti Competition, Market Market Integration mments through inter alia so	Total Fulfilled Criteria et Integration, Security of Supply, Sustainability - Regional (SEE + Serbia + FYROM) and beyond (ource and route diversification- Greece, Bulgaria,	(mm) 762 e.g. Hungary and through acro Serbia, FYROM, Hungary, Ukra	(km) 28 28 28 oss the NS ine, Turke	(MW) 0 0 SI gas corridor) Secu	Year 2020 rity of Supply

	Time Schedule
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
NG (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
5	noter has not applied officialy for a TPA Exemption. The project promoter has commenced discussions with NRA regarding the procedure for granting TPA 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 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	-	Financial Assistanc	ce	
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(1) Yes, we have appl	ied for CEF and we	have received o decisio
Submissin Date		Grants for studies			Ye
Decision Date		Grants for studies amount			Mln EUR
Vebsite		Grants for works			Ν
ountries Affected		Grants for works amount			
Countries Net Cost Bearer		Intention to apply for CEF		Yes	, for studies only
Additional Comments	CBCA is non applicable for the Project	Other Financial Assistance			N
		Comments	GASTRADE applied f on 10.10.2017 for a requested amount was was sound and comp due t	"site specific meto 207,500 euro. Alt	cean study". The hough the study ected for funding
		General Comments			
	Cornegli	iano UGS			
JGS-F-242	Project		Storage Facilit	у	FID
Update Date		/03/2018		A	dvanced
		ated in Lombardy (Italy). The faci Il rate from the facility will be 27	million cubic meters pe	a working gas vol r day. The project	dvanced ume of 1.3 has been fully
Jpdate Date	27/ Ital Gas Storage will construct a new gas storage facility loca billion cubic meters. The maximum injection and withdrawa authorised in March 2011, construction is expected to end b	ated in Lombardy (Italy). The faci Il rate from the facility will be 27	million cubic meters pe	a working gas vol r day. The project	dvanced ume of 1.3 has been fully
Jpdate Date Description PRJ Code - PRJ Name	27/ Ital Gas Storage will construct a new gas storage facility loca billion cubic meters. The maximum injection and withdrawa authorised in March 2011, construction is expected to end b 2018. PRJ-G-056 - New UGS in Cornegliano Laudense (IT)	ated in Lombardy (Italy). The faci Il rate from the facility will be 27	million cubic meters pe	a working gas vol r day. The project	dvanced ume of 1.3 has been fully
Jpdate Date Description	27/ Ital Gas Storage will construct a new gas storage facility loca billion cubic meters. The maximum injection and withdrawa authorised in March 2011, construction is expected to end b 2018. PRJ-G-056 - New UGS in Cornegliano Laudense (IT)	ated in Lombardy (Italy). The faci Il rate from the facility will be 27	million cubic meters per eration of the facility is e	a working gas vol r day. The project	dvanced ume of 1.3 has been fully
Update Date Description PRJ Code - PRJ Name Capacity Increments Variar	27/ Ital Gas Storage will construct a new gas storage facility loca billion cubic meters. The maximum injection and withdrawa authorised in March 2011, construction is expected to end b 2018. PRJ-G-056 - New UGS in Cornegliano Laudense (IT)	ated in Lombardy (Italy). The faci Il rate from the facility will be 27 by Q3 2018; and commercial ope Year	million cubic meters per eration of the facility is e From Gas System	a working gas vol r day. The project expected to comm	dvanced ume of 1.3 has been fully ence from Q4
Update Date Description PRJ Code - PRJ Name Capacity Increments Variar	27/ Ital Gas Storage will construct a new gas storage facility loca billion cubic meters. The maximum injection and withdrawa authorised in March 2011, construction is expected to end b 2018. PRJ-G-056 - New UGS in Cornegliano Laudense (IT) ht For Modelling Operator	ated in Lombardy (Italy). The faci Il rate from the facility will be 27 by Q3 2018; and commercial ope Year	From Gas System	a working gas vol r day. The project expected to comme To Gas System IT	dvanced ume of 1.3 has been fully ence from Q4 Capacity 297.0 GWh/d

Cornegliano

Comment: increas of 11% of actual Italian storage withdrawal capacity

									PCI Information	
Sponsors	nsors		General Information							
			Promoter		ITAL Gas St				Ten-year developr	and the second se
Whysol Gas Storage	e Holding S.r.l.	100%	Operator		ITAL Gas Storag	ge S.r.l.	Part of NDP	natura	al gas transmissio	n network 2017– 2026)
Default			Host Countr	ý		Italy	NDP Number			RN_10
ITAL GAS STORAGE	S.P.A.	100%	Status		In Pr	roaress	NDP Release D	ato		02/10/2017
	- /		Website		Project	t's URL	NDP Website	ate		NDP URL
							Currently PCI			No
							Priority Corrido	r(s)		110
							r nonty contac			
Schedule	Start Date	End Date							Access Regime	
Pre-Feasibility							Considered TPA	0		Regulated
Feasibility							Considered Tar	0		Regulated
FEED	06/2009	03/2011					Applied for Exe	mption		No
Permitting		03/2011					Exemption Grai	nted		No
Supply Contracts		12/2012								
FID		11/2015					Exemption in e	ntry direction		0.00%
Construction	12/2015	11/2018					Exemption in e	kit direction		0.00%
Commissioning	2018	2018								
				Technical Inforn	nation (UGS)					
Storage Facility	St	orage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdra Capac (mcm,	ity Capacity	Load Factor (%)	Comments	Commisioning Year
Cornegliano UGS	De	epleted Field	Yes	In progress	800	27.0) 27.0	100	Commercial operation of the facility is expected to commence from Q4 2018.	2018

	Fulfilled	Criteria	
Specific Criteria Fulfilled			
Specific Criteria Fulfilled	Comments		
	Time So	chedule	
Grant Obtention Date	15/03/2011		
Delay Since Last TYNDP			
Delay Explanation			
	Ben	efits	
Main Driver	Regulation SoS		
Main Driver Explanation	In the last decade Italy faced at least 4 gas crisis, not depending of supply, Italian storages could be used to grant citizens from othe Scenario and #16 Scenario		-
Benefit Description	Cornegliano UGS will contribute to the development of reverse g with an important source of flexibility and gas modulation at rela		
	Barı	riers	
Barrier Type	Description		
Financing	Amortization rates		
Regulatory	Low rate of return		
	CBCA	Finar	ncial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Culturizzia Data	not	Grants for studies amount	
Submissin Date		Grants for works	No
Decision Date		Grants for works amount	
Website			
Construine Affected		Intention to apply for CEF	
Countries Affected		Intention to apply for CEF Other Financial Assistance	No
Countries Affected Countries Net Cost Bear Additional Comments	rer		No

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)	

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
LICS IT Snow Data Cas (Ital assetsments	Snam Rete Gas S.p.A.	2018	STcIT	IT	294.3 GWh/d
UGS - IT - Snam Rete Gas/Italgasstorage	Snam Rete Gas S.p.A.	2018	IT	STcIT	294.3 GWh/d

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 (TYNDP 2017-2026)
	Operator	Snam Rete Gas S.p.A.	NDP Number	RN_10
	Host Country	Italy	NDP Release Date	30/11/2017
	Status	In Progress	NDP Website	<u>NDP URL</u>
	Website	Project's URL	Currently PCI	No
			Priority Corridor(s)	
Schedule Start Date End Date			Third-Party Acc	cess Regime
Pre-Feasibility			Considered TPA Regime	Regulated
Feasibility			Considered Tariff Regime	Regulated
FEED			Applied for Exemption	No
Permitting			Exemption Granted	No
Supply Contracts				
FID			Exemption in entry direction	0.00%
Construction			Exemption in exit direction	0.00%

Commissioning

2018

2018

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

Slovenian-Hungarian interconnector

TRA-N-325	Project	Pipeline including CS Non-FID
Update Date	02/10/2018	Advanced
Description	Plinovodi, Snam Retegas and FGSZ agreed to create a new bidirectional ga transmission route between the three countries.	s route in the region. Main target to ensure a new bidirectional

PRJ Code - PRJ Name

Point			Operator		Year	From Gas System	To Gas System	Capacity
			FGSZ Ltd.		2022	HU	SI	12.8 GWh/d
							Comment: phase I.	
			FGSZ Ltd.		2022	SI	HU	12.8 GWh/d
Pince (SI) / Tornys	zontmiklos (HLI)						Comment: phase I.	
Plife (SI) / Torriys			FGSZ Ltd.		2023	HU	SI	51.2 GWh/d
				Со	mment	: phase II. total capac	ity up to 64 GWh/d	
			FGSZ Ltd.		2023	SI	HU	51.2 GWh/d
				Со	mment	: phase II. total capac	ity up to 64 GWh/d	
Sponsors			General Information			NDP and	PCI Information	
FGSZ Ltd.	1	100%	Promoter	FGSZ Ltd.	Part o	of NDP	Yes (Hungaria	n TYNDP 2017
	1		Operator	FGSZ Ltd.	NDP	Number		12.12
			Host Country	Hungary	NDP	Release Date		28/12/2017
			Status	Planned	NDP	Website		<u>NDP UR</u>
			Website	Project's URL	Curre	ntly PCI		Yes (
					Priori	ty Corridor(s)		NSI
Schedule	Start Date	End Date				Third-Par	ty Access Regime	
Pre-Feasibility		12/2015			Consi	dered TPA Regime		Regulated
easibility	05/2016	12/2017			Consi	dered Tariff Regime		Regulated
EED	12/2019	12/2020			Applie	ed for Exemption		No
Permitting	11/2016	12/2019			Exem	ption Granted		Not Relevan
Supply Contracts								
ID		07/2019			Exem	ption in entry direction	on	0.00%
Construction	01/2020	10/2022			Exem	ption in exit direction		0.00%
Commissioning	2022	2023						

Pipelines and Compressor Statio	ns				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionir Year
Nagykanizsa-Kozármisleny	phase II.	600	150	12	2023
Nagykanizsa-Tornyiszentmiklós	phase I.	600	41		2022
	Total		191	12	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	market integration. Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP					
Delay Explanation	Time schedule in the last TYNDP was estimated according to the date of project as planned.	ata from the pre-feasibility stuc	ly with lov	ver level of details. Sl	ower progress
	Expected Gas Sourcing				
Algeria, Caspian Region, Libya, LN	IG (HR,IT)				
	Benefits				
Main Driver Others	Denents				
Main Driver Explanation					

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.

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

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

R15/1 Pince - Lendava - Kidričevo

TRA-N-112	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Advanced
Description	Interconnector with the transmission system of the Hungarian TSO. Cross-box for Slovenian gas suppliers, enabling access to LNG terminals in northern Adr Hungarian and Slovenian gas market and improving of N-1 infrastructure star PCI 6.23. Hungary – Slovenia interconnection (Nagykanizsa - Tornyiszentmikk	iatic and other gas sources for Hungarian gas sundard for SI and HU.	
PRJ Code - PRJ Name	PRJ-G-060 - Hungary – Slovenia interconnection		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Plinovodi d.o.o.	2022	HU	SI	12.8 GWh/d
				Comment: Phase 1	
	Plinovodi d.o.o.	2022	SI	HU	12.8 GWh/d
				Comment: Phase 1	
Pince (SI) / Tornyszentmiklos (HU)	Plinovodi d.o.o.	2023	HU	SI	46.6 GWh/d
				Comment: Phase 2 pacity 59.4 GWh/d.	
	Plinovodi d.o.o.	2023	SI	HU	46.6 GWh/d
				Comment: Phase 2 pacity 59.4 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	C3	
		Host Country	Slovenia	NDP Release Date	09/10/2017	
		Status	Planned	NDP Website	NDP URL	
		Website	<u>Project's URL</u>	Currently PCI	Yes ()	
				Priority Corridor(s)	NSIE	

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED	07/2019	12/2021
Permitting		
Supply Contracts		
FID		07/2019
Construction	10/2020	12/2023
Commissioning	2022	2023

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						

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
R15/1 Pince - Lendava - Kidričevo	500	73	6		
	Total		73	6	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	to the diversification of import sources and routes and the security of suppl	atic and other gas source ly for both countries. It	es for Hu	ngarian gas suppliers	, contributing
	Slovenian gas market and improving of N-1 infrastructure standard for SI and	nd HU.			

Current TYNDP : TYNDP	P 2018 FINAL - Annex A			Page 217 of 575
	Ben	efits		
Main Driver	Market Demand			
Main Driver Explanation	Also essential contribution to Security of supply.			
Benefit Description	Cross-border transmission, enabling access to underground stora Adriatic and other gas sources for Hungarian gas suppliers, conne standard for SI and HU.			
	Barı	riers		
Barrier Type	Description			
Permit Granting	Long lasting and complicated procedures of Spatial planning (Na procedure of acquiring the Construction permit (long procedures		procedures, Environmental conse	nt) as well as the
	Intergovernmer	ntal Agreements		
Agreement	Agreement Description		Is Signed Ag	greement Signature Date
Memorandum of Under	standing (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	Applied for CEF	(1) Yes, we have applied for CE	F and we have received a decision
	not	Grants for studies		Yes
Submissin Date		Grants for studies amount		Mln EUR (
Decision Date		Grants for works		No
Website		Grants for works amount		
Countries Affected		Intention to apply for CEF		
Countries Net Cost Bear	er	Other Financial Assistance		No
Additional Comments		Comments		
		General Comments		
	Albania - Koso	vo Gas Pipeline		
TRA-F-1028	Project		Pipeline including CS	FID
Update Date	15/	11/2018		Advanced

Description	The Albania Kosovo Gas Pipeline (ALKOGAP) project is to interconnect the existing and planned gas transmission system of the Republic of Albania including TAP & IAP project) with the future projected gas transmission system of the Republic of Kosovo, and the transmission interconnectors which are part of eastern brunch of Energy Community Gas Ring (ECGR), as well. This transmission pipeline would create the preconditions for the further development of the natural gas markets of Albania, and the creation and development of the natural gas markets of Kosovo in the estimated annual level of 2 bcm (1-1.3 bcm for Albania and 0.5 - 0.7 bcm for Kosovo). It would be possible to increase its capacity (double or triple), in the case that ALKOGAP will be used to supply Serbia and other countries with Caspian or Middle East gas.
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PRJ Code - PRJ Name

Variant : Lezha (Albania) - Prishtina (KO)	This routing scenario assumes that	t IAP moves forward	d to the implementat	ion stage;					
Point	Operator	Year	From Gas System	To Gas System	Capacity				
	MIE Albania & Albgaz		AL	ХК	63.7 GWh/d				
Alberia Kasawa Cas Binalina (ALKOCAD)	Comment: The Capacity for Albania is 1-1.3 bcm and for Kosovo is 0.5-0.7 bcm;								
Albania - Kosovo Gas Pipeline (ALKOGAP)	MIE Albania & Albgaz	2022	ХК	AL	63.7 GWh/d				
	Comment: The Capacity for Albania is 1-1.3 bcm and for Kosovo is 0.5-0.7 bcm;								
Capacity Increments Variant(s) For Information Only									
Variant : Fier - Lezha (AL) - Prishtina (KO)	This routing scenario shall be considered in case of not much progress is encountered with the implementation of IAP								
Point	Operator	Year	From Gas System	To Gas System	Capacity				
	MIE Albania & Albgaz	2022	AL	XK	63.7 GWh/d				
Alberia Kasawa Cas Binalina (ALKOCAD)	Comment: The Capacity for Albania is 1-1.3 bcm and for Kosovo is 0.5-0.7 bcm;								
Albania - Kosovo Gas Pipeline (ALKOGAP)	MIE Albania & Albgaz	2022	ХК	AL	63.7 GWh/d				
	Comment: The Capacity for Albania is 1-1.3 bcm and for Kosovo is 0.5-0.7 bcm;								

Sponsors		General Information	NDP and PCI Information		
Fier – Lezha (ALbania) – Prishtina (Kosovo)			Min. of Infrastructure and Energy AL & Min. of Economic	Part of NDP	Yes (General National Territory Plan of
Min. of Infrastructure & Energy of AL & Min. of	100%	Promoter			Albania)
Economic Development of KO	100%		Development KO	NDI NUITIDEI	Map no. 3.27, page 145
Lezha (Albania) - Pristina (Kosovo)		Operator	MIE Albania & Albgaz	NDP Release Date	14/12/2016
		Host Country	Albania	NDP Website	NDP URL
Min. of Infrastructure & Energy of AL & Min. of Economic Development of KO	100%	Status		Currently PCI	No
		Website	Project's URL	Priority Corridor(s)	

TEED Permitting Supply Contracts TID 07/2016	Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted	Regulate Regulate N N
FEED Permitting Supply Contracts FID 07/2016	Applied for Exemption	٨
Permitting Supply Contracts		
Supply Contracts 07/2016	Exemption Granted	٨
	Exemption in entry direction	0.00
Construction	Exemption in exit direction	0.00
Commissioning 2022 2022		
Enabled Projects		
Project Code Project Name		
UGS-N-1229 Underground Natural Gas Storage in Dumrea Area (UGS Dumrea)		
003-11-1229 Onderground Natural Gas Storage in Dunnea Area (005 Dunnea)		

Pipelines and Compressor Stations						
Lezha (Albania) - Prishtina (KO)		This routing scenario assumes that IAP moves forward to the implementation stage;				
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Section 1		 bi-directions flow; This routing scenario assumes that IAP moves forward to the implementation stage; 	610	175	2	2022
	Total			175	2	
Pipelines and Compressor Stations - Alternative Varian	it					
Fier - Lezha (AL) - Prishtina (KO)		This routing scenario shall be considered in case of not much progress is encountered with the implementation of IAP				
Pipeline Section		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Section 2		- bi-directions flow; This routing scenario shall be considered in case of not much progress is encountered with the implementation of IAP;	610	260	2	2022
	Total			260	2	
		Fulfilled Criteria				
Specific Criteria Fulfilled						
Specific Criteria Fulfilled Comments						
		Time Schedule				
Grant Obtention Date						
Dolay Since Last TVNDP						

Delay Since Last TYNDP

We don't see any delay for this Project.

Expected Gas Sourcing

Caspian Region

Delay Explanation

Comments about the Third-Party Access Regime

This step will take place after the FS and ESIA will be concluded.

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	Benefits
Main Driver	Market Demand
Main Driver Explanation	The Albania Kosovo Gas Pipeline (ALKOGAP) project is planned to interconnect the existing and planned gas transmission system of the Republic of Albania (including TAP & IAP project) with the future projected gas transmission system of the Republic of Kosovo, and the transmission interconnectors which are part of easternbrunch of Energy Community Gas Ring (ECGR), as well. The project aims to establish a new supply route fornatural gas from the Middle East and Caspian Region transported by Trans Adriatic Pipeline, northeastwards of the Western Balkan area towards Serbia. The ALKOGAP project however shall be planned as bidirectional pipeline, so the possible supply direction could also be north – south, from the ECGR, or other sources.
Benefit Description	The benefits will include: -introducing an environmentally more acceptable energy source in the region (replacement for firewood, coal, fuel oil and complementary generation to renewable energy, and the potential for increased cogeneration and CHP); -facilitating the gasification of considerable eastern parts of Albania and entire territory of Kosovo; -increasing energy security to both Albania and Kosovo; -providing diversified gas supply to the region providing the access to Albanian storage capacities; -providing significant transit capacity and income to Albania and Kosovo; -creating the preconditions for supporting the regional concept of South European Gas Ring; -reducing CO2 emissions in the region and facilitating economic development.
	Barriers
Barrier Type	Description
Regulatory	It is not foreseen any regulatory barrier related to ALKOGAP Project. This project will be developed based on the Law no. 102/2015 "On the the natural gas sector" for Albania (http://ere.gov.al/doc/ligj_nr102,_dt23.9.2015.pdf) and Law No. 05/L-082 "For natural gas" for Kosovo (http://ero-ks.org/2016/Ligjet/LIGJI_PER_GAZIN_NATYROR.pdf). Above mentioned laws are in accordance with the 3rd package of the Energy Community.
Permit Granting	The permit will be granting in accordance with the Regulation no. 347/2013.
Political	ALKOGAP Project has the support of Albanian and Kosovo Governments. This Project is part of "Single Project Pipeline" list of both governments.
Others	N/A.
Market	N/A. We don't see any market barrier.
Financing	Availability of funds and associated conditions

Financial Assistance		CBCA	
(3) No, we have not applied for C	Applied for CEF	No, we have not submitted an investment request yet,	
	Grants for studies	and we have not yet decided whether we will submit or	Decision
	Grants for studies amount	not	Submissin Date
	Grants for works		Decision Date
	Grants for works amount		Website
No decision yet tak	Intention to apply for CEF		Countries Affected
}	Other Financial Assistance	-	
We have received grant from WB -1.1 million Euro for the preparation of the Gas Mast Plan of Alban -0.3 million Euro for the Pre-Feasibility Study for th Proje As this study will be concluded, we will apply to WBIF for grant in order to prepare the Feasibility Study and ESI.	Comments	intries Net Cost Bearer ditional Comments	
The Gas Master Plan of Albani http://www.qbz.gov.al/Botime/Akteindividuale/Jan %202018/Fletore%2023/VKM%20nr.%2087,%20dd %2014.2.2018.p The National General Territory Pla http://www.qbz.gov.al/botime/fletore_zyrtare/2016/PE 2016/248-2016.p	General Comments		

Underground Natural Gas Storage in Dumrea Area (UGS Dumrea)

UGS-N-1229	Project	Storage Facility	Non-FID
Update Date	15/11/2018		Non-Advanced
Description	Albanian institutions have studied to develop two alternatives of salt formatio surface area of approximately 250 km ² . The salt mirror is mostly at depth 2,00 and anhydrite. The salt reaches down to 6,000 m. The salt volume is estimated would create the preconditions for the further development of the natural gas The construction of the UGS Dumrea would improve the gasification of Albani diversified and reliable natural gas supply. It would be possible to increase its supply Greece, Italy, Serbia and Croatia and other countries with Caspian or M	0 m. The overburden is carstic to a large extend to amount 1,400 km ³ . This UGS project, of all markets of Albania. The location of this proje ia, Greece, Italy, Montenegro and Kosovo cour capacity (double or triple), in the case that UG	It and consist of gypsum bout $1 - 1.2$ bcm capacity, ect is in Albanian territory. Intries and providing a
PRJ Code - PRJ Name			

Capacity Increments Variant For Modelling								
Variant : UGS Dumrea Alternative 2	Alternative A2							
Point	Operator	Year	From Gas System	To Gas System	Capacity			
	MIE Albania & Albgaz	2024	STcAL	AL	38.2 GWh/d			
UGS Dumrea	Comment: Alternative 2: Working Capacity 1-1.2 bcm/y; Withdrawal rate 6 mcm/day; Injection Capacity 2mcm/day.							
	MIE Albania & Albgaz	2024	AL	STcAL	38.2 GWh/d			
	Comment: Alternative 2: Working Capacity 1-1.2 bcm/y; Withdrawal rate 6 mcm/day; Injection Capacity 2mcm/day.							
Capacity Increments Variant(s) For Information Only								
Variant : UGS Dumrea Alternative 1	Alternative A1							
Point	Operator	Year	From Gas System	To Gas System	Capacity			
	MIE Albania & Albgaz	2024	STcAL	AL	9.6 GWh/d			
UGS Dumrea	Comment: Alternative 1: Working Capacity 0.26 - 0.3 bcm/y; Withdrawal rate 1.29 mcm/day; Injection Capacity 0.43 mcm/day.							
	MIE Albania & Albgaz	2024	AL	STcAL	9.6 GWh/d			

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UGS Dumrea

Comment: Alternative 1: Working Capacity 0.26 - 0.3 bcm/y; Withdrawal rate 1.29 mcm/day;

Injection Capacity 0.43 mcm/day.

Sponsors					General Information	NDP and I	PCI Information
Ministry of Infrastru Albgaz sh.a	ucture and Energy o	of Albania &	100%	Promoter	Ministry of Infrastructure and Energy of Albania and Albgaz sh.a.	Yes (NP	National General Territory Plan of Albania DoCM no. 881, dated 14.012.2016)
				Operator	MIE Albania & Albgaz	NDP Number	Map no. 3.27; page no. 145
				Host Country	Albania	NDP Release Date	14/12/2016
				Status	In Progress	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		03/2017				Considered TPA Regime	Regulated
Feasibility	01/2019	10/2019				Considered Tariff Regime	Regulated
FEED	01/2018	10/2019				Applied for Exemption	No
Permitting	09/2020	12/2020				Exemption Granted	No
Supply Contracts		06/2020					
FID		12/2019				Exemption in entry direction	0.00%
Construction	01/2022	12/2024				Exemption in exit direction	0.00%
Commissioning	2024	2024					
					Enabled Projects		
Project Code Pro	ject Name						
TRA-F-1028 Alba	ania - Kosovo Gas	Pipeline					

			Technical Informatic	on (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
UGS Dumrea	Salt Cavern	Yes	UGS Dumrea A.2	1,200	6.0	2.0	20	UGS Dumrea Alternative 2: Working Volume 1- 1.2bcm/year.	2024
UGS Dumrea	Salt Cavern	Yes	UGS Dumrea A.1	300	1.3	0.4	30	UGS Dumrea Alternative 1: Working Volume 0.26 - 0.3 bcm/year.	2024
			Fulfilled Criter	ia					
Specific Criteria Fulfilled									
Specific Criteria Fulfilled Co	omments								
			Time Schedul	e					

Grant Obtention Date		
Delay Since Last TYNDP		
Delay Explanation	This Project was not part of last TYNDP. This Project is in time without any delays.	
	Expected Gas Sourcing	
Caspian Region		
	Comments about the Third-Party Access Regime	
This phase will be done after	r the preparation of the FS and ESIA, also other necessary document.	

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	Benefits
Main Driver	Market Demand
Main Driver Explanation	The construction of the UGS Dumrea would improve the gasification of Albania, Montenegro and Kosovo and providing a diversified and reliable natural gas supply. This UGS project, of about $1 - 1.2$ bcm capacity, would create the preconditions for the further development of the natural gas markets of Albania. It would be possible to increase its capacity (double or triple), in the case that UGS Dumrea will be used to supply Greece, Serbia and Croatia and other countries with Caspian or Middle East gas.
Benefit Description	The expected benefits will include: - Improve the introducing an environmentally more acceptable energy source in the region (helping on the replacement for firewood, coal, fuel oil and complementary generation to renewable energy, and the potential for increased cogeneration and CHP); - facilitating the gasification of Albania and other countries on the region; - providing diversified gas supply to the region; - providing the access to Albanian gas network; - providing significant transit capacity and income to Albania; - reducing CO2 emissions in the region and facilitating economic development.
	Barriers
Barrier Type	Description
Regulatory	We don't see any regulatory barriers. Albania has transpose the EU Regulation concretely the 3rd package of the Energy Community, Law no. 102/2015 "On the Natural Gas Sector" (http://ere.gov.al/doc/ligj_nr102,_dt23.9.2015.pdf). The document that transpose the Regulation 347/2013 is in process for approval by the CM of Albania.
Permit Granting	The permits are going to be granting in concordance with the Regulation 347/2013.
Political	This Project has the support of Albanian Government. Also, this Project is part of the "Single Project Pipeline" list of Albania Government.
Others	N/A
Market	We don't see any market barriers related to UGS Dumrea Project.
Financing	Availability of funds and associated conditions

Financial Assistance		CBCA	
(3) No, we have not applied for C	Applied for CEF Grants for studies	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Decision
	Grants for studies amount Grants for works Grants for works amount	not	Submissin Date Decision Date
No decision yet tak	Intention to apply for CEF Other Financial Assistance		Website Countries Affected
We have received grant from WB -1.1 million Euro for the preparation of the Gas Mast Plan of Albar We have applied for the grant to prepare the Feasibil Study and ESIA for UGS Dumrea Proje	Comments		Countries Net Cost Bearer Additional Comments
The Gas Master Plan is approved with the DoCM no. & ated on 14.02.2018. In this study a detailed assessment conluded related to this project. UGS Dumrea is consid as very important project regarding the benefits on the security of supply of Albanian and neighbour countries	General Comments		

IAEF - Vlora ccgt

TRA-N-1303	Project		Pipeline including CS	Non-FID
Jpdate Date		15/11/2018		Advanced
Description	 The TAP Albania exit point to Vlora CCGT pipeline is transmission pipeline that will as per your PID: 1. Create the Gas Market in Albania 2. Connect an Anchor client 3. Support intermitent renewables 4. Provide the basis for PiP2 and PiP3 which are of Eugas from the Southern Gas Corridor will find its way in 5. The work has already started on the FEED 	ropean Relevance as they	develop into connections to Montenegro, BiH	
PRJ Code - PRJ Name	-			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Fier (AL) / (GR)	Albgaz Sha	2020	AL/TAP	AL	0.0 GWh/d

Sponsors	General Information		NDP and PCI Information		
	Promoter	Albgaz Sha	Part of NDP	Yes (Plani 10 Vjecar i Zhvillimit)	
	Operator	Albgaz Sha	NDP Number	PiP1	
	Host Country	Albania	NDP Release Date	15/02/2018	
	Status	Planned	NDP Website	NDP URL	
	Website	Project's URL	Currently PCI	No	
			Priority Corridor(s)		

rent TYNDP : 1	YNDP 2018 FINAI	L - Annex A	
Schedule	Start Date	End Date	Third-Party Acce
re-Feasibility		02/2017	Considered TPA Regime
easibility	03/2017	02/2018	Considered Tariff Regime
EED	09/2018	09/2018	Applied for Exemption
Permitting	11/2018	03/2019	Exemption Granted
Supply Contracts		06/2019	
ID		09/2019	Exemption in entry direction
Construction	11/2019	11/2020	Exemption in exit direction
Commissioning	2020	2020	

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
IAEF - Vlora CCGT		400	40		2020
	Total		40		

Fulfilled Criteria

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

		Time Schedule	
Grant Obtention Date	28/01/2016		
Delay Since Last TYNDP			
Delay Explanation			
		Expected Gas Sourcing	
Caspian Region, Potential for r	new gas discoveries by Shell (cu	rrently drilling 4th well).	

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	Ber	nefits					
Main Driver	Market Demand						
Main Driver Explanation	The TAP Albania exit point to Vlora CCGT pipeline is the first Priority Project as per the approved Gas Master Plan for Albania. It is a 40km transmission pipeline that will as per your PID: 1. Create the Gas Market in Albania 2. Connect an Anchor client 3. Support intermitent renewables 4. Provide the basis for PiP2 and PiP3 which are of European Relevance. 5. The work has already started on the FEED						
Benefit Description	The TAP Albania exit point to Vlora CCGT pipeline is the first Price pipeline that will as per your PID: 1. Create the Gas Market in Alb for PiP2 and PiP3 which are of European Relevance. 5. The work	pania 2. Connect an Anchor client 3. Suppor					
	Ba	riers					
Barrier Type	Description						
Regulatory	CCGT cooling developments.						
Financing	Availability of funds and associated conditions						
	СВСА	Finan	ncial Assistance				
	No, we have submitted an investment request, but not	Applied for CEF	(3) No, we have not applied for CE				
Decision	received a decision yet;#No, we have not submitted an	Grants for studies	Λ				
Culturaina Data	investment request yet, but we do plan to submit it	Grants for studies amount					
Submissin Date	21/03/2018	Grants for works	٨				
Decision Date		Grants for works amount					
Website	<u>CBCA URL</u>	Intention to apply for CEF	Yes, for studies and work				
Countries Affected	Albania	Other Financial Assistance	Λ				
Countries Net Cost Bear		Comments					
Additional Comments	We expect a positive decision any day by the National Regulatory Entity (ERE).	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 Murfeld is achieved.	T->SI, SI->AT). Moreover, physical RF capacity	at the Entry Point

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Gas Connect Austria GmbH	2022	AT	SI	105.2 GWh/d
New Seld (AT) / Contact (CI)	Comment: conversion from Nm ³ /h to kwh/h with a GCV of 11.19				
Murfeld (AT) / Ceršak (SI)	Gas Connect Austria GmbH	2022	SI	AT	166.5 GWh/d
	Comm	ent: conversion fro	om Nm³/h to kwh/h w	vith a GCV of 11.19)

	General Information NDP and PCI Informatio		nation	
noter GA	S CONNECT AUSTRIA GmbH	Part of NDP	Yes (NDP 2018 - 2027)	
rator	Gas Connect Austria GmbH	NDP Number	GCA 2015/08	
Country	Austria	NDP Release Date	19/01/2018	
JS	Planned	NDP Website	<u>NDP URL</u>	
site	<u>Project's URL</u>	Currently PCI	Yes ()	
		Priority Corridor(s)	NSIE	
r :	ator Country s	atorGas Connect Austria GmbHCountryAustriasPlanned	atorGas Connect Austria GmbHNDP NumberCountryAustriaNDP Release DateIsPlannedNDP WebsitesiteProject's URLCurrently PCI	

Current TYNDP	: TYNDP 2018 FI	NAL - Annex A
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Start Date	End Date	Third-Party Access Reg	jime
		Considered TPA Regime	Regul
		Considered Tariff Regime	Regul
		Applied for Exemption	
10/2015	07/2019	Exemption Granted	
		Exemption in entry direction	0.
	06/2022	Exemption in exit direction	0.
2022	2022		
	10/2015	10/2015 07/2019 06/2022	10/2015 07/2019 Considered TPA Regime 06/2022 Exemption in entry direction

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.				
	Total				
	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 Mu This strenghthens security of supply, competition and market integration. In addition, t				everse flow.

·		Benefits
in Driver	Market Demand	
n Driver Explar	nation	
efit Descriptio	n	

CBCA		ial Assistance
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
and we do not plan to submit it	Grants for studies	No
	Grants for studies amount	
	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	
		No, we have not submitted an investment request yet, and we do not plan to submit itApplied for CEFGrants for studiesGrants for studies amountGrants for worksGrants for worksGrants for works amountIntention to apply for CEFOther Financial AssistanceComments

GCA Mosonmagyaróvár **TRA-N-423 Pipeline including CS** Project Non-FID Advanced Update Date 28/02/2018 Current planning based on market indications. Potential connection to new gas sources from the Black Sea. Project will enable reverse flow. Description **PRJ Code - PRJ Name Capacity Increments Variant For Modelling** Operator From Gas System To Gas System Capacity Point Year Mosonmagyarovar Gas Connect Austria GmbH 2022 HU AT 153.1 GWh/d **General Information** NDP and PCI Information Sponsors Yes (NDP 2018 - 2027) Promoter GAS CONNECT AUSTRIA GmbH Part of NDP Gas Connect Austria GmbH NDP Number GCA 2015/05 Operator Host Country 19/01/2018 Austria NDP Release Date *Planned* NDP Website Status NDP URL Website Project's URL Currently PCI Yes () Priority Corridor(s) NSIE Schedule Start Date End Date **Third-Party Access Regime Considered TPA Regime** Regulated **Pre-Feasibility** Feasibility **Considered Tariff Regime** Regulated FEED Applied for Exemption No 07/2019 Permitting **Exemption Granted** 10/2015 No **Supply Contracts** Exemption in entry direction FID 0.00% Exemption in exit direction 0.00% Construction 05/2022 Commissioning 2022 2022

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of routes. oals.
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TRA-F-954	Project		Pipeline including	CS	FID
Update Date	09/03/2018			Ad	vanced
Description	The objective of the planning project TAG Reverse Flow is to create a reversisting entry DZK capacity to entry FZK capacity at the IP Arnoldstein/T Ceršak/Murfeld from the Slovenian to the Austrian gas transportation sy Italian and Slovenian gas system to the Austrian Virtual Trading Point ar supply routes and sources of supply. By enabling additional possibilities directions, this project is of strategic interest for the Austrian, Italian and	arvisio and additional stem. This project wo nd to improve local sec for physical reverse fl	y by allowing potentia uld grant access under curity of supply and liq ow to be offered in the	l entry FZK capacit all conditions fror uidity through div south-north and	ty at the IP m and betweer ersification of
PRJ Code - PRJ Name Capacity Increments Varia	- nt For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
	TAG GmbH	2019	IB-ITe	AT	0.0 GWh/d
Tarvisio (IT) / Arnoldstein	the Austrian side and supports of 11,19 kWh/Nm ³ /h (0°C)] at th system of Gas Connect Austria. Th	and all necessary mod nsport of at least 17,90 ystem up to the CS stat GCV 11,19 kWh/Nm ³ /h at the same time 6,714 he Murfeld entry point he project will also end	lifications to the station 04,000 kWh/h (1,600,00 ion Baumgarten, i.e. at 0 (0°C)] at the Arnoldste 0,000 kWh/h [600,000 N of the interconnected g	n control systems, 20 Nm ³ /h, 0°C) in 2 least 11,190,000 2 ein entry point on 3 M (0°C); GCV as transportation 6 from the Murfeld	

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Sponsors			(General Information	NDP and PCI In	formation
rans Austria Gasleitun	g GmbH	100%		Trans Austria Gasleitung GmbH	Part of NDP Yes (Coordin	nated Network Developmen Plan 2018-2023
			Operator	TAG GmbH	NDP Number	TAG 2016-0
			Host Country	Austria	NDP Release Date	19/01/201
			Status	Planned	NDP Website	NDP UR
			Website		Currently PCI	<u>NDF ON</u>
					Priority Corridor(s)	N
Schedule	Start Date	End Date			Third-Party Acce	oss Pagima
e-Feasibility					Considered TPA Regime	Regulate
easibility					Considered Tariff Regime	Regulate
EED					Applied for Exemption	Negatate
ermitting					Exemption Granted	Not Releval
ipply Contracts					I	
D					Exemption in entry direction	0.00
onstruction					Exemption in exit direction	0.009
ommissioning	2019	2019				
				Benefits		
1ain Driver	Others					
	The planning	project is triggered	by an obligation arisir	ng out of the decree of the Austrian re	gulatory authority, E-Control relate	ed to the Coordinated
1ain Driver Explanatior		-		rse flow of the TAG pipeline system sh , TAG GmbH also assesses an upgrade		
enefit 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 Sloven market area and the NSI East region.					nal possibilities for

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

South Caucasus Pipeline - (Future) Expansion - SCP-(F)X

TRA-F-1138	Project	Pipeline including CS	FID
Update Date	27/03/2018		Advanced
Description	SCP, exporting natural gas from Shah Deniz Phase 1 deposit, became operate expected these volumes will be more or less at the same level in future sever gas is contracted by BOTAS in Turkey. SCPX is the expansion of SCP, which is made by adding SCPX looping in Azer the existing 248 km), construction of 2 km tie-in with TANAP, increase of portion of the existing a factor of the expected several sector.	ral years, though they are not attributed neither erbaijan (new 424 km to the existing 443 km) and wer of Sangachal terminal compressor station in	to SCPX nor SCPFX. SCP l in Georgia (63 km to Azerbaijan and
	construction of two new compressor stations in Georgia. SCPX is a part of the for Turkey, 10 bcm/y for TAP System in the EU). SCPFX is the concept of future expansion, but it will also use SCP/SCPX System source gas, and of course costs of such FX.		
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Türkgözü	SOCAR Midstream Operations	2018	AZ/SCP	TR/TNP	464.0 GWh/d
Turkgozu				Comment: SCPX	

	General Information		NDP and PCI Information		
28%	Promoter		Part of NDP	No ((2) no NDP exists in the country)	
19%	romoter				
1370	Operator	SOCAR Midstream Operations	NDP Release Date		
16%	Host Country				
15%	Status	In Progress	Currently PCI	Yes ()	
10%	Website	<u>Project's URL</u>	Priority Corridor(s)	SGC	
10%					
	19% 16% 15% 10%	28% Promoter 19% Operator 16% Host Country 15% Status 10%	28% PromoterSOCAR Midstream Operations LLC19% OperatorOperator16%Host Country15%Status10%Project's URL	28% PromoterSOCAR Midstream Operations LLCPart of NDP NDP Number19% OperatorOperatorSOCAR Midstream Operations NDP Release Date AzerbaijanNDP Release Date NDP Website16%Host CountryAzerbaijan In ProgressNDP Website Currently PCI10%WebsiteProject's URL Priority Corridor(s)	

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		04/2010
Feasibility	04/2010	01/2013
FEED	01/2011	01/2012
Permitting	09/2010	04/2014
Supply Contracts		09/2018
FID		12/2013
Construction	01/2014	09/2018
Commissioning	2018	2018

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
South-Caucasus Pipeline	The duty compressor power of SCP is 6.4 MW. The stand-by compressor power of SCP is also 6.4 MW.	1,067	691	6	2006
	Total		691	6	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	SCP-(F)X is an integral part of the Sothern Gas Corridor value chain, which connects of		ornatura	i gas of Shari Defliz (1.2 thmon th,
Specific Criteria Fulfilled Comments	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a has a significant political support of involved governments.	he consortium	n of share	holders, mostly Inter	national Oil
Specific Criteria Fulfilled Comments	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a	he consortium	n of share	holders, mostly Inter	national Oil
	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a has a significant political support of involved governments.	he consortium	n of share	holders, mostly Inter	national Oil
Specific Criteria Fulfilled Comments Grant Obtention Date Delay Since Last TYNDP	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a has a significant political support of involved governments.	he consortium	n of share	holders, mostly Inter	national Oil
Grant Obtention Date	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a has a significant political support of involved governments. Time Schedule	he consortium	n of share	holders, mostly Inter	national Oil
Grant Obtention Date Delay Since Last TYNDP	with giant market for natural gas in the EU, in particular in the East and South-East. T Companies, have been contributing their technical experience and resources as well a has a significant political support of involved governments. Time Schedule	he consortium	n of share	holders, mostly Inter	national Oil

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	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanatior	1		
Benefit Description			
	Bar	riers	
Barrier Type	Description		
Political	Each of customers for Azerbaijani gas has the demand of certain has enough gas for buyers along its route. It is the setting of the Majors buyers are far. Many local requirements and national inter pipeline route from other regions should also be taken into accou- and other stakeholders, which will eventually safeguard investme	Southern Gas Corridor with new custome rests should be considered en route for S unt. Therefore, the SGC value chain will ne	ers in Turkey, EU that requires expansions of SCP CP/Shah Deniz to be profitable. Competitive
Others	Market uncertainty		
	Intergovernme	ntal Agreements	
Agreement	Agreement Description		Is Signed Agreement Signature Da
Intergovernmental Agre Azerbaijan and Georgia			Yes 17/04/2002
	CBCA	Fina	ancial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for C
Decision	and we have not yet decided whether we will submit or	Grants for studies	1
ularriaria Data	not	Grants for studies amount	
Submissin Date		Grants for works	Ι
Decision Date		Grants for works amount	
Vebsite		Intention to apply for CEF	Yes, for studies and wor
Vebsite Countries Affected			
Website Countries Affected Countries Net Cost Bea Additional Comments	rer	Intention to apply for CEF	Yes, for studies and wor

Zeebrugge LNG Terminal - 5th Tank

LNG-F-229	Project	LNG Terminal	FID
Update Date	27/03/2018		Advanced
Description	Construction of an additional storage tank with a capacity of 180000 m ³ LNG (FID, c Potential construction of additional send-out capacity of 450000 m ³ (n)/h (non-FID).	commissioning foreseen 2019).	
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling								
	Variant : FID	FID						
Point		Operator	Year	From Gas System	To Gas System	Capacity		
Zeebrugge LNG		Fluxys LNG	2019	LNG_Tk_BEh	IB-BEhz	0.0 GWh/d		
Capacity Increments V	Capacity Increments Variant(s) For Information Only							
	Variant : non-FID	non-FID						
Point		Operator	Year	From Gas System	To Gas System	Capacity		
Zachrunge INC		Fluxys Belgium	2019	LNG_Tk_BEh	IB-BEhz	122.0 GWh/d		
Zeebrugge LNG		Fluxys LNG	2019	LNG_Tk_BEh	IB-BEhz	122.0 GWh/d		

Sponsors		General Info	ormation	NDP and PCI Information		
Fluxys LNG	100%	Promoter	Fluxys LNG		Yes (Ten-Year Indicative Investment	
		Operator	Fluxys LNG	Part of NDP	Programme Fluxys Belgium & Fluxys	
		Host Country	Belgium	NDP Number	LNG 2017-2026)	
		Status	In Progress		Zeebrugge LNG Terminal - 5th Tank	
		Website	Project's URL	NDP Release Date NDP Website	NDP URL	
				Currently PCI	No	
				Priority Corridor(s)		

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

Technical Information (LNG)						
Regasification Facility	Reloading Ability Project Phase	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)	
Zeebrugge LNG Terminal	Yes 5th Tank	0.0 0	0.00	180,000 NA	2019 50	

Expected Gas Sourcing

LNG (BE)

	Benefits
Main Driver	Market Demand
Main Driver Explanati	ion
Main Driver Explanati Benefit Description	

CBCA	Financial Assistance			
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
and we do not plan to submit it	Grants for studies	No		
	Grants for studies amount			
	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			
		No, we have not submitted an investment request yet, and we do not plan to submit itApplied for CEFGrants for studiesGrants for studies amountGrants for worksGrants for worksGrants for works amountIntention to apply for CEFOther Financial AssistanceOther Financial AssistanceCommentsComments		

		- D			
TRA-N-500		Project		Pipeline inclue	
Update Date			30/05/2018		Non-Advanced
Description	of 2012: the gradual readure and end in 2030. The readure expected as from 2020	duction of L-gas exports to Belgineason behind this announcement). Most of the L-gas used in Franc rance. For the Fluxys Belgium grid	um (and therefore to France as t is the forecasted decline of the ce transits through Belgium mea	L gas is also exported to L-gas Groningen gas fi aning that L-gas transit o	ed by the Dutch authorities at the end o France), will begin in October 2024 eld (10%/year production decline capacity need to be ensured until port H gas to the newly converted L
PRJ Code - PRJ Name	-				
Sponsors		Genera	l Information	NDP	and PCI Information
Fluxys Belgium	1	00% Promoter	Fluxys Belgium		Yes (Ten-Year Indicative Investment
		Operator	Fluxys Belgium	Part of NDP	Programme Fluxys Belgium & Fluxys LNG 2017-2026
		Host Country	Belgium	NDP Number	L/H Conversion
		Status	Planned	NDP Release Date	2,11 20112130
		Website	<u>Project's URL</u>	NDP Website	NDP UR
				Currently PCI	Yes (
				Priority Corridor(s)	NSIM
Schedule S	Start Date End Date			Third	-Party Access Regime
Pre-Feasibility				Considered TPA Regim	ne Regulated
Feasibility				Considered Tariff Regin	me Regulated
FEED	09/2015			Applied for Exemption	Not Relevan
Permitting				Exemption Granted	Not Relevan
Supply Contracts					
FID				Exemption in entry dire	
Construction				Exemption in exit direc	ction 0.00%
Commissioning	2022 2022				

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
	Security of supply Without this project, the energy demand cannot be covered as soon as 2021 The security of supply of the L-gas area will be brought up to the level already reached in North West Europe, and even be improved. Competition Diversity in the L-gas area will reach the same level as the North West region, instead of depending solely on Dutch supply and producers. Moreover, maintaining the use of natural
Specific Criteria Fulfilled Comments	gas for heating will be a lot cheaper than converting to electricity (the price of electricity for the households in 2020 could be up to 4 times more expensive than gas. Market integration The L-gas area will go from an energy island (a single supply, through a single route) to a deeply interconnected market. Sustainability It would avoid building new energy infrastructures, new transmission and distribution capacities and new heating appliances.

	Benefits
Main Driver	Others
Main Driver Explanatio	in fille
Benefit Description	

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

Zeebrugge LNG Terminal - 3rd Jetty

LNG-N-742		Proje	ct	LNG Tern	ninal Non-FID
Update Date			28/02/2018		Non-Advanced
Description	market, with amongst others LNG feedering contracts for s imposing to make LNG availa to construct a 3rd Jetty, dedic	the LNG bunker w upply to Scandina ble in all seaports ated for small sca	I for the current installations on the one essel from Engie/Mitsubishi/NYK/Fluxys avia, more and more commercial vessels , etc, Fluxys LNG is evaluating in all doma le LNG ships as to support the realizatio t 1.000 m ³ up to about 30.000 m ³ .	which is operational sir converting to LNG, the ains (commercial and te	nce Q2 2017 in the Zeebrugge Port, Clean Power for Transport directive echnical) the need and the possibilities
PRJ Code - PRJ Name	-				
Sponsors			General Information	NDI	P and PCI Information
Fluxys LNG	100%	Promoter Operator	Fluxys LNG Fluxys LNG	Part of NDP	Yes (Ten-Year Indicative Investment Programme Fluxys Belgium & Fluxys LNG 2017-2026)
		Host Country Status Website	Belgium Planned Project's URL	NDP Number NDP Release Date	Zeebrugge LNG Terminal - 3rd Jetty
			Project's URL		
		WEDSILE	<u></u>	NDP Website	NDP URL
		Website	<u></u>	NDP Website Currently PCI	
		WEDSILE	<u></u>		
Schedule Sta	art Date End Date	Website	<u></u>	Currently PCI Priority Corridor(s)	
<mark>Schedule St</mark> a Pre-Feasibility	art Date End Date	Website	<u></u>	Currently PCI Priority Corridor(s)	No
	art Date End Date	Website		Currently PCI Priority Corridor(s) Thirc	I-Party Access Regime ne Regulated
Pre-Feasibility	art Date End Date	Website		Currently PCI Priority Corridor(s) Thirc Considered TPA Regin	No I-Party Access Regime ne Regulated ime Regulated

FID

Construction

Commissioning

2023

0.00%

0.00%

Exemption in entry direction

Exemption in exit direction

			Technical Infor	mation (LN	IG)				
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 (%)
Zeebrugge LNG Terminal	Yes	3rd Jetty	0.0	0	0.00	0	Berthing capacity	2023	50
			Expected Ga	s Sourcina					
LNG ()				, second second					
			Bene	fits					
Main Driver	Market Demand								
Main Driver Explanation	14								
Benefit Description									
			Barri	ers					
Barrier Type	Description								
Market	Lack of market m	aturity							
	CI	ЗСА				Finan	icial Assistance		
Decision	No, we ho	ave not submitted an inves	stment request yet,	Applied	for CEF		(3)) No, we have not ap	oplied for CEF
Decision		and we do n	ot plan to submit it	Grants f	or studies				No
Submissin Date				Grants f	or studies amo	ount			
Decision Date				Grants f	or works				No
Website				Grants f	or works amou	int			
Countries Affected				Intentio	n to apply for	CEF		No decis	sion yet taken
Countries Net Cost Beare	er			Other Fi	nancial Assista	ince			No
Additional Comments				Comme	nts				
				General	Comments				

Interconnection Bulgaria - Serbia

TRA-F-137	Project	Pipeline including CS	FID			
Update Date	31/05/2018		Advanced			
	IBS aims at connecting the national gas transmission networks of Bulgaria and Serbia. It will be implemented in 3 stages. 1st: a pipe will be built from Novi Iskar to Kalotina, BG (62.2 km) and from Nis to Dimitrovgrad, SR (108 km), with capacity from BG to SRB - 1,0 bcm/year, and from SRB to BG - 0.15 bcm/year.					
Description	2nd: the capacity will be increased from BG to SRB to 2,4 bcm/year, and from SRB to BG to 0,95 bcm/year, and later to 1,5 bcm/year, by construction of 2 CSs (20 MW each) and 2 new gas pipeline sections (from G Bogrov CS to N Iskar – 19 km and from V. Orašje to Nis – 161 km).					
	3rd: by construction of the looping VS Batulsi - G Bogrov CS (62 km) the capacit from SRB to BG the construction of the pipeline Batajnica - V Orašje (116 km) w Batočina (20 MW) will increase the capacity from 2.0 bcm/year to up to 2.5 bcm	ill ensure transmission of 2 bcm/ year, and the	5			
PRJ Code - PRJ Name	-					

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	IBS Future Operator	2022	BGn	RS	51.0 GWh/d
Internet and the PC PC			Comment: Ope	erator to be defined	1
Interconnector BG RS	IBS Future Operator	2022	RS	BGn	51.0 GWh/d
			Comment: Ope	erator to be defined	1



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						r age 250 or 5
Sponsors				General Information	NDP and PCI Information	
Bulgarian section			Promoter	Ministry of Energy	Part of NDP	Yes (2017-2026 Ten-year netw
Ministry of Energy	of Bulgaria	100	% Operator	IBS Future Operator	Tart of NDI	development plan of B
Serbian section			Host Country	Bulgaria	NDP Number	Sectin 5.2 (5.
		100	Status	Planned	NDP Release Date	10/04/2
Serbijagas		100	Website	Project's URL	NDP Website	<u>NDP (</u>
					Currently PCI	Ye
					Priority Corridor(s)	Λ
Schedule	Start Date	End Date			Third-Par	ty Access Regime
re-Feasibility		02/2011			Considered TPA Regime	Regula
easibility	12/2011	12/2012			Considered Tariff Regime	Regula
EED					Applied for Exemption	
ermitting	06/2013	12/2019			Exemption Granted	
upply Contracts		03/2020				
ID		12/2012			Exemption in entry direction	on 0.0
onstruction	03/2020	03/2022			Exemption in exit direction	0.0
ommissioning	2022	2022				

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		
Serbian territory	1.8 bcm/y maximum capacity	700	108		
	Total		170		

		Fulfilled Criteria			
Specific Criteria Fulfilled	Compe	etition, Market Integration, Security of Supply, Sustainability			
	IBS will and bo Chiren ments and rou under l access	connect networks of Bulgaria and Serbia. It is a prerequisite for development of the natural gas market, increase of market integration osting competition. All this involves the use of the potential and existing gas infrastructure on the territory of Bulgaria and Serbia, JGS capacity, UGS Banatski Dvor and Banatski Itebej. IBS will significantly contribute to the SoS, diversification of the supply sources tes; increasing the transport volumes and the liquidity of the regional gas market, as well as the integration with the EU gas network U regulations. Bulgaria will be able to take advantage of alternative gas supplies through the Baumgarten Hub, and Serbia will have o natural gas from the Southeast through the gas interconnections of Bulgaria with in Turkey and Greece. The connection of the gas of Bulgaria and Serbia will consequently contribute to the connection with the markets of the countries of Southeastern Europe.			
		Time Schedule			
Grant Obtention Date					
Delay Since Last TYNDP					
Delay Explanation	phase, project namely	e archeological survey and researches along the route. • The Public procurement procedure f including apeal to Court, took rather long. • Need for amendment of the Detailed Developm t on Bulgarian territory, according to the requirements under OPIC 2014-2020 has exclusive of y the start of construction works on Serbian territory is an essential prerequisite to commission tion and Competitiveness for beginning of the construction works on the Bulgarian territory	nent Plan. • The i conditionality wit on the grant und	mplementation of the the Serbian section,	
		Expected Gas Sourcing			
Caspian Region, Russia, LNG (0				
		Benefits			
Main Driver Othe	ers				
Main Driver Explanation					
	project should Serbia)	d enhance the system flexibility and contribute to the security of supply within the region (in	creased intercon	nection between Bulgaria	
		Intergovernmental Agreements			
Agreement		Agreement Description	Is Signed	Agreement Signature Dat	
oint statement by Bulgaria ar	nd Serbia	Joint statement signed in Brussels by Bulgaria and Serbia in 2010	Yes	05/03/2010	
Memorandum of Understand Bulgaria and Serbia	ing between	Memorandum of Understanding signed in Sofia between Bulgaria and Serbia in 2005	Yes	08/04/2005	

Bulgaria and Serbia

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

10/04/2017

NDP URL

Yes ()

NSIE

Bulgartransgaz EAD2024STcBGnBulgartransgaz EAD2024BGnSTBulgartransgaz EAD2024STcBGnMBulgartransgaz EAD (SSO)2024STcBGnMBulgartransgaz EAD (SSO)2024BGnSTSponsorsGeneral InformationNDP and PCI Information			UGS Chiren Exp	pansion				
DescriptionCapacity increase of the only gas storage facility on the territory of Bulgaria in order to achieve larger gas volumes stored, i pressures and higher daily average injection and withdrawal flowrates. The project provides for the increase in the working and increase in the injection and withdrawal rate up to 8 – 10 mcm/day.PRJ Code - PRJ Name-Capacity Increments Variant For ModellingPointOperatorYearFrom Gas SystemTo GasBulgartransgaz EAD2024STcBGnI Bulgartransgaz EADSTcBGnI Bulgartransgaz EADGMS ChirenBulgartransgaz EAD2024STcBGnI Bulgartransgaz EADSTcBGnI Bulgartransgaz EADSTcBGnI STcBGnSponsorsGeneral InformationNDP and PCI Information	-138		Project			Storage Facilit	y N	lon-FID
Description pressures and higher daily average injection and withdrawal flowrates. The project provides for the increase in the working and increase in the injection and withdrawal rate up to 8 – 10 mcm/day. PRJ Code - PRJ Name - Capacity Increments Variant For Modelling Operator Year From Gas System To Ga Bulgartransgaz EAD 2024 STcBGn Image: Stresson ST GMS Chiren Bulgartransgaz EAD 2024 STcBGn Image: Stresson ST Sponsors General Information NDP and PCI Information	Date		22/05/20	018			A	dvanced
Capacity Increments Variant For ModellingPointOperatorYearFrom Gas SystemTo GatBulgartransgaz EAD2024STcBGnIBulgartransgaz EAD2024BGnSTBulgartransgaz EAD (SSO)2024STcBGnIBulgartransgaz EAD (SSO)2024BGnSTSponsorsGeneral InformationNDP and PCI Information	lion	pressures and higher daily ave	erage injection and withdrawal flow	rates. The project prov		0 0		
PointOperatorYearFrom Gas SystemTo GatBulgartransgaz EAD2024STcBGnIBulgartransgaz EAD2024BGnSTBulgartransgaz EAD2024STcBGnIBulgartransgaz EAD (SSO)2024STcBGnIBulgartransgaz EAD (SSO)2024BGnSTSponsorsGeneral InformationNDP and PCI Information	e - PRJ Name	-						
GMS ChirenBulgartransgaz EAD2024STcBGnIBulgartransgaz EAD2024BGnSTBulgartransgaz EAD (SSO)2024STcBGnIBulgartransgaz EAD (SSO)2024BGnSTSponsorsGeneral InformationNDP and PCI Information	/ Increments Variant	For Modelling						
GMS Chiren Bulgartransgaz EAD 2024 BGn ST Bulgartransgaz EAD (SSO) 2024 STcBGn I Bulgartransgaz EAD (SSO) 2024 BGn ST Sponsors General Information NDP and PCI Information			Operator		Year	From Gas System	To Gas System	Capacity
GMS Chiren Bulgartransgaz EAD (SSO) 2024 STcBGn I Bulgartransgaz EAD (SSO) 2024 BGn ST Sponsors General Information NDP and PCI Information			Bulgartransgaz EAD		2024	STcBGn	BGn	48.9 GWh/d
Bulgartransgaz EAD (SSO) 2024 STcBGn Bulgartransgaz EAD (SSO) 2024 BGn ST Sponsors General Information NDP and PCI Information			Bulgartransgaz EAD		2024	BGn	STcBGn	51.0 GWh/d
Sponsors General Information NDP and PCI Inf	Iren		Bulgartransgaz EAD (SSO)		2024	STcBGn	BGn	48.9 GWh/d
			Bulgartransgaz EAD (SSO)		2024	BGn	STcBGn	51.0 GWh/d
	rs		General Informa	tion		NDP and	PCI Information	
Bulgartransgaz EAD 100% Promoter Bulgartransgaz EAD Part of NDP Yes (20) Operator Bulgartransgaz EAD Part of NDP Part of NDP Part of NDP Part of NDP	ransgaz EAD	100%	Promoter Operator	Bulgartransgaz EAD Bulgartransgaz EAD		of NDP	Yes (2017-2026 T developn	en-year network nent plan of BTG
Host Country Bulgaria NDP Number						Number	5	Section 5.3 (5.3.)

Status

Website

Planned NDP Release Date

Currently PCI

Priority Corridor(s)

Project's URL NDP Website

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		06/2011
Feasibility	03/2015	10/2019
FEED	08/2020	11/2022
Permitting	04/2021	12/2022
Supply Contracts		
FID		
Construction	06/2021	06/2024
Commissioning	2024	2024

			Technical Information	(UGS)					
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	LOAU FACIOR	Comments	Commisioning 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 Europewide 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.

Current

Current TYNDP : TYNDP 2018	8 FINAL - Annex A Page	255 of 575
	Time Schedule	
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 studie reasons are that within the tender procedure, the Selection Decision was appealed by one of the bidders and that hindered its succ completion. In the mean time new standard templates for tender procedures were approved by the Bulgarian Ministry of Finance, v our side let to delay in the preparation of new tender documentation for the 3D seismic studies tendering, which afterwards neede launch.	essful which from

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		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	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 4
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	Yes, for studies and works
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	

NDP URL

Generated by ENTSOG PDWS on 18/12/2018 06:49:05 PM

No

SGC

Interconnection Turkey-Bulgaria

TRA-N-140			Project			Pipeline including	g CS N	lon-FID
Update Date			31/	/05/2018			Non	-Advanced
of Description Lo th	Strandja in paralle oout 3 bcm/y at op senets is also envi e sources and rout	el to the e perating p saged to tes of nati	gas pipeline in the section be xisting transit gas pipeline of ressure 64 bar. A compressor be built. The project, as part c ural gas supply to/through Bu on of a competitive gas marke	about 76 km length on Bulg station Losenets – 2 near th of the priority Southern Gas Ilgaria and the region. Its im	garian t ne existi Corrido nplemer	erritory, diameter of t ing compressor statio or is crucial in terms o ntation is directly rela	he pipe 700 mm a n in the region of f f security and dive ted to achievemen	nd capacity of the village of rsification of
PRJ Code - PRJ Name -								
Capacity Increments Variant For	Modelling							
Point			Operator		Year	From Gas System	To Gas System	Capacity
nterconnector ITB (Turkey - Bul	garia) (BG>TR)		Bulgartransgaz EAD		2022	BGn	BG/ITB	97.0 GWh/d
nterconnector ITB (Turkey - Bul	garia) (TR>BG)		Bulgartransgaz EAD		2022	BG/ITB	BGn	97.0 GWh/d
Sponsors			General In	formation		NDP and	PCI Information	
Bulgartransgaz EAD for the gas p	pipeline section	100%	Promoter	Bulgartransgaz EAD) Dort (of NDP	Yes (2017-2026 T	en-year network
on the territory of Bulgaria		100%	Operator	Bulgartransgaz EAD		DINDP	development plan of BTG,	
			Host Country	Bulgaria		Number		ITB
			Status	Planned		Release Date		10/04/2017

Project's URL NDP Website

Currently PCI

Priority Corridor(s)

Website

urrent TYNDP : TYNDP 2018 FINAL - Annex A	
Schedule Start Date End Date	
re-Feasibility	
asibility 08/2015 02/2016	
EED	
rmitting	
upply Contracts	
Construction 12/2022	
Commissioning 2022 2022	

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

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

p

Specific Criteria Fulfilled Comments Specific Criteria Fulfilled Comments Fulfilled Comments

yes

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

Expected Gas Sourcing

Time Schedule

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	a Memorandum of Understanding between the Ministry of Economy and Energy of the Republic of Bulgaria and the Ministry of Energy and Natural Resources of the Republic of Turkey, concerning ITB project	Yes	28/03/2014			
Memorandum of Understanding between the Ministry of Economy, Energy and Tourism of the Republic of Bulgaria and the Ministry of Energy and Natural Resources of the Republic of Turkey on Comprehensive Cooperation in the Field of Energy	Memorandum of Understandingon Comprehensive Cooperation in the Field of Energy	Yes	29/01/2010			

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	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(1) Yes, we have applied for CEF and we have received of decisio
Submissin Date		Grants for studies	Ye
Decision Date		Grants for studies amount	Mln EUR
/ebsite		Grants for works	٨
ountries Affected		Grants for works amount	
ountries Net Cost Bearer		Intention to apply for CEF	Yes, for studies and wor
dditional Comments		Other Financial Assistance	٨
		Comments	On April 3, 2015 Bulgartransgaz EAD has signed a Gran Agreement No. INEA/CEF/ENER/M2014/0014 for the realization of a Feasibility study for the project Turkey Bulgaria (ITB)
			Bulgartransgaz EAD intends to apply for PCI label of IT in the next PCI round and respectively to apply fo financial support for other type of studies and for work
		General Comments	

Rehabilitation, Modernization and Expansion of the NTS

TRA-F-298	Project	Pipeline including CS	FID
Update Date	31/05/2018		Advanced
Description	A multicomponent project which consists of different actions for rehabilitation infrastructure in Bulgaria and includes activities on: CSs modernization, inspe- existing network and implementation of systems for optimization of the man account the complex nature of the project, a 3 phases implementation is env Phase 1: Unifies the actions undertaken in the period 2013-2015, planned to funds from the National Investment Plan. Phase 2: Includes actions initiated in 2016. They represent logic continuation Phase 1. Phase 3: Conditional infrastructure necessary after taking the FID for stage 2	ctions, repair and replacement of pipeline section agement process of the network technical condit isaged: be finalized in a short term and funded with BTG of the overall realization of the project following	ns, expansion of the ion. Taking into own resources and
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
	IBS Future Operator	2024	BGn	RS	19.4 GWh/d		
Interconnector PC PS	Comment: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.						
nterconnector BG RS	IBS Future Operator	2024	RS	BGn	19.4 GWh/d		
	Comment: Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.						
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		

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rrent IYNDP	: IYNDP 2018 FINA	L - Annex A				Page 262 of 575
Sponsors			G	eneral Information	NDP and	PCI Information
Bulgartransgaz	z EAD	100%	Promoter	Bulgartransgaz EAD	Part of NDP	Yes (2017-2026 Ten-year networ
			Operator	Bulgartransgaz EAD		development plan of BT
			Host Country	Bulgaria	NDP Number	Section 5.
			Status	Planned	NDP Release Date	10/04/201
			Website	Project's URL	NDP Website	NDP UF
					Currently PCI	Yes
					Priority Corridor(s)	NS
Schedule	Start Date	End Date			Third-Part	y Access Regime
re-Feasibility		12/2016			Considered TPA Regime	Not Applicab
easibility	08/2008	08/2017			Considered Tariff Regime	Not Applicab
EED					Applied for Exemption	Not Releval
ermitting	09/2009	02/2020			Exemption Granted	Not Releval
upply Contrac	ts					
ID					Exemption in entry direction	n <i>0.00</i>
Construction	09/2014	06/2021			Exemption in exit direction	0.00
Commissioning	2021	2024				
				Enabled Projects		
Project Code	Project Name					
FRA-N-654	Eastring - Bulgaria					
FRA-N-649	Looping CS Valchi Do	ol - Interconnector Bu	lgaria - Serbia			
FRA-N-594	Construction of a Loc	ping CS Provadia – R	Rupcha village			
RA-N-1048	Interconnection betw	een Bulgartransgaz ti	ransmission network a	nd IGB		
rra-N-592	Looping CS Valchi Do	ol - Line valve Novi Isl	kar			
RA-N-140	Interconnection Turk	ey-Bulgaria				
FRA-N-593	Varna-Oryahovo gas	pipeline				
JGS-N-138	UGS Chiren Expansio	n				
FRA-F-137	Interconnection Bulg	aria - Serbia				
TRA-N-57	Interconnection Bulg	anta Damanta				

		Diameter	l enath	Compressor Power	Comissionin
Pipeline Section	Pipeline Comment	(mm)	(km)	(MW)	Year
	Conditional infrastructure required after the final				
Gorni Bogrov - Novi Iskar	investment decision on the realization of IBS Stage 2 related to a capacity increase of 1.8 to 3.2 bcm/y.	700	19	20	
Lozenets-Nedyalsko		1,000	20		
PF Beglej - VA Dermantsi - VA Batul	tsi - VA Kalugerovo	700	58		
Valchi Dol - Preselka		700	23		
	Total		120	20	
	Fulfilled Criteria				
Specific Criteria Fulfilled					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste	em and provid smission of ad	de the rec dditional	quired capacities and natural gas quantities	pressures. The through the
	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste implementation of the activities planned will secure the technical capabilities for tran territory of the country, coming in through the existing and new entry and exit points	em and provid smission of ad	de the rec dditional	quired capacities and natural gas quantities	pressures. The through the
	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste implementation of the activities planned will secure the technical capabilities for tran territory of the country, coming in through the existing and new entry and exit points transmission depending on the market interest.	em and provid smission of ad	de the rec dditional	quired capacities and natural gas quantities	pressures. The through the
Specific Criteria Fulfilled Comments	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste implementation of the activities planned will secure the technical capabilities for tran territory of the country, coming in through the existing and new entry and exit points transmission depending on the market interest. Time Schedule	em and provid smission of ad	de the rec dditional	quired capacities and natural gas quantities	pressures. The sthrough the
Specific Criteria Fulfilled Comments Grant Obtention Date Delay Since Last TYNDP	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste implementation of the activities planned will secure the technical capabilities for tran territory of the country, coming in through the existing and new entry and exit points transmission depending on the market interest. Time Schedule 27/04/2016	em and provid smission of ad , and opportu	de the rec dditional unities for nentation	quired capacities and natural gas quantities r diversification of the Schedule has been n	pressures. The s through the e directions of
Specific Criteria Fulfilled Comments Grant Obtention Date Delay Since Last TYNDP	The modernization, rehabilitation and expansion of the existing gas transmission infra transmission, enhance the efficiency, reliability and flexibility of the transmission syste implementation of the activities planned will secure the technical capabilities for tran territory of the country, coming in through the existing and new entry and exit points transmission depending on the market interest. Time Schedule 27/04/2016 yes Fine-tuning the schedule to reflect the degree of project implementation. An update consequently to the technical and economic analysis of the operation of the new equ	em and provid smission of ad , and opportu	de the rec dditional unities for nentation	quired capacities and natural gas quantities r diversification of the Schedule has been n	pressures. The s through the e directions of

	Benefits
Main Driver	Others
Main Driver Explanation	With the implementation of the project improvement of the transmission system's efficiency, reliability and flexibility will be achieved, ensuring the necessary capacities and pressures including pressure recovery, bottlenecks removal, providing technical capabilities for transmission of additional natural gas quantities through the territory of the country, in relation to the planned new entry and exit points and opportunities for diversification of the transmission directions depending on the market interest and last but not least management optimization of the gas flows and setting the facilities meeting the ecologic requirements. Thus the technical and economic parameters of the existing gas infrastructure which has been in operation for forty years now will be improved.
Benefit Description	The project implementation will contribute to increasing the degree of market integration, creating a competitive gas market, encouraging the trade development, ensuring greater systems' flexibility, risk management optimization. It is directly related to the planned new interconnections with Greece (IGB), 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.

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	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decisior
ubmissin Date	01/09/2017	Grants for studies	Yes
Decision Date	10/10/2017	Grants for studies amount	Mln EUR 1
Vebsite	<u>CBCA URL</u>	Grants for works	Ye
ountries Affected	Bulgaria	Grants for works amount	Mln EUR (
ountries Net Cost Bearer	Bulgaria	Intention to apply for CEF	Yes, for studies and works
dditional Comments		Other Financial Assistance	Yes
		Comments	 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 During the 2017 CEF Energy Call for proposals
		General Comments	Bulgartransgaz EAD submitted a project proposal for works. The proposal was not recommended for funding.

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 press capacity of up to 3bcm/y, capable to be increased to up to 5 bcm/y with th		h a technical forward
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	
Komotini (DESFA) - GR / IGB	ICGB a.d.	2025	IB-GRk	BG/IGB	60.0 GWh/d	
	Comment: IGB will be technic		pacity upgrade from u /y with installation of			
	ICGB a.d.	2020	BG/IGB	BGn	90.0 GWh/d	
tara Zagora - IGB / BG	ICGB a.d.	2025	BG/IGB	BGn	60.0 GWh/d	
	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					

Sponsors		General Information		NDI	P and PCI Information
BEH EAD	50%	Promoter	ICGB a.d.	Part of NDP	Yes (Included in both the TYNDPs of
IGI Poseidon	50%	Operator	ICGB a.d.		Greece and Bulgaria)
	5070	Host Country	Bulgaria	NDP Number	not applicable
		Status	In Progress		
		Website	Project's URL	NDP Website	NDP URL
				Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

	P 2010 FINA	Annex A	
Schedule S	Start Date	End Date	Third-Party Access R
Pre-Feasibility		04/2009	Considered TPA Regime
Feasibility	05/2009	07/2009	Considered Tariff Regime
FEED	08/2010	03/2016	Applied for Exemption
Permitting	08/2010	06/2018	Exemption Granted
Supply Contracts			
FID		12/2015	Exemption in entry direction
Construction	09/2018	06/2020	Exemption in exit direction
Commissioning	2020	2025	

Pipelines and Compressor Sta Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin 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	Tear
	Total		182	12	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Com	As regional gas interconnector, IGB will bring benefits on all criteria, an in particular wi region, suffering from a high level of dependcy on single source of imports and lack of				
	Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP	1 year				
Delay Explanation	Extension in permitting procedures for authorization of construction and of Exemption Bulgarian authorities for conducting public procurement procedures for construction p 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 committments 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 Authorites 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 committment at least from Caucasian area and LNG. Other source 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.

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
	and we do not plan to submit it	Grants for studies	No
ubmissin Date		Grants for studies amount	
ecision Date		Grants for works	No
ebsite		Grants for works amount	
ountries Affected		Intention to apply for CEF	No decision yet taken
ountries Net Cost Bearer		Other Financial Assistance	Yes
dditional Comments		Comments	Financial assisstance has been approved for the IGB in the amount of 45 mln. EUR under the European Energy Programme for Recovery (EEPR).
			IGB Project is applying for additional financial support from EU Structural and Investment Funds.
		General Comments	

Looping CS Valchi Dol - Line valve Novi Iskar

TRA-N-592		Project			Pipeline including	g CS N	lon-FID
Jpdate Date		30/05,	/2018			A	dvanced
Description	CS Valchi dol to line valve No GWh/d and capacity increment European market, the realizat	I gas transmission network north vi Iskar. The realization of the pro nt in GMS Chiren with 44 GWh/d ion of the presented projects, for full compliance with the plans fo gas supply sources.	oject will ensure capacity In the context of the Eur ming the gas hub conce	increm opean ot, is in	ent in the direction to objectives to build ar line with the projects	Romania (throug interconnected ar for the developm	h IBR) with 30.8 nd single pan- ent of the
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
Sivis chilen		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 Infor	mation		NDP and	PCI Information	
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	Part o	of NDP	Yes (2017-2026 T	
		Operator	Bulgartransgaz EAD				nent plan of BTG
		Host Country	Bulgaria		Number	S	ection 5.1. (5.1.1
		Status	Planned		Release Date		10/04/2017
		Website	Project's URL		Website		<u>NDP UR</u>
					ently PCI		Yes (
				Priori	ty Corridor(s)		NSIE

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		06/2022
Commissioning	2022	2022

Enabled Projects

	Endoled Hojeed
Project Code	Project Name
TRA-N-593	Varna-Oryahovo gas pipeline
TRA-N-57	Interconnection Bulgaria–Romania
UGS-N-138	UGS Chiren Expansion
TRA-N-594	Construction of a Looping CS Provadia – Rupcha village

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Valchi dol - line valve Novi Iskar Total Fulfilled Criteria	700	383		2022	
	Total		383		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	sources to enter into a given real physical point in the region of Varna f same time at this point – a hub where every market participant could tra-	for their further transport a rade in gas. The idea of bui las infrastructure for transm	nd a venu ding the g	e for gas trade is org gas hub is supported	anized at the by the

	Tim	e Schedule	Page 272 of 575
Grant Obtention Date	17/05/2017		
Delay Since Last TYND)P		
Delay Explanation			
	Expecte	d Gas Sourcing	
Caspian Region, Russi	a, LNG (), Southern gas corridor gas sources; European gas hubs;	Black sea shelf gas; Domestic produ	iction;
		Benefits	
Main Driver	Others		
Main Driver Explanatio	into a given real physical point in the region of Varna for their on hub where every market participant could trade in gas. The id well-developed existing gas infrastructure for transmission an Greece and Serbia.	ea of building the gas hub is suppo d storage and the projects for the c	rted by the strategic geographic location of Bulgaria, the onstruction of interconnections with Romania, Turkey,
	The creation of a gas hub aims at building the gas transmission	on infrastructure required to link the	natural gas markets for the FU members states in the
Benefit Description	The creation of a gas hub aims at building the gas transmission region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the I single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources.
Benefit Description	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour ne security of supply and the diversit	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the I single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance
	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversite Applied for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the I single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received
Decision	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet,	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversite Applied for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the I single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision
Decision Submissin Date	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversite Applied for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the l single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision Y
Decision Submissin Date Decision Date	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Source ne security of supply and the diversite Applied for CEF Grants for studies	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the l single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision Yes, We have applied for CEF and we have received Mln EUR
Decision Submissin Date Decision Date Website	region - Bulgaria, Greece, Romania, Hungary, Croatia, Sloveni countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversion Applied for CEF Grants for studies Grants for studies amount	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the l single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received of decision Ye Mln EUR
Decision Submissin Date Decision Date Website Countries Affected	region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversion Applied for CEF Grants for studies Grants for studies amount Grants for works	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the l single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision Y Mln EUR
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Be	region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversion Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the I single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources.
Decision Submissin Date Decision Date Website Countries Affected	region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia countries from the Energy Community - Serbia, Macedonia, B European energy policy. In the context of the European object projects, forming the gas hub concept, is in line with the project for development of gas infrastructure in Europe to enhance the CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	a and through them to the members osna and Herzegovina and others, the tives to build an interconnected and ects for the development of the Sour- ne security of supply and the diversion Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the l single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received of decision Yes, for studies and work

		Varna-Oryahovo	gas pipeline			
TRA-N-593		Project		Pipeline includin	g CS	Non-FID
Update Date		30/05,	/2018		A	dvanced
Description	IP at Varna to a new IP at Bu	ucture, consisting of 844 km of ga Ilgaria/Romanian border near Orya otal installed capacity of 265 MW	ahovo city), ensuring an a	additional capacity of 42,6 b		0
PRJ Code - PRJ Name	-					
Capacity Increments Varian	t 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 Infor	mation	NDP an	d PCI Information	
Bulgartransgaz EAD	100%	Promoter	Bulgartransgaz EAD	Part of NDP	Yes (2017-2026 1	
		Operator	Bulgartransgaz EAD			ment plan of BTG)
		Host Country	Bulgaria			Section 5.1. (5.1.1)
		Status	Planned			10/04/2017
		Website	<u>Project's URL</u>			<u>NDP URL</u>
				Currently PCI		Yes ()
				Priority Corridor(s)		NSIE
Schedule Start	Date End Date			Third-Pa	rty Access Regime	•
Pre-Feasibility				Considered TPA Regime		Regulated
Feasibility				Considered Tariff Regime		Regulated
FEED				Applied for Exemption		No
Permitting				Exemption Granted		No
Supply Contracts						
FID				Exemption in entry directi	on	0.00%
Construction	06/2022			Exemption in exit direction	n	0.00%
Commissioning	2022 2022					

	Enabled Projects				
Project Code Project Name					
TRA-N-594 Construction of a	Looping CS Provadia – Rupcha village				
TRA-N-592 Looping CS Valch	ni Dol - Line valve Novi Iskar				
Pipelines and Compressor Statio	ns				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
Varna-Oryahovo gas pipeline	a new pipeline incl. 2 CS	1,200	844	265	
	Total		844	265	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Commer	sources to enter into a given real physical point in the region of Varna for nts same time at this point – a hub where every market participant could trac strategic geographic location of Bulgaria, the well-developed existing gas construction of interconnections with Romania, Turkey, Greece and Serbia	de in gas. The idea of buil s infrastructure for transm	ding the	gas hub is supported	by the
	j,j,				Jects for the
	Time Schedule				Jects for the
Grant Obtention Date					
Grant Obtention Date Delay Since Last TYNDP	Time Schedule				
Delay Since Last TYNDP	Time Schedule				
	Time Schedule				
Delay Since Last TYNDP Delay Explanation	Time Schedule 17/05/2017				
Delay Since Last TYNDP Delay Explanation	Time Schedule 17/05/2017 Expected Gas Sourcing				
Delay Since Last TYNDP Delay Explanation	Time Schedule 17/05/2017 Expected Gas Sourcing				

	Ber	nefits	
lain Driver	Others		
Main Driver Explanation	The concept for the creation of gas hub on the territory of Bulga into a given real physical point in the region of Varna for their fu hub where every market participant could trade in gas. The idea well-developed existing gas infrastructure for transmission and s Greece and Serbia.	of building the gas hub is suppor	as trade is organized at the same time at this point – a ted by the strategic geographic location of Bulgaria, the
Benefit Description	The creation of a gas hub aims at building the gas transmission is region - Bulgaria, Greece, Romania, Hungary, Croatia, Slovenia at countries from the Energy Community - Serbia, Macedonia, Bosr European energy policy. In the context of the European objective projects, forming the gas hub concept, is in line with the projects for development of gas infrastructure in Europe to enhance the second CBCA	nd through them to the members na and Herzegovina and others, th es to build an interconnected and s for the development of the Sout	s states from Central and Western Europe and to the nus contributing to achieving the main priorities of the single pan-European marker, the realization of the chern gas corridor and in full compliance with the plans
	No, we have not submitted an investment request yet,		(1) Yes, we have applied for CEF and we have received a
Decision	and we have not yet decided whether we will submit or	Applied for CEF	(1) res, we have applied for CEP and we have received a decision
	not	Grants for studies	Ye
ubmissin Date		Grants for studies amount	Mln EUR
ecision Date		Grants for works	Ν
Vebsite		Grants for works amount	
Countries Affected		Intention to apply for CEF	Yes, for studies and work.
Countries Net Cost Bear	er	Other Financial Assistance	N
Additional Comments		Comments	
		Conorrol Compresente	

General Comments

NDP URL

Yes ()

NSIE

Construction of a Looping CS Provadia – Rupcha village

TRA-N-594		Project			Pipeline including	g CS N	Non-FID
Update Date		30/05,	/2018			A	dvanced
Description	Provadia to the village of Rup	network for transit transmission ocha, replacement of 20 km (2x10 ase in the capacity of CS Strandja) km) 12 of existing gas p	pipeline	s with diameter of Dr	1000 from CS Stra	andja to the
PRJ Code - PRJ Name	-						
Capacity Increments Varia	ant For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Strandaha (PC) (Malkad	or (TD)	Bulgartransgaz EAD		2022	BGg/BGT	TRe	192.5 GWh/d
Strandzha (BG) / Malkocla	ar (TK)				Comn	nent: a new looping	7
Sponsors		General Infor	mation		NDP and	PCI Information	
Provadia - Rupcha		Promoter	Bulgartransgaz EAD	Part	of NDP	Yes (2017-2026 T	
Bulgartrasngaz EAD	100%	Operator	Bulgartransgaz EAD			developn	nent plan of BTG
Strandja-IP BG/TR		Host Country	Bulgaria	NDP	Number	S	ection 5.1. (5.1.1
Bulgartrasngaz EAD	100%	Status	Planned	NDP	Release Date		10/04/201
bulgar trashyaz EAD	100%				Website		

Website

NDP Website

Currently PCI

Priority Corridor(s)

Project's URL

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		06/2022
Commissioning	2022	2022

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		
Looping CS Provadia – Rupcha village	e	new looping and additional power to existing compressior station	1,200	50	10	
	Total			70	10	
		Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integrat	ion, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	sources to enter into a given same time at this point – a hu strategic geographic location	of gas hub on the territory of Bulgaria is based on the ide real physical point in the region of Varna for their further ub where every market participant could trade in gas. The of Bulgaria, the well-developed existing gas infrastructur ons with Romania, Turkey, Greece and Serbia.	transport ar idea of build	nd a venu ding the g	e for gas trade is org gas hub is supported	anized at the by the

		Time Sc	hedule	Page 278 of 575
Grant Obtention Date	17/05/2017			
Delay Since Last TYNDP	,			
Delay Explanation				
		Expected Ga	as Sourcing	
Caspian Region, Russia,	LNG (), Southern gas corridor gas sources; European	n gas hubs; Blac	ck sea shelf gas; Domestic produ	ction;
		Bene	efits	
Main Driver	Others			
Main Driver Explanation	hub where every market participant could trade in well-developed existing gas infrastructure for trans Greece and Serbia.	n gas. The idea o Ismission and sto	of building the gas hub is support orage and the projects for the co	as trade is organized at the same time at this point – a ted by the strategic geographic location of Bulgaria, the onstruction of interconnections with Romania, Turkey,
	The creation of a das hub aims at building the das	s transmission in		
Benefit Description	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro	atia, Slovenia and acedonia, Bosna opean objectives ith the projects	d through them to the members a and Herzegovina and others, th s to build an interconnected and for the development of the Sour	natural gas markets for the EU members states in the s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources.
Benefit Description	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi	atia, Slovenia and acedonia, Bosna opean objectives ith the projects	d through them to the members a and Herzegovina and others, th s to build an interconnected and for the development of the Sour	s states from Central and Western Europe and to the nus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans
	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to	atia, Slovenia and acedonia, Bosna opean objectives ith the projects o enhance the se request yet,	d through them to the members a and Herzegovina and others, th s to build an interconnected and for the development of the Sour	s states from Central and Western Europe and to the nus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received
	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re	atia, Slovenia and acedonia, Bosna opean objectives ith the projects o enhance the se request yet,	d through them to the members a and Herzegovina and others, th s to build an interconnected and for the development of the Sout ecurity of supply and the diversit	s states from Central and Western Europe and to the nus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decisi
Decision	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Sout ecurity of supply and the diversit Applied for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision
Decision Submissin Date Decision Date	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Sout ecurity of supply and the diversit Applied for CEF Grants for studies	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision Mln EUR
Decision Submissin Date Decision Date Website	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Sour ecurity of supply and the diversit Applied for CEF Grants for studies Grants for studies amount	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decisi MIn EUF
Decision Submissin Date Decision Date Website Countries Affected	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re and we have not yet decided whether we will	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Sout ecurity of supply and the diversit Applied for CEF Grants for studies Grants for studies amount Grants for works	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decision Mln EUF
Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Beau	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re and we have not yet decided whether we will	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Source ecurity of supply and the diversit Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	s states from Central and Western Europe and to the nus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources.
Benefit Description Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bear Additional Comments	region - Bulgaria, Greece, Romania, Hungary, Croa countries from the Energy Community - Serbia, Ma European energy policy. In the context of the Euro projects, forming the gas hub concept, is in line wi for development of gas infrastructure in Europe to CBCA No, we have not submitted an investment re and we have not yet decided whether we will	atia, Slovenia and acedonia, Bosna opean objectives ith the projects to enhance the se request yet, Il submit or	d through them to the members a and Herzegovina and others, the s to build an interconnected and for the development of the Sour ecurity of supply and the diversion Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	s states from Central and Western Europe and to the hus contributing to achieving the main priorities of the single pan-European marker, the realization of the thern gas corridor and in full compliance with the plans fication of natural gas supply sources. Financial Assistance (1) Yes, we have applied for CEF and we have received decisi Y MIn EUF

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

TRA-N-1197	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Non-Advanced
	The project envisages the construction of two new sections, the use of existing changes, the construction of two new compressor stations and one gas meterin - Section 1 – construction of a new gas pipeline with a length of about 9.3 km, I Strandja;	ng station, namely:	
Description	 Section 2 – existing infrastructure consisting of two gas pipelines DN1000 with one gas pipeline with a length of 93 km with looping with a length of 45 km, DI Section 3 - construction of a new gas pipeline, with a length of about 484.3 km Rasovo. 	N 1200 and a pressure of up 5,4 working in re	everse operating regime;
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	Bulgartransgaz EAD		No ((1) the NDP was prepared at an
		Operator	Bulgartransgaz EAD	Part of NDP	earlier date and the project will be
		Host Country	Bulgaria		proposed for inclusion in the next NDP)
		Status	Planned	NDP Number	
		Website		NDP Release Date	
				NDP Website	
				Currently PCI	No
				Priority Corridor(s)	

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

CS Strandja through CS Lozenets to CS Provadia reverse flow registion completing of new reverse flow register and the statement of the stateme	g gas transmission infrastructure in me, nominal pressure of 5,4 MPa, after cessary changes				
New section from					2020
horder and CS Provadia to the Bulgarian-Serbian and CS Nova Pro	n CS Provadia to the BG-RS border, e of 7,5 MPa and 2 new CSs - CS Rasovo vadia * The year indicated is the 1, missioning of the last of the sub-	,200 4	34 (64	2022
Strandia	new gas pipeline from the Bulgarian- CS Strandja, nominal pressure of 7,5 1, GMS - GMS Strandja	,200 9	3 (64	2020
Total		5	7 1	28	
F	ulfilled Criteria				
Specific Criteria Fulfilled					

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	Benefits						
Main Driver C	Others						
Main Driver Explanation t	The realization of the project for the expansion of Bulgartran he Bulgarian-Serbian border will achieve: • security of natura and the region; • market integration.						
Benefit Description							
	CBCA	Financial Ass	sistance				
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF				
Decision	and we have not yet decided whether we will submit or	Grants for stadies	No				
Submissin Date	no	Grants for studies amount					
Decision Date		Grants for works	No				
Vebsite		Grants for works amount					
Countries Affected		Intention to apply for CEF					
Countries Net Cost Bearer		Other Financial Assistance	No				
Additional Comments		Comments					
Additional Comments		General Comments					

LNG-N-1146	Project	LNG Terminal	Non-FID
Update Date	21/06/2018		Non-Advanced
Description	CyprusGas2EU project (7.5 in the 3rd PCI list) is the only candidate PCI proj the Southern Gas Corridor. The project focuses on two technological optio reception, storage and regasification for liquefied natural gas either onsho the internal gas pipeline to EAC power station and to enable security of su pipeline. The CyprusGas2EU project relates to 4 options included in TYNDF the following: 1) CyprusGas2EU (FSRU) for LNG imports to Cyprus in Vassil 3) LNG tank storage facility in Vassilikos area 4) Pipeline from Cyprus (Aphr	ns: A Floating solution (FSRU) for LNG imports to re or nearshore in Cyprus. –A Gas Storage facility pply for the FSRU and other gas projects such as P that aim for the development of gas infrastructu ikos area 2) Internal Gas Network to power statio	Cyprus, including to facilitate a Buffer for the PCI 7.3.1 EastMed ire in Cyprus which are
PRJ Code - PRJ Name	-		

Point	Operator		Year Fro	om Gas System	To Gas System	Capacity		
	Cygas		2020	LNG_Tk_CY	CY	40.0 GWh/d		
Terminal 2 Vassiliko - Lemesos Port	Comment:	Comment: (the entry point provided is not the correct one)-The correct entry point is Terminal 2 of Limassol Port at Vasilikos area.						
Sponsors	G	General Information			NDP and PCI Information			
	Promoter	Ministry of Energy, Commerce,	Part of ND	P N	o ((2) no NDP exist	s in the country		
	romoter	Industry and Tourism	NDP Num	ber		N		
	Operator	DESFA S.A.	NDP Relea	ase Date				
	Host Country	Cyprus	NDP Webs	site				
	Status	Planned	Currently I	PCI		Yes		
	Website	<u>Project's URL</u>	<i></i>			SGG		

irrent TYNDP : TYN	IDP 2018 FINAL	- Annex A				Page 283 of 575
Schedule	Start Date	End Date			Third-Party	Access Regime
Pre-Feasibility		02/2017			Considered TPA Regime	Not Applicable
easibility	04/2017	10/2017			Considered Tariff Regime	Not Applicable
EED	05/2017	12/2018			Applied for Exemption	No
Permitting	08/2017	06/2019			Exemption Granted	No
Supply Contracts						
ID					Exemption in entry direction	0.00%
Construction	12/2018	11/2020			Exemption in exit direction	0.00%
Commissioning	2020	2020				
			Technical Information (LN	C)		
			rechnical mornation (EN	Send-out	Storage	
Regasification Facility	/ Reloa / Abi		Expected Increment Ship Size (bcm/y) (m3)	capacity (mcm/d)	capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)
CyprusGas2EU	N	lo				
	-		Fulfilled Criteria			
Caracific Critaria Eulfil		Second states and states and				
Specific Criteria Fulfill			ation, Security of Supply, Sustainability		an at with the Evenence and a set	ende It will increase Community
Specific Criteria Fulfil			to market integration as it will enable C nd diversification of imported energy so			
			of GHG emissions in the island and pre-			
			Expected Gas Sourcing			
LNG (), Cyprus						
			Benefits			
Main Driver	Regulation S	oS				
Main Driver Explanati						
Main Driver Explanati	ion					
Benefit Description		ation of a Member State an	d allow market integration with other I	Member State	es	

	CBCA	Financial Assistance		
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision	
Submissin Date	14/08/2017	Grants for studies	No	
Decision Date	13/10/2017	Grants for studies amount		
Website	<u>CBCA URL</u>	Grants for works	Yes	
Countries Affected	Cyprus, Greece	Grants for works amount	Mln EUR 101	
Countries Net Cost Bearer	Cyprus	Intention to apply for CEF		
Additional Comments		Other Financial Assistance	Yes	
		Comments	From CEF Synergy Call 2017	
		General Comments	www.Cynergy-project.eu	

MONACO section phase I (Burghausen-Finsing)

TRA-F-241	Project Pipeline ir	ncluding CS FID
Update Date	27/03/2018	Advanced
Description	MONACO 1 is a new pipeline project with a length of 86,7 km and a daily capacity of 52.8 MCM/day, include The pipeline has a nominal diameter of DN 1200 and a nominal pressure of MOP 100. Off-take points are left to the pipeline has a nominal diameter of DN 1200 and a nominal pressure of MOP 100.	5 5
PRJ Code - PRJ Name	-	

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Usidash (AT) (Usidash USD (DE)	bayernets GmbH	2018	STcATn	DEn	293.8 GWh/d
Haidach (AT) / Haidach USP (DE)	bayernets GmbH	2018	DEn	STcATn	267.1 GWh/d
11.1.1.2.75	bayernets GmbH	2018	IB-STcATmm	DEn	241.2 GWh/d
Haiming 2 7F	bayernets GmbH	2018	DEn	IB-STcATmm	160.8 GWh/d
	bayernets GmbH	2018	STcATn	DEn	16.3 GWh/d
Haiming 2-RAGES/bn	bayernets GmbH	2018	DEn	STcATn	16.3 GWh/d
Überackern ABG (AT) / Überackern (DE)	bayernets GmbH	2018	AT	DEn	36.3 GWh/d
Überackern SUDAL (AT) / Überackern 2 (DE)	bayernets GmbH	2018	DEn	AT	143.4 GWh/d

Sponsors		General Information		NDP and PCI Information	
bayernets GmbH	100%	Promoter	bayernets GmbH	Part of NDP	Yes (Netzentwicklungsplan Gas 2018-
		Operator	bayernets GmbH		2028)
		Host Country	Germany	NDP Number	030-02a, 030-02b
		Status	In Progress	NDP Release Date	01/04/2018
		Website	Project's URL	NDP Website	<u>NDP URL</u>
			-	Currently PCI	No
				Priority Corridor(s)	

irrent TYNDP : T	YNDP 2018 FINA	L - Annex A	
Schedule	Start Date	End Date	Third-Party Access F
re-Feasibility			Considered TPA Regime
asibility	03/2009	05/2009	Considered Tariff Regime
EED	08/2009	12/2009	Applied for Exemption
Permitting	11/2013	02/2016	Exemption Granted
upply Contracts			
ID		04/2015	Exemption in entry direction
Construction	10/2016	10/2018	Exemption in exit direction
Commissioning	2018	2018	

Pipeline Section	Pipeline Comment	Diameter		Compressor Power (MW)	Comissioning Year
Burghausen-Finsing		(mm) 1,200	(km) 87	(10100)	rear
	Total	· · · · · · · · · · · · · · · · · · ·	87		
	Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP	Non existent				
Delay Explanation	Because of extensive negotiations about the rights of way and the late the original planning, delayed. The commissioning will take place in Oc				
	Expected Gas Sourcing				

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

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



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NOWAL - Nord West Anbindungsleitung

TRA-N-291	Project	Pipeline including CS	Non-FID
Update Date	03/08/2018		Advanced
Description	It is necessary to increase the capacity of the pipeline NOWAL between the netw GASPOOL). In the previous TYNDP, the project included more infrastructure eler- listed again in this overview. Given information describes the part of the project Anlage Rehden and GDRM-Anlage Drohne. This will increase the capacity at inte GWh/d to ensure the supply to South-West Germany.	nents. However, those are already in operation that is not commissioned yet, i.e. the upgrade	n and are therefore not e of the stations GDRM-
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling						
Point	Operator	Year	From Gas System	To Gas System	Capacity	
	GASCADE Gastransport GmbH	2020	DEg	DEn	260.0 GWh/d	
Drohne NOWAL	Comment: Level 2, on top of Level 1. In total 500 GWh/d. Increment due to upgrade of stations					
	GDRM-Anlage Rehden and GDRM-Anlage Drohne.					

Sponsors		G	eneral Information	ND	P and PCI Information
GASCADE Gastransport GmbH	100%	Promoter	GASCADE Gastransport GmbH	Part of NDP	Yes (Netzentwicklungsplan Gas 2016-
		Operator	GASCADE Gastransport GmbH		2026)
		Host Country	Germany		(already completed: 083-07, 409-01),
		Status	Planned	NDP Number	410-01 (older version compared to current draft NDP)
		Website	<u>Project's URL</u>	NDP Release Date	16/10/2017
				NDP Website	<u>NDP URL</u>
				Currently PCI	No
				Priority Corridor(s)	

Schedule S	P 2018 FINAL - Annex A		Page 289 of 575
Schedule	Start Date End Date	Third-Party Access Reg	gime
Pre-Feasibility		Considered TPA Regime	Regulate
Feasibility		Considered Tariff Regime	Regulate
FEED		Applied for Exemption	Ν
Permitting	01/2014 01/2016	Exemption Granted	Not Relevar
Supply Contracts			
FID		Exemption in entry direction	0.009
Construction		Exemption in exit direction	0.009
Commissioning	2020 2020		
Project Code Project		ed Projects	
	Expected	L Gas Sourcing	
VHP GASPOOL	Expected	d Gas Sourcing	
VHP GASPOOL		d Gas Sourcing Senefits	
VHP GASPOOL Main Driver			
	B Market Demand Part of the German National Development Plan 2016-2026: 08		National
Main Driver	E Market Demand Part of the German National Development Plan 2016-2026: 08 Development Plan 2018-2028: 410-01a, 410-01b Part of the German National Development Plan 2016-2026: 08	enefits	
Main Driver Main Driver Explanation	E Market Demand Part of the German National Development Plan 2016-2026: 08 Development Plan 2018-2028: 410-01a, 410-01b Part of the German National Development Plan 2016-2026: 08	Benefits 3-07 (completed), 409-01 (completed), 410-01 and Part of the G 3-07 (completed), 409-01 (completed), 410-01 and Part of the G	German

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

7 .

ZEELINK

TRA-F-329	Project	Pipeline including CS	FID
Update Date	21/03/2018		Advanced
Description	Pipeline and compressor station project to support the changeover from low-calorific gas to h	igh-calorific gas in Germany	
PRJ Code - PRJ Name			

Sponsors			General Information		PP and PCI Information
CS Legden Open Grid Europe GmbH, Germany	75%	Promoter Operator	Open Grid Europe GmbH and Thyssengas GmbH Open Grid Europe GmbH	Part of NDP	Yes (Netzentwicklungsplan 2016 (German NDP 2016) and consultation document German NDP 2018)
Thyssengas GmbH, Germany	25%	Host Country	Germany	NDP Number	204-02a, 205-02a, 416/02,
CS Würselen		Status	Planned	NDP Release Date	16/10/2017
Open Grid Europe GmbH, Germany	75%	Website	Project's URL	NDP Website	<u>NDP URL</u>
Thyssengas GmbH, Germany ZEELINK 1	25%			Currently PCI Priority Corridor(s)	No
Open Grid Europe GmbH, Germany	75%				
Thyssengas GmbH, Germany ZEELINK 2	25%				
Open Grid <mark>Europe G</mark> mbH, Germany	75%				
Thyssengas GmbH, Germany	25%				

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		01/2018
Construction	04/2019	03/2023
Commissioning	2023	2023

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Legden				26	2023
CS Würselen				39	2021
ZEELINK 1		1,000	112		2021
ZEELINK 2		1,000	115		2021
	Total		227	65	

Expected Gas Sourcing

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

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

CBCA	Financial Assistance			
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
and we do not plan to submit it	Grants for studies	No		
	Grants for studies amount			
	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			
		No, we have not submitted an investment request yet, and we do not plan to submit itApplied for CEFGrants for studiesGrants for studies amountGrants for worksGrants for worksGrants for works amountIntention to apply for CEFOther Financial AssistanceComments		

CS Wertingen

TRA-F-340	Project	Pipeline including CS	FID	
Update Date	27/03/2018		Advanced	
Description	VDS Wertingen is a new compressor station project including 3 compressor ur redundancy unit.	nits of 11 MW each. One of the compressor un	its will serve as a	
PRJ Code - PRJ Name	-			

Sponsors				General Information	NDP and PCI Information	
bayernets GmbH	6 - Y		55% Promoter	bayernets GmbH	Part of NDP Yes (Netzentwicklungsplan Gas	
Open Grid Europe	GmbH		45% Operator	bayernets GmbH		2028)
			Host Country	Germany	NDP Number	036-04
			Status	In Progress	NDP Release Date	01/04/2018
			Website	Project's URL	NDP Website	<u>NDP URL</u>
				-	Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-Party Access Regime	
Pre-Feasibility					Considered TPA Regime	Regulated
Feasibility	07/2015	11/2015			Considered Tariff Regime	Regulated
FEED					Applied for Exemption	No
Permitting	04/2016	04/2017			Exemption Granted	Not Relevant
Supply Contracts		08/2017				
FID		05/2016			Exemption in entry direction	0.00%
Construction	09/2017	12/2019			Exemption in exit direction	0.00%
Commissioning	2019	2019				
				Enabled Projects		
Project Code Pro	oject Name					
TRA-F-241 MC	NACO section ph	ase I (Burghause	en-Finsing)			

	Ben	efits	
Main Driver	Others		
Main Driver Explanation	The project results from the modelling of National Development Germany.	Plan (so called "Netzentwicklungsplan Gas'	') 2012, 2013, 2014, 2015, 2016 and 2018 in
Benefit Description			
	СВСА	Finan	cial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to apply
Countries Net Cost Bear	rer	Other Financial Assistance	Nc
Additional Comments		Comments	
		General Comments	

		CS Rimpar		
TRA-N-755		Project	Pipeline including CS	Non-FID
Update Date		27/02/2018		Non-Advanced
Description		essor station at the existing site of Rimpar on the MEC ng disappearing L-gas quantities.	GAL gas transport system allowing the ne	ccessary H-gas flows to
PRJ Code - PRJ Name	-			
	-			
Sponsors		General Information	NDP and PCI Info	ormation

Sponsors			Ge	neral Information	NDP and PCI Information		
GRTgaz Deutschlar	nd GmbH	55	% Promoter	GRTgaz Deutschland GmbH		es (Netzentwicklungsplan Gas 2016	
Open Grid Europe	GmbH	44	% Operator	GRTgaz Deutschland GmbH	Part of NDP	and consulation document Netzentwicklungsplan Gas 2018)	
			Host Country	Germany	NDP Number	312-01	
			Status	Planned	NDP Release Date	16/10/2017	
			Website		NDP Website	<u>NDP URL</u>	
					Currently PCI	No	
					Priority Corridor(s)		
Schedule	Start Date	End Date			Third-Pa	arty Access Regime	
Pre-Feasibility					Considered TPA Regime	Regulated	
Feasibility					Considered Tariff Regime	Regulated	
FEED					Applied for Exemption	Not Relevant	
Permitting	01/2019	12/2019			Exemption Granted	Not Relevant	
Supply Contracts		04/2020					
FID					Exemption in entry directi	ion 0.00%	
Construction	01/2020	12/2023			Exemption in exit directio	n 0.00%	
Commissioning	2023	2023					

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Rimpar / MEGAL		0	0	39	2023
	Total		0	39	

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

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

			Nord St	ream 2				
TRA-F-937			Project	2/2010	F	Pipeline including		FID
Update Date Description PRJ Code - PRJ Nam	S		28/0 s from Russia through the Baltic Sea t trengthen the internal market and sup		ierman s	hore. Nord Stream a		dvanced EU's security of
Capacity Increments Point	s Variant Fo	r Modelling	Operator		Year	From Gas System	To Gas System	Capacity
Lubmin II			Nord Stream 2 AG		2019	RU/NO2	DEg	1,750.0 GWh/d
Sponsors			General Info	ormation		NDP and	PCI Information	
			Promoter Operator Host Country Status Website	Nord Stream 2 AG Nord Stream 2 AG Germany In Progress <u>Project's URL</u>	Part of NDP N NDP R		4) there is no oblig l for such a project	
Schedule	Start Dat	te End Date				ntly PCI y Corridor(s) Third-Par	ty Access Regime	No
Pre-Feasibility					Consid	ered TPA Regime		Not Applicable
Feasibility FEED	01/201	2 10/2012				ered Tariff Regime d for Exemption		Not Applicable Not Relevant
Permitting Supply Contracts	04/201	3 06/2018 12/2016			Exemp	tion Granted		Not Relevant
FID		09/2015			Exemp	tion in entry directio	on	0.00%
Construction Commissioning	02/201 201				Exemp	tion in exit direction		0.00%

Pipelines and Compre	essor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nord Stream 2			1,153	1,200		
	Total			1,200		
	Expected G	as Sourcing				
Russia						
	Ben	nefits				
Main Driver Explanatic Benefit Description	Nord Stream 2 will enhance the EU's security of supply of natural	l gas, strengthen the internal marl		port EU c al Assista	-	
Decision	No, we have not submitted an investment request yet,	Applied for CEF			(3) No, we have not	applied for CEF
	and we do not plan to submit it	Grants for studies				No
Submissin Date		Grants for studies amount				
Decision Date		Grants for works				No
Website		Grants for works amount				
Countries Affected		Intention to apply for CEF			No, we do n	ot plan to apply
Countries Net Cost Be	arer	Other Financial Assistance				No
Additional Comments		Comments				
		General Comments				

	Expansion MS Hetlingen				
TRA-N-1200	Project		Pipeline including	g CS N	lon-FID
Update Date	24/03/2018			Non	-Advanced
Description	Connecting the measuring station Hetlingen to an additional South-North pilpelin the direction of Denmark or the supply of the northern German Area (Schleswig-H		maziation generates a	dditional capacitie	s for the exit in
PRJ Code - PRJ Name	-				
Capacity Increments Varia	ant For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Gasunie Deutschland Transport Services GmbH	2019	Y-DKe	DEg	-86.9 GWh/d

Point	Operator	Year	From Gas System	To Gas System	Capacity
	Gasunie Deutschland Transport Services GmbH	2019	Y-DKe	DEg	-86.9 GWh/d
Ellund	Gasunie Deutschland Transport Services GmbH	2019	DEg	Y-DKe	24.0 GWh/d
	Gasunie Deutschland Transport Services GmbH	2022	DEg	Y-DKe	-24.0 GWh/d

Sponsors	General Information		NDP and PCI Information		
	Promoter	Gasunie Deutschland Transport Service GmbH	Part of NDP	No ((1) the NDP was prepared at an earlier date and the project will be	
	Operator	Gasunie Deutschland Transport		proposed for inclusion in the next NDP)	
	Operator	Services GmbH	NDP Number	ID 503-01a	
	Host Country	Germany	NDP Release Date		
	Status	Planned	NDP Website	<u>NDP URL</u>	
	Website		Currently PCI	No	
			Priority Corridor(s)		

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		End Date
Pre-Feasibility		
easibility		
EED		
Permitting		
Supply Contracts		
ID		
Construction		
Commissioning	2019	2022

		Benefits			
Main Driver	Market Demand				
Main Driver Explanation					
Benefit Description					

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

CS Elten

TRA-N-1254	Project Pipeline including	CS Non-FID
Update Date	09/03/2018	Non-Advanced
Description	Compressor station project to support the changeover from low-calorific gas to high-calorific gas in Germany.	
PRJ Code - PRJ Name	-	

				General Information	ND	P and PCI Information
mbH		50%	Promoter	Open Grid Europe GmbH and Thyssengas GmbH	Part of NDP	Yes (Netzentwicklungsplan 2016 (German NDP 2016) and consultation
		50%	Operator	Thyssengas GmbH		document German NDP 2018)
			Host Country	Germany	NDP Number	422/01
			Status	Planned	NDP Release Date	16/10/2017
			Website	Project's URL	NDP Website	<u>NDP URL</u>
				-	Currently PCI	No
					Priority Corridor(s)	
Start Date	End Date				Thir	d-Party Access Regime
					Considered TPA Regin	me Regulated
10/2018	06/2019				Considered Tariff Reg	ime Regulated
					Applied for Exemptio	n No
10/2018	04/2020				Exemption Granted	No
					Exemption in entry di	rection 0.00%
					Exemption in exit dire	ection 0.00%
2022	2022					
	10/2018 10/2018	Start Date End Date 10/2018 06/2019 10/2018 04/2020	50% Start Date 10/2018 06/2019 10/2018 04/2020	Promoter50%OperatorHost CountryStatusWebsite10/201806/201910/201804/2020	mbH50%PromoterOpen Grid Europe GmbH and Thyssengas GmbH50%OperatorThyssengas GmbH0peratorThyssengas GmbHHost CountryGermany StatusStart DateEnd Date10/201806/201910/201804/2020	mbH50% 50%PromoterOpen Grid Europe GmbH and Thyssengas GmbH Part of NDP50%OperatorThyssengas GmbH

Pipelines and Compressor Stations				
Pipeline Section	Pipeline Comment	Length (km)	Compressor Power (MW)	Comissioning Year
CS Elten			11	2022
	Total		11	

Expected Gas Sourcing

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

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

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

Upgrade Sülstorf station					
TRA-N-1267	Project		Pipeline including CS	Non-FID	
Update Date		28/03/2018		Advanced	
	The station Sülstorf has to be upgraded by a preheatin	g facility and an additiona	I measturing section in order to allow for add	litional flaur frame	
Description	pipeline NEL into the pipeline FGL 219.	g lacinty and an additiona	in medstanning section in order to driow for dde	altional now from t	

Sponsors			G	General Information	ND	P and PCI Information
Fluxys Deutschland	d GmbH			NGT GmbH / GUD GmbH & Co.		No ((1) the NDP was prepared at an
Gasunie Deutschla	nd GmbH & Co. KC	<u>.</u>	Promoter	KG / Fluxys D GmbH / ONTRAS GmbH	Part of NDP	earlier date and the project will be proposed for inclusion in the next NDP)
NEL Gastransport (GmbH		Operator	NEL Gastransport GmbH	NDP Number	
ONTRAS Gastransport GmbH		Host Country	Germany	NDP Release Date		
On the Castransp			Status	Planned	NDP Website	
			Website		Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thir	d-Party Access Regime
Pre-Feasibility					Considered TPA Regi	me Regulated
Feasibility					Considered Tariff Reg	gime Regulated
FEED	01/2017	01/2019			Applied for Exemption	n No
Permitting					Exemption Granted	No
Supply Contracts						
FID					Exemption in entry d	irection 0.00%
Construction					Exemption in exit dire	ection 0.00%
Commissioning	2019	2019				

Project Code Project Name

TRA-N-763 EUGAL - Europaeische Gasanbindungsleitung (European Gaslink)

Benefits					
Main Driver	Market Demand				
Main Driver Explanation	The project will satisfy market demand that was expressed through binding capacity bookings in the context of "more capacity". The market demand is proven by the successful auctioning of the new capacities in the yearly auctions of 2017 that also proves the economic viability of the project.				
Benefit Description	The "more capacity" projects - especially in combination with the other projects within PRJ group "More capacity - DE/CZ Capacity4Gas Project" - will enhance market integration, security of supply, sustainability, and competition within Europe.				

Enabled Projects

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

1

Compressor Station Krummhoern

TRA-F-1271	Project Pipeline including CS	FID
Update Date	28/02/2018	Advanced
Description	Extension of the existing OGE compressor station Krummhoern near Emden in Lower Saxony. The compressor station Kr compressed gas into the connected transmission pipelines.	ummhoern is used to feed
PRJ Code - PRJ Name		

Sponsors		Ger	neral Information	NDP and PCI Information		
CS Krummhoern ext	tension step 1		Promoter	Open Grid Europe GmbH		Yes (Netzentwicklungsplan Gas 2016
Open Grid Europe G	mbH	100%	Operator	Open Grid Europe GmbH	Part of NDP	(German NDP 2016) and draft NDP 2018)
CS Krummhoern ext	tension step 2		Host Country	Germany	NDP Number	414-01 an 415-01
Open Grid Europe G	mbH	100%	Status	Planned	NDP Release Date	16/10/2017
1	/		Website	<u>Project's URL</u>	NDP Website	NDP URL
					Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-I	Party Access Regime
Pre-Feasibility					Considered TPA Regime	e Regulated
Feasibility					Considered Tariff Regim	ne Regulated
FEED					Applied for Exemption	No
Permitting					Exemption Granted	No
Supply Contracts						
FID					Exemption in entry direct	ction 0.00%
Construction					Exemption in exit direct	ion 0.00%
Commissioning	2022	2022				

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Pipelines and Compressor Stations Pipeline Section	Pipeline Comment	Diameter Length Compressor Power Comissionin (mm) (km) (MW) Year
CS Krummhoern extension step 1		13 2019
CS Krummhoern extension step 2		13 2022
	Total	26

Expected Gas Sourcing

Norway

	Benefits
Main Driver	Market Demand
Main Driver Explanation	n
Benefit Description	

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

Norwegian tie-in to Danish upstream system

TRA-N-394	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Advanced
Description	A new offshore pipeline between the Norwegian gas system (Europipe II) in t combination with the Baltic Pipe - that Norwegian gas (approx. 10 bcm/year) the wider Central and Eastern European region. This will provide a number of could also flow through the Danish German interconnection point Ellund-Egt construction of a new offshore pipeline between the Norwegian gas system i Denmark is planned on the beach near Blåbjerg), construction of a new pipel receiving plant at Nybro. - Former project name: "Gassled -Norwegian upstream system to Denmark"	can be transported directly through Denmark to countries with improved access to additional su ved to the wider European gas market. The proj n the North Sea (the offshore pipeline landfall o	o Sweden, Poland and upply sources. The gas ect consists of in the west coast of
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
	Energinet	2022	NO	IB-NPcDKn	306.8 GWh/d
Europipe (NO) / Baltic Pipe (DK)		Commer	t: Connection to the I	Norwegian offshore	2
Nolous	Energinet	2022	IB-NPcDKn	DK	306.8 GWh/d
Nybro			Comment: Del	ete peak increment	t

Sponsors	General Info	ormation	NDP and PCI Information			
	Promoter	Energinet.dk	Part of NDP	No ((5) others - please comment below)		
	Operator	Energinet	NDP Number			
	Host Country	Denmark	NDP Release Date			
	Status	Planned	NDP Website			
	Website	Project's URL	Currently PCI	No		
			Priority Corridor(s)	BEMIP		

Schedule		- Annex A		309 of 575
	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility				ot Applicab
Feasibility	09/2015	12/2016		ot Applicab
FEED	05/2018	02/2022		Not Releva
Permitting	01/2018	07/2019	Exemption Granted	Not Releva
Supply Contracts				
FID		12/2018	Exemption in entry direction	0.00
Construction	01/2020	10/2022	Exemption in exit direction	0.00
Commissioning	2022	2022		
			Enabled Projects	
Project Code Pro	oject Name			
-				
TRA-N-428 (Mi	irror) Baltic Pipe			
TRA-F-780 Bal	tic Pipe project – or	nshore section in Denmark		
	<u> </u>			
			Expected Gas Sourcing	
Norway				
			Benefits	
Main Driver	Market Dema	Ind	Benefits	
Main Driver Main Driver Explana		ind	Benefits	
	ation	ind	Benefits	
Main Driver Explana	ation	and	Benefits	
Main Driver Explana	ation	and	Benefits	
Main Driver Explana	ation	and	Benefits	
Main Driver Explana	ation	and	Benefits	
Main Driver Explana	ation	and	Benefits	
Main Driver Explana	ation	and	Benefits	

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	CBCA	Financial Assistance			
Decision	Yes, we have submitted an investment request and have	Applied for CEF	(3) No, we have not applied for CEF		
	received a decision	Grants for studies	No		
Submissin Date	27/10/2017	Grants for studies amount			
Decision Date	27/02/2018	Grants for works	No		
Website	<u>CBCA URL</u>	Grants for works amount			
Countries Affected	Denmark, Poland, Sweden	Intention to apply for CEF			
Countries Net Cost Bearer		Other Financial Assistance	No		
	The Danish NRA (DERA) approved the CBCA on the	Comments			
	27 February 2018. The Polish NRA (URE) approved the CBCA on the 12 March 2018.	General Comments			

Additional Comments

The Danish decision can be found here: http://energitilsynet.dk/gas/afgoerelser/tilsynsafgoerels er/2018/godkendelse-af-omkostningsfordelingenmellem-polen-og-danmark-for-baltic-pipe-projektet/

The Polish decision can be found here: https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje/innedecyzje-informacj/3634,Inne-decyzje-informacjesprawozdania-opublikowane-w-2018-r.html? search=3253

			Paldi	ski LNG Terminal				
LNG-N-79			Project			LNG Termina	l N	Ion-FID
Update Date			a star and a star and a star a st	28/03/2018			Non	-Advanced
Description	l de la companya de l	LNG import and regasific	ation terminal for regional u	use on the Pakri peninsula on the	Easern o	coast of the Baltic Sea		
PRJ Code - PRJ Nan	ne -							
Capacity Increment	s Variant Fo	or Modelling						
Point	1	10	Operator		Year	From Gas System	To Gas System	Capacity
			Balti Gaas plc		2025	LNG_Tk_EE	EE	140.0 GWh/d
Paldiski LNG				Comment: The regasification cap	pacity w		arket demand and icConnector usage.	
Sponsors			Gen	eral Information		NDP and	PCI Information	
Balti Gaas LLC	1	100	9% Promoter	Balti Gaas plo	Part o	of NDP	Yes (Estonian tran	
	1		Operator	Balti Gaas plo	5		development pla	n for 2018-2027)
			Host Country	Estonia	(Number		-
			Status	Planned	(Release Date		03/03/2018
			Website	<u>Project's URL</u>	-	Website		<u>NDP URL</u>
						ently PCI		No
					Priori	ity Corridor(s)		BEMIP
Schedule	Start Da	te End Date				Third-Par	ty Access Regime	
Pre-Feasibility		11/2008			Consi	dered TPA Regime		Regulated
Feasibility	01/20	12 01/2016			Consi	dered Tariff Regime		Regulated
FEED	04/20	13 04/2014			Appli	ed for Exemption		No
Permitting	01/20	08 06/2017			Exem	ption Granted		Not Relevant
Supply Contracts								
FID		01/2022			Exem	ption in entry directio	n	0.00%
Construction	11/20	22 12/2025			Exem	ption in exit direction		0.00%
Commissioning	20.	25 2025						

			Technical Info	prmation (LN					
egasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	t Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Facto (%)
Paldiski LNG Terminal	Yes	Phase I	1.2	160,000	13.30	160,000	Estimates	2025	25
			Fulfillec	d Criteria					
pecific Criteria Fulfilled	Comp	petition, Security of Supp	oly, Sustainability						
pecific Criteria Fulfilled	Comments Sustai	torage possibility for Est inability is improved by s palancing power plants i	switching from high em						
			Time S	chedule					
irant Obtention Date									
	2 year	rs							
elay Since Last TYNDP	The pi	rs roject is technically read ical decision regarding re					projects and go	vermental aid issue	s are solved
elay Since Last TYNDP elay Explanation	The pr (politi	roject is technically read cal decision regarding re	egional LNG terminal ar Expected G	id potential f ias Sourcing	inancial aid to	it).		vermental aid issue	s are solvec
Delay Since Last TYNDP Delay Explanation	The pr (politi	roject is technically read	egional LNG terminal ar Expected G	id potential f ias Sourcing	inancial aid to	it).		vermental aid issue	s are solvec
Pelay Since Last TYNDP Pelay Explanation NG (?), Terminal operat	The provident of the pr	roject is technically read ical decision regarding re ole for LNG sourcing. Thi C	egional LNG terminal ar Expected G is is done by terminal cl Comments about the Th	nd potential f ias Sourcing ients (TPA). T nird-Party Ac	inancial aid to he terminal ha cess Regime	it). Is LNG quality a	3		
Delay Since Last TYNDP Delay Explanation NG (?), Terminal operat he regulatory scheme a	The provident of the pr	roject is technically read cal decision regarding re ole for LNG sourcing. Thi	egional LNG terminal an Expected G is is done by terminal cl Comments about the Th he project has a PCI lab	id potential f i <mark>as Sourcing</mark> ients (TPA). T hird-Party Ac le,and thus w	inancial aid to he terminal ha cess Regime rould have sigr	it). Is LNG quality a nificant cross-b	a order impact, the		
Delay Since Last TYNDP Delay Explanation NG (?), Terminal operat he regulatory scheme a	The provident of the pr	roject is technically read ical decision regarding re ole for LNG sourcing. Thi oroject is unclear. Since t	egional LNG terminal an Expected G is is done by terminal cl Comments about the Th he project has a PCI lab n for LNG terminals in th	id potential f i <mark>as Sourcing</mark> ients (TPA). T hird-Party Ac le,and thus w	inancial aid to he terminal ha cess Regime rould have sigr	it). Is LNG quality a nificant cross-b	a order impact, the		
he regulatory scheme a	The provide the provided the pr	roject is technically read cal decision regarding re ole for LNG sourcing. Thi project is unclear. Since t ditionally, the regulation	egional LNG terminal an Expected G is is done by terminal cl Comments about the Th he project has a PCI lab n for LNG terminals in th Ben	id potential f ias Sourcing ients (TPA). T nird-Party Ac le,and thus w he project cou nefits	inancial aid to he terminal ha <mark>cess Regime</mark> rould have sigr untry (Estonia)	it). Is LNG quality a nificant cross-b does not yet e	a order impact, the xist.	e regulatory scheme	e must be
Delay Since Last TYNDP Delay Explanation NG (?), Terminal operat The regulatory scheme a Acceptable to all concer	The provide alternative	roject is technically read ical decision regarding re ole for LNG sourcing. Thi oroject is unclear. Since t	egional LNG terminal an Expected G is is done by terminal cl Comments about the Th he project has a PCI lab n for LNG terminals in th Ben with Russia as the only rage capability. Currentl	id potential f ias Sourcing ients (TPA). T nird-Party Ac le,and thus w ie project cou refits counterpart y, there is a t	inancial aid to he terminal ha cess Regime rould have sigr untry (Estonia) and supply sol emporary solu	it). Is LNG quality a nificant cross-b does not yet e urce for gas. Ar tion in Klaiped	a order impact, the xist. n LNG import and a, but a permane	e regulatory scheme d re-gasification ter	e must be minal woul

		Barı	riers		
Barrier Type	Description				
Regulatory	Regulatory frame	work for LNG facilities in Estonia is insufficient to	o clarify this point.		
Permit Granting	Long process				
Political	The assesment m	ethods of competing PCI projects is not well est	ablished.		
Regulatory	Lack of proper tra	ansposition of EU regulation			
		Intergovernmer	ntal Agreements		
Agreement		Agreement Description		Is Signed A	greement Signature Date
Agreement between PMs of Estonia and Finland Memorandum of Understanding		Agreement in regards to the gas infrastructur	re in the countries.	Yes	17/11/2014
		MoU between Estonia and Finland and LNG p	en Estonia and Finland and LNG project promoters		28/02/2014
	CE	3CA		Financial Assistance	
Decision	Yes, we have	e submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for C	EF and we have received a decision
Submissin Date		10/08/2016	Grants for studies		Ye
Decision Date		28/10/2016	Grants for studies amount		Mln EUR 137
Website		<u>CBCA URL</u>	Grants for works		Ye
Countries Affected		Estonia, Finland	Grants for works amount		Mln EUR 13
Countries Net Cost Bea	arer		Intention to apply for CEF		
Additional Comments		No net cost bearers were identified	Other Financial Assistance		N
			Comments		
			Conversit Conversito	The CEF funding application w	
			General Comments	situation with the temporary sol of clarity regardi	ution in Klaipeda and lack ng the permanent solutior

Enhancement of Estonia-Latvia interconnection

TRA-F-915	Project	Pipeline including CS	FID
Update Date	28/03/2018		Advanced
Description	The project composes of implementation of reverse flow in Karksi metering reverse flow gas measuring station would be erected to the location of the measuring of gas quantities through Estonia with the main advantages of r pipeline. Karksi reverse flow enables the full use of Inculkalns UGS for all th transportation of gas through Estonia and the Balticconnector offshore pip enable the full use of the planned offshore pipeline without a compressor so the physical implementations needed for market integration between the E	existing measuring station in Karksi. Karksi reverse reverse flow used after the commissioning of the Ba ne market participants. Puiatu compressor station er peline to the Finnish gas market. The current system station in south of Estonia. Puiatu compressor station	flow enables the alticconnector offshore nables the design does not
PRJ Code - PRJ Name			

Capacity increment	valuant for modeling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
K 1 1	Elering AS	2019	EE	LV	105.0 GWh/d
Karksi	Elering AS	2019	LV	EE	46.4 GWh/d

Sponsors			General Information	NDP and PCI Information		
Karksi metering station		Promoter	Elering AS	Part of NDP	Yes (EESTI GAASIÜLEKANDEVÕRGU	
Elering AS	100%	Operator	Elering AS		ARENGUKAVA 2018-2027)	
Puiatu Compressor Station		Host Country	Estonia	NDP Number	paragraph 3.3	
	100%	Status	In Progress	NDP Release Date	03/03/2018	
Elering AS	100%	Website	Project's URL	NDP Website	<u>NDP URL</u>	
				Currently PCI	Yes ()	
				Priority Corridor(s)	BEMIP	

urrent TYNDP : T	NDP 2018 FINAL	Annex A			Pag	ge 315 of 575
Schedule	Start Date	End Date		Third-Pa	arty Access Regime	
Pre-Feasibility		01/2015		Considered TPA Regime		Regulated
Feasibility	01/2015	01/2016		Considered Tariff Regime		Regulated
FEED	05/2015	05/2016		Applied for Exemption		No
Permitting	09/2015	06/2019		Exemption Granted		Not Relevan
Supply Contracts		02/2018				
FID		10/2016		Exemption in entry direct	ion	0.00%
Construction	06/2018	12/2019		Exemption in exit direction	on	0.00%
Commissioning	2019	2019				
			Enabled Projects			
Project Code Dr	aiact Nama					
	oject Name					
	oject Name Iticconnector					
	-					
	lticconnector					
TRA-F-895 Bal	lticconnector		Pipeline Comment	Diameter Length	Compressor Power	Comissioning
TRA-F-895 Bal Pipelines and Com Pipeline Section	lticconnector		Pipeline Comment	Diameter Length (mm) (km)	Compressor Power (MW)	Year
TRA-F-895 Bal	lticconnector		·		(MW) 10	0
TRA-F-895 Bal Pipelines and Com Pipeline Section	lticconnector		Total		(MW)	Year
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu	Iticconnector		Total Fulfilled Criteria		(MW) 10	Year
TRA-F-895 Bal Pipelines and Com Pipeline Section	Iticconnector		Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability	(mm) (km)	(MW) 10 10	Year 2019
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu	Iticconnector Pressor Stations CS filled C	he Enhancement	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with	(mm) (km) the Balticconnector project, will ir	(MW) 10 10 ncrease the security of	Year 2019
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu	lticconnector pressor Stations CS filled C T	he Enhancement innish and whole	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with e Baltic region by connecting the gas systems of Finland	(mm) (km) the Balticconnector project, will ir and Baltic countries. Bi-directional	(MW) 10 10 ncrease the security of Estonia-Latvia	Year 2019 of supply of the
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu	filled Comments	he Enhancement innish and whole nterconnection po	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with e Baltic region by connecting the gas systems of Finland point will also enable Finnish gas customers access to the	(mm) (km) the Balticconnector project, will ir and Baltic countries. Bi-directional Incukalns UGS in Latvia. In additic	(MW) 10 10 ncrease the security of lity of Estonia-Latvia on, connecting the ga	Year 2019 of supply of the
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu Specific Criteria Ful	filled Comments Filled Comments B	he Enhancement innish and whole nterconnection po altic countries an	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with e Baltic region by connecting the gas systems of Finland point will also enable Finnish gas customers access to the nd Finland will create a positive environment for the deve	(mm) (km) the Balticconnector project, will ir and Baltic countries. Bi-directional Incukalns UGS in Latvia. In additic elopment of regional gas market, v	(MW) 10 10 ncrease the security of lity of Estonia-Latvia on, connecting the ga which is also expecte	Year 2019 of supply of the as systems of d to increase
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu Specific Criteria Ful	Iticconnector Ipressor Stations CS filled C filled Comments ir B C	he Enhancement innish and whole nterconnection po altic countries an ompetition in the	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with e Baltic region by connecting the gas systems of Finland point will also enable Finnish gas customers access to the	(mm) (km) the Balticconnector project, will ir and Baltic countries. Bi-directional Incukalns UGS in Latvia. In additic elopment of regional gas market, v	(MW) 10 10 ncrease the security of lity of Estonia-Latvia on, connecting the ga which is also expecte	Year 2019 of supply of the as systems of d to increase
TRA-F-895 Bal Pipelines and Com Pipeline Section Karksi GMS, Puiatu Specific Criteria Ful	Iticconnector Ipressor Stations CS filled C filled Comments ir B C	he Enhancement innish and whole nterconnection po altic countries an ompetition in the	Total Fulfilled Criteria rket Integration, Security of Supply, Sustainability t of Estonia-Latvia interconnection project, together with e Baltic region by connecting the gas systems of Finland point will also enable Finnish gas customers access to the nd Finland will create a positive environment for the deve e gas market. The aim is to move to Finnish-Baltic single	(mm) (km) the Balticconnector project, will ir and Baltic countries. Bi-directional Incukalns UGS in Latvia. In additic elopment of regional gas market, v	(MW) 10 10 ncrease the security of lity of Estonia-Latvia on, connecting the ga which is also expecte	Year 2019 of supply of the as systems of d to increase

Main Driver Regulation-Interroperability

Main Driver Explanation Main project driver is the operational link with the Balticconnector project

Benefit Description

	CBCA	Financial Assistance			
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision		
Submissin Date	07/04/2016	Grants for studies	No		
Decision Date	22/04/2016	Grants for studies amount			
Website	<u>CBCA URL</u>	Grants for works	Yes		
Countries Affected	Finland, Latvia	Grants for works amount	Mln EUR 0		
Countries Net Cost Bearer	Estonia	Intention to apply for CEF			
Additional Comments		Other Financial Assistance	No		
		Comments			

Benefits

General Comments

LNG-N-962	Project	LNG Terminal	Non-FID
Update Date	15/11/2018		Advanced
Description	Conventional LNG import terminal (bunkering, break-bulk, on-grid and off-grid lar supply and serving commercial customers. The project includes 5x800 m3 pressuri 11 m), 2x100m3/h truck loading rack and connection to the low pressure natural g covering about 60% of Estonian gas demand. And one to two flat bottom storage m3, with second connection to the berth (LOA 365m depth -17m) capable of hanc (MOP 54 bar) national high pressure grid located about 13 km from the terminal s 160 000 m3 with 4 bcma connection to the national high pressure grid. (grid conn	ized bullets, connection to the existing berth gas distribution network located about 1 km tanks with the total LNG storage capacity of dling any size LNG carrier on the market, con site. Rail shunting tracks are 200m. Current so	n (LOA 198 m; depth - from terminal site, f 50 000 m3 to 320 000 nnection to DN711
PRJ Code - PRJ Name			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Tallinn LNG	Vopak / Elering	2022	LNG_Tk_EE	EE	121.0 GWh/d

Sponsors			General Information	NDP a	and PCI Information
Vopak / Vopak E.O.S.	75% Promoter		Vopak E.O.S. AS / Vopak LNG Holdings B.V/ Port of Tallinn AS	Part of NDP	Yes (Eesti Gaasi Ülekandevõrgu arengukava 2018-2027.)
Port of Tallinn	25%	Operator	Vopak / Elering	NDP Number	Paragraph 3 point 7
		Host Country	Estonia	NDP Release Date	03/03/2018
		Status	Planned	NDP Website	<u>NDP URL</u>
		Website	Project's URL	Currently PCI	No
				Priority Corridor(s)	BEMIP

Current TYNDP : TYN	IDP 2018 FINAL	- Annex A				Page 318 of 575
Schedule	Start Date	End Date			Third-Party /	Access Regime
Pre-Feasibility		09/2012			Considered TPA Regime	Regulated
Feasibility	01/2012				Considered Tariff Regime	Regulated
FEED	01/2016				Applied for Exemption	No
Permitting	01/2012	01/2018			Exemption Granted	Not Yet
Supply Contracts						
FID					Exemption in entry direction	0.00%
Construction					Exemption in exit direction	0.00%
Commissioning	2022	2022				
			Technical Information (LN	1G)		
Regasification Facility	, Reloa Abi	PICIECI PITASE	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)

Tallinn LNG	Yes	Tallinn LNG	4.0	160,000	11.00	160,000	No comments	2022	50
			Fulfi	lled Criteria					
Specific Criteria Fulfilled	Com	petition, Market Integration	, Security of Suppl	y, Sustainability					
Specific Criteria Fulfilled Comments	s Help	nn LNG terminal is an optime s mitigating demand for cur nects second or third gas so	tailment under m	ajor import route	e distruption.	2. Ensures the o	compliance with the	N-1 requiremen	
			Tim	e Schedule					
Grant Obtention Date									
Delay Since Last TYNDP	One	to two years							
Delay Explanation		project is delayed because o e, feasibility, FEED and FID.	f the uncertainty a	and delay in othe	er former LNG	Terminal proje	ects in the region, as	this affects the p	oroject
			Expected	d Gas Sourcing					
LNG ()									

	Ben	efits					
Main Driver	Market Demand						
Main Driver Explanatior	Market integration and diversification, SoS, market development, clean energy.						
Benefit Description	Reduces isolation and bottlenecks, interoperability, appropriate connections, diversification of sources, diversification of routes, sustainability.						
	Barı	riers					
Barrier Type	Description						
Others	The market interference which has been created by FSRU 'Indepervent vessel being socialized over the Lithuanian gas consumer with an negatively affecting other Baltic terminal developments. As other market-based commercially sound solutions in the region. A concentimes lower than any other large LNG facility. We expect the Euro	y additional service provided by the vessel projects do not enjoy such heavy state fun crete example is FSRU 'Independence' re-g	being largely underpriced; the vessel is ding and will therefore have to develop asification price, which is priced about 10-20				
	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co	f an onshore facility. Over 10y period, total	lease cost of the vessel is in excess of Eur 600				
Market	base of this particular vessel largely exceeds 'normal' cost level of	f an onshore facility. Over 10y period, total	lease cost of the vessel is in excess of Eur 600				
Market	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co	f an onshore facility. Over 10y period, total onstruction cost.	lease cost of the vessel is in excess of Eur 600 cial Assistance				
Market	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity	f an onshore facility. Over 10y period, total onstruction cost.					
	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	f an onshore facility. Over 10y period, total onstruction cost.	cial Assistance (3) No, we have not applied for CE				
Decision	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet,	f an onshore facility. Over 10y period, total onstruction cost. Finan Applied for CEF	cial Assistance (3) No, we have not applied for CE				
Decision ubmissin Date	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	f an onshore facility. Over 10y period, total onstruction cost. Finan Applied for CEF Grants for studies	<mark>cial Assistance</mark> (3) No, we have not applied for CE N				
Decision Submissin Date Decision Date	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	f an onshore facility. Over 10y period, total onstruction cost. Finan Applied for CEF Grants for studies Grants for studies amount	<mark>cial Assistance</mark> (3) No, we have not applied for CE N				
Decision Submissin Date Decision Date Website	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	F an onshore facility. Over 10y period, total onstruction cost. Finan Applied for CEF Grants for studies Grants for studies amount Grants for works	<mark>cial Assistance</mark> (3) No, we have not applied for CE N				
Decision Submissin Date Decision Date Website Countries Affected	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	<mark>cial Assistance</mark> (3) No, we have not applied for CE N N				
Market Decision Submissin Date Decision Date Website Countries Affected Countries Net Cost Bea Additional Comments	base of this particular vessel largely exceeds 'normal' cost level of million, that is equal to about two similar land-based terminals co Lack of market maturity CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	F an onshore facility. Over 10y period, total onstruction cost. Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works More amount Intention to apply for CEF	cial Assistance				

LNG-F-163								
		Projec	t			LNG Termin	al	FID
Update Date			25/06/2018				A	dvanced
Description	A new regasification terminal The start-up of the Gran Cana period is reported as the start terminal would already be jus	ria LNG terminal is -up date. This does	assumed to take place wi					
PRJ Code - PRJ Name	-							
Capacity Increments Varia	nt For Modelling					E C C I	TCC	
Point		Operator			Year	From Gas System		Capacity
Gran Canaria LNG			ansporte S.A.U.		2027	LNG_Tk_ESc	ESc	41.9 GWh/d
		Gascan			2027	LNG_Tk_ESc	ESc	41.9 GWh/d
Sponsors			General Information			NDP an	d PCI Information	
Gascan	100%	Promoter		Gascan	Dart o	of NDP	′es (Planta de regas	ificación de Grar
		Operator		Gascan	rait	n ndr		Canario
		Host Country		Spain	NDP	Number	No	code in the ND
		Status		Planned	NDP	Release Date		01/05/200
		Website			NDP	Website		<u>NDP UR</u>
					Curre	ntly PCI		N
					Priori	ty Corridor(s)		

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2027	2027

		Technical Inform	nation (LN	IG)				
Regasification Facility	Reloading Ability Project Phase	Expected Increment SI (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning L Year	.oad Factor (%)
Gran Canaria	No Gran Canaria	1.3	140	3,600,000.00	150,000	the commissioning year does not constitute an stimate of the start-up date	2027	100

	Expected G	as Sourcing
.NG ()		
	Ben	efits
Main Driver	Others	
Main Driver Explanat	ion	
Main Driver Explanat Benefit Description		

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

		Μι	usel LNG terminal		
LNG-F-178		Project		LNG Termina	al FID
Update Date			13/09/2018		Advanced
Description	A new LNG terminal in Musel (North of Spain). Facility pending start-up authorisation by the government according to Ro Transporte expects to get the start-up authorization by 2020.			aw 13/2012. Construction h	nas been completed and Enagás
PRJ Code - PRJ Name	-				
Capacity Increments Varia	ant For Modelling				
Point		Operator		Year From Gas System	To Gas System Capacity
Musel		Enagas Tran	sporte S.A.U.	2020 LNG_Tk_ESa	ES 0.0 GWh/d
Sponsors		Ge	eneral Information	NDP and	d PCI Information
		Promoter	Enagás Transporte, S.A.U.	Part of NDP	Yes (planta de regasificación de E
		Operator	Enagas Transporte S.A.U.		Muse
		Host Country	Spain		No code in the ND
		Status	Planned	NDP Release Date	01/05/200
		Website		NDP Website	<u>NDP UR</u>
				Currently PCI	Ν
				Priority Corridor(s)	
Schedule Sta	rt Date End Date			Third-Pa	rty Access Regime
Pre-Feasibility				Considered TPA Regime	Regulate
Feasibility				Considered Tariff Regime	Regulate
FEED				Applied for Exemption	N
Permitting				Exemption Granted	Ν
Supply Contracts					
FID				Exemption in entry direction	on 0.009
Construction				Exemption in exit direction	0.009
Commissioning	2020 2020				

			Technical Info	mation (LN	G)		
Regasification Facility	Reloading Ability	Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Facto Year (%)
Musel	No						
			Expected Ga	as Sourcing			
LNG ()	12						
			Bene	efits			
Main Driver C	thers						
Main Driver Explanation							
Benefit Description							

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

		Tenerife LNG Termina	al				
LNG-F-183		Project		LNG Terminal			FID
Update Date		25/06/2018				A	dvanced
Description	This project consists in a new	regasification Terminal in Tenerife (Arico-G	iranadilla, Spaiı	n), in th	e Canary Islands.		
PRJ Code - PRJ Name	-						
Capacity Increments Varia	ant For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Tenerife LNG		Enagas Transporte S.A.U.		2021	LNG_Tk_ESc	ESc	41.9 GWh/d
		Gascan		2021	LNG_Tk_ESc	ESc	41.9 GWh/d
Sponsors		General Information			NDP and	PCI Information	
Gascan	100%	Promoter	Gascan	Part o	of NDP	Yes (Planta de I	egasificacion de
1		Operator	Gascan				Tenerife)
		Host Country	Spain		Number	No	code in the NDP
		Status	Planned		Release Date		01/05/2008
		Website			Website		<u>NDP URL</u>
					ntly PCI ty Corridor(s)		No
Schedule Sta	rt Date End Date			THOM	·	ty Access Regime	
Pre-Feasibility				Consi	dered TPA Regime	ty Access Regime	Regulated
Feasibility					dered Tariff Regime		Regulated
FEED					ed for Exemption		No
Permitting					ption Granted		No
Supply Contracts				Exern			110
FID				Exem	ption in entry directio	n	0.00%
Construction					ption in exit direction		0.00%
Commissioning	2021 2021						

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			Technical Info	innation ^r (Ll					
Regasification Facility	Reloading Ability	⁹ Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	g Load Facto (%)
enerife LNG Terminal	No	Tenerife LNG	1.3	140,000	3,600,000.00	150,000	no additional comments	2021	100
			Expected G	as Sourcing	l				
NG ()	1								
			Ben	efits					
1ain Driver Ot	hers		Ben	efits					
Main Driver Ot Main Driver Explanation	hers		Ben	efits					
1	hers		Ben	efits					
Main Driver Explanation	hers		Ben	efits					
Main Driver Explanation		BCA	Ben	efits		Finar	ncial Assistance		
Main Driver Explanation	C No, we he	ave not submitted an in	ivestment request yet,		l for CEF	Finar		No, we have not a	pplied for Cl
Main Driver Explanation	C No, we he		vestment request yet, ther we will submit or	Applied	l for CEF for studies	Finar		No, we have not a	pplied for CL
Main Driver Explanation	C No, we he	ave not submitted an in	ivestment request yet,	Applied Grants				No, we have not a	
Main Driver Explanation	C No, we he	ave not submitted an in	vestment request yet, ther we will submit or	Applied Grants Grants	for studies			No, we have not a	
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date	C No, we he	ave not submitted an in	vestment request yet, ther we will submit or	Applied Grants Grants Grants	for studies for studies amo	unt		No, we have not a	٨
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date Website	C No, we he	ave not submitted an in	vestment request yet, ther we will submit or	Applied Grants Grants Grants Grants	for studies for studies amo for works	unt nt		No, we have not a	٨
Main Driver Explanation Benefit Description Decision Submissin Date Decision Date Website Countries Affected	C No, we he	ave not submitted an in	vestment request yet, ther we will submit or	Applied Grants Grants Grants Grants Intentio	for studies for studies amo for works for works amou	unt nt CEF		No, we have not a	٨
Main Driver Explanation	C No, we he	ave not submitted an in	vestment request yet, ther we will submit or	Applied Grants Grants Grants Grants Intentio	for studies for studies amo for works for works amou on to apply for C inancial Assista	unt nt CEF		No, we have not a	~

Mugardos LNG Terminal: Send-out Increase

Update Date	23/02/2018		Non-Advanced
Description	The project aims to expand the LNG terminal capacity from 9,9 mcm/d to 19,8 mcm/d t	through the construction of new Oper	n Rack Vaporizers.
PRJ Code - PRJ Name	-		

Point		Operat	or		Year	From Gas System	To Gas System	Capacity
Musendes		Regand	osa		2023	LNG_Tk_ESa	ES	115.0 GWh/d
Mugardos		Regand	osa (LSO)		2023	LNG_Tk_ESa	ES	115.0 GWh/d
Sponsors			General Information			NDP and	d PCI Information	
Reganosa	100%	Promoter		Reganosa	Part of	f NDP Yes	(PLANIFICACION E	
		Operator		Reganosa				GAS 2008-2016)
		Host Country		Spain			Number- Name: An	•
		Status		Planned	NDPN	Number <i>de l</i>	Reganosa. Ampliaci	on ae Emision a 825,600 Nm3/h
		Website		<u>Project's URL</u>	NDP R	Release Date		01/05/2008
					NDP V	Vebsite		<u>NDP URL</u>
					Currer	ntly PCI		No

Priority Corridor(s)

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility	04/2017	02/2018
FEED	08/2018	11/2019
Permitting	03/2020	02/2021
Supply Contracts		
FID		02/2021
Construction	06/2021	09/2023
Commissioning	2023	2023

			Technical Info	rmation (LN	G)				
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 (%)
Mugardos LNG Terminal	Yes	Mugardos LNG	3.6	0	9.90	0	This expansion will mean an increase in send-out capacity until to 825,600 Nm3/h, meaning, twice the current capacity.		100

	Expected Gas Sourcing	
LNG (WO)		

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	Ben	efits				
Main Driver	Market Demand					
Main Driver Explanation	The expansion of the send-out capacity will enable to balance the North-South capacities of the Spanish gas system inputs and to reduce the costs in g transport, promoting the approach of emission points to consumption points and generating efficiencies through of the lower use of compression stations. Likewise, it will reinforce the security of supply by building the infrastructures that allow the Northwest area to be in a situation of integration comparable with the rest of Spain.					
Benefit Description						
	Bari	iers				
Barrier Type	Description					
Market	Lack of market maturity					
Market	Lack of market support					
Regulatory	Capacity quotas					
	СВСА	Finan	cial Assistance			
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CE			
	and we do not plan to submit it	Grants for studies	Λ			
Submissin Date		Grants for studies amount				
Decision Date		Grants for works	٨			
Website		Grants for works amount				
Countries Affected		Intention to apply for CEF				
Countries Net Cost Bear Additional Comments	er	Other Financial Assistance	٨			
Additional Comments		Comments				
		General Comments				

Mugardos LNG Terminal: 2nd Jetty

LNG-N-296	Project	LNG Terminal	Non-FID
Update Date	09/03/2018		Advanced
Description	Construction of a second jetty for berthing of LNG ship with capacity from appro	oximately 1,000m3 LNG up to 266,000m3 LNG	
PRJ Code - PRJ Name	-		

Sponsors			General	nformation	NDP and PCI Info	rmation
Reganosa		100%	Promoter	Reganosa	Part of NDP No ((5) others	s - please comment below)
			Operator	Reganosa	NDP Number	
			Host Country	Spain	NDP Release Date	
			Status	Planned	NDP Website	
			Website	Project's URL	Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-Party Access	Regime
Pre-Feasibility					Considered TPA Regime	Regulated
easibility	02/2015	12/2015			Considered Tariff Regime	Regulated
FEED	04/2016	06/2017			Applied for Exemption	No
Permitting	10/2017	08/2018			Exemption Granted	Not Relevant
Supply Contracts						
FID		08/2018			Exemption in entry direction	0.00%
Construction	11/2018	09/2020			Exemption in exit direction	0.00%
Commissioning	2020	2020				
			Enable	ed Projects		

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			Technical Info	rmation (LN	IG)				
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 Facto (%)
Mugardos LNG Terminal	l Yes	2nd Jetty	0.0	266,000	0.00	0	This new jetty of the Terminal will be able to operate with a range of vessels from 1,000 m3 to 266,000m3	2020	100
_			Expected G	as Sourcing					
NG (WO)	1								
			Ben	ofits					
Main Driver	Market Demand		Den						
Vain Driver Explanation	1								
	The second jetty on new operational restant satellite Terminals	equirements derived to in nearby ports and o	able the Port of Ferrol to r from the implementation o coasts. Apart from that, it v ugardos terminal is ideally	of LNG as fu vill guarante	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
	The second jetty on new operational restant satellite Terminals	equirements derived to in nearby ports and o	from the implementation of coasts. Apart from that, it w	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Main Driver Explanation Benefit Description Barrier Type	The second jetty on new operational restant states and the second	equirements derived to in nearby ports and o	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description	The second jetty of new operational restination of the satellite Terminals loading and unloading and	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description Barrier Type	The second jetty of new operational re satellite Terminals loading and unloa Description	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description Barrier Type	The second jetty of new operational re satellite Terminals loading and unloa Description	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description Barrier Type	The second jetty of new operational re satellite Terminals loading and unloa Description	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description Barrier Type	The second jetty of new operational re satellite Terminals loading and unloa Description	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and
Benefit Description Barrier Type	The second jetty of new operational re satellite Terminals loading and unloa Description	equirements derived f in nearby ports and o ading vessels. Also, Mo	from the implementation of coasts. Apart from that, it was a gardos terminal is ideally	of LNG as fu will guarante located to t	el in maritime ee the availabil	transport for bo ity of the Termin	th ships navigating nal to carry out the	the Atlantic corr	idor and

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

Mugardos LNG Terminal: Storage Extension

			Mugardos LNG Terminal:	Storage Extension				
LNG-N-297			Project			LNG Terminal	N	lon-FID
Update Date		1	09/03/20	18			Ad	dvanced
	Constr	ruction of an additiona	l storage tank with capacity of one h	undred ninety thousar	nd cubi	c meters of LNG.		
Description								
PRJ Code - PRJ Nai	me -							
Constitute	ta Mariant Far Ma	dell'as						
Capacity Increment	ts variant for Mo	dening	Operator		Year	From Gas System	To Gas System	Capacity
Mugardos			Reganosa (LSO)		2022	LNG_Tk_ESa	ES	0.0 GWh/d
Sponsors			General Informa	tion		NDP and	PCI Information	
Reganosa		100%	Promoter	Reganosa	Part o	of NDP No ((5) others - please	comment below)
	1		Operator	Reganosa	NDP I	Number		
			Host Country	Spain	NDP F	Release Date		
			Status	Planned	NDP \	Website		
			Website	<u>Project's URL</u>	Curre	ntly PCI		No
					Priorit	ty Corridor(s)		
Schedule	Start Date	End Date				Third-Part	ty Access Regime	
Pre-Feasibility					Consid	dered TPA Regime		Regulated
Feasibility	02/2015	12/2015			Consid	dered Tariff Regime		Regulated
FEED	08/2016	11/2017			Applie	ed for Exemption		No
Permitting	04/2018	02/2019			Exemp	otion Granted		Not Relevant
Supply Contracts		02/2019						
FID					Exemp	otion in entry directio	n	0.00%

05/2019

2022

12/2021

2022

0.00%

Exemption in exit direction

Benefits Main Driver Market Demand The third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barrier Type Description										
Regasification Facility Reloading Ability Project Phase Expected increment Ship Size (bcm/y) capacity (m3) capacity (mcm/d) Comments Commissioning Load Fact Year Mugardos LNG Terminal Yes Mugardos LNG 0.0 0 0.00 190,000 of 190,000 m3, increasing the total capacity of the terminal to 490,000 m3. 2022 100 LNG (WO) Expected Gas Sourcing Expected Gas Sourcing 100 100,000 m3, 490,000 m3. 2022 100 Main Driver Market Demand The third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barriers Barrier Type Description Barriers Easting Superstructure in the superstructure in t				Technical Infor	mation (LN	G)				
Mugardos LNG TerminalYesMugardos LNG0.000.00190,000	Regasification Facility	-	Project Phase			capacity	capacity (m3	Comments	0	
LNG (WO) Benefits Main Driver Market Demand Main Driver Explanation The third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barrier Type Description	Mugardos LNG Terminal	Yes I	Mugardos LNG	0.0	0	0.00	190,000	Terminal tank will have a storage capacity of 190,000 m3, increasing the total capacity of the terminal to	2022	100
Benefits Main Driver Market Demand Main Driver Explanation The third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barrier Type Description		.//. 		Expected Ga	s Sourcing					
Main Driver Market Demand Main Driver Explanation The third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barrier Type Description	LNG (WO)									
Main Driver ExplanationThe third tank of the Terminal will enable the inclusion of the northwest of the peninsula in the market of large gas carriers, such as the Q-flex (216,000 m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel.Benefit DescriptionMugardos terminal is ideally located to take advantage of the US FOB volumes.Barrier TypeDescription				Bene	fits					
Main Driver Explanation m3) and Q-max (266,000 m3). Likewise, it will convert the Terminal in a real LNG hub. Additionally, synergetic effects could be created between the naval and fishing sector in Galicia (repairs in shipyards, construction of new ships, etc.) and it will allow the participation of Galicia in the new LNG markets, e.g., the of the use of LNG as maritime fuel. Benefit Description Mugardos terminal is ideally located to take advantage of the US FOB volumes. Barrier Type Description	Main Driver	Market Demand								
Barrier Type Description	Main Driver Explanation	m3) and Q-max (26 and fishing sector in	66,000 m3). Likewise, it w n Galicia (repairs in shipy	ill convert the Termina	l in a real LN	NG hub. Addit	ionally, synergeti	c effects could be	created between	n the naval
Barrier Type Description	Benefit Description	Mugardos terminal	is ideally located to take	e advantage of the US	FOB volume	·S.				
				Barri	ers					
Market Lack of market maturity	Barrier Type	Description								
	Market	Lack of market mat	urity							

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

<u>/</u>____

Guitiriz - Lugo - Zamora pipeline

TRA-N-950	Project Pipeline including CS	Non-FID
Update Date	15/11/2018	Advanced
Description	Construction of the Interconnector between Guitiriz, Lugo and Zamora, with a length of 318 km and 30" diameter.	
PRJ Code - PRJ Name		

Sponsors				General Information	ND	P and PCI Information
Reganosa		100%	Promoter	Reganosa	Part of NDP	Yes (PLANIFICACION ELECTRICIDAD Y
	· / ·		Operator	Reganosa		GAS 2008-2016)
			Host Country	Spain	NDP Number	N/A.
			Status	Planned	NDP Release Date	01/05/2008
			Website	Project's URL	NDP Website	<u>NDP URL</u>
					Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thir	d-Party Access Regime
Pre-Feasibility					Considered TPA Regi	me Regulated
Feasibility	07/2017	12/2017			Considered Tariff Reg	jime Regulated
FEED	12/2017	12/2018			Applied for Exemptio	n No
Permitting	11/2018	08/2019			Exemption Granted	Not Relevant
Supply Contracts						
FID		08/2019			Exemption in entry di	rection 0.00%
Construction	08/2019	11/2020			Exemption in exit dire	ection 0.00%
Commissioning	2024	2024				

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Guitiriz-Lugo		750	30	0	2020
Lugo-Zamora		750	288	0	2020
	Total		318	0	

Expected Gas Sourcing

Algeria, LNG (WO)

Additional Comments

	Ben	efits	
Main Driver	Regulation SoS		
Main Driver Explanation	The northwest of the Iberian Peninsula is suffering congestion, the Guitiriz-Lugo-Zamora will remove the existing congestion and en- security of supply in the Northwest.	5	
Benefit Description	This project is an "enabler" for the security of supply of the North	west area in Spain.	
	Barı	iers	
Barrier Type	Description		
Regulatory	Lack of proper transposition of EU regulation		
	CBCA	Finan	cial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEI
Decision	and we do not plan to submit it	Grants for studies	N
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bear	er	Other Financial Assistance	No

Comments

General Comments

No

Reverse capacity from France to Germany at Obergailbach

TRA-N-47	Project	Pipeline including CS	Non-FID
Update Date	15/11/2018		Non-Advanced
Description	This project aims to create a reverse flow between France and Germany at the O It consists in enabling a physical reverse flow from France to Germany by imple requirements related to odorant level	5	lbach to meet German's

Point	Operator	Year	From Gas System	To Gas System	Capacity
Obergailbach (FR) / Medelsheim (DE)	GRTgaz	2022	IB-FR1	Y-DEnm	100.0 GWh/d

Sponsors			General Information	NI	DP and PCI Information
GRTgaz	100%	Promoter	GRTgaz		Yes (Plan décennal de développement
1	-	Operator	GRTgaz	Part of NDP	du réseau de transport de GRTgaz 2017-
		Host Country	France		2026)
		Status	Planned	NDP Number	na
		Website	Project's URL	NDP Release Date	27/11/2017
			<u></u>	NDP Website	NDP URL
				Currently PCI	No
				Priority Corridor(s)	NSIW

		- Annex A	B FINAL - Annex A	YNDP 2018 FINA	rrent TYNDP : TY
Re	Third-Party Access	End Date	ate End Date	Start Date	Schedule
	Considered TPA Regime	06/2013	06/2013		Pre-Feasibility
	Considered Tariff Regime	06/2017	013 06/2017	07/2013	easibility
	Applied for Exemption				EED
	Exemption Granted				Permitting
					Supply Contracts
	Exemption in entry direction				ID
	Exemption in exit direction	11/2022	11/2022		Construction
		2022	022 2022	2022	Commissioning

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Obergailbach interconnection station	n Enabling reverse flow and implementing a de odorization facility	<u>)-</u>			2022
	Total				
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
	Creating a reverse flow would contribute to security of supply by enabling	-	-		
Specific Criteria Fulfilled Comments	France and Iberia to Germany and Central Eastern Europe markets. It will also to replace L-gas which will be strongly declining from 2016. In addition, it w NCG.	so respond to the need	of more	H-Gas sources in Ger	many in orde
Specific Criteria Fulfilled Comments	France and Iberia to Germany and Central Eastern Europe markets. It will als to replace L-gas which will be strongly declining from 2016. In addition, it v	so respond to the need	of more	H-Gas sources in Ger	many in orde
Specific Criteria Fulfilled Comments	France and Iberia to Germany and Central Eastern Europe markets. It will als to replace L-gas which will be strongly declining from 2016. In addition, it w NCG.	so respond to the need	of more	H-Gas sources in Ger	many in ordei
Specific Criteria Fulfilled Comments	France and Iberia to Germany and Central Eastern Europe markets. It will als to replace L-gas which will be strongly declining from 2016. In addition, it w NCG.	so respond to the need	of more	H-Gas sources in Ger	many in ordei
Specific Criteria Fulfilled Comments Grant Obtention Date Delay Since Last TYNDP	France and Iberia to Germany and Central Eastern Europe markets. It will als to replace L-gas which will be strongly declining from 2016. In addition, it w NCG. Time Schedule	so respond to the need	of more	H-Gas sources in Ger	many in order
Specific Criteria Fulfilled Comments Grant Obtention Date	France and Iberia to Germany and Central Eastern Europe markets. It will als to replace L-gas which will be strongly declining from 2016. In addition, it w NCG. Time Schedule	so respond to the need	of more	H-Gas sources in Ger	many in ordei

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		Ben	efits	
Main Driver	Others			
Main Driver Explanation	on Market integration	between France and Germany until now incor	nplete due to the absence of rev	erse capacity linked to different odorization practices.
Benefit Description	-	flow would improve integration of German and erranean basins for Germany and Eastern mark		on as a result. It would give access to LNG supplies from
		Bar	riers	
Barrier Type	Description			
Market	Lack of market sup	port		
	СВС	CA		Financial Assistance
Decision		e not submitted an investment request yet, not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
		not	Grants for studies	Yes
Submissin Date			Grants for studies amount	Mln EUR 0
Decision Date			Grants for works	No
Website			Grants for works amount	
Countries Affected			Intention to apply for CEF	No decision yet taken
Countries Net Cost Be			Other Financial Assistance	No
Additional Comments			Comments	
			General Comments	

TRA-N-429	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	The L-gas area covers around 10% of French gas consumption. It depends on the annual basis. Additional flexibility is ensured by Gournay UGS and peak H-to-L co Due to the decline of L-gas production the conversion of the whole French L-ga The project covers both the required infrastructure to ensure access to H-gas su coordinated with Belgian and Dutch operators.	onversion facility at Loon-Plage. s area will have to be achieved by the end of	f 2029.
PRJ Code - PRJ Name			

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Blaregnies L (BE) / Taisnières B (FR)	GRTgaz	2025	BEI	FRnL	-115.0 GWh/d		

Sponsors			General Information	NDP and PCI Information		
Storage		Promoter	er GRTgaz and Storengy Pa		Yes (Plan décennal de développement	
Storengy	5%	Operator	GRTgaz		du réseau de GRTgaz 2017-2026)	
Transmission		Host Country		NDP Number	Plan de conversion du gaz B en gaz H	
		Status	Planned	NDP Release Date	27/11/2017	
GRTgaz	95%	Website	Project's URL	NDP Website	<u>NDP URL</u>	
				Currently PCI	Yes ()	
				Priority Corridor(s)	NSIW	

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		09/2016
Feasibility	06/2014	09/2016
FEED	09/2015	09/2020
Permitting	11/2016	12/2026
Supply Contracts		
FID		12/2021
Construction	04/2017	12/2026
Commissioning	2025	2025

Pipelines and Compressor Stations	5				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Arleux interconnection station	Adaptation				
Bethune area	New pipeline	300	8		
Brouckerque area	New pipeline	200	2		
Connection to H-gas grid	Gravelines, Diéval, Isbergues, Orchies, Beaure Caulaincourt and Nesle	evoir,			
Interconnection with Gournay UGS	Adaptation				
Taisnieres interconnection station	Adaptation				
	Total		10		
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comments	The project will ensure that gas consumers of the former L-gas area will be consumers.	enefit from the same cor	npetitive	and secured supply a	is H-gas
	Expected Gas Sourcing				

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

	Ben	efits					
Main Driver	Others						
Main Driver Explanation	Decline of L-gas production in the Netherlands with supply contracts ending on 2029 for France and Belgium notwithstanding earlier termination date.						
Benefit Description	Currently the L-gas area across France, Belgium and Germany is s H-gas, the project is part of set of new regional infrastructures en supply as the rest of North-West Europe.						
	CBCA	Finan	cial Assistance				
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF				
Decision	and we have not yet decided whether we will submit or not	Grants for studies	No				
Culturizzia Data		Grants for studies amount					
Submissin Date		Grants for works	No				
Decision Date		Grants for works amount					
Website		Intention to apply for CEF	No decision yet taken				
Countries Affected		Other Financial Assistance	No				
Countries Net Cost Bear	er	Comments					
Additional Comments		General Comments					

			۷	Vhite Stream				
TRA-N-53			Project			Pipeline including	g CS 💦 N	Non-FID
Update Date				30/05/2018			Non	-Advanced
Description	will branch off an connection point Romania, across t	existing pip to Georgian he Black Sea	eline from Azerbaijan to Black Sea coast where a. An alternative destina	ed in Turkmenistan and the Caspia o Georgian-Turkish border (the SC a major compressor station will p tion to Varna, Bulgaria can be cor to bring competitively priced gas	CP) and rovide the transidered	will include an onshor he high pressure requ I. White Stream will be	re pipeline from th uired to transmit g e connected to exi	ne SCP las to Constanta isting Trans-
PRJ Code - PRJ Name	-							
Capacity Increments Variant	For Modelling							
Point			Operator		Year	From Gas System	To Gas System	Capacity
Constants (Milita Stream)			White Stream		2022	TM/SCP	RO	505.0 GWh/d
Constanta (White Stream)							Comment:	•
South Caucasus Pipeline / W	lhite Stream		White Stream		2022	ТМ	TM/SCP	505.0 GWh/d
	The Stream						Comment:	
Sponsors			Gen	eral Information		NDP and	PCI Information	
W-Stream Pipeline Company	' Ltd	80%	Promoter	White Stream Ltd	Part of NDP No ((5) othe		(5) others - please	comment below)
Georgian Oil and Gas Corpor	ration (GOGC)	10%	Operator	White Stream	NDP	Number		
M Bryza		10%	Host Country	.		Release Date		
W Dryza		1070	Status			Website		
			Website	Project's URL				No
					Priori	ty Corridor(s)		SGC

	YNDP 2018 FINAI					-	ge 345 of 575
Schedule	Start Date	End Date				arty Access Regime	
Pre-Feasibility		12/2011		Considered TPA	-		Regulate
Feasibility	09/2018	09/2019		Considered Tari	-	5	Negotiate
FEED	10/2019	09/2020		Applied for Exer			٨
Permitting	01/2020	12/2020		Exemption Gran	ted		Not Releva
Supply Contracts		12/2020					
FID		01/2021		Exemption in en	5		0.00
Construction	06/2021	12/2022		Exemption in ex	it directio	on	0.009
Commissioning	2022	2022					
			Enabled Projects				
Project Code Pro	oject Name						
· · ·	-						
TRA-N-339 Tra	ans-Caspian						
	C						
Pipelines and Com	pressor Stations			Diamatar	Longth	Compressor Dower	Comissioning
Pipeline Section			Pipeline Comment	Diameter (mm)	(km)	Compressor Power (MW)	Year
Supsa to Constanta	a		Offshore (for first stage / 16 bcma)	726	1,115	375	
Vale to Supsa			Onshore	1,039	135		
			Total		1,250	375	
			Fulfilled Criteria				
Specific Criteria Ful	filled C	Competition, Market I	Fulfilled Criteria ntegration, Security of Supply, Sustainability				
Specific Criteria Ful Specific Criteria Ful		Competition, Market I					
		Competition, Market I					
		Competition, Market I					
		Competition, Market I	ntegration, Security of Supply, Sustainability				
Specific Criteria Ful		Competition, Market I	ntegration, Security of Supply, Sustainability				
Specific Criteria Ful		Competition, Market I	ntegration, Security of Supply, Sustainability				

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	Benefits				
Main Driver	Market Demand				
Main Driver Explanation	diversification of delivery routes (two entry points into EU) resulting in the reduction of perceived risk is important for such sizable supply source as Turkmenistan. For Germany and Austria White Stream also ensures lower transportation costs in comparison with the route via Turkey being advantageous for SEE. WS provides for internal diversification of routes within the Southern Gas Corridor in expectation of increased import needs for mentioned areas in the EU.				
Benefit Description	increased competition because of the highly competitive gas from Turkmenistan, improved security of gas supply because of the new source and new route and market integration because of enabling more competition even in Georgia (trade with the EU-internal market on swap basis).				

	CBCA	Financial Assistance		
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF	
Decision	and we have not yet decided whether we will submit or	Grants for studies	No	
Culomissin Data	not	Grants for studies amount		
Submissin Date		Grants for works	No	
Decision Date		Grants for works amount		
Website		Intention to apply for CEF	No decision yet taken	
Countries Affected		Other Financial Assistance	Yes	
Countries Net Cost Bearer		Comments	TEN-E in 2008 and 2009	
Additional Comments		General Comments		

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Poseidon Pipeline

TRA-N-10	Project	Pipeline including CS	Non-FID
Update Date	05/12/2018		Advanced
Description	The Poseidon Pipeline project represents a valid "multi-source" option to consupply. The current configuration of the project includes 2 sections entirely within the Turkey to Thesprotia and ii) 210 offshore crossing the Ionian Sea up to the lt In its first phase, Poseidon pipeline would transport 10-12 Bcm/y of the avail southern Balkans. In its second development phase, the project capacity will Eastern Mediterranean region through EastMed pipeline, to which Poseidon	e EU territory: i) 770km onshore crossing Greece alian landfall in Otranto. able gas volumes at Turkish/Greek border, towa be increased up to 20 Bcm/y allowing the flow c	e from the border with rds Italy and the
PRJ Code - PRJ Name	-		

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

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Sponsors			Ge	eneral Information	NDP ar	nd PCI Information
igi poseidon s.a.		100%	Promoter	Natural Gas Submarine Interconnector Greece-Italy Poseidon S.A		es (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.c
			Host Country	Greece	NDP Release Date	30/11/201
			Status	Planned	NDP Website	<u>NDP UF</u>
			Website	Project's URL	Currently PCI	Yes
					Priority Corridor(s)	SG
Schedule	Start Date	End Date			Third-Pa	arty Access Regime
re-Feasibility					Considered TPA Regime	Not Applicabl
easibility					Considered Tariff Regime	e Not Applicabl
EED	08/2017	01/2019			Applied for Exemption	Not Ye
ermitting	08/2017	06/2019			Exemption Granted	Not Ye
upply Contracts						
D		06/2019			Exemption in entry direct	tion 0.009
onstruction	09/2019	09/2022			Exemption in exit direction	on 0.009
Commissioning	2022	2025				
				Enabled Projects		
Project Code Proj	ect Name					
TRA-N-330 East	Med 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
	Total		980	150	

	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.
	Time Schedule
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 obtair	ed 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 So 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 A	greement Signature Date
Italy-Greece Intergovernmental Agreement		Yes	01/11/2005
Italy-Greece-Turkey Intergovernmental Agreement		Yes	01/07/2007
Joint statement of the Italian Minister of Economic Development and the Turkish Minister of Energy and Natural Resources		Yes	01/11/2009
Memorandum of Understanding between Greece and Turkey		Yes	01/05/2010
Protocol of Cooperation between Italy and Azerbaijan		Yes	01/12/2007

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

			Komotin	i-Thesprotia pip	eline				
TRA-N-14 Update Date			Project	30/03/2018			Pipeline including		Ion-FID -Advanced
Description	High pre	essure pipeline from k	Komotini to Thesprotia		ast along with 2	, compi	ressor stations and 1		
	ingri pre					- compi			
PRJ Code - PRJ Name	-								
Capacity Increments Vari	iant For Mode	elling							
Point	12		Operator			Year	From Gas System	To Gas System	Capacity
Dessiden Greek Franz			DESFA S.A.			2024	IB-GRk	GR/IGI	275.4 GWh/d
Poseidon Greek Entry			DESFA S.A.			2024	GR/IGI	IB-GRk	80.0 GWh/d
Sponsors	- C		Gen	eral Information			NDP and	PCI Information	
DESFA S.A.	/	100%	Promoter		DESFA S.A.		V	es (Development F	Plan NNGS 2016-
			Operator		DESFA S.A.	Part c	of NDP		2025)
			Host Country		Greece	NDP	Number		2.2.1.6
			Status		Planned	NDP	Release Date		
			Website		<u>Project's URL</u>	NDP	Website		<u>NDP URL</u>
							ntly PCI		No
						Priori	ty Corridor(s)		SGC
Schedule Sta	art Date	End Date					Third-Par	ty Access Regime	
Pre-Feasibility						Consi	dered TPA Regime		Regulated
Feasibility						Consi	dered Tariff Regime		Regulated
FEED						Applie	ed for Exemption		No
Permitting						Exemp	otion Granted		Not Relevant
Supply Contracts									
FID							otion in entry directio		0.00%
Construction						Exemp	ption in exit direction		0.00%
Commissioning	2024	2024							

Diversities Constinue	essor Stations		D: I'				Diameter	Length	Compressor Power	Comissioning
Pipeline Section			Pipelii	ne Comment			(mm)	(km)	(MW)	Year
Komotini-Thesprotia		<u> </u>	total le	ength of new pi	pes		1,067	613	58	
			Total					613	58	
				Fulfille	ed Criteria					
Specific Criteria Fulfille	ed	Competition, Marke	et Integration, Se	curity of Supply,	, Sustainability					
Specific Criteria Fulfille	ed Comments									
				Time	Schedule					
Grant Obtention Date	e									
Delay Since Last TYNE	DP	1 year								
Delay Explanation	- 1 A	Lack of interest fron	n the market							
				Expected	Gas Sourcing					
Caspian Region, Russi	ia, Other Centra	al Asian, Middle East	ern and East-Me	editerranean sou	irces.					
					enefits					
				Be	enerits					
Main Driver	Market Den	nand		Ве	enents					
Main Driver Main Driver Explanatio		nand		Be	enents					
	on The project, Middle East European le	, together with Gree ern and Eastern Me	diterranean gas a pending on the	nector offshore sources and Eur source of gas to	project (sponso opean consume b be transmitted	rs. The project aim	s at enhanci	ng the div	re energy corridor be versification of supply us contributing to the	routes at a
Main Driver Explanation	on The project, Middle East European le	, together with Gree ern and Eastern Me evel and possibly, de	diterranean gas a pending on the	nector offshore sources and Eur source of gas to South Eastern Eu	project (sponso opean consume b be transmitted	rs. The project aim	s at enhanci	ng the div	versification of supply	routes at a
Main Driver Explanation	on The project, Middle East European le	, together with Gree ern and Eastern Me evel and possibly, de rity of Supply level i	diterranean gas a pending on the	nector offshore sources and Eur source of gas to South Eastern Eu	project (sponso opean consume b be transmitted rope.	rs. The project aim	s at enhanci	ng the div	versification of supply	routes at a
Main Driver Explanation	on The project, Middle East European le of the Secur Description	, together with Gree ern and Eastern Me evel and possibly, de rity of Supply level i	diterranean gas a pending on the	nector offshore sources and Eur source of gas to South Eastern Eu	project (sponso opean consume b be transmitted rope.	rs. The project aim	s at enhanci	ng the div	versification of supply	routes at a

		Intergovernmer	ntal Agreements			
Agreement		Agreement Description	nul Agreements		Is Signed Ag	reement Signature Dat
Intergovernmental Agreen Greece and Italy for the in the Interconnection Greeo	nplementation of	The Agreement was ratified by the Greek Par A' 39/27.02.2006).	iament in 2006 (Law 3441/Gove	rnment Gazette	Yes	04/11/2005
	СВ	CA		Financial As	sistance	
Decision	No, we hav	ve not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(1) Yes, we hav	e applied for CE	F and we have received a decisior
Submissin Date			Grants for studies			Yes
Decision Date			Grants for studies amount			Mln EUR (
Website			Grants for works			No
Countries Affected			Grants for works amount			
Countries Net Cost Beare	• /		Intention to apply for CEF			
Additional Comments			Other Financial Assistance			No
			Comments	European Energy	y Networks, (TEN	s was granted from Trans I) in 2005 (Decision 2004 I/05/TEN E – S07.51845).
			General Comments			

	Trans Adhate Apeline				
TRA-F-51	Project		Pipeline including	g CS	FID
Jpdate Date	31/05/2018			Ad	dvanced
Description	Trans Adriatic Pipeline (TAP) will transport natural gas from Kipoi in Greece near to Italy's southern Puglia region in the province of Lecce. TAP will interconnect with secure access to the Shah Deniz natural gas field in Azerbaijan, and ties into Italy' province of Lecce. TAP's initial capacity is 10 bcm/a and it can expand its capacity capacity will be offered to the market via market tests, from no later than start of	TANAP, whic 's gas transpo y up to 20 bcr	h is linked further to t ortation grid operated m/a, subject to bindin	the East with system I by Snam Rete Ga g market demand.	ms in Turkey, s in the
PRJ Code - PRJ Name	-				
Capacity Increments Varia Point	nt For Modelling Operator	Year	From Gas System	To Gas System	Capacity
	Trans-Adriatic Pipeline AG	2019	TR/TNP	GR/TAP	350.0 GWh
(ipi (TR) / Kipi (TAP)	Comment:	GCV used for	capacity calculations:	: 11.071 kWh/Sm3.	
(amatini TAD / ICP	Trans-Adriatic Pipeline AG	2019	GR/TAP	BG/IGB	142.0 GWh/
Comotini - TAP / IGB	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/
	Comment:	GCV used for	capacity calculations:	: 11.071 kWh/Sm3.	
	Trans-Adriatic Pipeline AG	2019	GR	GR/TAP	142.0 GWh/
	Comment: This entry point is subject to the d		capacity calculations: of required facilities by		
Nea Mesimvria	Trans-Adriatic Pipeline AG	2019	GR/TAP	GR	142.0 GWh/o
	Comment:	GCV used for	capacity calculations:	: 11.071 kWh/Sm3.	
	ncremental capacity available for allocation	n is subject to	a check of the system	's capabilities and	

dependent on the capacity bookings in place.

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						1 age 555 01 575
Sponsors				General Information	ND	PP and PCI Information
BP		2	20% Promoter	Trans Adriatic Pipeline AG	Part of NDP	No ((5) others - please comment below)
Snam		2	20% Operator	Trans-Adriatic Pipeline AG	NDP Number	
			Host Count	ry Greece	NDP Release Date	
SOCAR		2	20% Status	In Progress	NDP Website	
Fluxys		1	9% Website	Project's URL	Currently PCI	Yes ()
Enagas		1	6%		Priority Corridor(s)	SGC
Ахро			5%			
Schedule	Start Date	End Date			Thir	rd-Party Access Regime
Pre-Feasibility					Considered TPA Regi	ime Negotiated
easibility					Considered Tariff Reg	gime Negotiated
EED	01/2008	03/2013			Applied for Exemptic	on Yes
Permitting	09/2011	05/2018			Exemption Granted	Yes
Supply Contracts		04/2015				
ID		12/2013			Exemption in entry d	lirection 100.00%
Construction	05/2016	12/2019			Exemption in exit dire	ection 100.00%
Commissioning	2019	2019				

Pipelines and Compressor Sta	ations				
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	
Offshore section		900	105		
	Total		878	90	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply				
Specific Criteria Fulfilled Comr	ments Explanations enclosed.				

	Innex A		Page 356 of 575
	Time Schedule		
Grant Obtention Date 02/0	3/2017		
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 subsequently every two years. In this rega	Expansion capacity is subject to TPA and will be offered to the market via market tests, from no lat rd, please note enclosed Annexes.	er than star	t of operations and
	Benefits		
Main Driver Market Demand			
Main Driver Explanation			
Benefit Description the Caspian bas	te to the security and diversity of Europe's energy supply by connecting to existing gas networks a n into European markets. TAP will be providing the necessary infrastructure to transport gas from the		
	e to Southern Europe.		
	e to Southern Europe. Intergovernmental Agreements		
Agreement Host-government agreement between TA	e to Southern Europe. Intergovernmental Agreements Agreement Description The HGA is designed to fill legal, regulatory and fiscal caviats to mitigate commercial risks and		Agreement Signature Date 05/04/2013
Agreement Host-government agreement between TA and Albania Host-government agreement between TA	e to Southern Europe. Intergovernmental Agreements Agreement Description 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 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	Is Signed	Agreement Signature Date
Agreement Host-government agreement between TA and Albania Host-government agreement between TA and Greece Inter-governmental Agreements (only applicable for import pipeline projects	 P 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 P 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 	Is Signed Yes	Agreement Signature Date 05/04/2013

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	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 3
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	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'.

		Compressor Station H	Кірі			
FRA-N-128		Project		Pipeline including	J CS I	Non-FID
Jpdate Date		30/05/2018			Nor	n-Advanced
Description	in order to make possible t	ompressor Station on the GR side of the GR/ he transmission of natural gas to the Greek that will be implemented the configuration w	and European markets	with the use of down	stream transmiss	
PRJ Code - PRJ Nam	ne -					
Capacity Increments	s Variant For Modelling					
	Variant : 103.20 GWh/d	case where TAP will be, from th IGB will be supplied by TAP the ones of neighbouring operator	refore the C/S will sup			I
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
				C	Comment: 3 bcm/	y
(omotini (DESEA) B	ottleneck	DESFA S.A.	2020	IB-GRk	GR	54.4 GWh/d
Komotini (DESFA) Bottleneck				C	Comment: 3 bcm/	У
apacity 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, andVh/dIGB will be supplied by the DESFA network therefore the C/S will supply gas to the DESFAsystem and the ones of neighbouring operators through IGB.				
Point		Operator	Year	From Gas System	To Gas System	Capacity
		DESFA S.A.	2020	TRi	IB-GRk	157.8 GWh/d
Kipi (TR) / Kipi (GR)						

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Sponsors				General Information	ND	P and PCI Information
DESFA S.A.		100%	Promoter	DESF	A S.A. Part of NDP	Yes (Development Plan NNGS 2016
			Operator	DESF	FA S.A.	2025,
			Host Country		Greece NDP Number	2.2.1.3
			Status	Pla	anned NDP Release Date	
			Website	<u>Project</u>		<u>NDP URI</u>
					Currently PCI	Yes (
					Priority Corridor(s)	NSI
Schedule	Start Date	End Date			Third	d-Party Access Regime
e-Feasibility					Considered TPA Regin	me Regulated
easibility					Considered Tariff Reg	ime <i>Regulated</i>
ED					Applied for Exemption	n No
ermitting					Exemption Granted	Not Relevan
upply Contracts						
D					Exemption in entry di	rection 0.00%
onstruction					Exemption in exit dire	ection 0.00%
ommissioning	2020	2020				

)
Pipelines and Compre	essor 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
Кірі			0	0	9	
		Total		0	9	
Pipelines and Compre	essor Stations - Alternative Var	iant				
	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
Кірі			0	0	18	
			0	18		
		Fulfilled Criteria				
Specific Criteria Fulfille	ed Competition, Ma	arket Integration, Security of Supply				
Specific Criteria Fulfille		ease the import capacity from Turkey in order to supply both the Greek try of new suppliers in the market that may supply gas at higher pressu				
		Time Schedule				
Grant Obtention Date						
Delay Since Last TYND	0P 0					
Delay Explanation						
		Expected Gas Sourcing				
Caspian Region Russia	a ING () Other Central Asian M	Aiddle Eastern and East-Mediterranean sources				

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Market Demand

Main Driver Explanation

Benefit Description

Main Driver

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

Benefits

		Revythoussa (2nd	upgrade)				
LNG-F-147 Update Date		Project 28/03/201	18		LNG Termin		FID dvanced
Description		e upgrading of the send-out capacity 10 m3 to 225.000 m3 with the addition				lm3/d) - the upgrac	ling of the
PRJ Code - PRJ Name	-						
Capacity Increments Var	riant 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 Informat	ion		NDP an	d PCI Information	
DESFA	100%	Promoter	DESFA S.A.	Dort o	of NDP	Yes (Development H	Plan NNGS 2016-
1		Operator	DESFA S.A.	Parto	I NDP		2025)
		Host Country	Greece	NDP	Number		2.2.1.7
		Status	In Progress	NDP F	Release Date		
		Website	Project's URL	NDP \	Website		<u>NDP URL</u>
			2	Curre	ntly PCI		No
				Priorit	ty Corridor(s)		
Schedule S ^r	tart Date End Date				Third-Pa	arty Access Regime	
Pre-Feasibility				Consid	dered TPA Regime		Regulated
Feasibility				Consid	dered Tariff Regime		Regulated
FEED				Applie	ed for Exemption		No
Permitting				Exemp	otion Granted		Not Relevant
Supply Contracts							
FID				Exemp	otion in entry direct	ion	0.00%
Construction	08/2018			Exemp	otion in exit directio	n	0.00%
Commissioning	2018 2018						

Regasification Facility Reloading Ability Project Phase Expected Increment (bcm/y) Ship Size (m3) Send-out capacity (mcm/d) Storage capacity (m3) Comments Commissioning Load Year Revythoussa LNG Terminal No No Time Schedule Image: Storage capacity (m3) Comments Comments Vear Grant Obtention Date Delay Since Last TYNDP two quarters Image: Storage capacity (m3) Image: Storage capacity (m3)		
Regasification Facility Reloading Ability Project Phase Expected Increment Ship Size (bcm/y) capacity (m3) capacity (m3 Comments LNG) Commissioning Load Year Revythoussa LNG Terminal No Time Schedule Image: Schedule Ima		Technical Information (LNG)
Image: Constraint of 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	Regasification Facility	Ability Project Phase Expected Increment Ship Size capacity capacity (m3 Comments Commissioning Load Factor
Grant Obtention Date two quarters Delay Since Last TYNDP belays in the contract award procedure Delays due to the capital controls imposed in Greece in July 2015 Delays due to the need to shut the terminal in order to perform the tie-ins, in a low demand season. Delay Explanation Expected Gas Sourcing LNG (DZ,WO) Expected Gas Sourcing Main Driver Regulation SoS Main Driver Explanation 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	Revythoussa LNG Term	inal No
Grant Obtention Date two quarters Delay Since Last TYNDP two quarters 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 the terminal in order to perform the tie-ins, in a low demand season. LNG (DZ,WO) Expected Gas Sourcing Main Driver Regulation SoS Main Driver Explanation 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		
Delay Since Last TYNDP two quarters Delay Explanation Delays in the contract award procedure Delays due to the capital controls imposed in Greece in July 2015 Delays due to the need to shurt the terminal in order to perform the tie-ins, in a low demand season. LNG (DZ,WO) Expected Gas Sourcing Main Driver Regulation SoS Main Driver Explanation 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		Time Schedule
Delay Explanation 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 the terminal in order to perform the tie-ins, in a low demand season. LNG (DZ,WO) Expected Gas Sourcing Main Driver Regulation SoS Main Driver Explanation Regulation SoS Main Driver Explanation 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	Grant Obtention Date	
Delay Explanation the terminal in order to perform the tie-ins, in a low demand season. Expected Gas Sourcing LNG (DZ,WO) Benefits Main Driver Regulation SoS Main Driver Explanation 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	Delay Since Last TYND	two quarters
LNG (DZ,WO) Benefits Main Driver Main Driver Explanation Regulation SoS Main Driver Explanation 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	Delay Explanation	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.
Benefits Main Driver Amount Regulation SoS Main Driver Explanation 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		Expected Gas Sourcing
Main Driver Regulation SoS Main Driver Explanation	LNG (DZ,WO)	
Main Driver Regulation SoS Main Driver Explanation 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	_	Develite
Main Driver Explanation 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	Main Driver	
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		
Benefit Description 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		
	Benefit Description	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

	СВСА	Financial Assistance		
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF	
Decision	and we do not plan to submit it	Grants for studies	No	
Submissin Date		Grants for studies amount		
Decision Date		Grants for works	No	
Website		Grants for works amount		
Countries Affected		Intention to apply for CEF	No, we do not plan to apply	
Countries Net Cost Bearer		Other Financial Assistance	Yes	
Additional Comments		Comments	Total amount from ERDF funds 45.904 million Euro	
		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 to the European gas system. The project consists of 5 sections connecting the following areas: Levantine I The system will have a capacity of 320-350 GWh/d with the option to upgrad case relevant reserves will be discovered in the offshore of Crete.	pasin – Cyprus –Crete- Peloponnese –West Gree	ce-Thesprotia.
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Fast Mad / Grate (CD)	IGI Poseidon S.A.	2025	GRc	GR/EMD	190.0 GWh/d
East Med / Crete (GR)	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

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

Schedule	Start Date	End Date
Pre-Feasibility		08/2012
Feasibility	05/2015	03/2018
FEED	11/2018	12/2020
Permitting	06/2018	06/2021
Supply Contracts		
FID		06/2021
Construction	06/2021	12/2024

Enabled Projects

Project Code Project Name Poseidon Pipeline TRA-N-10

2025

2025

Commissioning

Pipelines and Compressor Stations	5					
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	
EastMed pipeline: section from Cyp	orus to Crete	This section of the project is related to the offshore pipeline between Cyprus and Crete.	660	732	100	
EastMed pipeline: section from Leva	antine Basin to Cyprus	This offshore pipeline section will tansport 350GWh/d to Cyprus where it will deliver 30 Gwh/d for the internal consumption and the remaing 320GW/d will be exported to Greece via Crete.	610	165		
EastMed pipeline: section from We	st Greece to Thesprotia	This offshore pipeline section is designed to transport 320 GWh/d of natural gas form the Levantine Basine and can be upgraded for further 190 GWh/d of natural gas from the offshore of Crete in case relevant reserves will be discovered.	1,070	236		
EastMed: section from Peloponnese to West Greece		This offshore pipeline section is designed to transport 320 GWh/d of natural gas form the Levantine Basine and can be upgraded for further 190 GWh/d of natural gas from the offshore of Crete in case relevant reserves will be discovered.	1,070	317		
	Tot	tal		1,871	220	
		Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integ	gration, Security of Supply, Sustainability				
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 competiation gas the whole gas chain, including among producers. The new gas will compete, to the advantage of the consumer, with all existing supprovide competitive gas supply, contributing to displace power production from Coal and Oil, reducing CO2 emissions per energy unit generated.						

Current TY	(NDP :	TYNDP	2018	FINAL	- Annex A
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	Time Schedule
Grant Obtention Date	25/01/2018
Delay Since Last TYND)P
Delay Explanation	Thanks to the positive outcomes of the Pre-FEED activities, co-financed by European Commission trough 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	l be defined at a later stage of the development activities
	Benefits
Main Driver	Others
Main Driver Explanatic	The primary objective of the Eastern Mediterranean Pipeline is to provide a permanent connection of the recently discovered gas reserves in the Levantin Basin with the European gas markets. The specific objectives to be achieved with implementation of the project are to: • exploit the proximity of the Levantine Basin gas fields to mainland Europe, to diversify the sources, routes and counterparts of the European gas supply with 10-16 bcm/year of deliveries from new sources, which are wholly or partly produced within the EU; • integrate Cyprus with the European gas system, further promoting gas trading in the South Eastern Europe region; • promote the development of a gas trading hubs in Greece and in Italy, in connection with other Southern Corridor initiatives, facilitating gas exchanges in South Eastern Europe; • gasify regions of Greece that currently have no access to gas, such as Crete, Peloponnese and Western Greece.
Benefit Description	The dependence of the European Union on external gas supplies is continuously increasing, with indigenous production declining, leading to the need to diversify sources so as to strengthen security of the markets' supply, particularly in SEE. On the other hand, unlocking the recent discoveries in the Levantine Basin, including - referring to the sole Cyprus - the largest recent discovery of gas reserves in Europe, is particularly relevant for the development of the exploration and hydrocarbons in the whole East Mediterranean. Considering all the above, EastMed addresses the following main needs: • Increases security and diversification of gas supplies to Europe, as well as competition in line with the EU objectives to complete the internal energy market; • Contributes to the development of EU domestic gas resources, thus limiting the dependence on third countries • Secures access to gas sources strategically located for EU
	Barriers
Barrier Type	Description
Political	A supportive political, fiscal and regulatory framework is necessary to secure the timely development of the EastMedProject.
Onticul	

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Intergovernmental Agreements						
Agreement	Agreement Description	Is Signed	Agreement Signature Date			
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 Mediterran"	Yes	28/01/2016			
Italiy-Greece-Cyprus-Israel Working Group		Yes	01/12/2016			
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			

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
	not	Grants for studies	Yes
Submissin Date		Grants for studies amount	Mln EUR 4
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		Comments	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.
		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	
	Hellenic Republic Asset Management Fund	2023	STcGR	IB-GRk	44.0 GWh/d	
LICE Couth Kouch (CD)			Comment: from storage to grid			
UGS South Kavala (GR)	Hellenic Republic Asset Management Fund	2023	IB-GRk	STcGR	55.0 GWh/d	
			Comment: f	rom grid to storage		

Sponsors			General Information	N	DP and PCI Information
Hellenic Republic Asset Develpment 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		
		operator	Management Fund	NDP Release Date	
		Host Country	Greece	NDP Website	
		Status		Currently PCI	Yes ()
		Website		Priority Corridor(s)	NSIE

Supply Contracts Exemption in entry direction End Exemption in entry direction Construction Exemption in exit direction Commissioning 2023 2023 2023 Storage Facility Type Multiple-cycle Project Phase Yes Yes Storage Facility Type Storage Facility Type Multiple-cycle Facility Yes Storage Facility Type Storage Facility Type Multiple-cycle Facility Yes Storage Facility Type Storage Facility Type Multiple-cycle Facility Yes Storage Facility Type Storage Facility Type Multiple-cycle Facility Yes Storage Facility Type Storage Facility Type Multiple-cycle Facility Yes Comments (%) Comments (%) Comments (%) Comments (%) Comments (%) Storage Facility Type Storage Facility Storage Facility Type Storage	ge 371 of 575	Pa		FINAL - Annex A	TYNDP 2018 FIN	Irrent TYNDP : TY
Teasibility Considered Tariff Regime Applied for Exemption Applied for Exemption Supply Contracts Exemption Granted PD Exemption in entry direction Construction Exemption in entry direction Commissioning 2023 2023 2023 Storage Facility Type Multiple-cycle Project Phase Volume Capacity Capacity Comments Storage Facility Yes Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Storage Facility of Supply, Sustainability Specific Criteria Fulfilled Comments Storage Facility of Supply, Sustainability Storage Facility Supply Sustainability Storage Facility Supply		Third-Party Access Regime		ate End Date	Start Date	Schedule
TEED Applied for Exemption Permitting Exemption Granted Supply Contracts Exemption in entry direction Construction Exemption in exit direction Commissioning 2023 2023 2023 Storage Facility Type Multiple-cycle Project Phase Yolume Capacity Capacity Capacity (mcm/d) (mcm/d) (mcm/d) (mcm/d) Storage Facility Type Multiple-cycle Facility Yes Storage Facility Type Storage Facility Facility Facility Storage Facility Facility Facility Facility Facility Facility <	Regulated	Considered TPA Regime				Pre-Feasibility
Permitting Supply Contracts Supply Contracts	Regulated	Considered Tariff Regime				easibility
Supply Contracts TD Exemption in entry direction Construction Commissioning 2023 2023 Storage Facility Type Multiple-cycle Facility Project Phase Morking Withdrawal Injection Storage Facility Type Project Phase Morking Withdrawal Injection Storage Facility Type Project Phase Morking Withdrawal (mcm/d) Capacity (mcm/d) Cap	No	Applied for Exemption				EED
Construction 2023 2023 Storage Facility Type Multiple-cycle Project Phase Yolume Capacity Capacity Comments Storage Facility Yes Fulfilled Criteria Storage Facility Specific Criteria Fulfilled Comments Specific Criteria Fulfilled Comments Grant Obtention Date Eutor Storage Facility	Not Relevan	Exemption Granted				Permitting
Construction 2023 2023						Supply Contracts
Commissioning 2023 2023	0.00%	Exemption in entry direction				ID
Technical Information (UGS) Storage Facility Storage Facility Type Multiple-cycle Facility Project Phase Working Volume (mcm) Withdrawal Capacity (mcm/d) Load Factor Capacity (mcm/d) Cond Factor (%) Comments	0.00%	Exemption in exit direction				Construction
Storage Facility Storage Facility Type Multiple-cycle Facility Project Phase Working Volume Capacity Capacity (mcm/d) Load Factor (%) Comments (%) <td< td=""><td></td><td></td><td></td><td>23 2023</td><td>2023</td><td>Commissioning</td></td<>				23 2023	2023	Commissioning
Storage Facility Storage Facility Type Multiple-cycle Facility Project Phase Working Volume (mcm) Withdrawal Capacity (mcm/d) Load Factor Capacity (mcm/d) Load Factor (%) Comments </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Storage Facility Storage Facility Type Multiple-Cycle Project Phase Volume Capacity Capacity Capacity (%) Comments (mcm) (mcm/d) (mcm/d) (%) (%) Comments (mcm) (mcm/d) (mcm/d) (mcm/d) (%) (%) Comments (mcm) (mcm/d)		tion (UGS)	Technical Informatio			
Fulfilled Criteria Specific Criteria Fulfilled Comments Specific Criteria Fulfilled C	Commisioning Year	Volume Capacity Capacity Comments		Storage Facility Type		Storage Facility
Specific Criteria Fulfilled Comments Competition, Security of Supply, Sustainability Specific Criteria Fulfilled Comments Time Schedule Grant Obtention Date			es	Depleted Field		South Kavala
Specific Criteria Fulfilled Competition, Security of Supply, Sustainability Specific Criteria Fulfilled Comments Time Schedule Grant Obtention Date Security of Supply, Sustainability						
Specific Criteria Fulfilled Comments Time Schedule Grant Obtention Date		teria	Fulfilled Criter			
Time Schedule			y, Sustainability	Competition, Security	ulfilled	Specific Criteria Fulfi
Grant Obtention Date				ients	ulfilled Comment	Specific Criteria Fulfi
Grant Obtention Date			Time Calendar		_	
		ule			Data	Grant Obtantion Da
Jeray Since Last HNDP 2 years				2 voars		
Decision on the procedure to select the project promoter and time needed to prepare the relevant tender procedure.		and time peeded to prepare the relevant tender procedure	elect the project promotor an			
				Decision on the proces	1	
Expected Gas Sourcing						
Caspian Region, Russia, LNG (?), The project may source gas from all gas sources supplying or transitting Greece		transitting Greece	Il gas sources supplying or tra), The project may source ga	Russia, LNG (?), Th	Caspian Region, Rus
Comments about the Third-Party Access Regime			omments about the Third-Pai			

Market Demand

Main Driver

Main Driver Explanatio	on		
Benefit Description	The project will enhance the national and regional (GR, BG, RO) s LNG market. Given the proximity of the project location to the TA		
	Bar	riers	
Barrier Type	Description		
Market	Lack of market maturity		
	CBCA	Finan	cial Assistance
Decision Submissin Date Decision Date Website Countries Affected	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	(3) No, we have not applied for CEF No No No decision yet taken
Countries Affected Countries Net Cost Be Additional Comments		Other Financial Assistance Comments General Comments	No

Benefits

Metering and Regulating station at Nea Messimvria

TRA-F-941			Project				Pipeline including	g CS	FID
Update Date		1	and the second sec	30/05/2018				A	dvanced
Description		oject consists of the hission system with	e implementation of one M TAP.	etering & Regulating s	tation at Ne	a Mess	imvria for the interco	onnection of the G	reek
PRJ Code - PRJ Nan	ne -								
Capacity Increments	s Variant For Mo	delling							
Point			Operator			Year	From Gas System	To Gas System	Capacity
Nea Mesimvria			DESFA S.A.			2019	GR/TAP	GR	114.0 GWh/d
Sponsors			Gen	eral Information			NDP and	PCI Information	
			Promoter Operator		DESFA S.A. DESFA S.A.	Part o	f NDP	es (Development F	Plan NNGS 2016- 2025)
			Host Country		Greece	NDP	Number		2.2.1.5
			Status		Planned	NDP I	Release Date		27/01/2017
			Website	P	roject's URL	NDP \	Website		NDP URL
						Curre	ntly PCI		Yes ()
						Priorit	ty Corridor(s)		SGC
Schedule	Start Date	End Date					Third-Par	ty Access Regime	
Pre-Feasibility						Consid	dered TPA Regime		Regulatea
Feasibility						Consid	dered Tariff Regime		Regulatea
FEED	05/2016	03/2018				Applie	ed for Exemption		Not Relevant
Permitting						Exemp	otion Granted		Not Relevant
Supply Contracts									
FID						Exemp	otion in entry directio	on	0.00%
Construction						Exemp	otion in exit direction		0.00%
Commissioning	2019	2019							

Pipelines and Compress	or Stations				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Nea-Messivria to TAP			1		
	Total		S. 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 t	ransmissio	n system.		
Caspian Region, LNG ()	Expected Gas Sourcing				
Caspian Region, ENG ()					
	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 sour	ce and rout	te.		

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	СВСА		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	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	Yes
		Comments	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.
		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 a	llowing the supply of FYRoM by the Greek Ga	s Transmission System
PRJ Code - PRJ Name	-		

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

Sponsors			C	General Information	NDP and PCI	Information
DESFA S.A.		100%	Promoter	DESFA S.A.	Part of NDP	Yes (Draft NDP 2017-2026)
	- V		Operator	DESFA S.A.	NDP Number	2.1.2.2
			Host Country	Greece	NDP Release Date	
			Status	Planned	NDP Website	NDP URL
			Website	Project's URL	Currently PCI	No
					Priority Corridor(s)	NSIE
Schedule	Start Date	End Date			Third-Party A	ccess Regime
Pre-Feasibility					Considered TPA Regime	Regulated
Feasibility					Considered Tariff Regime	Regulated
FEED					Applied for Exemption	No
Permitting					Exemption Granted	No
Supply Contracts						
FID					Exemption in entry direction	0.00%
Construction					Exemption in exit direction	0.00%
Commissioning	2021	2021				

Pipelines and Compressor Stations	
Pipeline SectionDiameterLengthCompressor Port(mm)(km)(MW)	er Comissioning Year
Nea-Messimvria to Pontoiraklia/Stojakovo 700 50	
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)	
Benefits	
Main Driver Market Demand	
Main Driver Explanation	
Benefit Description	
Barriers	
Barrier Type Description	
Market Lack of market maturity	

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

Compressor station at Nea Messimvria TRA-N-971 Project **Pipeline including CS** Non-FID Non-Advanced Update Date 30/05/2018 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 Description 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** Operator From Gas System To Gas System Point Capacity Year Nea Mesimvria DESFA S.A. 2022 GR **GR/TAP** 142.0 GWh/d **General Information** NDP and PCI Information Sponsors No ((5) others - please comment below) Promoter DESFA S.A. Part of NDP Operator DESFA S.A. NDP Number Host Country Greece NDP Release Date *Planned* NDP Website Status Website Project's URL Currently PCI Yes () Priority Corridor(s) SGC Schedule Start Date **End Date Third-Party Access Regime** Pre-Feasibility Considered TPA Regime Regulated Regulated Feasibility Considered Tariff Regime FEED Applied for Exemption Not Relevant Permitting **Exemption Granted** Not Relevant Supply Contracts Exemption in entry direction FID 0.00% Exemption in exit direction 0.00% Construction Commissioning 2022 2022

Nea Messimvria to TAP	ection Pipeline Comment				Compressor Power (MW)	Comissioning Year
	Nea Messimvria to TAP			(km)	27	
	Total				27	
	Fulfilled	Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply					
Specific Criteria Fulfilled Con	nments The possibility to inject gas from the various sources and commercial options to the customers connected		n network to	TAP, prov	vides increased securi	ity of supply
	Expected G	as Sourcing				
Caspian Region, LNG ()						
	Ben	efits				
Main Driver Ma	rket Demand					
Main Driver Explanation						
Benefit Description	e project will enable TAP to acquire increased flexibility since g npensated by quantities delivered by DESFA to TAP.	as quantities that might be deliv	ered by TAP	to interm	nediate destinations w	vill be
Benefit Description		as quantities that might be deliv	-	to interm al Assista		vill be
Benefit Description Cor	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	as quantities that might be deliv Applied for CEF	-			
Benefit Description The cor	npensated by quantities delivered by DESFA to TAP.		-		nce	
Benefit Description The cor	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	Applied for CEF	-		nce	applied for CE
Benefit Description The cor Decision Submissin Date	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	Applied for CEF Grants for studies	-		nce	applied for CE
Benefit Description The cor Decision Submissin Date Decision Date	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	Applied for CEF Grants for studies Grants for studies amount	-		nce	applied for CE N
Benefit Description The con Decision Submissin Date Decision Date Website	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	Applied for CEF Grants for studies Grants for studies amount Grants for works	-		nce (3) No, we have not	applied for CE N
Benefit Description	npensated by quantities delivered by DESFA to TAP. CBCA No, we have not submitted an investment request yet,	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	-		nce (3) No, we have not	applied for CE N

Metering and Regulating Station at Alexandroupoli

TRA-N-1090			Project		F	Pipeline including	JCS N	Ion-FID
Update Date		1	29/1	0/2018			Non	-Advanced
Description			plementation of one Metering tem with the LNG terminal in N		Alexand	roupoli (Amphitriti) fo	or the potential in	terconnection
PRJ Code - PRJ Name	-							
Capacity Increments Vari	ant For Mod	lelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Alexandroupolis Amphitr	iti		DESFA S.A.		2020	GRa	IB-GRk	268.0 GWh/d
Sponsors			General Info	ormation		NDP and	PCI Information	
DESFA S.A.	0.	100%	Promoter	DESFA S.A.	Part o	f NDP No ((5) others - please	comment below
			Operator	DESFA S.A.	NDP N	lumber		
			Host Country	Greece	NDP F	Release Date		
			Status	Planned	NDP V	Vebsite		
			Website	<u>Project's URL</u>	Currer	ntly PCI		Yes (
					Priorit	y Corridor(s)		NSI
Schedule Sta	rt Date	End Date				Third-Part	ty Access Regime	
Pre-Feasibility					Consic	lered TPA Regime		Regulated
easibility					Consic	lered Tariff Regime		Regulated
EED					Applie	d for Exemption		Not Relevan
Permitting					Exemp	tion Granted		Not Relevan
Supply Contracts								
ID					Exemp	tion in entry directio	n	0.00%
Construction					Exemp	tion in exit direction		0.00%
Commissioning	2020	2020						

	Fulfillec	l Criteria	
Specific Criteria Fulfillec	Competition, Market Integration, Security of Supply		
Specific Criteria Fulfillec	Comments		
	Expected G	as Sourcing	
LNG ()			
	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanation			
Benefit Description			
	Bar	riers	
Barrier Type	Description		
Market	Lack of market maturity		
	CBCA	Finar	ncial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bear	rer	Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

			Metering and Regulatin	g station at Megalopo	li			
TRA-N-1091			Project		F	Pipeline including	g CS 🛛 🛚	Non-FID
Update Date		1	29/1	10/2018			Nor	-Advanced
Description			mplementation of one Metering k gas transmission system with t		galopo	li, in the Peloponnes	e, for the potentia	I
PRJ Code - PRJ Nar	ne -							
Capacity Increment	s Variant For M	odelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
East Med / Pelopon	inesus (GR)		DESFA S.A.		2025	GR/EMD	GR	90.0 GWh/d
Sponsors			General Info	ormation		NDP and	PCI Information	
DESFA S.A.		100%	Promoter	DESFA S.A.	Part of	f NDP No ((5) others - please	comment below)
	14		Operator	DESFA S.A.	NDP N	lumber		
			Host Country	Greece	NDP R	Release Date		
			Status	Planned	NDP V	Vebsite		
			Website	<u>Project's URL</u>	Currer	ntly PCI		Yes ()
					Priorit	y Corridor(s)		SGC
Schedule	Start Date	End Date				Third-Par	ty Access Regime	
Pre-Feasibility					Consid	lered TPA Regime		Regulated
Feasibility					Consid	lered Tariff Regime		Regulated
FEED					Applie	d for Exemption		Not Relevant
Permitting					Exemp	tion Granted		Not Relevant
Supply Contracts								
FID					Exemp	tion in entry directio	in	0.00%
Construction					Exemp	tion in exit direction		0.00%
Commissioning	2025	2025						

	Fulfillec	l Criteria	
Specific Criteria Fulfilled	d Competition, Market Integration, Security of Supply		
Specific Criteria Fulfilled	d Comments The project will allow one additional source of gas (Le	evantine basin) to supply the Greek transmi	ssion system
	Time S	chedule	
Grant Obtention Date			
Delay Since Last TYND			
Delay Explanation	Lack of market demand		
	Expected G	as Sourcing	
Cyprus			
	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanation	n		
Benefit Description	The project will add one more source of supply to the Greek mar	ket thus increasing SoS and Market integra	tion.
	Bar	riers	
Barrier Type	Description		
Market	Lack of market support		
	CBCA	Finan	cial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or not	Grants for studies	No
Submissin Date	not	Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taker
Countries Net Cost Bea	rer	Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

Metering and Regulating Station at UGS South Kavala

TRA-N-1092		Project			Pipeline incluc	ding CS	Non-FID
Update Date			29/10/2018				Non-Advanced
Description	The project consists of the im transmission system with the		etering and Regulating Station at l	Kavala f	or the potential i	nterconnection c	of the Greek
PRJ Code - PRJ Name							
Capacity Increments Variar	nt For Modelling						
Point		Operator		Year	From Gas Syste	em To Gas Sys	tem Capacity
		DESFA S.A.		2023	STcGR	IB-GRk nt: from storage t	-
UGS South Kavala (GR)		DESFA S.A.		2023	IB-GRk	STcGR	0
					Commer	nt: From grid to st	torage
Sponsors		Gene	eral Information		NDP	and PCI Informa	ation
DESFA S.A.	100%	Promoter	DESFA S.A.	Part o	of NDP	No ((5) others - p	lease comment below)
		Operator	DESFA S.A.	NDP I	Number		
		Host Country	Greece	NDP I	Release Date		
		Status	Planned	NDP	Website		
		Website	<u>Project's URL</u>	Curre	ntly PCI		Yes ()
				Priori	ty Corridor(s)		NSIE

Сι

Irrent TYNDP : TYN	DP 2018 FINAL - Annex A		Page 386 of 575
Schedule	Start Date End Date	Third-Party Access Reg	gime
Pre-Feasibility		Considered TPA Regime	Regulated
easibility		Considered Tariff Regime	Regulated
EED		Applied for Exemption	No
Permitting		Exemption Granted	No
Supply Contracts			
ID		Exemption in entry direction	0.00%
Construction		Exemption in exit direction	0.00%
Commissioning	2023 2023		
		lled Criteria	
Specific Criteria Fulfill	ed Market Integration, Security of Supply, Sustainabil	ity	
Specific Criteria Fulfill Specific Criteria Fulfill	ed Market Integration, Security of Supply, Sustainabil		d by others (Hellenic
·	ed Market Integration, Security of Supply, Sustainabil ed Comments The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF)	ity	d by others (Hellenic
·	ed Market Integration, Security of Supply, Sustainabil ed Comments The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF)	ity ssion system to allow its connection to the UGS of South Kavala promoted	d by others (Hellenic
Specific Criteria Fulfill	ed Market Integration, Security of Supply, Sustainabil ed Comments The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time	ity ssion system to allow its connection to the UGS of South Kavala promoted	d by others (Hellenic
Specific Criteria Fulfill Grant Obtention Date	ed Market Integration, Security of Supply, Sustainabil ed Comments The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP	ity ssion system to allow its connection to the UGS of South Kavala promoted	
Specific Criteria Fulfill Grant Obtention Date Delay Since Last TYNI	ed Market Integration, Security of Supply, Sustainabil The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP The project schedule depends on the implementar is indicative.	ity ssion system to allow its connection to the UGS of South Kavala promoted e Schedule	
Specific Criteria Fulfill Grant Obtention Date Delay Since Last TYNI Delay Explanation	ed Market Integration, Security of Supply, Sustainabil The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP The project schedule depends on the implementar is indicative.	ity ssion system to allow its connection to the UGS of South Kavala promoted re Schedule tion of the UGS of South Kavala, promoted by others (HRADF). Therefore	
Specific Criteria Fulfill Grant Obtention Date Delay Since Last TYNI Delay Explanation	ed Market Integration, Security of Supply, Sustainabil The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP The project schedule depends on the implementar is indicative. Expecter	ity ssion system to allow its connection to the UGS of South Kavala promoted re Schedule tion of the UGS of South Kavala, promoted by others (HRADF). Therefore	
Specific Criteria Fulfill Grant Obtention Date Delay Since Last TYNI Delay Explanation All sources of gas con	ed Market Integration, Security of Supply, Sustainabil The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP The project schedule depends on the implementar is indicative. Expecter	ity ssion system to allow its connection to the UGS of South Kavala promoted e Schedule tion of the UGS of South Kavala, promoted by others (HRADF). Therefore d Gas Sourcing	
Specific Criteria Fulfill Grant Obtention Date Delay Since Last TYNE Delay Explanation All sources of gas con Main Driver	ed Market Integration, Security of Supply, Sustainabil The project is a needed part of the Greek transmis Republic Assets Development Fund - HRADF) Time DP The project schedule depends on the implementar is indicative. Expecte	ity ssion system to allow its connection to the UGS of South Kavala promoted e Schedule tion of the UGS of South Kavala, promoted by others (HRADF). Therefore d Gas Sourcing	

	Bar	riers	
Barrier Type	Description		
Others	The implementation of the project depends on the implementation	on of the UGS South Kavala.	
	CBCA	Final	ncial Assistance
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(3) No, we have not applied for C
Submissin Date		Grants for studies Grants for studies amount	
Decision Date		Grants for works	
Website		Grants for works amount	,
Countries Affected		Intention to apply for CEF	No decision yet tak
Countries Net Cost Bea	arer	Other Financial Assistance	
Additional Comments		Comments	
		General Comments	

Compressor Station Kipi Increment TRA-N-1129 Project **Pipeline including CS Non-FID** Non-Advanced 31/10/2018 Update Date This project represents the necessary increment for the Kipi compressor station (TRA-N-128) to reach the capacity needed to ensure the supply with Description gas of the Komotini-Thesprotia pipeline (TRA-N-014). **PRJ Code - PRJ Name Capacity Increments Variant For Modelling** Operator From Gas System To Gas System Capacity Year Point Kipi (TR) / Kipi (GR) DESFA S.A. 2024 TRi IB-GRk 275.2 GWh/d **General Information NDP and PCI Information** Sponsors Yes (Development Plan NNGS 2016-DESFA S.A. 100% Promoter DESFA S.A. Part of NDP 2025) Operator DESFA S.A. 2.2.1.3 NDP Number Host Country Greece NDP Release Date Planned Status NDP Website NDP URL Project's URL Website **Currently PCI** No SGC Priority Corridor(s) Schedule End Date Third-Party Access Regime Start Date Pre-Feasibility Considered TPA Regime Regulated Feasibility **Considered Tariff Regime** Regulated FEED Applied for Exemption No Permitting **Exemption Granted** Not Relevant **Supply Contracts** Exemption in entry direction FID 0.00% Construction Exemption in exit direction 0.00% Commissioning 2024 2024

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

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
1				20	
	Total			20	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comr	nents				

Caspian Region, Russia, LNG ()

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

Compressor station at Nea Messimvria (3rd unit)

			Compressor station	at Nea Messimvria (3rd u	nit)			
TRA-N-1276			Project			Pipeline including	g CS I	Non-FID
Update Date		1	and the second sec	31/10/2018			Nor	n-Advanced
Description		5	addition of a third turbocor rthern (Sidirokastro) and Eas	npressor unit at the existing Co tern (Kipi) import points	mressor	station of Nea Messir	mvria in order to i	ncrease the
PRJ Code - PRJ Name	e -							
Capacity Increments	Variant For Moc	lelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Kulata (BG) / Sidiroka	astron (GR)		DESFA S.A.		2021	BGg/BGT	GR	11.4 GWh/d
Sponsors			Gener	al Information		NDP and	PCI Information	
Schedule	Start Date	End Date	Promoter Operator Host Country Status Website	DESFA S.A DESFA S.A Greec Planne <u>Project's UR</u>	A. e NDP d NDP <u>L</u> NDP Curre	Number Release Date Website ently PCI ty Corridor(s)	Yes (Draft Develop	2026, 2.1.2.9 <u>NDP URI</u> No
Pre-Feasibility Feasibility FEED Permitting Supply Contracts FID Construction					Consi Applie Exem Exem	dered TPA Regime dered Tariff Regime ed for Exemption ption Granted ption in entry directio ption in exit direction		Regulated Regulated No 0.009 0.009
Commissioning	2021	2021						0.007

Specific Criteria Fulfilled Comments Benefits Main Driver Market Demand Main Driver Explanation	ific Criteria Fulfilled			
Benefits Main Driver Market Demand Main Driver Explanation		iments		
Main Driver Market Demand Main Driver Explanation				
Main Driver Market Demand Main Driver Explanation Benefit Description CBCA No, we have not submitted an investment request yet, and we do not plan to submit it Submissin Date Decision Date Statement Decision Date Submissin Date Decision Date		Ban	afits	
Aain Driver Explanation enefit Description CBCA CBCA No, we have not submitted an investment request yet, and we do not plan to submit it ubmissin Date Decision Date CBCA Secision Date CBCA <	Driver Mar			
enefit Description CBCA Financial Assistance Decision No, we have not submitted an investment request yet, and we do not plan to submit it ubmissin Date Applied for CEF (3) No, we have not applied for studies Decision Date Grants for studies amount Grants for works				
CBCA Financial Assistance Decision No, we have not submitted an investment request yet, and we do not plan to submit it Applied for CEF (3) No, we have not applied Grants for studies Grants for studies amount Grants for works				
Decision No, we have not submitted an investment request yet, and we do not plan to submit it Submissin Date Decision Date Makeita				
and we do not plan to submit it Grants for studies Grants for studies amount Grants for works		СВСА	Finan	cial Assistance
and we do not plan to submit it Grants for studies ubmissin Date Grants for studies amount Decision Date Grants for works	tion	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for Cl
Vecision Date Grants for works	ion	and we do not plan to submit it	Grants for studies	٨
Grants for works	nissin Date		Grants for studies amount	
/ebsite Grants for works amount	sion Date		Grants for works	٨
	site		Grants for works amount	
ountries Affected Intention to apply for CEF No decision	tries Affected		Intention to apply for CEF	No decision yet take
ountries Net Cost Bearer Other Financial Assistance	tries Net Cost Bearer		Other Financial Assistance	٨
dditional Comments Comments	tional Comments		Comments	
General Comments			General Comments	

TRA-N-1278 Update Date Description The project comparison PRJ Code - PRJ Name - Capacity Increments Variant For Modelling Point	onsists in the ins		31/10/2018 ressor station at Ambelia	(in Centra		Pipeline including		lon-FID -Advanced
Description The project comparison PRJ Code - PRJ Name - Capacity Increments Variant For Modelling	onsists in the ins			(in Centra	al Gree	ce).	Non	-Advanced
PRJ Code - PRJ Name -	onsists in the ins		ressor station at Ambelia	(in Centra	al Gree	ce).		
Capacity Increments Variant For Modelling								
Point								
		Operator		Y	Year	From Gas System	To Gas System	Capacity
Kulata (BG) / Sidirokastron (GR)		DESFA S.A.		2	2022	GR	BGg/BGT	60.0 GWh/d
		DESFA S.A.		2	2022	BGg/BGT	GR	54.7 GWh/d
Sponsors		Gene	eral Information			NDP and	PCI Information	
DESFA S.A.	100%	Promoter	DI	ESFA S.A.	Part o	f NDP	Yes (Draft Develop)	
		Operator	DI	ESFA S.A.				2026)
		Host Country		Greece		lumber		2.1.2.3
		Status		runneu		Release Date		
		Website	<u>Proj</u>	ect's URL		Vebsite		<u>NDP URL</u>
					Currer	ntly PCI		No
					Priorit	y Corridor(s)		
Schedule Start Date Enc	d Date					Third-Part	ty Access Regime	
Pre-Feasibility					Consic	lered TPA Regime		Regulated
Feasibility					Consid	lered Tariff Regime		Regulated
FEED					Applie	d for Exemption		No
Permitting					Exemp	tion Granted		No
Supply Contracts								
FID					Exemp	tion in entry directio	n	0.00%
Construction					Exemp	tion in exit direction		0.00%
Commissioning 2022	2022							

	Fulfilled		
Specific Criteria Fulfilled Specific Criteria Fulfilled C		l Criteria	
	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanation			
Benefit Description			
	CBCA	Finar	ncial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer	r	Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

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

TRA-N-70		Project			Pipeline including	JCS N	Ion-FID
Jpdate Date		09/03,	/2018			A	dvanced
Description Bačko Novo diversificatio	Selo (Serbia). I	a, connecting the Croatian gas tran t will be new interconnection, new o ute for Serbia. It will enable Serbia a system.	entry point and transmiss	ion rou	ite for the needs of Se	erbia; it will be SoS	and
PRJ Code - PRJ Name -							
Capacity Increments Variant For Modellin	g						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Slobodnica - Sotin (HR) / Bačko Novo Selo (RS)		Plinacro Ltd		2023	HR	RS	227.5 GWh/d
		Plinacro Ltd		2023	RS	HR	227.5 GWh/d
Sponsors		General Infor	mation		NDP and	PCI Information	
Croatian section		Promoter	Plinacro Ltd	Part c	of NDP		Yes (2018-2027
Plinacro	100%	6 Operator	Plinacro Ltd	NDP	Number		1.30, 1.3
Serbian section		Host Country	Croatia	NDP	Release Date		15/12/201
Srbijagas	100%	Status	Planned	NDP	Website		<u>NDP UR</u>
		Website	<u>Project's URL</u>	Curre	ntly PCI		N
				Priori	ty Corridor(s)		

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		_			
Schedule Start Date End Date		Third-Party Access Regin	Third-Party Access Regime		
Pre-Feasibility			Considered TPA Regime	Reg	
easibility			Considered Tariff Regime	Reg	
EED			Applied for Exemption		
Permitting	01/2010	10/2023	Exemption Granted		
Supply Contracts					
FID		10/2021	Exemption in entry direction		
Construction	01/2022	10/2023	Exemption in exit direction		
Commissioning	2023	2023			
5					

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

Expected Gas Sourcing

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

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

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	CBCA	Financ	ial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Culturia Data	not	Grants for studies amount	
Submissin Date		Grants for works	No
Decision Date		Grants for works amount	
Website		Intention to apply for CEF	
Countries Affected		Other Financial Assistance	No
Countries Net Cost Beare	r	Comments	110
Additional Comments			
Additional Comments		General Comments	

Compressor station 1 at the Croatian gas transmission system

TRA-F-334		Project			Pipeline including	y 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 suff gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring significantly increase efficiency of the Croatian gas transmission system. Compressor stations are integral in the system, primarily in a manner to increase the flexibility of managing the existing transmission capa increase of transmission capacities according to user needs, that is, the requirements of the market and to application of new legal regulation.				ighbouring countries. are integral part of the ission capacities of th	Compressor statione transmission system, and to p	ons will tem, integrated rrovide rational
PRJ Code - PRJ Name	-						
Capacity Increments Varia	ant For Modelling				E C C I	TOOL	
Point		Operator		Year	From Gas System	To Gas System	Capacity
Dravaszerdahely		Plinacro Ltd		2019	HR	HU	13.6 GWh/d
Sponsors		General Information	1		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	<u>Project's URL</u>	Curre	ently PCI		Yes ()
				Prior	ity Corridor(s)		NSIE

Current TYNDP : TYN	NDP 2018 FINA	L - Annex A
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

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

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

	Fulfilled Criteria					
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability					
	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 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 Explanatio	Main Driver Explanation Project will enable the reverse flow in all interconnection points.					
Benefit Description	Construction of such facilities is neccessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas delivery pressure conditions and for development of the gas market in Croatia and the neighbouring countries. Compressor stations will significantly increase efficiency of the Croatian gas transmission system.					

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

Interconnection Croatia/Slovenia (Umag-Koper)

TRA-N-336	Project	Pipeline including CS	Non-FID	
Update Date	23/02/2018		Non-Advanced	
	This pipeline is a regional link to Croatian and Slovenian system. Relevant gas pipeline is significant for the regional security of supply, especia the light of the fact that these parts of Croatian and Slovenian markets are alocated at the ends of the associated gas transportation systems. also important for the competitiveness and market competition.			
Description		ited at the ends of the associated gas transp	portation systems. It is	

Capacity increments variant for Modelling						
Point	Operator	Year	From Gas System	To Gas System	Capacity	
Seževije (SI) (Plevenije (LIP)	Plinacro Ltd	2027	HR	SI	16.2 GWh/d	
Sečovlje (SI) / Plovanija (HR)	Plinacro Ltd	2027	SI	HR	162.0 GWh/d	

Sponsors				General Information	NDP and PCI Inf	ormation
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 Acces	ss Regime
Pre-Feasibility	¥				Considered TPA Regime	Regulated
Feasibility					Considered Tariff Regime	Regulated
FEED					Applied for Exemption	No
Permitting					Exemption Granted	No
Supply Contracts						
FID					Exemption in entry direction	0.00%
Construction	04/2027	11/2027			Exemption in exit direction	0.00%
Commissioning	2027	2027				

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

Expected Gas Sourcing

LNG (HR), Croatian gas transmission system

Benefits							
Main Driver	Market Demand						
Main Driver Explanation	on						
Benefit Description							
	CDCA						

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

Compressor stations 2 and 3 at the Croatian gas tranmission system

TRA-N-1057			Project		Pipeline including CS	Non-FID
Update Date			22	2/05/2018		Advanced
Description	gas de signific in the s increas	livery pressure conditic antly increase efficienc system, primarily in a m	ons and for development of t y of the Croatian gas transm nanner to increase the flexibil cities according to user need	he gas market in Croatia and ission system. Compressor sta lity of managing the existing	I as providing sufficient transmission the neighbouring countries. Compre- ations are integral part of the transmi- transmission capacities of the system the market and to satisfy market cou	ssor stations will ssion system, integrated , and to provide rational
PRJ Code - PRJ Nam	ne -					
Sponsors			General Ir	nformation	NDP and PCI Info	rmation
Plinacro		100%	Promoter	Plinacro Ltd	Part of NDP	Yes (2018-2027)
//	1		Operator	Plinacro Ltd	NDP Number	5.3 and 5.4
			Host Country	Croatia	NDP Release Date	15/12/2017
			Status	Planned	NDP Website	NDP URL
			Website	Project's URL	Currently PCI	Yes ()
					Priority Corridor(s)	NSIE
Schedule	Start Date	End Date			Third-Party Access	s Regime
Pre-Feasibility					Considered TPA Regime	Not Applicable
Feasibility					Considered Tariff Regime	Not Applicable
FEED					Applied for Exemption	Not Relevant
Permitting	09/2018	01/2020			Exemption Granted	Not Relevant
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				

Project Code Project Name

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

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled C	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 t 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.
	Time Schedule
Grant Obtention Date	25/04/2016
Delay Since Last TYNDP	
Delay Explanation	
	Benefits
/ain Driver	/larket Demand
Aain Driver Explanation	Projects will enable the reverse flow in all interconnection point
Benefit Description	Construction of such facilities is neccessary due to the opening of the gas market, as well as providing sufficient transmission capacities and natural gas lelivery 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.

Enabled Projects

	CBCA	Financial Assistance			
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision		
	not	Grants for studies	Yes		
Submissin Date		Grants for studies amount	Mln EUR 4		
Decision Date		Grants for works	No		
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF			
Countries Net Cost Bearer		Other Financial Assistance	No		
Additional Comments		Comments			
		General Comments			

Vecsés MGT / FGSZ

25.9 GWh/d

Városföld CS								
TRA-N-123	Project		Pipeline including	g CS N	lon-FID			
Update Date		02/10/2018			Advanced			
Description	An additional compressor unit (5.7 MW) at the existin along the HU section of the Corridor.	g compressor station at Városföld neces	ssary to ensure adequa	ate pressure for th	e transportatior			
PRJ Code - PRJ Name	-							
Capacity Increments Varia	nt For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity			
	FGSZ Ltd.	2022	HU	HUi	102.9 GWh/d			

Comment: The increment subject to ROHU Open season final result.

2022

Comment: The increment subject to ROHU Open season final result.

HUi

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

FGSZ Ltd.

ΗU

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Schedule	Start Date	End Date		Thir	d-Party Access Regime	
Pre-Feasibility		06/2014		Considered TPA Regi	ime	Regulated
Feasibility	09/2016	07/2017		Considered Tariff Reg	gime	Regulated
FEED	01/2019	01/2020		Applied for Exemption	on	No
Permitting	10/2019	04/2020		Exemption Granted		No
Supply Contracts		05/2020				
FID		03/2019		Exemption in entry d	irection	0.00%
Construction	05/2020	10/2022		Exemption in exit dire	ection	0.00%
Commissioning	2022	2022				
			Enabled Projects			
Project Code Project	t Name		Enabled Projects			
Pipelines and Compres	ssor Stations					
Pipeline Section		P	Pipeline Comment		gth Compressor Power m) (MW)	Comissioning Year
Pipeline Section Városföld CS			Pipeline Comment		m) (MW) 6	-
		P Total	Pipeline Comment		m) (MW)	-
			Pipeline Comment Fulfilled Criteria		m) (MW) 6	-
Városföld CS		Total Competition, Market Integratio	Fulfilled Criteria on, Security of Supply, Sustainability	(mm) (k	m) (MW) 6 6	Year
	d Comments	Total Competition, Market Integratio	Fulfilled Criteria	(mm) (k	m) (MW) 6 6	Year
Városföld CS Specific Criteria Fulfilleo	d Comments	Total Competition, Market Integratio The compressor help to increas	Fulfilled Criteria on, Security of Supply, Sustainability	(mm) (k	m) (MW) 6 6	Year
Városföld CS Specific Criteria Fulfilleo Specific Criteria Fulfilleo	d Comments (I	Total Competition, Market Integratio The compressor help to increas	Fulfilled Criteria on, Security of Supply, Sustainability se capacity of Vecsés 4 (MGT>FGSZ), Vecsés 4	(mm) (k	m) (MW) 6 6	Year
Városföld CS Specific Criteria Fulfilleo	ed Comments (H	Total Competition, Market Integratio The compressor help to increas (HU>SK). 14/10/2015	Fulfilled Criteria on, Security of Supply, Sustainability se capacity of Vecsés 4 (MGT>FGSZ), Vecsés 4	(mm) (k	m) (MW) 6 6	Year
Városföld CS Specific Criteria Fulfilleo Specific Criteria Fulfilleo Grant Obtention Date	ed Comments (H	Total Competition, Market Integratio The compressor help to increas (HU>SK). 14/10/2015	Fulfilled Criteria on, Security of Supply, Sustainability se capacity of Vecsés 4 (MGT>FGSZ), Vecsés 4	(mm) (k	m) (MW) 6 6	Year
Városföld CS Specific Criteria Fulfilleo Specific Criteria Fulfilleo Grant Obtention Date Delay Since Last TYNDF	ed Comments (H	Total Competition, Market Integratio The compressor help to increas (HU>SK). 14/10/2015	Fulfilled Criteria on, Security of Supply, Sustainability se capacity of Vecsés 4 (MGT>FGSZ), Vecsés 4	(mm) (k	m) (MW) 6 6	Year

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	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanation	n		
Benefit Description	o The Hungarian projects taken as a whole main aim, is to enhan- systems, ensuring reserves flow availability, and guaranteeing flow along with helping with further market integration.		
	СВСА		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date		Grants for studies	Yes
Decision Date	06/10/2015	Grants for studies amount	Mln EUR 2
Website		Grants for works	No
Countries Affected	Hungary, Romania	Grants for works amount	
Countries Net Cost Bea	arer	Intention to apply for CEF	No decision yet taken
Additional Comments		Other Financial Assistance	Nc
		Comments	
		General Comments	

Supply Contracts

03/2022

2022

03/2020

2022

Construction

Commissioning

FID

0.00%

0.00%

				Vecsés-V	árosföld gas transit pipeline			
TRA-N-831				Proje	ct	Pipeline inc	cluding CS	Non-FID
Update Date					26/03/2018			Non-Advanced
Description	Inte	erconnecton into s	south dir	ection. The projec	ional high pressure transit pipeline betw t contributes to develop the North-Sout transmission routes.			
PRJ Code - PRJ Name	-							
Sponsors					General Information	N	IDP and PCI Inform	nation
Magyar Gáz Tranzit Z	Rt.		100%	Promoter Operator	Magyar Gáz Tranzit Zrt. MGT Hungarian Gas Transit Ltd.	Part of NDP		evelopment Plan - MGT Year Development Plan)
				Host Country	Hungary	NDP Number		TRA-N-831
				Status	Planned	NDP Release Date		
				Website	Project's URL	NDP Website		<u>NDP URL</u>
						Currently PCI		Yes ()
						Priority Corridor(s)		NSIE
Schedule	Start Date	End Date				Th	ird-Party Access I	Regime
Pre-Feasibility						Considered TPA Re	gime	Regulated
Feasibility						Considered Tariff R	egime	Regulated
FEED						Applied for Exempt	ion	Yes
Permitting						Exemption Granted		Yes

Exemption in entry direction

Exemption in exit direction

Pipelines and Compressor Station	ons				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
/ecsés-Városföld	Pressure regulator at Vecsés node, hub and metering station at Városföld.,	800	80		
	Total		80		
	Fulfilled Criteria				
pecific Criteria Fulfilled	Competition, Market Integration, Security of Supply				
pecific Criteria Fulfilled Comme	This capacity project is to promote the diversified procurement of gas and the securi increase price convergence of the HU gas market to the EU markets. As part of the n SoS issues identified in the CEE and SEE region. Furthermore, to better utilise the exist improve the transit routes in order to improve transit services, while providing for the systems. The project shall result in the operational efficiencies -linking of the 75 bar t AT-HU).	orth-south ax sting assets of e expected qu	is it will c f the dom Iality of th	ontribute also to han lestic natural gas syst ne natural gas on the	dling of the em and to connecting
	Expected Gas Sourcing				
lorway, Russia, LNG (), Romania					
	Benefits				
Aain Driver Market	Demand				
Iain Driver Explanation Security	y of Gas Supply New gas transit routes New gas sources Diversification of gas sources and	d routes			
Benefit Description					

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

Physical Reverse Flow on South North Pipeline

TRA-N-71			Project		I	Pipeline including	CS N	on-FID
Update Date		1		21/03/2018			Non	Advanced
Description				nd via the South North Pipeline is directional flows on the existing So			n flows from the (Gormanston
PRJ Code - PRJ Name	-							
Capacity Increments Va	riant For Mod	lelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
South North CSEP			Gas Network	s Ireland	2023	UKn/BGI	IE	27.6 GWh/d
South North CSEP				Comment: PremierTransmission Ltd	d may al	lso be a potential TSO (under 'From TSO'	
Sponsors			Ger	neral Information		NDP and F	PCI Information	
Gas Networks Ireland		1009		Gas Networks Ireland	Part o	Vos (Ga	islink, Network de	velopment Plan
			Operator	Gas Networks Ireland		TNDP		2013
			Host Country	Ireland	NDP	Number		N/A
			Status	Planned	NDP F	Release Date		
			Website	Project's URL	NDP V	Vebsite		NDP UR
						ntly PCI		No
					Priorit	y Corridor(s)		
Schedule S	tart Date	End Date				Third-Party	Access Regime	
Pre-Feasibility		05/2019			Consic	lered TPA Regime		Regulated
Feasibility	06/2019	05/2020				lered Tariff Regime		Regulated
FEED	06/2020	05/2021				d for Exemption		No
Permitting	06/2021	05/2022				otion Granted		Not Relevan
Supply Contracts	Come in the							
FID					Exemp	otion in entry direction		0.00%
Construction	06/2022	12/2023				otion in exit direction		0.00%
Commissioning	2023	2023						

Pipelines and Compressor Stations						
Pipeline Section	Pipeline Comr	iment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
	to the Irish on	uld involve compression and tie-in facilities nshore transmission system. To be post feasibility study.	S			
	Total					

Fulfilled Criteria

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

	Benefits
Main Driver	Others
Main Driver Explanation	
Benefit Description	1.Physical reverse flow between Ireland and Northern Ireland is beneficial to the development of an integrated market on the island of ireland, having significant importance in the development and operation of a single gas market between both jurisdictions. 2. It would widen the market that is available to Northern Ireland gas market participants. 3. Contributes to the viability of LNG and storage projects.

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

		lr	nisfree LNG				
LNG-N-1231		Project			LNG Termina	1 1	Non-FID
Update Date		1	15/11/2018			Nor	n-Advanced
Description	The Inisfree LNG project is pla	anned to be developed in	r development by NextDecade LI n Cork Harbour and will consist o operated by Gas Networks Ireland	f a FSRI			
PRJ Code - PRJ Name	-						
Capacity Increments Varia	ant For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Cork LNG (IE)		NextDecade LN	lG	2022	LNG_Tk_IE	IE	111.0 GWh/d
Sponsors		Gene	ral Information		NDP and	d PCI Information	
NextDecade LNG	100%	Promoter	NextDecade LNG			Yes (Gas Networ	
		Operator	NextDecade LNG	Part c		twork Developmer y the Commission	
		Host Country	Ireland			ties on Dec. 15, 20	
		Status	Planned	NDP	Number		CER1727
		Website		NDP	Release Date		
				NDP	Website		<u>NDP UR</u>
				Curre	ntly PCI		N
				Priori	ty Corridor(s)		

Current TYNDP : TYNDP 20	018 FINAL - Annex A				Page 415 of 575
Schedule Star	t Date End Date			Third-Party A	Access Regime
Pre-Feasibility				Considered TPA Regime	Negotiated
Feasibility				Considered Tariff Regime	Negotiated
FEED				Applied for Exemption	Not Yet
Permitting				Exemption Granted	Not Yet
Supply Contracts					
FID				Exemption in entry direction	0.00%
Construction				Exemption in exit direction	0.00%
Commissioning	2022 2022				
		Technical Information (LN			
Regasification Facility	Reloading Ability Project Phase	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)
Inisfree LNG	No				
		Fulfilled Criteria			
Specific Criteria Fulfilled					
Specific Criteria Fulfilled Co	mments				
		Expected Gas Sourcing			
LNG (US)					
		Comments about the Third-Party Ac	cess Regime		
The project intends to apply	/ for a TPA exemption during the pe				
	1 3 1	Benefits			
Main Driver Ma	arket Demand	Benefits			
	curity of supply for Ireland pending	Brovit			
Benefit Description	curry of supply for freiding pending	DICAL			
Benefit Description					

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

Development for new import from the South (Adriatica Line)

TRA-N-7		Project		Pipeline ir	ncluding CS	Non-FID
Update Date		30/03/	2018			Non-Advanced
	The project consists in new of at new or existing Entry Point	n-shore pipeline and compressor is in south Italy.	station along the center	-south of Italy that	will allow the incre	ase of transport capacity
PRJ Code - PRJ Name	-					
Capacity Increments Variant Fo	or Modelling					
Point		Operator		Year From Gas	System To Gas	System Capacity
Italy Mezzogiorno Import Fork	K	Snam Rete Gas S.p.A.		2025 IB-I1	۲s ا	T 264.0 GWh/c
Italy Mezzogiorno Import Fork	<	Snam Rete Gas S.p.A. General Inform			rs ات NDP and PCI Info	
	< 100%				NDP and PCI Info	
Sponsors		General Inform	nation	Part of NDP	NDP and PCI Info	rmation
Sponsors		General Inform Promoter	mation Snam Rete Gas S.p.A.	Part of NDP NDP Number	NDP and PCI Infor Yes (Snam Ret	rmation Te Gas TYNDP 2017-2020
Sponsors		General Inform Promoter Operator	mation Snam Rete Gas S.p.A. Snam Rete Gas S.p.A. Italy	Part of NDP NDP Number	NDP and PCI Infor Yes (Snam Ret	rmation re Gas TYNDP 2017-2020 RN_0
Sponsors		General Inform Promoter Operator Host Country	mation Snam Rete Gas S.p.A. Snam Rete Gas S.p.A. Italy	Part of NDP NDP Number NDP Release Date NDP Website	NDP and PCI Infor Yes (Snam Ret	rmation Te Gas TYNDP 2017-2026 RN_0 30/11/201

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
EED		
Permitting		
Supply Contracts		
FID		
Construction		
Commissioning	2025	2025

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Adriatica Line		1,200	430	33	2025
	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 gas, market Integration (Increase of competition) and flexibility of the system.	routes, N-1 Natior	nal (Italy),	back-up for renewab	oles, power-to-

	Benefits
Main Driver	Market Demand
Main Driver Explanation	n
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	Financ	ial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer		Other Financial Assistance	Yes
Additional Comments		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 incr at new or existing Entry Points in that area.	ease of transport capacity
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
New IP North-East Italy	Comment: Considering that the pror to its national development pl			0	

modelling purposes in the final year of the publication (2035).

Sponsors		(General Information	N	DP 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_06
		Host Country	Italy	NDP Release Date	30/11/2017
		Status	Planned	NDP Website	NDP URL
		Website	Project's URL	Currently PCI	No
				Priority Corridor(s)	

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

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

	Benefits
Main Driver	Market Demand
lain Driver Explanatio	on
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	Financ	ial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		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 co the increase of transport capacity at new or existing Entry Points in south Italy.	ompressor stations along the center-s	outh of Italy to permit
PRJ Code - PRJ Name	-		

Point	Operator	Year	From Gas System	To Gas System	Capacity
	Snam Rete Gas S.p.A.	2034	IB-ITs	IT	264.0 GWh/d
Italy Mezzogiorno Import Fork	Comment: Considering that the pro to its national development p	lan, ENTSOG consider	5	ent as relevant for	
	Snam Rete Gas S.p.A.	2034	IB-ITi	IB-ITs	264.0 GWh/d
Italy Southern Import Fork	Comment: Considering that the pro to its national development p	,		0	

Sponsors			General Information	NI	DP 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	<u>NDP URL</u>
		Website	Project's URL	Currently PCI	No
				Priority Corridor(s)	

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

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

Benefits					
Main Driver	Market Demand				
Main Driver Explanation	n				
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	Financ	ial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

GALSI Pipeline Project

TRA-N-12	Project	Pipeline including CS	Non-FID
Jpdate Date	30/05/2018		Advanced
Description	Gas pipeline project aiming to create a new link between Algeria and Ital transporting 8 billions mc of gas. From El Kala (Koudiet Draouche) in Alg 2.800 m of depth getting to Porto Botte in Sardinia (which will be the em Network). From Porto Botte an onshore section will cross Sardinia toward finally bring the long awaited gas to Sardinian users and thus remove the of the pipeline will cross the Tyrrhenian Sea at around 800 m of depth to existing Rete Nazionale Gasdotti of Snam Rete Gas.	eria an offshore section will cross the Mediterranea cry point in the Italian RNG - Rete Nazionale Gasdo ds Olbia in the north of the island (with 39 offtake p e isolation of Sardinia from RNG). From Olbia then a	n Sea going down to tti or Gas National oint along the route to another offshore sectior
RJ Code - PRJ Name	-		
Capacity Increments Varia	ant For Modelling		
Point	Operator	Year From Gas System To Gas	System Capacity

Point	Operator	Year	From Gas System	To Gas System	Capacity	
	Galsi S.p.A.	2019	DZ	DZi/GAL	258.0 GWh/d	
Koudiet Eddraouch (Galsi) (DZ)		Comment: Entry of GALSI International Section Increment is equivalent to 8 bcm/y				
	Galsi S.p.A.	2019	ITs	ITn/GAL	258.0 GWh/d	
Olbia (Galsi)		Comment: Increment is equivalent to 8 bcm/y				
	Galsi S.p.A.	2019	ITn/GAL	ITs	32.0 GWh/d	
			Comment: Eq	uivalent to 1 bcm/y	/	
Diamhina (Calai)	Galsi S.p.A.	2019	ITn/GAL	IB-ITs	226.0 GWh/d	
Piombino (Galsi)			Comment: Eq	uivalent to 7 bcm/y	/	
	Galsi S.p.A.	2019	DZi/GAL	ITs	258.0 GWh/d	
Porto Botte (Galsi)		Com	ment: Exit of GALSI I Increment is eq	nternational Sectior uivalent to 8 bcm/y		

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Sponsors					General Information	ND	P and PCI Information
Sonatrach			47% Prom	oter		Part of NDP	Yes (SNAM NDP 2017-
dison SpA			23% Opera	tor	Galsi S.p.A	NDP Number	
			Host	Country	Italy	NDP Release Date	
Enel Produzione SpA			17% Status	5	Planned	NDP Website	
Hera SpA			11% Webs	ite	<u>Project's URI</u>	Currently PCI	
						Priority Corridor(s)	
Schedule	Start Date	End Date				Thirc	I-Party Access Regime
re-Feasibility	1	12/2006				Considered TPA Regir	ne
easibility	01/2006	12/2006				Considered Tariff Reg	ime
ED	01/2007	12/2010				Applied for Exemptior	ו
ermitting	07/2008	11/2018				Exemption Granted	
upply Contracts		11/2019					
ID		11/2019				Exemption in entry dir	rection
onstruction	12/2019	12/2022				Exemption in exit dire	ction
Commissioning	2019	2019					

Pipeline Section		Pipeline Comment		-	Compressor Power	-
GALSI International Section		The GALSI International Section includes a compression station on the Algerian coast (3x33 MW) and a gas sealine from Algerian coast to South Sardinia coast (Porto Botte, near Cagliari)	(mm) 660	(km) 288	(MW) 99	Year
GALSI Italian Section 1 onshore	e pipeline crossing Sardinia	The GALSI National Section will become integral part of the Italian National Gas Network, with the Entry Point located at the landfall of the sealine from Algeria in1,219South Sardinia coast (Porto Botte). In Sardinia the project foresees 39 offtake points.1,219				
GALSI Italian Section 2 sealine	Sardinia - Tuscany	This section includes a 285 km sealine from Olbia (Sardinia) - where it will be realized a 2x26 MW compression station - to Piombino (Tuscany) and 3 km onshore pipeline in Tuscany up to the interconnection with existing Snam gas newtwork.	812	288	52	
	Тс	otal		861	151	
		Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Inte	gration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comm	nents demand and further on t	te to the creation of an Italian Gas Hub, by opening a more eff he Central EU market. It will give a significant contribution to s oportunity of a clean and sustainable energy source for Sardini	security of su	upply and	d competition for Ital	
		Time Schedule				
Grant Obtention Date	13/08/2010					
Grant Obtention Date Delay Since Last TYNDP	13/08/2010 12 months					
Delay Since Last TYNDP						
		Expected Gas Sourcing				
Delay Since Last TYNDP						

On 29th October 2010, the project has received from the competent Italian Authority (Ministry of the Economic Development) by decree a Priority Allocation right (Allocazione Prioritaria) of the entry capacity at the Porto Botte Entry Point, for 100% of the capacity and for a periofd of 25 years.

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Benefits						
Market Demand						
The project has been developed from its start on the basis of the prospected timing of European gas demand growth						
- The Galsi project will improve security of supply in Italy and Europe, providing for a new and more efficient route for Algerian gas to reach the certain gas consumption (located in northern Italy) and further on the northern European markets. In the longer term, with the development of new projects interconnecting different gas sources in Africa (e.g. new Algerian shale gas or TSGP project for Nigerian gas), the Galsi pipeline could provide highly strategic diversification of gas supply routes to European markets and their supply flexibility The Galsi project will contribute to the creation Italian gas hub for gas supply to Europe which, through the increase of gas liquidity, will enable the export of major gas volumes from Italy to othe European markets through the development of reverse flow capacities Reduction of GHG emissions; the Galsi project complies with sustainable development guidelines, i.e. the promotion of the substitution of high pollutant fo						
Barriers						
Description						
The Italian Section of the project will be ruled under the Italian regulatory framework. The International Section (from Algeria to Italian territorial waters in Sardinia) will be build and operated by Galsi as an independent operator with a tariff agreed between the Company and shippers.						
Permitting process (involved inter alia 2 regions, 9 provinces and 40 townships) substantially completed: environmental permits obtained in 2011 and Authorization Decree by the Ministry of the Economic Development needs only final approval of Tuscany.						
The persistent uncertainties in the market scenarios make more complex the finalisation by the Shareholders of the commercial framework of the project, i.e. the definition of suitable terms and conditions for the gas supply and gas transportation agreements, which represents an essential piece for the final investment decision.						
	0					
Intergovernmental Agreements						
Agreement Description	s Signed A	greement Signature Date				
	Yes	14/11/2007				
	Market Demand The project has been developed from its start on the basis of the prospected timing of European gas demand growth. - The Galsi project will improve security of supply in Italy and Europe, providing for a new and more efficient route for Italian gas consumption (located in northern Italy) and further on the northern European markets. In the longer term, projects interconnecting different gas sources in Africa (e.g. new Algerian shale gas or TSGP project for Nigerian gas), highly strategic diversification of gas supply routes to European markets and their supply flexibility The Galsi project tatlian gas hub for gas supply to Europe which, through the increase of gas liquidity, will enable the export of major gas European markets through the development of reverse flow capacities Reduction of GHG emissions; the Galsi project development guidelines, i.e. the promotion of the substitution of high pollutant fo Barriers Description The Italian Section of the project will be ruled under the Italian regulatory framework. The International Section (from Sardinia) will be build and operated by Galsi as an independent operator with a tariff agreed between the Company and Permitting process (involved inter alia 2 regions, 9 provinces and 40 townships) substantially completed: environment. Authorization Decree by the Ministry of the Economic Development needs only final approval of Tuscany. The persistent uncertainties in the market scenarios make more complex the finalisation by the Shareholders of the coi i.e. the definition of suitable terms and conditions for the gas supply and gas transportation agreements, which repress investment decision. EEPR funds for 120 millions euros we	Market Demand The project has been developed from its start on the basis of the prospected timing of European gas demand growth. - The Galsi project will improve security of supply in Italy and Europe, providing for a new and more efficient route for Algerian gas Italian gas consumption (located in northern Italy) and further on the northern European markets. In the longer term, with the deer projects interconnecting different gas sources in Africa (e.g. new Algerian shale gas or TSGP project for Nigerian gas), the Galsi priptic static diversification of gas supply routes to European markets and their supply flexibility The Galsi project will contribute talian gas hub for gas supply to Europe which, through the increase of gas liquidity, will enable the export of major gas volumes European markets through the development of reverse flow capacities Reduction of GHG emissions; the Galsi project complies development guidelines, i.e. the promotion of the substitution of high pollutant fo Description The Italian Section of the project will be ruled under the Italian regulatory framework. The International Section (from Algeria to It Sardinia) will be build and operated by Galsi as an independent operator with a tariff agreed between the Company and shippers. Permitting process (involved inter alia 2 regions, 9 provinces and 40 townships) substantially completed: environmental permits of Authorization Decree by the Ministry of the Economic Development needs only final approval of Tuscany. The persistent uncertainties in the market scenarios make more complex the finalisation by the Shareholders of the commercial fri i.e. the definition of suitable terms and conditions for the gas supply and gas transportation agreements, which re				

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

LNG-N-198	Project	LNG Terminal	Non-FID
Update Date	15/11/2018		Advanced
Description	The planned Porto Empedocle LNG Terminal will be located in Italy, in the Sicily Reg received a thirty-year concession. It will consist of two underground storage tanks of treatment facilities required to process LNG and a breakwater with mooring jetty and The LNG Terminal at Porto Empedocle will offer a nominal yearly regasification capa 155.000 m3 of capacity. The LNG Terminal will be able to inject the gas at the standard grid pressure (around operated by SnamReteGas by means of a pipeline section specifically built by Snaml	f 160.000 of m ³ of capacity each, vaporise d unloading arms. acity of 8 billion m3; will be able to receive d 70 bar) and will be connected to the tra	er pumps and other e LNG tankers up to
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	Sponsors		General Information		DP and PCI Information
Nuove Energie Srl	100%	Promoter	Nuove Energie S.r.l.	Part of NDP	Yes (Piano decennale di sviluppo SNAM
		Operator	Nuove Energie S.r.l.		2017-2026)
		Host Country	Italy	NDP Number	RN_12
		Status	Planned	NDP Release Date	30/11/2017
		Website		NDP Website	<u>NDP URL</u>
				Currently PCI	No
				Priority Corridor(s)	NSIW

Current TYNDP : TYN	NDP 2018 FINA	AL - Annex A					Pag	e 432 of 575
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	ion	0.00%
Construction	12/2018	12/2021				Exemption in exit directio	n	0.00%
Commissioning	2021	2021						
-			Technical Information	tion (LNC	G)			
Regasification Facilit		bading bility Project Phase	Expected Increment Shi		Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	s Commissionin Year	g Load Factor (%)
Porto Empedocle LNC	G	No						
	2		Fulfilled Crit	torio				
Specific Criteria Fulfi	llod	Compatition Market Integr	ation, Security of Supply, Susta					
Specific Criteria Fulfi	lled Comments	Market Integration: it provid of EU gas market, through Security of Supply: it provid diversified and flexible than fired generation operational would help to create new lo	des a good contribution to the TAG and Transitgas, with positi es a strong improvement of th gas via pipeline and it gives ad I flexibility required by the gro ocal and sutainable jobs in the bya, Russia) which are becomin	EU gas n ive impaction SoS of ccess to a owing inte area. Con	t on prices, g the system, r plurality of r rmittent rene npetition: it p	as flows, diversification, flexi not only in Italy but also in ot markets and players. Sustain wables generation; building provides additional competiti	bility and price conve ther Member States; L ability: it provides add a terminal in Souther ive pressure to tradition	rgence. .NG is more ditional gas- rn Italy (Sicily)
			Time Sched	dule				
Grant Obtention Dat	te							
Delay Since Last TYN	IDP	about 2 years						
Delay Explanation		After the issues of the Natio	onal Energy Strategy (SEN) in O	October 20	017, Nuove E	nergie is reconsidering and r	reevaluating the proje	ect.

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Expected Gas Sourcing

Algeria, LNG (DZ,QA,US), Nigeria, Trinindad 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
Market	Lack of market support
Regulatory	Low rate of return

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	CBCA	Fina	ancial Assist	tance
	No, we have not submitted an investment request yet,	Applied for CEF		(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies		No
Cubrainain Data	not	Grants for studies amount		
Submissin Date		Grants for works		No
Decision Date		Grants for works amount		
Website		Intention to apply for CEF		Yes, for studies and works
Countries Affected		Other Financial Assistance		No
Countries Net Cost Bearer		Comments		
Additional 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-sh Alfonsine	ore gas fields: Fiume Treste - Minerbio - Ripalta - Sab	bioncello - Sergnano -
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling							
Point	Operator		Year From Gas	s System	To Gas System	Capacity	
	STOGIT		2027 ST	IT	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 1	Г	STcIT	20.9 GWh/d	
	Comment: Interconnection po capacity available is equa	0	, 0		,		
Sponsors	General Information			NDP and	PCI Information		
Stogit 100%	Promoter	STOGIT	Part of NDP	Yes (.	Snam Rete Gas TYI	NDP 2017-2026,	
	Operator	STOGIT	NDP Number			NA	
	Host Country	Italy	NDP Release Dat	te			
	Status	Planned	NDP Website			NDP URI	
	Website		Currently PCI			No	

Priority Corridor(s)

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Schedule	Start Date	End Date
Pre-Feasibility		
Feasibility		
FEED		
Permitting		01/2025
Supply Contracts		
FID		
Construction		
Commissioning	2027	2027

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

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

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

Interconnection with Slovenia							
TRA-N-354 Update Date		Project	30/03/2018	Pipeline inc	uding CS	Non-FID Non-Advanced	
Description	In line with the expected incr national network of San Dorli	<u> </u>	in the area of Koper (SLO), the pr	oject foresees new ca	pacity at the new	exit point of the	
PRJ Code - PRJ Name	-						
Capacity Increments Variant	For Modelling						
Point		Operator	,	Year From Gas Sy	stem To Gas S	ystem Capacity	
San Dorligo della Valle (IT) /	Osp (SI)	Snam Rete Gas	S.p.A.	2023 IT	SI	3.6 GWh/d	
Sponsors		Gene	ral Information	N	OP and PCI Inform	nation	
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_03	
		Host Country	Italy	NDP Release Date		30/11/2017	
		Status	Planned	NDP Website		NDP URL	
		Website	Project's URL	Currently PCI		No	
				Priority Corridor(s)			
Schedule Start D	Date End Date			Thi	rd-Party Access F	Regime	
Pre-Feasibility				Considered TPA Reg	ime	Regulated	
Feasibility				Considered Tariff Re	gime	Regulated	
FEED				Applied for Exemption	on	No	
Permitting				Exemption Granted		No	
Supply Contracts							
FID				Exemption in entry of	lirection	0.00%	
Construction				Exemption in exit di	rection	0.00%	
Commissioning 2	2023 2023						

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	

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

LARINO - RECANATI Adriatic coast backbone

TRA-N-974	Project	Pipeline including CS	Non-FID
Update Date	30/05/2018		Advanced
Description	 Complete the realisation of a Gas Tranportation system on Adriatic coast. The project forsees the development under 5 phases of the main backbone and completed and another one is under construction. 1 Construction of 113 km 24" LARINO-CHIETI 55 km 20" CHIETI - CELLINO (already completed and running) 90 km 20" CELLINO - SAN MARCO (15 km completed and 75 km under construction of 35 km 24" SAN MARCO Recanati Construction 3 MW compression station SAN MARCO 		one section is already
PRJ Code - PRJ Name	-		

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

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						5
Sponsors			Gener	al Information	ND	OP and PCI Information
			Promoter	Società Gasdotti Italia	Part of NDP	Yes (Piano Decennale di sviluppo delle reti di trasporto gas naturale 2017-2026)
			Operator	Società Gasdotti Italia		
			Host Country	Italy	NDP Number	Dorsale Larino Recanati
			Status	In Progress	NDP Release Date	
			Website		NDP Website	<u>NDP URL</u>
					Currently PCI	No
					Priority Corridor(s)	SGC
Schedule	Start Date	End Date			Thir	rd-Party Access Regime
Pre-Feasibility		12/2013			Considered TPA Regi	ime Regulated
Feasibility	01/2014	12/2014			Considered Tariff Reg	gime Regulated
FEED	01/2015	01/2015			Applied for Exemption	on No
Permitting	01/2015	12/2019			Exemption Granted	No
Supply Contracts		06/2019				
FID		12/2018			Exemption in entry d	irection 0.00%
Construction	03/2019	12/2022			Exemption in exit dire	ection 0.00%
Commissioning	2022	2022				

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

	Benefits							
Ma	ain Driver	Regulation SoS						
Ma		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 co to the Stogit's San Salvo Storage facitity and to additional potential future storage facilities planned in the area It is expected to deliver increment capacity northward through connection to existing storage facilities (Cellino) and will complete a major integrated gas transport system in Centre pipe, together with the construction of the planned compression station, will allow the return to SRG of volumes coming from Stogit San Salvo se project will strenghten an area where gas flows from the south and from the north merges at a relatively low pressure regime. In critical condition 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 f (both in the flow south/north and in the flow north/south).	ntal ral Italy The storage The ons this set					
Bei	nefit Description	Increasing flexibility and allowing reverse flow along the Adriatic coasto:1) support the management of Emergency situation by Snam and 2) ensitive capability to meet increasing peak demand requirement in the area.	sure the					

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



Sardinia Gas Transportation Network

TRA-N-975	Project		Pipeline including	CS N	on-FID
Update Date	22/05/2018			Ac	dvanced
Description PRJ Code - PRJ Name	Construction of an onshore Gas Tranportation Network on Sardinia island, to terminals with small scale LNG capabilities and/or by an offshore connection backbone of the national gas transmission grid (national line) and the paralle - Construction of 292,4 km of 16" national backbone - Additional 657 km of regional primary and secondary connections with dia	to mainland. The el connection of th	project forsees the de e regional lines:		
Canacity Increments \	Variant For Modelling				
	/ariant For Modelling Operator	Year	From Gas System	To Gas System	Capacity
Capacity Increments V Point Cagliari (IT)		Year 2020	From Gas System LNG_Tk_ITs	To Gas System ITs	Capacity 17.0 GWh/c

				DP and PCI Information
	Promoter	Società Gasdotti Italia	Part of NDP	Yes (Piano decennale di sviluppo delle
(Operator	Società Gasdotti Italia		reti di trasporto gas naturale 2017-2026)
1	Host Country	Italy	NDP Number	Metanizzazione della regione Sardegna
· · · · · · · · · · · · · · · · · · ·	Status	Planned	NDP Release Date	31/10/2017
,	Website		NDP Website	<u>NDP URL</u>
			Currently PCI	No
			Priority Corridor(s)	

urrent TYNDP : T	YNDP 2018 FINAI	- Annex A	Pa	ge 444
Schedule	Start Date	End Date	Third-Party Access Regime	
Pre-Feasibility		06/2015	Considered TPA Regime	
Feasibility	07/2015	07/2015	Considered Tariff Regime	1
FEED	08/2015	12/2015	Applied for Exemption	
Permitting	03/2016		Exemption Granted	
Supply Contracts				
FID			Exemption in entry direction	
Construction			Exemption in exit direction	
Commissioning	2020	2021		

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Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
National Network backbone		400	400		
Regional Network		250	200		
	Total		600		

Expected Gas Sourcing					
LNG ()					
	Benefits				
Main Driver	Market Demand				
Main Driver Explanation	Sardinia, located off the West coast of Italy, has ca. 1.7mn inhabitants and is currently the only region in Italy that does not have a proper gas infrastructure Sassari, Nuoro, Oristano and Cagliari have already a developed local distribution network, supplied by aired LPG; local distribution companies are developing a network covering ca. 40% of the population. Additional investments would significantly improve gas penetration in the island. MSE, the Sardinia region and AEEGSI are assessing possible solutions to Sardinia's gas supply via LNG				
Benefit Description	A single Sardinia price for gas - enabled by a region wide gas Network - will also bring a relevant cost reduction for Sardinia citizens and industries, whose energy prices can be as high as twice Italian average. Natural gas will replace other more polluting fossil fuels, reducing CO2 emissions, also converting coal and oil fired power stations to gas.				

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	CBCA	Financ	ial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		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, in	to a reservoir for the storage of methane gas	
PRJ Code - PRJ Name	-		

Point	Operator	Year	From Gas System	To Gas System	Capacity		
	STOGIT		STcIT	IT	177.1 GWh/d		
	STOGIT	2020	IT	STcIT	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 1009	Promoter	STOGIT S.p.A.	Part of NDP	Yes (Snam Rete Gas TYNDP 2017/2026)	
	Operator	STOGIT	NDP Number	NA	
	Host Country	Italy	NDP Release Date	30/11/2017	
	Status	Planned	NDP Website	<u>NDP URL</u>	
	Website	Project's URL	Currently PCI	No	
			Priority Corridor(s)		

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

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
Bordolano	Depleted Field	No	Bordolano 2nd phase	757	16.2	9.5	90	NA	2020

	Benefits
Main Driver	Market Demand
Main Driver Explanatio	n
Benefit Description	Increased flexibility of the system; Market integration (increase of competition and market liquidity).

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

TAP interconnection **TRA-F-1193 Pipeline including CS** Project FID 31/05/2018 Advanced Update Date The project is functional to connect the new TAP import infrastructure, scheduled to arrive in Melendugno, with the existing national network near Description Brindisi. **PRJ Code - PRJ Name Capacity Increments Variant For Modelling** Operator From Gas System To Gas System Capacity Point Year Snam Rete Gas S.p.A. 2019 AL/TAP IB-ITs 509.0 GWh/d Melendugno - IT / TAP Comment: This project enables the connection of the TAP entry point to the transmission network. **General Information** NDP and PCI Information **Sponsors** Snam Rete Gas s.p.a. 100% Promoter Snam Rete Gas S.p.A. Part of NDP Yes (Snam Rete Gas TYNDP 2017-2026) Snam Rete Gas S.p.A. NDP Number Operator RN_02 Host Country *Italy* NDP Release Date 30/11/2017 *Planned* NDP Website NDP URL Status Project's URL Currently PCI Website No Priority Corridor(s) Schedule Start Date End Date **Third-Party Access Regime** Regulated Pre-Feasibility Considered TPA Regime Feasibility **Considered Tariff Regime** Regulated FEED Applied for Exemption No Permitting **Exemption Granted** No **Supply Contracts** FID Exemption in entry direction 0.00% Exemption in exit direction Construction 0.00% Commissioning 2019 2019

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

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

	Ben	efits	
/lain Driver	Market Demand		
Aain Driver Explanation	Snam rete gas received a First Request for access to the National di Regolazione per Energia Reti e Ambiente and with paragraph 8		
Benefit Description	Security of supply, diversification of sources, diversification of rou and flexibility of the system.	tes, back-up for renewables, power-to-gas	, market Integration (Increase of competition)
	CBCA	Finan	cial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CE
	and we do not plan to submit it	Grants for studies	No
ubmissin Date		Grants for studies amount	
Decision Date		Grants for works	No
/ebsite		Grants for works amount	
ountries Affected		Intention to apply for CEF	No decision yet taker
ountries Net Cost Bear	rer	Other Financial Assistance	No
Additional Comments		Comments	

			S	ardinia Methanizatior	ı				
TRA-N-1194			Proje	ct		F	Pipeline including	g CS	Non-FID
Update Date				30/03/2018				Nor	n-Advanced
Description	realiza	0	nsport facilities inte	erconnected with the supp inia that is not even metha					
PRJ Code - PRJ Name	-								
Capacity Increments Va	ariant For Mo	delling							
Point			Operato	or		Year	From Gas System	To Gas System	Capacity
Sardinia LNG			Snam Re	ete Gas S.p.A.		2020	LNG_Tk_ITs	ITs	17.0 GWh/d
			Snam Re	ete 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	Snam R	ete Gas S.p.A.	Part o	f NDP Yes ('Snam Rete Gas T	YNDP 2017-2026)
			Operator	Snam R	ete Gas S.p.A.	NDP N	lumber		RN_09
			Host Country		Italy	NDP F	Release Date		30/11/2017
			Status		Planned	NDP V	Vebsite		<u>NDP URL</u>
			Website		<u>Project's URL</u>	Currer	ntly PCI		No
						Priorit	y Corridor(s)		
Schedule	Start Date	End Date					Third-Part	ty Access Regime	2
Pre-Feasibility						Consid	lered TPA Regime		Regulated
Feasibility						Consid	lered Tariff Regime		Regulated
FEED						Applie	d for Exemption		No
Permitting Supply Contracts						Exemp	tion Granted		No
FID						Exemp	tion in entry directio	n	0.00%
Construction						Exemp	tion in exit direction		0.00%
Commissioning	2020	2025							

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
phase 1		250	17		2020
phase 2		150	29		2021
phase 3		650	50		2022
phase 4		650	77		2022
phase 5		250	8		2025
phase 6		150	6		2025
phase 7		150	26		2025
	Total		213		

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

Matagio	ia - iv	lassatra	a pir	beiine

TRA-N-1195		Project			Pipeline including	I CS N	Ion-FID	
Update Date			/03/2018				Non-Advanced	
Description		a pipeline will allow the incre y of the system from the Sout		city of tl	he Puglia entry points	up to 74 MScm/c	l without	
PRJ Code - PRJ Name	-							
Capacity Increments Variant	t For Modelling							
Point		Operator		Year	From Gas System	To Gas System	Capacity	
Melendugno - IT / TAP		Snam Rete Gas S.p.A	Α.	2025	AL/TAP	IB-ITs	310.0 GWh/d	
Otranto - IT / IGI Poseidon		Snam Rete Gas S.p.A	Α.	2025	GR/IGI	IB-ITs	310.0 GWh/d	
Sponsors		General In	formation		NDP and	PCI Information		
Snam Rete Gas S.p.A.	100%	Promoter	Snam Rete Gas S.p.A.	Part o	of NDP Yes (S	Snam Rete Gas TY	NDP 2017-2026)	
		Operator	Snam Rete Gas S.p.A.	NDP	Number		RN_05	
		Host Country	Italy	NDP	Release Date		30/11/2017	
		Status	Planned	NDP	Website		NDP URL	
		Website	<u>Project's URL</u>	Curre	ntly PCI		No	
				Priori	ty Corridor(s)			
Schedule Start	Date End Date				Third-Part	y Access Regime		
Pre-Feasibility				Consi	dered TPA Regime		Regulated	
Feasibility				Consi	dered Tariff Regime		Regulated	
FEED				Applie	ed for Exemption		No	
Permitting				Exemp	otion Granted		No	
Supply Contracts								
FID				Exemp	otion in entry directior	n	0.00%	
Construction				Exemp	otion in exit direction		0.00%	
Commissioning	2025 2025							
					Generated by EN	TSOG PDWS on 18/12	2/2018 06:49:05 PM	

Decision Date

Countries Affected

Countries Net Cost Bearer

Additional Comments

Website

No

No

No decision yet taken

			Diameter	Lenath	Compressor Power	Comissioning
Pipeline Section	Pipeline Comment		(mm)	(km)	(MW)	Year
Matagiola - Massafra			1,400	80		2025
	Total			80		
	Fulfilled	l Criteria				
Specific Criteria Fulfil	led					
Specific Criteria Fulfil	led Comments					
	Ben	efits				
Main Driver	Market Demand					
Main Driver Explanat	ion					
Benefit Description	Security of supply, competitiveness, Flexibility of the system.					
	CBCA		Financi	al Assista	nce	
Decision	No, we have not submitted an investment request yet,	Applied for CEF			(3) No, we have not	applied for CE
Decision	and we do not plan to submit it					
Submissin Date		Grants for studies				N

Grants for works

Comments

General Comments

Grants for works amount

Intention to apply for CEF

Other Financial Assistance

RA-N-1227		Project		Pipeli	ne including	g CS N	Non-FID	
lpdate Date	30/03/2		2018			Non	Advanced	
Description	The project consists of the up Gwh/day).	ograding of Gorizia plant in order	to increment the firm bi	directional cap	acity of the pc	pint up to 6 MScm	/day (64.74	
RJ Code - PRJ Name								
apacity Increments Variant	For Modelling							
oint		Operator		Year From	Gas System	To Gas System	Capacity	
orizia (IT) /Šempeter (SI)		Snam Rete Gas S.p.A.		2022	IT	SI	17.3 GWh/o	
ionzia (in) / Sempeter (Si)		Snam Rete Gas S.p.A.		2022	SI	IT	44.0 GWh/o	
Sponsors		General Inform	mation		NDP and	PCI Information		
Snam Rete Gas S.p.A.	100%	Promoter Operator	Snam Rete Gas S.p.A. Snam Rete Gas S.p.A.	Part of NDP		lo ((1) the NDP was earlier date and th posed for inclusion	e project will	
		Host Country Status Website	Italy Planned	NDP Numbe NDP Release NDP Website Currently PC	e Date e I		1	
				Priority Corri				

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

Fulfilled Criteria

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

	Benefits
Main Driver	Market Demand
lain Driver Explanation	on
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).

	СВСА	Financ	ial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		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 indigen	ous production in Sicily near Gela.	
PRJ Code - PRJ Name			

Capacity Increments	Variant For Mo	delling							
Point	nt				Year	From Gas System	To Gas System	Capacity	
IT - Indigenous Proc	luction		Snam Rete Gas S.p.A	۸.	2020	NPcIT	IT	45.0 GWh/d	
Sponsors			General In	formation		NDP and	PCI Information		
Snam Rete Gas S.p.A	λ.	100%	Promoter	Snam Rete Gas S.p.A.		٨	Io ((1) the NDP was		
	V. 1		Operator	Snam Rete Gas S.p.A.	Part	of NDP	earlier date and the project will roposed for inclusion in the next N		
			Host Country	Italy			posea for inclusion i	n the next NDP	
			Status	In Progress	5	Number			
			Website			Release Date Website			
								Δ1.	
						ently PCI		No	
					Prior	ty Corridor(s)			
Schedule	Start Date	End Date				Third-Par	ty Access Regime		
Pre-Feasibility					Cons	dered TPA Regime		Regulated	
Feasibility					Cons	dered Tariff Regime		Regulated	
FEED					Appli	ed for Exemption		No	
Permitting					Exem	ption Granted		No	
Supply Contracts									
FID					Exem	ption in entry direction	on	0.00%	
Construction					Exem	ption in exit direction		0.00%	
Commissioning	2020	2020							
1									

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
	Total		1	0	

	Benefits
Main Driver	Market Demand
Main Driver Explanatio	in
Benefit Description	

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

Greece - Italy interconnection TRA-N-1246 **Pipeline including CS** Project Non-FID Non-Advanced 30/03/2018 Update Date The project is the result of the incremental capacity cycle started in 2017 and consists of the interconnection from Greece to Italy through an Description offshore infrastructure. **PRJ Code - PRJ Name Capacity Increments Variant For Modelling** Operator From Gas System To Gas System Capacity Point Year **IP Greece - Italy** Snam Rete Gas S.p.A. 2025 GR IB-ITs 357.7 GWh/d **General Information** NDP and PCI Information **Sponsors** No ((5) others - please comment below) Snam Rete Gas S.p.A. Snam Rete Gas S.p.A. Part of NDP 100% Promoter Operator Snam Rete Gas S.p.A. NDP Number Host Country Italy NDP Release Date *Planned* NDP Website Status Website Project's URL Currently PCI No Priority Corridor(s) Schedule Start Date **End Date Third-Party Access Regime** Pre-Feasibility Regulated Considered TPA Regime Regulated Feasibility **Considered Tariff Regime** FEED Applied for Exemption No Permitting **Exemption Granted** No Supply Contracts Exemption in entry direction FID 0.00% Exemption in exit direction 0.00% Construction Commissioning 2025 2025

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

	Benefits
Main Driver	Market Demand
Main Driver Explanation	n
Benefit Description	

	СВСА	Financial Assistance			
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
Decision	and we do not plan to submit it	Grants for studies	No		
Submissin Date		Grants for studies amount			
Decision Date		Grants for works	No		
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF	No decision yet taken		
Countries Net Cost Bearer		Other Financial Assistance	No		
Additional Comments		Comments			
		General 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 exist 2022.	ing Snam Rete Gas network that will	be commissioned until
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			Ge	neral Information	ND	P and PCI Information
Snam Rete Gas S.p.A		100%	Promoter Operator Host Country Status Website	Snam Rete Gas S.p.A. Snam Rete Gas S.p.A. Italy Planned	NDP Release Date NDP Website Currently PCI	No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDP) No
Schedule Pre-Feasibility	Start Date	End Date			Considered TPA Regir	-
Feasibility FEED Permitting Supply Contracts					Considered Tariff Reg Applied for Exemption Exemption Granted	
FID Construction Commissioning	2022	2022			Exemption in entry di Exemption in exit dire	

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
	Total		21		

		Benefits	
Main Driver	Market Demand		
Main Driver Explana	ation		
Benefit Description			

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

LNG Terminal in Klaipeda

LNG-N-824		Project			LNG Termina	<u> </u>	Ion-FID
Update Date		30/05	/2018			Non	-Advanced
Description	Terminal, i.e. exercise the pur of the substantial regional be security of supply, availability FSRU would also facilitate sub	lease turned to be a success sto chase option available within the nefits already brought to the reg of alternative natural gas suppli- ostantially lower regasification ar vell as facilitate faster developme	e pilot action's existing TC jion and ensure the susta es, LNG break bulk infrast nd reload tariffs and conse	P contr inability ructure equenti	act. This long-term so of future regional ga and effective natural ally lower the effective	olution will ensure as market. The ben gas price cap. Pur e natural gas price	a consolidatior refits include rchase of the e cap for all
PRJ Code - PRJ Name							
Capacity Increments Varia	ant For Modelling	Operator		Year	From Gas System	To Gas System	Capacity
Klaipeda (LNG)		AB Klaipėdos Nafta		2024	LNG_Tk_LT	LT	122.4 GWh/d
Sponsors		General Infor	rmation		NDP and	PCI Information	
AB Klaipėdos Nafta	100%	Promoter	AB Klaipėdos Nafta	Part o	of NDP No ((5) others - please	comment belov
		Operator	AB Klaipėdos Nafta	NDP	Number		
		Host Country	Lithuania	NDP	Release Date		
		Status	Planned	NDP	Website		
		Website	<u>Project's URL</u>	Curre	ntly PCI		N
				Priori	ty Corridor(s)		BEMI

Current TYNDP : TYNDI	P 2018 FINAL -	Annex A						Page	466 of 575
Schedule S	Start Date	End Date				Third-Party Access Regime			
Pre-Feasibility						Considered T	PA Regime		Regulated
Feasibility	11/2017	03/2018				Considered Ta	ariff Regime		Regulated
FEED						Applied for Ex	emption		No
Permitting						Exemption Gr	anted		Not Relevant
Supply Contracts									
FID		12/2020				Exemption in	entry direction		0.00%
Construction						Exemption in	exit direction		0.00%
Commissioning	2024	2024							
Regasification Facility	Reloadir Ability	, Floject Flase	Technical Info Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	(%)
FSRU Independence	Yes	Purchase	3.7	160,000	10.20	170,000	-	2024	40
			Fulfilled	Criteria					
Specific Criteria Fulfilled	l Con	npetition, Market Integra	ition, Security of Supply, S		, ,				
	Enh Comments glob	anced security of natura	l gas supply Diversification gas prices cap in the regio	of natural g	gas supply sou				
			Expected Ga	as Sourci <u>ng</u>					

LNG (LNG,NO,US,WO), Nigeria, Trinidad and Tobago

Comments about the Third-Party Access Regime

Tariff regulation created by Lithuania NRA and Parliament, which was also approved by EC -State aid SA.36740 (2013/NN) – Lithuania. All services of Klaipeda LNG terminal is regulated.

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	Ben	efits							
Main Driver	Regulation SoS								
Main Driver Explanation	Ensure certainty on the SoS in the region Without a project there is uncertainty on: - compliance with N-1 standard - competition of gas supply in the market - successful evolution of the regional gas market								
Benefit Description	Ensure certainty of independence from the single external natural gas supplier Ensure certainty of diversification of natural gas supply sources Ensure certainty to the regional gas market players and create real gas market ensuring natural gas supply in the Baltics The project is also driven by a market demand to have flexibility in choosing different sources of supply, to be connected with global market								
	Bar	riers							
Barrier Type	Description								
Market	Lack of market support								
Market	Lack of market maturity								
Regulatory	Low or zero-priced short-term capacity								
Financing									
Financing	Amortization rates								
mancing	CBCA	Finan	cial Assistance						
	CBCA No, we have not submitted an investment request yet,	Finan Applied for CEF							
	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or		(3) No, we have not applied for C						
Decision	CBCA No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for Cl						
Decision ubmissin Date	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies	(3) No, we have not applied for Cl N						
Decision ubmissin Date Decision Date	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies Grants for studies amount	(3) No, we have not applied for Cl N						
Decision ubmissin Date Decision Date Vebsite	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies Grants for studies amount Grants for works	(3) No, we have not applied for Cl N						
Decision Submissin Date Decision Date Website Countries Affected	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	(3) No, we have not applied for CE N N Yes, for work on						
Decision Submissin Date Decision Date Website	CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	<mark>cial Assistance</mark> (3) No, we have not applied for CE N Yes, for work on N						

Skulte LNG											
LNG-N-912 Update Date	Project 15/11/2018		LNG Terminal			Non-FID Non-Advanced					
Description PRJ Code - PRJ Name			to build cost effective LNG FRU ble flexibility and low price sprea	solution which will have d		inked to Latvia Incuk					
Capacity Increments Variant F Point	or Modelling		Operator		Year	From Gas System	To Gas System	Capacity			
Skulte (LV)			AS Skulte LNG Termin		2021	LNG_Tk_LV	LV	150.0 GWh/d			
Sponsors Full project Nacionala gazes terminala bie Terminal Society) Arnfinn Unum Peter Ragauss SIA DIGAS	driba (National Gas	56% 16% 16% 10%	General Info Promoter Operator Host Country Status Website	ormation AS Skulte LNG Terminal AS Skulte LNG Terminal Latvia Planned <u>Project's URL</u>	NDP N NDP F NDP V Currer	No ((f NDP leve Number Release Date Website ntly PCI	d PCI Information 4) there is no obligo l for such a project	to be part of the NDP) No			
ScheduleStart DPre-FeasibilityFeasibilityFeasibility03/20FEED06/20Permitting01/20Supply ContractsFIDConstruction03/20Commissioning20	03/2015 015 05/2016 018 02/2019 019 03/2019 02/2020 03/2019				Priority Corridor(s) Third-Party Acces Considered TPA Regime Considered Tariff Regime Applied for Exemption Exemption Granted Exemption in entry direction Exemption in exit direction		on	BEMIP s Regime Regulated Regulated No No 100.00% 100.00%			

			Technical Info	rmation (LN	IG)				
Regasification Facility	/ Reloading / Ability	9 Project Phase	Expected Increment (bcm/y)	Ship Size (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 LNG)	Comments	Commissioning Year	Load Fact (%)
RU	Yes	PreFeed	1.5	170,000	17.00	700,000	All LNG will be stored in UGS	2021	30
			Fulfilled	Criteria					
pecific Criteria Fulfil	led Com	petition, Market Integration	on, Security of Supply, S	ustainability	1				
pecific Criteria Fulfil	led Comments Provi	des significant decrease/e	elimination of price spre	ads with Eu	ropean gas hu	bs			
			Time Sc	hedule					
Grant Obtention Date Delay Since Last TYN Delay Explanation		3/2018							
			Expected G	as Sourcing					
_NG ()									
			Ben	efits					
Main Driver	Market Demand								
Main Driver Explanat	ion Existing import e	entry points in the region	does not provide price o	convergence	e with Europea	n gas hubs			
Benefit Description	Low cost LNG ter	rminal with direct link to	JGS - provides felixibilit	y of supply.					
			Barr	iers					
Barrier Type	Description								
Regulatory	Lack of proper tr	ansposition of EU regulat	ion						
Market	Lack of market m	naturity							

	СВСА	Financial Assistance			
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
	but we do plan to submit it	Grants for studies	No		
Submissin Date	01/10/2018	Grants for studies amount			
Decision Date		Grants for works	No		
Website		Grants for works amount			
Countries Affected	Estonia, Finland, Latvia, Lithuania	Intention to apply for CEF	Yes, for studies and works		
Countries Net Cost Bearer	Estonia;#Finland;#Latvia	Other Financial Assistance	No		
Additional Comments		Comments			
		General Comments			

Trans-Balkan Bi-directional Flow (Moldavia phase)

TRA-N-1253		Project		Pipeline including	J CS N	lon-FID
Update Date		29/03/2018			Non	-Advanced
Description	Corridor. The Trans-Balkar some reconstructions. The with Romania. In case of c of Balkan Region and wou Romania to CEE Region, ir	ey element of energy security of the Balkans and S n route consists of three high diameter pipelines, w Ukrainian GTS and Moldavian GTS can transport u onstruction of TANAP and Turkish stream, this pro- ld ensure utilization of the existing infrastructure. Inter alia to provide the offshore gas production con- reconnectivity in the Balkan and CEE regions; - to er	which can transpo up to 20 bcm fror ject would becon The key overall ol mpanies with the	rt bi-directionally up to n/to UA-PL, UA-SK and ne a strategic one as it ojectives are: - to facili access to the gas infra	o 20 bcm of nature d UA-HU borders could ensure secu itate export of nat astructure and the	al gas after to/from the IPs urity of supply ural gas from
PRJ Code - PRJ Name	-					
Capacity Increments Va	ariant For Modelling					
	Variant : Phase 1	establishment of physical and virtual which would not require building ad			m per year,	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Grebenyky		Moldovatransgaz LLC	2019	UA	MD	43.1 GWh/d
Стеренуку				Comment: Entry to Uk	kraine-reverse flow	,
Capacity Increments Va	ariant(s) For Information Only					
	Variant : Phase 2	establishment of physical and virtual of 5 bcm per year	flow via Transit	1 pipeline up to its ma	aximum capacity	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Crohomylay		Moldovatransgaz LLC	2021	UA	MD	143.5 GWh/o
Grebenyky				Comment: Entry to Uk	kraine-reverse flow	,
Capacity Increments Va	ariant(s) For Information Only					
	Variant : Phase 3	establishment of physical and virtual capacity (approximately 20 bcm per		1-2-3 pipelines up to	their maximum	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Grobonyky		Moldovatransgaz LLC	2024	UA	MD	574.1 GWh/o
Grebenyky				Comment: Entry to Uk	kraine-reverse flow	,

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Sponsors		General Information		NDP and PCI Information		
Moldovatransgaz L	LC	100%	Promoter Operator Host Country Status Website	Moldovatransgaz LLC Moldovatransgaz LLC Moldavia Planned	Part of NDP NDP Number NDP Release Date NDP Website	No ((1) the NDP was prepared at an earlier date and the project will be proposed for inclusion in the next NDF
					Currently PCI Priority Corridor(s)	Ν
Schedule	Start Date	End Date			Thi	ird-Party Access Regime
Pre-Feasibility Feasibility FEED Permitting Supply Contracts FID Construction					Considered TPA Reg Considered Tariff Re Applied for Exemption Exemption Granted Exemption in entry of Exemption in exit dir	egime Regulated on N N direction 0.009
Commissioning	2019	2019			Exemption in exit di	lection 0.004

Pipelines and Compres	ssor Stations						
	Phase 1		establishment of physical and virtual flow via Transit 1 pipeline up to 1.5 bcm per year, which would not require building additional infrastructure				
Pipeline Section			Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Phase 1			Phase 1 - From the Ukrainian side it is necessary to reconstruct the CS and GMS Orlovka, CS Berezivka and the GMS Grebenyky. On the Moldavian side, it is necessary to reconstruct the CS Vulkaneshty and the GMS Kaushany.	1,200	320		2019
		Total			320		
Pipelines and Compres	ssor Stations - Alternative Varia	nt					
	Phase 2		establishment of physical and virtual flow via Transit 1 pipeline up to its maximum capacity of 5 bcm per year				
Pipeline Section			Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
Phase 2			Phase 2 - also requires some reconstruction works by Romanian TSO.	1,200	320		2021
		Total			320		
Pipelines and Compres	ssor Stations - Alternative Varia	nt					
	Phase 3		establishment of physical and virtual flow via Transit 1- 2-3 pipelines up to their maximum capacity (approximately 20 bcm per year)				
Pipeline Section			Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
Phase 3			Phase 3 - establishment of physical and virtual flow via Transit 1-2-3 pipelines up to their maximum capacity (approximately 20 bcm per year)	1,200	320		2024
		Total			320		
			Fulfilled Criteria				
Specific Criteria Fulfilleo	4						

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

	Expected G	as Sourcing					
Caspian Region, Russia,	LNG (GR), Romanian gas production						
	Ben	efits					
Main Driver	Market Demand						
Main Driver Explanation	Romanian gas producers in Black Sea offshore fields are planning to start gas production in 2020. They are looking for ways to export gas and the project will open for them Ukranian market.						
Benefit Description							
	Bar	riers					
Barrier Type	Description						
Financing	Availability of funds and associated conditions						
Financing	Amortization rates						
	СВСА	Finan	cial Assistance				
Decision Submissin Date Decision Date	No, we have not submitted an investment request yet, but we do plan to submit it 02/07/2018	Applied for CEF Grants for studies Grants for studies amount	(3) No, we have not applied for CEF No				
Website		Grants for works Grants for works amount	No				
Countries Affected Countries Net Cost Bear Additional Comments	er	Intention to apply for CEF Other Financial Assistance Comments	No, we do not plan to apply N				
		General Comments					

Interconnection Macedonia-Serbia

TRA-N-965	Pro	oject	Pipeline including CS	Non-FID
Update Date		30/05/2018		Non-Advanced
Description	Main gas pipeline section Klechovce-Sopot Dimensions and capacity: Diameter: DN500 Length: 23 km Capacity (m3/day): Q= 160. 000 m3/h Working (operating), maximum and minimu p= 40 bars; pmax = 54 bars, pmin = 25 bars. Data on accompanying elements of the gas Valve stations with nominal diameter DN50 Pig Launching-Receiving Station DN500: 1 p Pig Receiving station DN500: 1 pcs. Telemetric system for monitoring Main regulation and measuring station	ım pressure pipeline: 0: 2pcs.		
PRJ Code - PRJ Name	-			

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
Sopot (MK) / Strezovac (RS)	MER JSC Skopje	2021	RS	МК	1.0 GWh/d		

Sponsors			Ge	eneral Information		nd PCI Information
sponsors						
			Promoter	MER JSC Skopje	Part of NDP	es (Work Program of the Government of R. Macedonia)
			Operator	MER JSC Skopje		
			Host Country	former Yugoslav Republic of	NDP Number	N/A
			Host country	Macedonia	NDP Release Date	
			Status	Planned	NDP Website	NDP URL
			Website		Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-P	arty Access Regime
Pre-Feasibility					Considered TPA Regime	Regulated
Feasibility	04/2009	07/2010			Considered Tariff Regime	e Regulated
FEED		07/2010			Applied for Exemption	Yes
Permitting					Exemption Granted	Not Relevant
Supply Contracts						
FID					Exemption in entry direct	tion 0.00%
Construction					Exemption in exit direction	on 0.00%
Commissioning	2021	2021				

Pipelines and Compressor Stations		
Pipeline Section	Pipeline Comment	Diameter Length Compressor Power Comissionir (mm) (km) (MW) Year
Main gas pipeline section Klechovce-S	Sopot (border with Serbia)	500 23
	Total	23

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	
he transmission tariff will be regulated according to EU regulations.	

			Page 477 of 575					
Ben	efits							
Regulation SoS								
n Driver Explanation Enormous development of the national gasification system and increased consumption/demand in the market -Security of supply -Diversification of sources -Development of the region (reversible gas pipelines)								
-Security of supply -Diversification of sources -Development of the	ne region (reversible gas pipelines)							
Barı	riers							
Description								
After determining the project financing.								
Barriers regarding the implementation of the projects have not be	een encountered.							
Intergovernmer	ntal Agreements							
Agreement Description		Is Signed Ag	eement Signature Da					
rstanding between		No	18/05/2016					
			-, ,					
СВСА	Fina	incial Assistance						
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we	have not applied for C					
but we do plan to submit it	Grants for studies							
	Grants for studies amount							
	Grants for works							
	Grants for works amount							
	Intention to apply for CEF							
rer	Other Financial Assistance							
	Comments							
	General Comments							
	Ben Regulation SoS Enormous development of the national gasification system and in -Security of supply -Diversification of sources -Development of the Barri Description After determining the project financing. Barriers regarding the implementation of the projects have not be Intergovernment Agreement Description Standing between	Benefits Regulation SoS Enormous development of the national gasification system and increased consumption/demand in the material of supply -Diversification of sources -Development of the region (reversible gas pipelines) Security of supply -Diversification of sources -Development of the region (reversible gas pipelines) Barriers Description After determining the project financing. Barriers regarding the implementation of the projects have not been encountered. Intergovernmental Agreements Agreement Description standing between CBCA Final No, we have not submitted an investment request yet, but we do plan to submit it Applied for CEF Grants for studies Grants for studies Grants for works Grants for works amount Intertion to apply for CEF Other Financial Assistance Comments Other Financial Assistance	Regulation SoS Enormous development of the national gasification system and increased consumption/demand in the market -Security of supply - Diversification of sources - Development of the region (reversible gas pipelines) Barriers Description After determining the project financing. Barriers regarding the implementation of the projects have not been encountered. Intergovernmental Agreements Agreement Description Signed Agr Signed Agr No CBCA No, we have not submitted an investment request yet, but we do plan to submit it Grants for studies Grants for studies Grants for studies Grants for works Grants for works Grants for works amount Intertion to apply for CEF Other Financial Assistance Comments					

Interconnection Macedonia-Bulgaria

RA-N-976	Project		Pipeline including CS	Non-FID
pdate Date		30/05/2018		Non-Advanced
Pescription	 Main gas pipeline section Hamzali – Novo Selo (bc Within this section the following objects and system -Line part in length of 25 km with pipe diameter D -Valve stations with nominal diameter DN700, 3 pc -Pig Launching-Receiving station DN700, 2 pcs. -Main Measuring station Novo Selo, -System for automatic operating with the technoloc Line for connection with optic fibres; -Power supply system -Cathodic protection system -Security Signaling System and fire signalization working (operating) pressure p= 40 bars; maximum pressure (projected) pmax = 54 bars minimum pressure pmin = 25 bars -Capacity 326.000 m3/h (76,4 GWh/d) 	ms are included: N 700 (28''), cs.	ansport (DCS/SCADA);	

PRJ Code - PRJ Name

Point	Operator		Year	From Gas System	To Gas System	Capacity
Novo Selo (MK) / Samuilova Krepost (BG)	MER JSC Skopje		2021 BGg/BGT		МК	1.0 GWh/d
Sponsors	Gene	eral Information		NDP and	PCI Information	
Hamzali-Novo Selo	Promoter	MER JSC Skopje	Part of	Yes	(Work Program of	the Governmen
MER JSC Skopje 100%	Operator	MER JSC Skopje		ND		of R.Macedonia
section Hamzali – Novo Selo (border with Bulgaria)	Hast Country	former Yugoslav Republic of		NDP Number		N/A
	Host Country	Macedonia	NDP R	elease Date		
Bulgartransgaz 100%	Status	Planned	NDP V	Vebsite		NDP UR
	Website		Currer	ntly PCI		Λ
			Priority	y Corridor(s)		

YNDP 2018 FINAL	Annex A		Page 479 of 5
Start Date	End Date	Third-Party Access Re	gime
		Considered TPA Regime	Regul
04/2009	07/2010	Considered Tariff Regime	Regu
	07/2010	Applied for Exemption	
		Exemption Granted	Not Rele
		Exemption in entry direction	0
		Exemption in exit direction	0
2021	2021		
	Start Date 04/2009	04/2009 07/2010 07/2010	Start Date End Date Third-Party Access Re 04/2009 07/2010 Considered TPA Regime Considered Tariff Regime 07/2010 07/2010 Applied for Exemption Exemption Granted Exemption in entry direction Exemption in exit direction

Pipelines and Compressor Stations			
Pipeline Section	Pipeline Comment	Diameter Length Compressor Power Comissic (mm) (km) (MW) Yea	
Main gas pipeline section Hamzali – Novo S Bulgaria)	Selo (border with	700 25	
	Total	25	

Time Schedule

Grant Obtention Date

Delay Since Last TYNDP

Delay Explanation

MER JSC Skopje for the first time submits its projects in the TYNDP. The possibility of delay is due to the interstate procedures and financing.

Expected Gas Sourcing

Caspian Region, Russia, The interconnection allows access to all gas sources from the neighbouring countries

Comments about the Third-Party Access Regime

The transmission tariff will be regulated according to EU regulations.

6 - - -

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s d consumption/demand on the egion (reversible gas pipelines) s intered. Agreements)	
egion (reversible gas pipelines) s intered.)	
egion (reversible gas pipelines) s intered.)	
s intered.		
intered.	Is Signed	
	Is Signed	
	Is Signed	
Agreements	ls Signed	
	Is Signed	
		d Agreement Signature Dat
	No	18/05/2016
	Financial Assistance	
Applied for CEF	(3) N	lo, we have not applied for Cl
Grants for studies		1
Grants for studies amount		
Grants for works		٢
Grants for works amount		
Intention to apply for CEF		
Other Financial Assistance		٨
Comments		
General Comments		
	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments

Interconnection Macedonia-Greece

TRA-N-980	Project	Pipeline including CS	Non-FID
Update Date	22/05/2018		Non-Advanced
Description	 The project will ensure supply of additional quantities of natural gas from Gre connection to the existing LNG Terminal Revithoussa and transit of additional Main gas pipeline section Stip-Hamzali-Stojakovo (border with Greece) Within this section the following objects and systems are included: Line part in length of 110 km with pipe diameter DN 700 (28"), Valve stations Pig Launching-Receiving Station DN700, System for automatic operating with the technological process for natural gas Line for connection with optic fibres; Power supply system Cathodic protection system Security Signaling System and fire signalization. working (operating) pressure p= 40 bars; maximum pressure (projected)pmax = 54 bars minimum pressurepmin = 25 bars -Capacity 326.000 m3/h (76,4 GWh/day) 	quantities of natural gas intended for Serbia.	bugh Greece, direct
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	МК	76.5 GWh/d		

Sponsors			Ge	eneral Information	ND	P and PCI Information
DESFA		100%	Promoter	MER JSC Skopje	Part of NDP	Yes (Work Program of the Government
			Operator	MER JSC Skopje		of R.Macedonia)
			Host Country	former Yugoslav Republic of	NDP Number	N/A
			Host Country	Macedonia	NDP Release Date	
			Status	Planned	NDP Website	NDP URL
			Website		Currently PCI	No
					Priority Corridor(s)	
Schedule	Start Date	End Date			Thirc	I-Party Access Regime
Pre-Feasibility					Considered TPA Regir	ne Regulated
easibility					Considered Tariff Reg	ime Regulated
FEED					Applied for Exemption	No No
Permitting					Exemption Granted	No
Supply Contracts						
ID					Exemption in entry di	rection 0.00%
Construction					Exemption in exit dire	ction 0.00%
Commissioning	2020	2020				

Pipeline Section		Pipeline Comment	Diameter Length Compressor Power Comission (mm) (km) (MW) Year
Stip-Hamzali-Stoj	akovo (border with Greece)		
		Total	
		Benefits	
Main Driver	Market Demand	Benefits	
Main Driver Main Driver Expla		Benefits	

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18/05/2016

No

	Intergovernmental Agreements					
Agreement	Agreement Description	Is Signed Agreement Signature Date				
Mamarandum of understanding batwaan						

Memorandum of understanding between DESFA S.A. and MER JSC Skopje

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

TRA-N-31			Project		Pipeline including CS	Non-FID
Update Date		1		21/11/2018		Advanced
Description	pipelin approx flow bu contrib shippir	e interconnection imate length of 15 ut its primary aim is oute to integration	between Malta (Delimara) 9 km (151 km offshore, 7 k s to enable gas flows from of the gas market and imp	and Italy (Gela, Sicily) with a capacit of onshore in Sicily and 1km onsho Italy to Malta. The project will end I proved security of energy supply, giv	ipeline interconnection with Italy at G y of 2 bcm/year, diameter of 22" (DN re in Malta). The pipeline is being desi Malta's isolation from the European ga ren that presently the island depends o n and the inland market thereby impro	560) and an gned for bi-directional is network and thus on LNG supply through
PRJ Code - PRJ Nam	ne -					
Sponsors			Ger	neral Information	NDP and PCI Infor	mation
			Promoter	Melita TransGas Co. Ltd.	Part of NDP Yes (Malta Natio	onal Reform Programme
			Operator	Melita TransGas Co. Ltd.		April 2017,
			Host Country	Malta	NDP Number	Section 4.3.2
			Status	Planned	NDP Release Date	30/04/2017
			Website	Project's URL	NDP Website	<u>NDP URI</u>
					Currently PCI	Yes (
					Priority Corridor(s)	NSIW
Schedule	Start Date	End Date			Third-Party Access	Regime
Pre-Feasibility		04/2015			Considered TPA Regime	Regulated
Feasibility	04/2013	04/2015			Considered Tariff Regime	Regulated
FEED	11/2018	03/2020			Applied for Exemption	No
Permitting	11/2017	07/2020			Exemption Granted	No
Supply Contracts		10/2021				
FID		07/2020			Exemption in entry direction	0.00%
Construction	03/2023	05/2024			Exemption in exit direction	0.00%
Commissioning	2024	2024				

		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
		Length of the pipeline interconnection has been				
		updated following the results of the basic design study				
Delimara (Malta) to Gela (Sicily) Italy		completed in June 2017.NOTE: With reference to the	560	159	0	2024
		load factor figure of 22% of the pipeline stated in the				
		PCI call submission below, it is to be note				
	Total			159	0	
		Fulfilled Criteria				
Specific Criteria Fulfilled C	Competition, Market Integrati	on, Security of Supply, Sustainability				
		g and regasification, as is the case with ling use and will s	support baci	(-up for i	renewable energy. It v	will contribute
		g and regasification, as is the case with LNG use and will surces and thus enhance competition in Italy. In Malta, it with a sector the sector	vill provide a	iccess to	a potentially lower co	
		urces and thus enhance competition in Italy. In Malta, it v	vill provide a	iccess to	a potentially lower co	
р		urces and thus enhance competition in Italy. In Malta, it v ially for the inland market sector thereby improving com	vill provide a	iccess to	a potentially lower co	
p Grant Obtention Date 2	oower generation and potent	urces and thus enhance competition in Italy. In Malta, it v ially for the inland market sector thereby improving com	vill provide a	iccess to	a potentially lower co	
p Grant Obtention Date 2	oower generation and potenti 5/01/2018	urces and thus enhance competition in Italy. In Malta, it v ially for the inland market sector thereby improving com	vill provide a	iccess to	a potentially lower co	
p Grant Obtention Date 21 Delay Since Last TYNDP Ye	oower generation and potenti 5/01/2018	urces and thus enhance competition in Italy. In Malta, it v ially for the inland market sector thereby improving com	vill provide a	iccess to	a potentially lower co	

	Benefits
Main Driver	Others
Main Driver Explanation	The main driver is the elimination of Malta's isolation from the European Gas network.
Benefit Description	The gas pipeline interconnection will put an end to Malta's isolation from the European gas network and contribute to the integration of the Internal Energy Market; moreover the project shall: • Replace the importation of LNG for the production of electricity; • Contribute to the system's overall flexibility and interoperability in that it will offer the possibility of capacity for reverse flows in the future. • Complement the Energy Union's strategy towards the diversification of sources, routes and suppliers of natural gas. • Guarantee greater security of energy supply to the island; • Enable easier access to the natural gas resources at a lower cost for Malta; • Support objectives of sustainability as it will contribute towards the reduction of GHG (Greenhouse Gas) emissions by delivering natural gas more efficiently, eliminating the need for liquefaction, shipping and regasification, as is the case with LNG use for electricity generation purposes.

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, but we do plan to submit it	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 4
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	Yes, for studies and works
Additional Comments		Other Financial Assistance	Yes
			(1) TEN-E Programme 2012 Call: 'Feasibility Study and cost-benefit analysis of a gas pipeline between Malta and Sicily' 2012-G215/12-ENER/12/TEN-ESI2.661346 Decision Nr C(2013) 8516 - Amount: 125,925 Eur
		Comments	(2) CEF Synergy Call of 2016: 'Technical Study and Cost- Benefit Analysis for the Development of LNG as a Marine Fuel in Malta' Grant Agreement No: INEA/CEF/SYN/A2016/1338428; Action No: 2016-MT- SA-0005 - Amount : 600,000 Eur
		General Comments	

North - South Gas Corridor in Eastern Poland

TRA-N-245	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	The investment tasks within the project constitute essential elements of the p Eastern Europe. The corridor covers Eastern Poland and is planned to be com Poland – Slovakia Interconnection. Implementation of the project will allow for Eastern Poland towards PL-SK Interconnection and PL-UA Interconnection. The along the North-South axis. It will also enhance the access to the UGS Stracher security of supply infrastructure in the CEE region. Hermanowice – Strachocina pipeline and Gustorzyn-Wronów pipeline are pla 2027.	nected to two interconnectors, Poland – Ukraine or significant volumes of gas to be transported v nis investment plays a key role in the integration ocina that have large expansion potential and m	e Interconnection and via the corridor in n with the CEE region nay serve as essential
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling									
Point	Operator	Year	From Gas System	To Gas System	Capacity				
	GAZ-SYSTEM S.A.	2022	DScPL	PL	0.0 GWh/d				
Aggregated Distribution (PL)	Comment: The is an inter	nal project which is p	lanned to be connecte	ed to PL-SK, PL-UA					
				interconnections					

Sponsors	Gene	General Information		NDP and PCI Information		
Gas Trans <mark>mission O</mark> perator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmissior System Development Plan 2018-2027	
		Operator	GAZ-SYSTEM S.A.		· ·	
		Host Country	Poland	NDP Number	N/	
		Status	Planned	NDP Release Date		
		Website	Project's URL	NDP Website	NDP UR	
				Currently PCI	Yes	
				Priority Corridor(s)	NSI	

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Schedule	Start Date	End Da	ate	Third-Party Access Re
Pre-Feasibility				Considered TPA Regime
Feasibility				Considered Tariff Regime
FEED				Applied for Exemption
Permitting				Exemption Granted
Supply Contracts				
FID				Exemption in entry direction
Construction				Exemption in exit direction
Commissioning	2022	202)22	

Enabled Projects

Project Code	Project Name
TRA-N-621	Poland - Ukraine Gas Interconnection (PL section)
TRA-F-275	Poland - Slovakia Gas Interconnection (PL section)

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Gustorzyn-Wronów pipeline		1,000	316		
Hermanowice-Jarosław pipeline		700	39		
Hermanowice-Strachocina pipeline		700	72		
Jarosław - Rozwadów pipeline		700	60		
Rembelszczyzna-Wronów pipeline			135		
Rozwadów-Końskowola-Wronów pipeline		700	103		
	Total		725		

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Fulfilled Criteria						
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability					
Specific Criteria Fulfilled Comments	The project is an internal enabler for PL-SK and PL-UA interconnections. Its implementation will have an impact on: Market integration: - Creation of a well-integrated and functioning market in the CEE region. SoS: - Mitigation of exposure to supply disruptions in CEE countries; - Reduction of dependence on gas supplies from Russia in the CEE region; - Bringing new route for natural gas to the south-eastern part of Poland which has developed gas transmission system and storage facilities. Competition: - Reduction of price differences between the CEE and North-West regions; - Enhanced access to new sources of supply in the CEE region (LNG, NO supplies). d) Sustainability - Reduction of emissions in the CEE region by promoting natural gas in national economies.					

	Benefits							
Main Driver	Others							
Main Driver Explanation	r Explanation Regulation SoS, market demand							
Benefit Description	The project will allow to transport significant volumes of gas via PL-SK and PL-UA Interconnections. It will also enhance the access to the UGS Strachocina that have large expansion potential and may serve as essential security of supply infrastructure in the CEE region. Construction of the pipelines within this project, together with completion of the PL-SK Interconnection and PL-UA Interconnection, will have a positive impact on the competition in the CEE region, as the project will provide a possibility to open the market for more gas suppliers. This would in turn mean ending the state of major dependency on one single gas supplier for the countries in the respective regions thanks to the potential access to gas deliveries from new sources.							
	Barriers							
Barrier Type	Description							
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the project.							
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.							
Financing	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.							

	СВСА		Financial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to apply
Countries Net Cost Bearer		Other Financial Assistance	Yes
Additional Comments		Comments	Structural Funds (Operational Programme Infrastructure and Environment 2014-2020) - Hermanowice - Strachocina pipeline.
		General Comments	

North - South Gas Corridor in Western Poland

TRA-F-247	Project	Pipeline including CS	FID
Update Date	30/03/2018		Advanced
Description	The investment tasks within the project constitute essential elements of the The corridor covers Western Poland and it is planned to be connected to PL project will allow for exploiting full potential of gas transmission from LNG corridor to other CEE countries. This infrastructure will be used for purpose	-CZ Interconnection. Implementation of the inves Terminal in Świnoujście and Baltic Pipe through th	tment tasks within this
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Aggregated Distribution (PL)	GAZ-SYSTEM S.A.	2020	DScPL	PL	0.0 GWh/d

Sponsors		General Information	ND	P and PCI Information	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
		Operator	GAZ-SYSTEM S.A.		System Development Plan 2018-2027)
		Host Country	Poland	NDP Number	N/A
		Status	Planned	NDP Release Date	
		Website	Project's URL	NDP Website	NDP URL
				Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

Irrent TYNDP : T	(NDP 2018 FINA	L - Annex A		Page 492
Schedule	Start Date	End Date	Third-Party Access Re	gime
Pre-Feasibility			Considered TPA Regime	R
Feasibility			Considered Tariff Regime	R
FEED	09/2013	08/2017	Applied for Exemption	
Permitting	11/2014	08/2017	Exemption Granted	Not
Supply Contracts				
FID		11/2017	Exemption in entry direction	
Construction			Exemption in exit direction	
Commissioning	2020	2020		

Enabled Projects

Project Code Project Name

TRA-N-273 Poland - Czech Republic Gas Interconnection (PL section)

Pipelines and Compressor Stations					
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Kędzierzyn				30	
CS Odolanów				34	
Kędzierzyn Node					
Tworóg-Kędzierzyn Koźle pipeline		1,000	43		
Zdzieszowice - Wrocław pipeline		1,000	130		
Zdzieszowice-Kędzierzyn Koźle		1,000	19		
	Total		192	64	

	Fulfilled Criteria						
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability						
Specific Criteria Fulfilled Comments	The project is an internal enabler for PL-CZ interconnection. Its implementation will have an impact on: Market integration: - Creation of a well- integrated and functioning market in the CEE region. SoS: - Mitigation of effects resulting from supply disruptions in the CEE countries; - Reduction of dependence on gas supplies from Russia in the CEE region; - Enhanced security of supply with an improved supply link in the CEE region to the European gas market, global LNG supplies, deliveries of gas from Norway. Competition: - Reduction of price differences between the CEE and North-West regions; - Enhanced access to new sources of supply in the CEE region (LNG, Norway, supplies from the EU market) that improves competition not only in PL but also in the whole CEE region. Sustainability - Reduction of emissions in the CEE region by promoting natural gas in national economies.						

	Benefits
Main Driver	Others
Main Driver Explanation	The project is driven by SoS and market demand considerations
Benefit Description	Implementation of the investment tasks within this project will allow for ensuring full functionality of PL-CZ Interconnection. This project will have an impact on: enhancing functionality of transmission system in Central and Southern Poland in order to facilitate better operational functioning of the upgraded PL-CZ Interconnection; increasing the security of supply sources, routes and counterparts, as well as on providing an overall flexibility for the CEE region; improving European gas grid interconnections; creating a well-functioning internal market in the CEE region by ensuring high reliability of the cross-border transmission between Poland and the Czech Republic.
	Barriers
Barrier Type	Description
Permit Granting	Efficient permitting procedures are necessary for timely implementation of the Project.
Others	Due to the project drivers which are mainly related to SoS in Central-Eastern Europe, the project does not meet the criterion of economic viability, so the external co-financing is indispensable. Lack of external financial support may be a serious barrier in implementation.

	СВСА		Financial Assistance
ecision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received decision decision
ubmissin Date	31/10/2013	Grants for studies	Y
ecision Date	24/06/2014	Grants for studies amount	
/ebsite	<u>CBCA URL</u>	Grants for works	Λ
ountries Affected		Grants for works amount	
ountries Net Cost Bearer		Intention to apply for CEF	
dditional Comments		Other Financial Assistance	Ŷ
			Structural Funds (Operational Programme Infrastructur and Environment 2014-2020 - Tworóg - Kędzierzyn-Koźle - Zdzieszowice- Wrocław
		Comments	Zdzieszowice- Wrocław TEN-E: " Studies and preinvestment works related to th utilization and further development possibilities of th Interconnector Poland - Czech Republic
		General Comments	

Upgrade of LNG terminal in Świnoujście

LNG-F-272	Project	LNG Terminal	FID
Update Date	15/11/2018		Advanced
Description	 The project includes the extension of the regasification capacity from 5 bcm/y to relements: Additional submerged combustion vaporizers (SCVs); Third LNG storage tank of min 160.000 cm LNG; Second jetty; Rail loading terminal; The terminal will provide for small scale services covering bunkering, reloading to The expansion would entail increasing plant's regasification capacity and supply of through which the Polish LNG terminal could become a prominent reloading dependent of the polish LNG. 	smaller vessels, trans-shipment and rail loa f highly-specialized LNG reloading service	ading. for smaller vessels,
PRJ Code - PRJ Name	-		

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
Swinewissis	GAZ-SYSTEM S.A.	2023	LNG_Tk_PL	PL	76.6 GWh/d
Swinoujscie	Polskie LNG S.A.	2023	LNG_Tk_PL	PL	76.6 GWh/d

Sponsors	General Information		NDP and PCI Information		
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
		Operator	Polskie LNG S.A.		System Development Plan 2018-2027)
		Host Country	Poland	NDP Number	N/A
		Status	Planned	NDP Release Date	
		Website	Project's URL	NDP Website	NDP URL
				Currently PCI	Yes ()
				Priority Corridor(s)	BEMIP

urrent TYNDP : T	NDP 2018 FINA	L - Annex A				Page 496 of 575
Schedule	Start Date	End Date			Third-Party	y Access Regime
Pre-Feasibility					Considered TPA Regime	Regulate
Feasibility	04/2015	12/2017			Considered Tariff Regime	Regulate
FEED	12/2017	06/2018			Applied for Exemption	Λ
Permitting					Exemption Granted	Not Relevar
Supply Contracts						
FID		01/2018			Exemption in entry direction	0.00
Construction	06/2018	01/2023			Exemption in exit direction	0.00
Commissioning	2023	2023				
	6 V					
			Technical Information (L		-	
Regasification Facil		ading Project Phase pility	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity (mcm/d)	Storage capacity (m3 Comments LNG)	Commissioning Load Factor Year (%)
LNG terminal in Św	vinoujście N	Vo			,	
	,					
			Fulfilled Criteria			
Specific Criteria Ful	filled	Competition, Market Integ	gration, Security of Supply, Sustainabili	ty		
			pply sources, routes and counterparts			
Specific Criteria Ful	filled Comments I	BEMIP and CEE regions; - between the BEMIP and N	in PL and other countries in the BEMIP Development of small scale services th lorth-West regions. Sustainability: - Rec NG in the transport sector and the indu	at supply isolat duction of emis	ed gas systems. Competition -	Reduction of price differences

	Ben	efits				
Main Driver	Others					
Main Driver Explanation	Implementation of the project is driven by SoS and market demand considarations					
Benefit Description	The extension of the LNG terminal in Świnoujście will have an imp supply routes, sources (new physical source of supply for both re- regional markets; promoting natural gas as a reliable, competitive transport); creating a physical hub in Swinoujscie and/or a virtual forecasted growth of the gas demand in Poland and possible leve The LNG terminal in Świnoujście contributes to the NSI EAST corr system in Poland, PL-CZ PL-SK and PL-UA interconnections towa	gions) and counterparts (access e and environmentally-friendly so hub in Poland; establishing adeo erage for market coupling poten ridor, as the supplies from Świno	to global LNG market); enhancing competition on burce of energy e.g. in the transport sector (maritime quate technical conditions necessary to cover the tial in the Baltic Sea region and in Central-Eastern Europe			
	Bar	riers				
Barrier Type	Description					
Others	Possible lack of risk-taking in the private gas sector which would infrastructure operator. It could be mitgated by external susbisdie (reduction of emissions due to fuel change in maritime transport)	es (EU) to cover positive external	ities such as SoS, positive environmental impact			
Market	Lack of market maturity					
Financing	Availability of funds and associated conditions					
Regulatory	Low rate of return					
Regulatory	Capacity quotas					
	CBCA		Financial Assistance			
Decision	No, we have not submitted an investment request yet, and we do not plan to submit it	Applied for CEF	(1) Yes, we have applied for CEF and we have received (decisio			
Submissin Date		Grants for studies	٨			
Decision Date		Grants for studies amount				
Website		Grants for works	Λ			
Countries Affected		Grants for works amount				
Countries Net Cost Bear	er	Intention to apply for CEF				
Additional Comments		Other Financial Assistance	Λ			
		Comments				
		General Comments				

		UGS Damasławek				
UGS-N-914		Project		Storage Facilit	:y N	Non-FID
Update Date		15/11/2018			Non	-Advanced
Description PRJ Code - PRJ Name	facility with the gas transmiss	to construct a UGS facility in salt caverns in Da sion system. The initial working gas volume will competition perspective. It will also be instrum	l amount for 800 m	ncm. UGS Damasławe	k will play an impo	ortant role from
Capacity Increments Varia	ant For Modelling					
Point		Operator	Year	From Gas System	To Gas System	Capacity
Dama dama la (DL)		GAZ-SYSTEM S.A.	2026	STcPL	PL	200.0 GWh/c
Damasławek (PL)		GAZ-SYSTEM S.A.	2026	PL	STcPL	100.0 GWh/c
Sponsors		General Information		NDP and	PCI Information	

Sponsors		General Information	ND	P and PCI Information	
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
		Operator	GAZ-SYSTEM S.A.		System Development Plan 2018-2027)
		Host Country	Poland	NDP Number	N/A
		Status	Planned	NDP Release Date	
		Website	Project's URL	NDP Website	NDP URL
				Currently PCI	No
				Priority Corridor(s)	

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urrent TYNDP : TY	NDP 2018 FINAL - Annex A			Page 499 of 575		
Schedule	Start Date End Date		Third-Party Access Regir	me		
Pre-Feasibility			Considered TPA Regime	Regulated		
Feasibility			Considered Tariff Regime	Regulated		
FEED			Applied for Exemption	No		
Permitting			Exemption Granted			
Supply Contracts						
FID			Exemption in entry direction	0.00%		
Construction			Exemption in exit direction	0.00%		
Commissioning	2026 2026					
		Technical Inform	nation (UGS)			
Storage Facility	Storage Facility	Type Multiple-cycle Project Phase Facility	Working Withdrawal Injection Volume Capacity Capacity (%) (mcm) (mcm/d) (mcm/d)	Commisioning Year		
UGS Damasławek	Salt Cavern	Yes				
		Benefi	ts			
Main Driver	Others					
Main Driver Explana	tion Project drivers: SoS, marke	et demand				
Benefit Description						

Decision and we do not plan to submit it Grants for studies N Submissin Date Grants for studies amount M Decision Date Grants for works M Website Grants for works amount M Countries Affected Intention to apply for CEF Intention to apply for CEF	CBCA	Financial Assistance			
and we do not plan to submit itGrants for studiesNSubmissin DateGrants for studies amountDecision DateGrants for worksNWebsiteGrants for works amountCountries AffectedIntention to apply for CEFCountries Net Cost BearerOther Financial AssistanceN		Applied for CEF	(3) No, we have not applied for CEF		
Decision Date Grants for studies amount Decision Date Grants for works Website Grants for works amount Countries Affected Intention to apply for CEF Countries Net Cost Bearer Other Financial Assistance	and we do not plan to submit it	Grants for studies	No		
Website Grants for works Mebsite Countries Affected Intention to apply for CEF Countries Net Cost Bearer Other Financial Assistance		Grants for studies amount			
Countries Affected Intention to apply for CEF Countries Net Cost Bearer Other Financial Assistance		Grants for works	No		
Countries Net Cost Bearer Other Financial Assistance No		Grants for works amount			
Additional Comments		Intention to apply for CEF			
Additional Comments Comments		Other Financial Assistance	No		
		Comments			
General Comments		General Comments			
		No, we have not submitted an investment request yet,	No, we have not submitted an investment request yet, and we do not plan to submit it Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments		

FSRU Polish Baltic Sea Coast

LNG-N-947	Project	LNG Terminal	Non-FID
Update Date	15/11/2018		Non-Advanced
Description	The FSRU Polish Baltic Sea Coast project is planned as the first floating terminal in P capacity about 4.5 bcm/y. Terminal will consist of storage tanks with the capacity of loading and reloading of LNG. The project will offer its regasification capacities to the region (supplies to be directed via Gas Interconnection Poland-Lithuania and/or LNG North-South Gas Corridor via PL-CZ, PL-SK and PL-UA interconnections). The implementation of the project supports the EU's efforts to reduce the sulfur cor long-haul shipping (for bunkering service). The FSRU terminal also supports the devitransport.	approx. 165 tcm and other equipment t ne gas consumers in Poland and other co G ships) and in Central-Eastern Europe (s ntent of marine fuels by ensuring LNG su	to be used during the puntries in the Baltic Sea supplies within the applies for short and
PRJ Code - PRJ Name			

Capacity Increments Variant For Modelling					
Point	Operator	Year	From Gas System	To Gas System	Capacity
FSRU Polish Baltic Sea Coast	GAZ-SYSTEM S.A.	2022	LNG_Tk_PL	PL	138.0 GWh/d

Sponsors	General Information		NDP and PCI Information		
Gas Transmission Operator GAZ-SYSTEM S.A.	100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	Yes (National Ten-Year Transmission
		Operator	GAZ-SYSTEM S.A.		System Development Plan 2018-2027)
		Host Country	Poland	NDP Number	N/A
		Status	Planned	NDP Release Date	
		Website	<u>Project's URL</u>	NDP Website	NDP URL
				Currently PCI	No
				Priority Corridor(s)	BEMIP

urrent TYNDP : TY Schedule					Thind Dentry	Page 502 of 575 Access Regime
Pre-Feasibility	Start Date	End Date			Considered TPA Regime	Access Regime Regulate
Feasibility	03/2017	01/2018			Considered Tariff Regime	Regulate
FEED	10/2018	05/2019			Applied for Exemption	Negulate
Permitting	10/2018	12/2019			Exemption Granted	Not Relevar
Supply Contracts	,	05/2020				
FID		05/2019			Exemption in entry direction	0.009
Construction	07/2020	06/2022			Exemption in exit direction	0.009
Commissioning	2022	2022			I	
5						
			Technical Information (LN	G)		
Regasification Facili	ity Reloa Abil		Technical Information (LN Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity	Storage capacity (m3 Comments	Commissioning Load Factor Year (%)
	Abil	lity	Expected Increment Ship Size	Send-out	<u> </u>	-
Regasification Facili FSRU Polish Baltic S	Abil	lity	Expected Increment Ship Size	Send-out capacity	capacity (m3 Comments	<u> </u>
	Abil	lity	Expected Increment Ship Size	Send-out capacity	capacity (m3 Comments	<u> </u>
	Abil	lity	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity	capacity (m3 Comments	Commissioning Load Facto Year (%)
	Abil	lity	Expected Increment Ship Size	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S	Abil	lity	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S	ity Abil	lity	Expected Increment Ship Size (bcm/y) (m3)	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver	ity Abil Tea Coast No	lity Project Phase	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver Main Driver Explana	ity Abil Gea Coast No Others Ation Project driver	lity	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver	ity Abil Gea Coast No Others Ation Project driver	lity Project Phase	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing Benefits	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver Main Driver Explana Benefit Description	iea Coast No Others ation Project driver	lity Project Phase	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver Main Driver Explana Benefit Description Barrier Type	ea Coast No ation Conters Project driver Description	r: SoS, market demand	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing Benefits Barriers	Send-out capacity	capacity (m3 Comments	<u> </u>
FSRU Polish Baltic S LNG () Main Driver Main Driver Explana Benefit Description	ea Coast No ation Conters Project driver Description	f funds and associated co	Expected Increment Ship Size (bcm/y) (m3) Expected Gas Sourcing Benefits Barriers	Send-out capacity	capacity (m3 Comments	<u> </u>

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

GCP GAZ-SYSTEM/ONTRAS - incremental capacity project

TRA-N-1202		Project		Pipeline	including	CS N	lon-FID
Update Date		15/11	/2018			Non	-Advanced
dire To r Description dev the	ection Poland to GASPOOL meet the indicated deman relopment of the Lasów ga Polish gas transmission sy	ect concerns the IP GCP GAZ-SY d for incremental capacity at this s station. The maximum level of stem will have to be developed a auction of the incremental capa	s IP, GAZ-SYSTEM S.A. and the capacity developmen through extension of the	d ONTRAS conduc t is set on 2,025,6 Kiełczów gas node	ted analyse 76 kWh/h. I e.	es related to the to	echnical
PRJ Code - PRJ Name -				·			
Capacity Increments Variant For N	Modelling						
Point		Operator			s System	To Gas System	Capacity
GCP GAZ-SYSTEM/ONTRAS		GAZ-SYSTEM S.A.		2022 P	L	DEg	48.6 GWh/d
Sponsors		General Infor	mation		NDP and	PCI Information	
Gas Transmission Operator GAZ-S	SYSTEM S.A. 100%	Promoter	GAZ-SYSTEM S.A.	Part of NDP	No ((.	5) others - please	comment below
		Operator	GAZ-SYSTEM S.A.	NDP Number			
		Host Country	Poland	NDP Release Da	te		
		Status	Planned	NDP Website			
		Website	<u>Project's URL</u>	Currently PCI			N
				Priority Corridor	(s)		

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

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Kiełczów node - modernisation					
	Total				
	Benefits				
Main Driver Market	Demand				
Visio Drivor Evolanation	remental process regarding extension of the GCP GAZ-SYSTEM/ONTRAS capacity ental capacity in the given point.	y has been started due	to the ir	terest of market part	icipants in the
Benefit Description					

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

		Carregado Co	ompressor Station				
TRA-N-320		Project		F	Pipeline including	JCS N	on-FID
Update Date		2	22/05/2018			Ad	lvanced
Description	Sines and Leiria, to enable the	at higher flow rates can be t in (pipeline Celorico-Spanis	high pressure pipeline and it a transported from the Sines LNC h Border), TRA-N- 284 3rd IP b hede-Mangualde).	G Termi	nal. This project enak	oles the projects TI	RA-N-283 3rd
PRJ Code - PRJ Name	- /						
Capacity Increments Varia	ant For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Sines		REN - Gasodutos,	S.A.	2024	LNG_Tk_PT	PT	92.8 GWh/d
Jiles		Comm	ment: Incremental capacity in pi	ipeline n	network from Sines LI	NG regaseification.	
Sponsors		General	Information		NDP and	PCI Information	
REN Gasodutos, SA	100%	Promoter	REN-Gasodutos, S.A.	Part o	f NDP	Yes	(PDIRGN 2017
		Operator	REN - Gasodutos, S.A.	NDP N	Number		
		Host Country	Portugal	NDP R	Release Date		
		Status	Planned	NDP V	Vebsite		<u>NDP UR</u>
		Website	<u>Project's URL</u>	Currer	ntly PCI		No
				Priorit	y Corridor(s)		

Current TYNDP : T	YNDP 2018 FINA	L - Annex A		Page 508 of 5
Schedule	Start Date	End Date	Third-Party Access Reg	gime
Pre-Feasibility			Considered TPA Regime	Regul
Feasibility	09/2008	01/2010	Considered Tariff Regime	Regul
FEED	08/2010	11/2010	Applied for Exemption	
Permitting			Exemption Granted	
Supply Contracts				
FID			Exemption in entry direction	0.
Construction		12/2022	Exemption in exit direction	0
Commissioning	2024	2024		

Enal	bled	Proj	iects

Project Code Project Name

TRA-N-285 3rd IP between Portugal and Spain (pipeline Cantanhede-Mangualde)

TRA-N-283 3rd IP between Portugal and Spain (pipeline Celorico-Spanish border)

TRA-N-284 3rd IP between Portugal and Spain (Compressor Station)

Pipelines and Compressor Sta		Diameter	Longth	Compressor Power	Comissioning
Pipeline Section	Pipeline Comment	(mm)	(km)	(MW)	Year
Setubal - Leiria (Lote 1)	Carregado Compressor Station.			14	
	Total			14	
	Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP	3 years				
Delay Explanation	Demand forecasts decrease due to the economic and financial context in the low prices of the CO2 emissions. The investment in this infrastructure s end of 2021. The schedule of this project is aligned and is a enabler of the (TRA-N-283, TRA-N-284, TRA-N-285).	should be decided by 20 ⁻	18, with th	ne commissioning to	occur by the

Expected Gas Sourcing

LNG (DZ,NO,QA,US,WO,YE)

	Bend	etits	
/lain Driver	Market Demand		
Aain Driver Explanation			
Benefit Description	The project aims to increase the capacity of the pipeline section be Sines LNG Terminal. The project will increase the interoperability a from the high share of wind generation capacity installed in Portu- increase in their regasification capacity to RNTGN, this project will From the strategic and planning point of view, the Carregado CS is Sines LNG terminal, the construction of the 3rd interconnection P	and system flexibility and consequently sup Igal and Spain. With the expansion of the S I contribute for the diversification of supply is proposed in order to integrate the other	pport intermitent renewable generation, mainl Sines LNG Terminal and the consequent y sources and also supplying counter parts.
	Barr	iers	
Barrier Type	Description		
2000 atory	of the project plus the amortization recovery and the opex cost re		
Regulatory	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur.	users Nevertheless, it's important to notic	ce that it is not possible to predict if, when and
Regulatory	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA	users Nevertheless, it's important to notic	ce that it is not possible to predict if, when and
Regulatory	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur.	users Nevertheless, it's important to notic Finan Applied for CEF	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for Cl
egulatory	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet,	users Nevertheless, it's important to notic Finan Applied for CEF Grants for studies	ce that it is not possible to predict if, when and
egulatory Decision ubmissin Date	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	users Nevertheless, it's important to notic Finan Applied for CEF	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for Cl
egulatory ecision ubmissin Date ecision Date	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	s users Nevertheless, it's important to notic Finan Applied for CEF Grants for studies Grants for studies amount	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for C
egulatory Pecision ubmissin Date Pecision Date Vebsite	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Example a series of the series	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for C
Decision ubmissin Date Decision Date Vebsite Countries Affected	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for C I No decision yet tak
egulatory	ensured through the payment of regulated TPA tariffs by network to what extent any changes to this model may occur. CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Finan Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works Intention to apply for CEF	ce that it is not possible to predict if, when and ncial Assistance (3) No, we have not applied for Cl

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

TRA-N-139		Proje	ct	Pipeline incl	uding CS	Non-FID
Update Date			19/03/2018			Advanced
Description	The project consists in the fol Phase I: NTS Interconnection with th Repair works to the Dn 800 Phase II: Upgrading and extension of Upgrading the Gas compress Modifications inside the TN Works in the TN Şendreni.	e international ga mm Cosmești - C f the gas compres ssor station Oneșt	sor station Siliștea; i;	area of the Isaccea me	tering station;	
PRJ Code - PRJ Name	-					
Sponsors			General Information	ND	P and PCI Informa	ation
Transgaz	100%	Promoter Operator Host Country Status	SNTGN Transgaz SA SNTGN Transgaz S.A. Romania Planned	Part of NDP NDP Number NDP Release Date		onal Gas Transmission ment Plan 2017-2026) 7.3 22/06/2017
		Website	<u>Project's URL</u>	NDP Website Currently PCI Priority Corridor(s)		<u>NDP URL</u> Yes () NSIE

inent mor . H	NDP 2018 FINAL	L - Annex A			Page 511 of 575
Schedule	Start Date	End Date		Third-Party Access R	legime
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			
			Enabled Projects		
Project Code Pro	oject Name		Endbled Hojects		
			Fulfilled Criteria		
Specific Criteria Ful Specific Criteria Ful		Market Integration, Security of Supp Security of supply, Market Integration	oly, Sustainability on, Sustainability		
Specific Criteria Ful	filled Comments S		bly, Sustainability		
Specific Criteria Ful Grant Obtention Da	filled Comments S	Security of supply, Market Integration	oly, Sustainability on, Sustainability		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY	filled Comments S		oly, Sustainability on, Sustainability		
Specific Criteria Ful Grant Obtention Da	filled Comments S	Security of supply, Market Integration	oly, Sustainability on, Sustainability Time Schedule		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY Delay Explanation	filled Comments S	Security of supply, Market Integration	oly, Sustainability on, Sustainability		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY	filled Comments S	Security of supply, Market Integration	oly, Sustainability on, Sustainability Time Schedule		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY Delay Explanation	filled Comments S	Security of supply, Market Integration	oly, Sustainability on, Sustainability Time Schedule		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY Delay Explanation	filled Comments S ate 'NDP 1	Security of supply, Market Integration	oly, Sustainability on, Sustainability Time Schedule Expected Gas Sourcing		
Specific Criteria Ful Grant Obtention Da Delay Since Last TY Delay Explanation Black Sea	filled Comments S ate 'NDP 1 <u>Regulation-I</u>	Security of supply, Market Integration	oly, Sustainability on, Sustainability Time Schedule Expected Gas Sourcing		

	Barı	riers	
Barrier Type	Description		
Regulatory	The Competent Authority to coordinate all permit granting proce	sses is not yet functional in Romania.	
Permit Granting	The permitting process is long and complicated		
Financing	Availability of funds and associated conditions		
	СВСА	Finar	ncial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Culturaina Data	not	Grants for studies amount	
Submissin Date		Grants for works	No
Decision Date		Grants for works amount	
Website		Intention to apply for CEF	No decision yet taken
Countries Affected		Other Financial Assistance	No
Countries Net Cost Bea	arer	Comments	
Additional Comments		General Comments	

15.8 GWh/d

	Depomures				
UGS-N-233	Project		Storage Facilit	:y N	on-FID
Update Date	28/03/2018			Ac	dvanced
Description	The project consists in the revamping and expansion of an existing gas storag rationale of the project is three fold (i) increase operational independence by le rented from another party (ii) gradually expand the storage capacity (from 300 and (iii) increase flexibility of the storage by increasing injection and withdraw mcm/day after implementation of the second stage. The implementation of the first stage has already been initiated with a partial	building its own 0 mcm to 400 m ing capacity fror	compression unit as o cm in a first stage and n the existing average	currently compress d to 600 mcm in a e 1.7 mcm/ day to	ion services ar second stage) approx. 5.0
PRJ Code - PRJ Name	the development project is expected in 2018.		1260 III Q 1 2010, WHIN	e the FID for the er	itire phase i of
PRJ Code - PRJ Name Capacity Increments Var	the development project is expected in 2018.		1260 HT Q T 2010, WHIR	e the FiD for the er	itire phase i of
	the development project is expected in 2018.	Year	From Gas System	To Gas System	Capacity
Capacity Increments Var	the development project is expected in 2018.				
Capacity Increments Var	the development project is expected in 2018. 	Year	From Gas System	To Gas System	Capacity

Sponsors		Genera	I Information	NDP and PCI Information		
GDF International	59%	Promoter	Engie Romania SA	Part of NDP	No ((2) no NDP exists in the country)	
		Operator	Depomures	NDP Number		
		Host Country	Romania	NDP Release Date		
		Status	In Progress	NDP Website		
		Website	Project's URL	Currently PCI	Yes ()	
				Priority Corridor(s)	NSIE	

2023

RO

Depomures

STcRO

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		06/2004
Feasibility	06/2008	06/2009
FEED	06/2011	06/2012
Permitting	06/2012	09/2017
Supply Contracts		12/2018
FID		06/2018
Construction	07/2015	03/2023
Commissioning	2020	2023

			Technical Inform	nation (UGS)					
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)		LOAU FACTOR	Comments	Commisioning 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
	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 scenario with impact on Romania, Bulgaria, Hungary, Italy, Greece and Croatia. The impact is most visible in extreme scenarios such as Ukraine disruption with 2 week cold spell The project contributes to a decrease of the disrupted demand in two Members States, namely Romania and Bulgaria, and also in the FYR of Macedonia (although not a Member State) in most scenarios.

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	Time Schedule				
Grant Obtention Date					
Delay Since Last TYNDP	3 years for Phase 2				
Delay Explanation	The main delay encountered is related to permit granting for part of the investment (i.e. the last sector of the main gathering pipeline). The construction of the main gathering pipeline 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 poly impact on Romania, Bulgaria, Hungary, Italy, Greece and Croatia. Thus, indirectly it contributes to a more integrated gas market. Sustainability It replate existing rather obsolete gas compression facilities with modern and high-efficiency technology (new electro-compressors etc.) which will reduce emiss 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.				
Financing	Availability of funds and associated conditions				
Regulatory	Low or zero-priced short-term capacity				
Regulatory	Low rate of return				

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	CBCA	Financial Assistance			
	No, we have not submitted an investment request yet,	Applied for CEF		(3) No, we have not applied for CEF	
Decision	and we have not yet decided whether we will submit or	Grants for studies		No	
Culoraisain Data	not	Grants for studies amount			
Submissin Date		Grants for works		No	
Decision Date		Grants for works amount			
Website		Intention to apply for CEF		No decision yet taken	
Countries Affected		Other Financial Assistance		No	
Countries Net Cost Bearer		Comments			
Additional 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	The Project "NTS development in the North East area of Romaniei in order to capacities to the Republic of Moldova" consists in the construction of a new with the Technological Node Leţcani in the Oneşti – Gherăeşti – Leţcani direc The project implies the construction of new objectives and the construction Technological Node Onești and up to the Technological Node Leţcani and o	gas transmission pipeline to connect the Technol ction. of two pipeline sections with a total length of 16!	logical Node Onești
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.	100%	Promoter	SNTGN Transgaz SA	Part of NDP	Yes (The National Gas Transmission	
		Operator	SNTGN Transgaz S.A.		System Development Plan 2017 - 2026)	
		Host Country	Romania	NDP Number	7.4	
		Status	Planned	NDP Release Date	22/06/2017	
		Website	Project's URL	NDP Website	<u>NDP URL</u>	
				Currently PCI	No	
				Priority Corridor(s)		

urrent TYNDP : T	YNDP 2018 FINA	L - Annex A		Page 518
Schedule	Start Date	End Date	Third-Party Access	Regime
Pre-Feasibility		02/2014	Considered TPA Regime	Re
Feasibility	02/2014	01/2018	Considered Tariff Regime	Re
FEED	01/2016	01/2018	Applied for Exemption	
Permitting	01/2016	01/2018	Exemption Granted	Not F
Supply Contracts				
FID		04/2018	Exemption in entry direction	
Construction	06/2018	10/2019	Exemption in exit direction	
Commissioning	2019	2019		

Pipelines and Compress	sor Stations							
Pipeline Section	Pipeline Comment			r Length (km)	Compressor Power (MW)	Comissioning Year		
Onesti - Gheraesti - Letc	cani		711	165	18	2019		
		Total		165	18			
		Time Schedule						
Grant Obtention Date								
Delay Since Last TYNDP								
Delay Explanation	Delays in obta	aining the necessary approvals, permits and authorization	S					
		Expected Gas Sourcing						
European gas market, Bl	ack 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 deliv 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							

Benefit Description 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.

					: age = := e: = :			
		Barı	riers					
Barrier Type	Description							
Permit Granting	The permitting	The permitting process is long and complicated						
Political	Area with poten	Area with potential conflicts Requires the conclusion of an Intergovernmental Agreement						
inancing	Availability of fu	unds and associated conditions						
		Intergovernmer	ntal Agreements					
Agreement		Agreement Description						
Memorandum of Un	derstanding	5	Ministry of Economy, Commerce and Business Economy from the Republic of Moldova related on of the high pressure gas transmissi	Yes	21/05/2015			
	(СВСА	Financial As	sistance				
		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 Cl			
Decision	and we he		Grants for studies		Γ			
ubmissin Date			Grants for studies amount					
Decision Date			Grants for works		Ι			
Vebsite			Grants for works amount					
ountries Affected			Intention to apply for CEF		No, we do not plan to app			
ountries Net Cost B	Bearer		Other Financial Assistance					
dditional Comment			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	 The project consists in the building of a gas transmission pipeline connecting and the construction of three gas compressor stations along the pipeline rou Podişor – Recaş 32" x 63 bar gas transmission pipeline approximately 479 k three gas compressor stations (Podişor CS, Bibeşti CS and Jupa CS), each state ensure bi-directional gas flow. After the implementatiopn of the project the following transmission capacities towards Hungary: 1.75 bcm/year; towards Bulgaria: 1.5 bcm/year. 	te (Jupa CS, Bibești CS and Podișor CS) as follow km long; ation being equipped with two compressors, wit	rs:
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.	100% Promoter		SNTGN Transgaz S.A.	Part of NDP	Yes (Development Plan for the National
		Operator	SNTGN Transgaz S.A.		GTS 2017-2026)
		Host Country	Romania	NDP Number	7.1
		Status	In Progress	NDP Release Date	22/06/2017
		Website	Project's URL	NDP Website	<u>NDP URL</u>
				Currently PCI	Yes ()
				Priority Corridor(s)	NSIE

Feasibility01/201412/2014Considered Tariff RegimeRegulFEED07/201502/2017Applied for ExemptionPermitting01/201402/2018Exemption GrantedNot RefulSupply Contracts08/201711/2016Exemption in entry direction0	urrent TYNDP : T\	YNDP 2018 FINA	L - Annex A				Pa	ge 521 of 575
Peasibility 01/2014 12/2014 Considered Tariff Regime Regul FEED 07/2015 02/2017 Applied for Exemption Not Rel Permitting 01/2014 02/2018 Exemption Granted Not Rel Supply Contracts 08/2017 Exemption in entry direction 0.00 FID 11/2016 Exemption in entry direction 0.00 Construction 12/2017 12/2019 Exemption in entry direction 0.00 Project Code Project Name Transmission Corridor 0.00 0.00 Phelines Section Pipeline Comment Diameter Length Compressor Power Comission (mm) Phase I- Podisor Recas Security of Supply	Schedule	Start Date	End Date			Third-Pa	rty Access Regime	
FEED 07/2015 02/2017 Applied for Exemption Permitting 01/2014 02/2018 Exemption Granted Not Ref. Supply Contracts 08/2017 Exemption in entry direction Off FID 11/2/2019 Exemption in entry direction Off Commissioning 2019 2019 Exemption in exit direction Off Project Code Project Name Exemption in exit direction Off Off Project Code Project Name Figeline Comment Eigen Comment Eigen Comment Off(MW) Year Pipeline Section Project Reca Pipeline Comment Diameter Eigen Comment Eigen Comment Commentsor Power Commentsor Phase I: Podisor-Reca Pipeline Comment Diameter Eigen Comment Eigen Comment<	Pre-Feasibility		12/2013		Considered TPA	Regime		Regulated
Permitting 01/2014 02/2018 Exemption Grant U Not Ref Supply Contracts 08/2017 Exemption in entry direction 0.0 FID 11/2016 Exemption in entry direction 0.0 Construction 12/2017 12/2019 Exemption in entry direction 0.0 Commissioning 2019 2019 Exemption in entry direction 0.0 Project Code Project Name Exemption france Exemption france 0.0 Project Code Project Name Fipeline Comment Image: Project Name Exemption france Fipeline Sector 0.0 479 28 2019 Project Road Fipeline Comment Fipeline Criteria 800 479 28 2019 Project Criteria Fulfilled Security of Supply Security of Supply 28 2019<	Feasibility	01/2014	12/2014		Considered Tari	ff Regime		Regulated
Supply Contracts 08/2017 FID 11/2016 Exemption in entry direction 0 Construction 12/2017 12/2019 Exemption in exit direction 0 Commissioning 2019 2019 Exemption in exit direction 0 Project Code Project Name Exemption in exit direction 0 0 Project Code Project Name Exemption in exit direction 0 0 Pipelines and Compressor Stations Pipeline Comment Pipeline Comment Immeter Length Compressor Power Comission (mm) Phase I: Podisor-Recas Pipeline Comment Pipeline Criteria 479 28 2019 Total 479 28 2019 Time Schedule Grant Obtention Date 09/09/2016 Time Schedule Grant Obtention Date 09/09/2016 Delay Since Last TVNDP Stage 1- 9 months delay in commissioning in 2019 Expected Gas Sourcing Expected Gas Sourcing	FEED	07/2015	02/2017		Applied for Exer	mption		No
FUNCTION 11/2016 Exemption in entry direction 0 Construction 12/2017 12/2019 Exemption in exit direction 0 Commissioning 2019 2019 2019 0 Project Code Project Name Enabled Projects V TRA-N-362 Development on the Romanian territory of the Southern Transmission Corridor Diameter Length Pipelines and Compressor Stations Pipeline Comment Diameter Compressor Power Pipeline Section Pipeline Comment Diameter Length Pipeline Section Pipeline Comment Diameter Compressor Power Pipeline Section Pipeline Comments Length Compressor Power Specific Criteria Fulfilled Security of Supply 28 2019 Specific Criteria Fulfilled Comments Pipeline Schedule Security of Supply Specific Criteria Fulfilled Comments Pipeline Schedule Security of Supply Specific Criteria Fulfilled Comments Pipeline Schedule Security of S	Permitting	01/2014	02/2018		Exemption Gran	ited		Not Relevant
Construction 12/2017 12/2019 Exemption in exit direction Commission Commissioning 2019	Supply Contracts		08/2017					
Q019 Q019 Project Code Project Name TRA-N-362 Development on the Romanian territory of the Southern Transmission Corridor Pipelines and Commessor Stations Pipeline Comment Diameter Length Compressor Power Comission (MMW) Year Phase I: Podisor-Recas Pipeline Comment Diameter Length Compressor Power Comission (MW) Year Phase I: Podisor-Recas Total 479 28 2019 Specific Criteria Fulfilled Security of Supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of Supply 28 2019 Specific Criteria Fulfilled Comments Security of Supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of Supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of Supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of Supply 28 2019 Specific Criteria Fulfilled Comments Phase I - Security of Supply 28 28	FID		11/2016		Exemption in er	ntry directi	on	0.00%
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 Pipeline Section Pipeline Security of Supply Specific Criteria Fulfilled Security of Supply Specific Criteria Fulfilled Comments Phase 1 - Security of supply Specific Criteria Fulfilled Comments Phase 1 - Security of supply Specific Criteria Fulfilled Comments Pipeline Security of Supply <t< td=""><td>Construction</td><td>12/2017</td><td>12/2019</td><td></td><td>Exemption in ex</td><td>it directio</td><td>n</td><td>0.00%</td></t<>	Construction	12/2017	12/2019		Exemption in ex	it directio	n	0.00%
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 (MW) Compressor Power Comission (MW) Phase I: Podisor-Recas 800 479 28 2019 Total 479 28 2019 Specific Criteria Fulfilled Criteria Specific Criteria Fulfilled Comments Fulfilled Criteria Specific Criteria Fulfilled Comments Fulfilled Criteria Specific Criteria Fulfilled Comments Phase I – Security of Supply Specific Criteria Fulfilled Comments 99/09/2016 Time Schedule Grant Obtention Date 09/09/2016 Delay Since Last TYNDP Stage 1-9 months delay in commissioning Stage 2 – 21 months in commissioning in 2019 Expected Gas Sourcing Expected Gas Sourcing	Commissioning	2019	2019					
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 Length Compressor Power Comission (MWV) Year Phase I: Podisor-Recas 800 479 28 2019 Total 479 28 2019 Specific Criteria Fulfilled Criteria Specific Criteria Fulfilled Comments Fulfilled Criteria Time Schedule Grant Obtention Date 09/09/2016 Delay Since Last TYNDP Stage 1-9 months delay in commissioning Stage 2 – 21 months in commissioning in 2019 V V V Expected Gas Sourcing				Enabled Projects				
TRA-N-362 Development on the Romanian territory of the Southern Transmission Corridor Pipelines and Compressor Station Pipeline Comment Length Compressor Power Compressor Power </th <th>Project Code Pro</th> <th>oiect Name</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Project Code Pro	oiect Name						
Phase I: Podisor-Recas 800 479 28 2019 Total 479 28 2019 Specific Criteria Fulfilled Security of Supply 28 28 Security Specific Criteria Fulfilled Security of Supply 28 28 Specific Criteria Fulfilled Security Specific Criteria 28 28 Specific Crite		ipressor Stations		Pipeline Comment		-		-
Total 479 28 Fulfilled Criteria Specific Criteria Fulfilled Security of Supply Security of Supply Specific Criteria Fulfilled Comment Phase I – Security of supply Security of Supply Time Schedule Grant Obtention Date 09/09/2016 Stage 1 - 9 months delay in commissioning Stage 2 - 21 months in commissioning Stage 1 - 9 months delay in commissioning in 2019 Delay Explanation Phase I – on time. FID taken in November 2016. Comissioning in 2019 Security	Phase I: Podisor-Re	ecas						
Specific Criteria Fulfilled Security of Supply Specific Criteria Fulfilled Comments Phase I – Security of supply Time Schedule 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			Тс	otal	000			2015
Specific Criteria Fulfilled Comments Phase I – Security of supply Time Schedule 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				Fulfilled Criteria				
Time Schedule 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	Specific Criteria Ful	Ifilled	Security of Supply					
Grant Obtention Date09/09/2016Delay Since Last TYNDPStage 1- 9 months delay in commissioning Stage 2 - 21 months in commissioningDelay ExplanationPhase I - on time. FID taken in November 2016. Comissioning in 2019Expected Gas Sourcing	Specific Criteria Ful	Ifilled Comments	Phase I – Security of sup	ply				
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				Time Schedule				
Delay Explanation Phase I – on time. FID taken in November 2016. Comissioning in 2019 Expected Gas Sourcing	Grant Obtention D							
Expected Gas Sourcing	Grant Obtention Da	ate (09/09/2016					
				in commissioning Stage 2 – 21 months in commissioning				
Caspian Region, LNG (), Black Sea	Delay Since Last TY	(NDP S	Stage 1- 9 months delay					
	Delay Since Last TY	(NDP S	Stage 1- 9 months delay	ken in November 2016. Comissioning in 2019				

Regulatory

		Benefits
Main Driver	Regulation SoS	
Main Driver Explan	nation	
Benefit Descriptior	1	
		Barriers
Barrier Type	Description	
Pogulatory	The Competent Authority to coordinate a	Il permit granting processes is not yet functional in Romania.

	CBCA		Financial Assistance
Decision	Yes, we have submitted an investment request and have received a decision	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
Submissin Date	12/10/2015	Grants for studies	Yes
Decision Date	06/10/2015	Grants for studies amount	Mln EUR 2
Website	<u>CBCA URL</u>	Grants for works	Yes
Countries Affected	Hungary, Romania	Grants for works amount	Mln EUR 179
Countries Net Cost Bearer	Hungary;#Romania	Intention to apply for CEF	
Additional Comments		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	 The pipeline with a total length of approximately 308,2 km, is a telescopic piperessure of 63 bar. The two pipeline sections are: Section I, Black Sea shore – Amzacea, with a length of 32,5 km, will have a diameter section II, Amzacea – Podişor, with a length of 275,7 km, will have a diameter 	liameter of Ø 48″ (Dn1200);	ransmit gas at a
PRJ Code - PRJ Name	- //		

Sponsors				General Information		P and PCI Information
A			Promoter	SNTGN Transgaz SA	Part of NDP	Yes (The National Gas Transmission
SNTGN Transgaz SA	a de la companya de la	100%	Operator	SNTGN Transgaz S.A.		System Development Plan 2017-2026)
Default			Host Country	Romania	NDP Number	7.2
GOGC (GE)		25%	Status	Planned	NDP Release Date	22/06/2017
			Website	<u>Project's URL</u>	NDP Website	<u>NDP URL</u>
MVM (HU)		25%			Currently PCI	Yes ()
ROMGAZ (RO)		25%			Priority Corridor(s)	NSIE
SOCAR (AZ)		25%				
Schedule	Start Date	End Date			Third	d-Party Access Regime
Pre-Feasibility		06/2014			Considered TPA Regin	me Regulated
Feasibility	07/2014	01/2016			Considered Tariff Reg	ime Regulated
FEED	06/2016	02/2018			Applied for Exemption	n No
Permitting	01/2015	05/2018			Exemption Granted	Not Relevant
Supply Contracts						
FID		06/2018			Exemption in entry di	rection 0.00%
Construction	01/2019	10/2020			Exemption in exit dire	ection 0.00%
Commissioning	2020	2020				

	Enabled Projects
Project Code Project	ct Name
TRA-F-358 Devel	opment on the Romanian territory of the NTS (BG–RO-HU-AT)-Phase I
Pipelines and Compre	essor Stations
Pipeline Section	Pipeline CommentDiameterLengthCompressorPowerComissioning(mm)(km)(MW)Year
Black Sea shore - Pod	işor The pipeline is telescopic, the diameter is reduced to 1,200 308 2020
	Total 308
	Fulfilled Criteria
Specific Criteria Fulfille	ed Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfille	ed Comments Security of supply, Market Integration, Sustainability, Competition
Speeme enteria i uninc	cu comments security of supply, market integration, sustainability, competition
	Expected Gas Sourcing
Black Sea	
	Benefits
Main Driver	Market Demand
Main Driver Explanatio	n
Benefit Description	- Increase of competition through the diversification of gas sources and transmission routes, and the emerging of new players on the regional gas market, with positive effects on the gas price, decreasing thus market concentration for each impacted country; - Increase of sustainability through diminishing CO2 emissions, as a result of replacing gas with liquid (oil) or solid fossil fuels (coal) with higher CO2 emissions.
	Barriers
Barrier Type	Description
Regulatory	Changes in national/EU legislation whcih may impact the implementation of the project.
Permit Granting	Long and complicated process requiring also the obtaining of the right of way
Financing	Availability of funds and associated conditions

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CBCA		Financial Assistance		
No, we have not submitted an investment request yet,		Applied for CEF		(3) No, we have not applied for CEF
		Grants for studies		No
not		Grants for studies amount		
		Grants for works		No
		Grants for works amount		
				No
				No
		Comments		
		General Comments		
	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	and we have not yet decided whether we will submit or	and we have not yet decided whether we will submit or not Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments	and we have not yet decided whether we will submit or not Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments

Sarmasel undeground gas storage in Romania

UGS-N-371	Project	Storage Facility	Non-FID
Update Date	06/12/2018		Non-Advanced
Description	 Sarmasel Underground Storage in Romania consists in the increase of working cap 0.65 Bcm/cycle, an enhanced withdrawal capacity of up to10 million cm/day and a The required investment consists of: construction of one more compressor module, refurbishment of surface infrastructure for all injection-withdrawal wells; recompletion of all wells and installation of safety devices for each of them; drilling new additional wells; increasing the cushion gas. The geological suitability is backed up by existing reservoir studies. The rationale of the project is to: (a) decongest existing storage capacities in South (b) increase the flexibility of the storage system, contribute to the sustainability and Russian gas etc. 	n increased injection rate of up to 10 mill Romania which may become available fo	ion cm/day. r neighboring countries,
PRJ Code - PRJ Name	-		

Point	Operator			Year	From Gas System	n To Gas System	Capacity
		S.N.G.N. Ro	mgaz S.A.	2024	STcRO	RO	34.0 GWh/d
UGS Sarmasel		S.N.G.N. Romgaz S.A.			RO	STcRO	42.0 GWh/d
Sponsors General			eneral Information		NDP ar	nd PCI Information	
SNGN ROMGAZ S.A.	100%	Promoter	Societatea Națională de Gaze Naturale ROMGAZ S.A.		of NDP No	o ((5) others - please	comment below)
		Operator	S.N.G.N. Romgaz S.A.	NDP I	Release Date		
		Host Country	Romania		Website		
		Status	Planned	Curre	ntly PCI		Yes ()
		Website	Project's URL	Priori	ty Corridor(s)		NSIE

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		06/2016
Feasibility	05/2018	05/2019
FEED	08/2019	06/2020
Permitting	06/2019	08/2020
Supply Contracts		12/2020
FID		10/2020
Construction	02/2021	10/2024
Commissioning	2024	2024

			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
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, S	ecurity of Suppl	у						
Specific Criteria Fulfilled Commen	in case of UA import Adv. Infra. CBA assess disruption for all neig distance to transit line transmission system i	route disruption sment shows cro hbouring count es or the interco n case of UA dis I the project im	g 2020-2030, but afterwar a, and (2) N-1 which canno oss-border impact of the S ries: BG, HU, RS. CBA resu onnection systems between sruption. There is an impac pact varies between 3-4 %	t be fulfille armasel sto Its show the n countries ct of the pro	d anymore, d orage on SE E at irrespective , there is an ir oject betweer	ropping to urope in te of the geo mpact on n 2 and 4 %	83% for Low erms of securi ographical loc leighbouring on DR for all	Infrastructure ar ty of supply, in ca cation of the stor countries throug scenarios and ty	nd to 85% for ase of UA route age or the h the pe of

	Time Schedule
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 o 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.
Market	Lack of market support
Market	Lack of market maturity
Financing	Amortization rates
Regulatory	Low rate of return
Regulatory	Low or zero-priced short-term capacity

	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, but we do plan to submit it	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 1
Website		Grants for works	No
Countries Affected		Grants for works amount	
Countries Net Cost Bearer		Intention to apply for CEF	Yes, for studies and works
Additional Comments		Other Financial Assistance	No
		Comments	
		General Comments	We have applied for CEF grant for studies but it was not approved,

Azerbaijan, Georgia, Romania Interconnector - AGRI

LNG-N-376	Project		LNG Termina	I N	Ion-FID
Update Date	26/03/2018	Non	-Advanced		
	The solution for the transmission of natural gas from Caspian region through transportation via Black Sea to Romania and Hungary and potentially to othe			ia, its liquefaction a	and
	Romania and Hungary as EU Member State Support this project being involv	ed as shareholde	r in the project comp	any (the promoter	of this project).
Description	As a "standby LNG project", AGRI will implement and operate the LNG portio - 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.	on:			
PRJ Code - PRJ Name	-				
Capacity Increments Varia	Int For Modelling				
Point	Operator	Year	From Gas System	To Gas System	Capacity
	AGRI	2026	GEa	RO	240.0 GWh/d
AGRI / Constanta (RO)			Comment: Rege	azification termina	!
	AGRI	2026	TM/SCP	GEa	240.0 GWh/d
AGRI / Poti (GE)			Commont: Liv	auofaction tormina	1

Comment: Liquefaction terminal

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						1 age 551 61 57
Sponsors				General Information	NDP	and PCI Information
GOGC (GE)		2	Promoter	AGRI LNG Project Company SRL	٨	No ((4) there is no obligation at nationa
MVM (HU)		2	25%	(RO)	Part of NDP	level for such a project to be part of th
		_	Operator	AGRI		ND
ROMGAZ (RO)		2	.5% Host Country	Romania	NDP Number	
SOCAR (AZ)		2	5% Status	Planned	NDP Release Date	
			Website	Project's URL	NDP Website	
					Currently PCI	N
					Priority Corridor(s)	NSIE, SG
Schedule	Start Date	End Date			Third	-Party Access Regime
Pre-Feasibility					Considered TPA Regin	ne Not Applicabl
Feasibility	06/2012	04/2015			Considered Tariff Regi	me Not Applicable
FEED	01/2019	04/2020			Applied for Exemption	Not Relevan
Permitting	01/2018	09/2019			Exemption Granted	Not Relevan
Supply Contracts		10/2022				
FID		11/2020			Exemption in entry dir	ection 0.009
Construction	06/2022	08/2026			Exemption in exit direc	ction 0.009
Commissioning	2026	2026				

			Technical Info	rmation (LN	G)				
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	Comp	etition, Market Integratio	on, Security of Supply, S	ustainability	,				
Specific Criteria Fulfilled Comm	ents Divers	ification of supply source	es						

	Time S	chedule	5
Grant Obtention Date			
Delay Since Last TYNDP Ionger process for deciding the next steps of the Project Delay Explanation Ionger process for deciding the next steps of the Project Caspian Region, LNG (GE) Expected Gas Sourcing Main Driver Others Main Driver Keplanation 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. Barrier Type Description Permit Granting Iong 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 Celsion No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not submitted an investment request yet, and we have not yet decided whether we will submit or not submitted on investment request yet, and we have not yet decided whether we will submit or not submitted on investment request yet, and we have in the yet decided whether we will submit or not submitted on investment request yet, and we have not yet decided whether we will submit or not submitted on investment request yet, and we have not yet decided whether we will submit or not submitted on investment request yet, and we have not yet decided whether we will submit or not submitted on investment request yet, and we have not yet decided whethere we			
Delay Explanation	longer process for deciding the next steps of the Proje	er process for deciding the next steps of the Project Expected Gas Sourcing Benefits of supply sources; New Markets competition; Market demand ts with Azerbaijan (Caspian) gas source by the most direct route wich avoids sole reliance on pipelines Barriers or obtaining permits netegration with the local Project is required unds and associated conditions support CRCA have not submitted an investment request yet, ave not yet decided whether we will submit or not CRCA financial Assistance Applied for CEF Grants for studies amount Grants for works Mo Grants for works Mo Comments	
Grant Obtention Date Delay Since Last TYNDP Delay Explanation Ionger process for deciding the next steps of the Project Expected Gas Sourcing Caspian Region, LNG (CF) Benefits Main Driver Others Main Driver Others Main Driver Explanation Diversification of supply sources; New Markets competition; Market demand Barrier Type Barrier Type Description Links EU market with Azerbaijan (Caspian) gas source by the most direct route wich avoids sole reliance on pipelines. Barrier Type Description End of tunds and associated conditions Market market further integration with the local Project is required Financial Assistance Financing No, we have not systement request yet, and we have not yet decided whether we will submit or not so traines Grants for studies No Submissin Date No, we have not yet decided whether we will submit or not so traines Grants for works No Submissin Date No we have not yet decided whether we will submit or not so traines Grants for works No Submissin Date Countries Affected Contunties Net Cost Bearer Yes, for studie			
Caspian Region, LNG (G	GE)		
	Ben	efits	
Main Driver			
Main Driver Explanation	Diversification of supply sources; New Markets competition; Mark	ket demand	
Benefit Description	Links EU market with Azerbaijan (Caspian) gas source by the mos	t direct route wich avoids sole reliance o	n pipelines
	Bar	riers	
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	Fin	ancial Assistance
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
	not	Grants for studies amount	
		Grants for works	No
		Grants for works amount	
		Intention to apply for CEF	Yes, for studies and works
		Other Financial Assistance	No
	rer	Comments	
Additional 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	 Development of gas transmission capacity on the Oneşti – Coroi – Haţeg Sea shore or from other on-shore blocks. The development of this gas transmission corridor requires: the rehabilitation of some of the NTS existing pipelines; replacement of some of the NTS existing pipelines with new pipelines or development of 4 or 5 new compressor stations having a total installed 	r the building of new pipelines installed in parallel	
PRJ Code - PRJ Name			

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

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

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

Pipelines and Compressor Sta	tions				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Onesti - Nadlac	existing pipelines + rehabilitation + new pipelines	813	843	82	2023
Total			843	82	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfilled Comm	nents Market Integration, Security of Supply, Sustainability, Competition				

	Benefits	
ain Driver	Market Demand	
ain Driver Explana	ation	
enefit Description		

	CBCA	Financial Assistance			
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
Decision	but we do plan to submit it	Grants for studies	No		
Submissin Date		Grants for studies amount			
Decision Date		Grants for works	No		
Website		Grants for works amount			
Countries Affected		Intention to apply for CEF	No decision yet taken		
Countries Net Cost Bearer		Other Financial Assistance	No		
Additional Comments		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 tran of DN 500 and a design pressure of 55 bar.	sit pipeline T1 with a diameter
PRJ Code - PRJ Name		

Sponsors				General Information	NDF	P and PCI Information
SNTGN Transgaz SA		100%	Promoter Operator	SNTGN Transgaz SA SNTGN Transgaz S.A.	Part of NDP	Yes (The National Gas Transmission System Development Plan 2017-2026)
			Host Country	Romania	NDP Number	7.6
			Status	Planned	NDP Release Date	22/06/2017
			Website		NDP Website	NDP URL
					Currently PCI	Yes ()
					Priority Corridor(s)	NSIE
Schedule	Start Date	End Date			Third	l-Party Access Regime
Pre-Feasibility		09/2016			Considered TPA Regin	ne Regulated
Feasibility	10/2016	05/2017			Considered Tariff Regi	me Regulated
FEED	08/2017	01/2018			Applied for Exemption	No No
Permitting	03/2017	12/2017			Exemption Granted	No
Supply Contracts		10/2018				
FID					Exemption in entry dir	ection 0.00%
Construction	11/2018	07/2019			Exemption in exit dire	ction 0.00%
Commissioning	2019	2019				

Project Code Project Name

- TRA-N-959 Further enlargement of the BG—RO—HU—AT transmission corridor (BRUA) phase 3
- TRA-N-357 NTS developments in North-East Romania
- TRA-N-139 Interconnection of the NTS with the DTS and reverse flow at Isaccea

Pipelines and Compressor St	tations				
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 Com	ments Market integration, SoS, Sustainability, Competition				

Enabled Projects

	Expected Gas Sourcing
Black Sea	
	Benefits
Main Driver	Market Demand
Main Driver Explanat	tion
Benefit Description	

CBCA	Financial Assistance			
No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
and we do not plan to submit it	Grants for studies	No		
	Grants for studies amount			
	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			
		No, we have not submitted an investment request yet, and we do not plan to submit itApplied for CEFGrants for studiesGrants for studies amountGrants for worksGrants for worksGrants for works amountIntention to apply for CEFOther Financial AssistanceComments		

		Romania-Serbia	a Interconnection				
TRA-N-1268		Project			Pipeline includii	ng CS	Non-FID
Update Date		15,	/11/2018			No	on-Advanced
Description	the area of Petrovaselo, the o	ruction of a 97 km long gas tra county of Timiș. In the connec a Gas Metering Station, 18 blo	tion point a pig launching/r	eceiving	g station will be inst	alled. On the terri	tory of Romania
PRJ Code - PRJ Name	•						
Capacity Increments Vari	ant For Modelling						
Point		Operator		Year	From Gas System	To Gas Syster	n Capacity
RO/SB IP		SNTGN Transgaz S.A	Α.	2020	RO	RS	46.3 GWh/d
		SNTGN Transgaz S.A	Α.	2020	RS	RO	46.3 GWh/d
Sponsors		General In	formation		NDP ar	d PCI Informatio	n
SNTGN Transgaz SA	100%	Promoter	SNTGN Tranzgaz SA				HE NATIONAL GAS
		Operator	SNTGN Transgaz S.A.	Part	of NDP TRA	VSMISSION SYSTI	EM DEVELOPMENT
		Host Country	Romania		Niumala au		PLAN 2017-2026
		Status	Planned	NDP Number NDP Release Date			7.1
		Website			Website		22/06/2011 NDP UR
					ently PCI		<u>NDP OR</u> N
					ity Corridor(s)		110
				FIIOI	ity contaor(s)		

Current TYNDP : TY	NDP 2018 FINA	L - Annex A
Schedule	Start Date	End Date
Pre-Feasibility		02/2018
Feasibility	02/2018	08/2018
FEED	03/2018	12/2018
Permitting	03/2018	12/2018
Supply Contracts		
FID		10/2018
Construction	10/2018	04/2019
Commissioning	2020	2020

Pipeline Section		Pipeline Comment	Diameter (mm)	÷	Compressor Power (MW)	r Comissioning Year
PETROVASELO-COMLOȘU MARE Total		Romanian section of the interconnection pipeline	600	85		2020
		Total		85		
	/	Benefits				
Main Driver	Regulation SoS					
Main Driver Explana	tion					
Benefit Description						
		Barriers				
Barrier Type	Description					
Permit Granting	The permitting process i	s long and complicated				
Financing	Availability of funds and	associated conditions				

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

No

Upgrading GMS Isaccea 1 and GMS Negru Voda 1

TRA-N-1277		Project			Pipeline includir	ng CS 🛛 🔊	Non-FID
Update Date			28/02/2018			A	dvanced
Description	The project "Upgrading GMS locations of the Metering Stat		gru Vodă 1" consists in the constru	uction o	f two new gas mete	ring stations on the	existing
PRJ Code - PRJ Name	-						
Capacity Increments Variant I	For Modelling						
Point		Operator		Year	From Gas System	To Gas System	Capacity
Isaccea (RO) - Orlovka (UA) I		SNTGN Trans	gaz S.A.	2019	RO/TBP	UA	28.9 GWh/d
Sponsors		Gen	eral Information		NDP ar	d PCI Information	
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA	Dart	of NDP	Yes (The National O	Gas Transmissio
		Operator	SNTGN Transgaz S.A.		Sy Sy	stem development F	Plan 2017 - 2020
		Host Country	Romania	NDP	Number		7.
		Status	Plannea	NDP	Release Date		22/06/201
		Website		NDP	Website		<u>NDP UR</u>

			Priority Corridor(s)
Schedule	Start Date	End Date	Third-Party Access Reg
-Feasibility			Considered TPA Regime
asibility	01/2018	08/2018	Considered Tariff Regime
ED	01/2018	08/2018	Applied for Exemption
ermitting	01/2018	08/2018	Exemption Granted
upply Contracts			
ID		08/2018	Exemption in entry direction
Construction	08/2018	12/2019	Exemption in exit direction
ommissioning	2019	2019	

Currently PCI

Pipelines and Compr	ressor Stations					
Pipeline Section	Pipeline Comment		Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
А	The project refers only Metering Stations	to the upgrading of the two Gas				2019
	Total					
		Gas Sourcing				
Caspian Region, Russ	sia					
	Ber	nefits				
Main Driver	Regulation SoS					
Main Driver Explanati	ion					
Benefit Description						
	Bar	riers				
Barrier Type	Description					
Financing	Availability of funds and associated conditions					
	CBCA		Financia	al Assista	ince	
Decision	No, we have not submitted an investment request yet,	Applied for CEF	Financia	al Assista	nce (3) No, we have not	applied for CEI
Decision		Applied for CEF Grants for studies	Financia	ıl Assista		applied for CEI No
Submissin Date	No, we have not submitted an investment request yet,	Grants for studies Grants for studies amount	Financia	ıl Assista		
Submissin Date Decision Date	No, we have not submitted an investment request yet,	Grants for studies	Financia	ıl Assista		
Submissin Date Decision Date Website	No, we have not submitted an investment request yet,	Grants for studies Grants for studies amount Grants for works Grants for works amount	Financia	ıl Assista	(3) No, we have not	No
Submissin Date Decision Date Website Countries Affected	No, we have not submitted an investment request yet, and we do not plan to submit it	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	Financia	ıl Assista	(3) No, we have not	No No ecision yet taker
Submissin Date Decision Date Website Countries Affected Countries Net Cost B	No, we have not submitted an investment request yet, and we do not plan to submit it Rearer	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance	Financia	ıl Assista	(3) No, we have not	No
Submissin Date Decision Date Website Countries Affected	No, we have not submitted an investment request yet, and we do not plan to submit it Rearer	Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	Financia	ıl Assista	(3) No, we have not	No No ecision yet taker

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

TRA-N-1322		Project			Pipeline including	g CS N	lon-FID
Update Date		21/06/	/2018			Ad	dvanced
Description	GMS and the extension of the • Podişor – Recaş 32" x 63 bar • extension of the three gas c • extension of the Horia GMS	the project the following transm rear;	ximately 50 km long; Bibeşti CS and Jupa CS) b	oy mour	nting an additional co	Ū	
PRJ Code - PRJ Name	-						
Capacity Increments Vari Point	ant For Modelling	Operator		Year	From Gas System	To Gas System	Capacity
		SNTGN Transgaz S.A.		2022	HU	RO	78.1 GWh/d
Csanadpalota		SNTGN Transgaz S.A.		2022	RO	HU	75.9 GWh/d
Sponsors		General Infor	mation		NDP and	PCI Information	
SNTGN Transgaz SA	100%	Promoter	SNTGN Transgaz SA	Part o	of NDP	Yes (201	7- 2026 TYND
		Operator	SNTGN Transgaz S.A.	NDP	Number		7
		Host Country	Romania	NDP	Release Date		22/06/201
		Status	Planned	NDP	Website		<u>NDP UI</u>
		Website		Curre	ently PCI		Yes
				Priori	ity Corridor(s)		NSI

Current TYNDP : T	NDP 2018 FINA	L - Annex A	
Schedule	Start Date	End Date	Third-Party Acc
Pre-Feasibility		12/2013	Considered TPA Regime
Feasibility	01/2014	09/2015	Considered Tariff Regime
FEED	07/2015	03/2018	Applied for Exemption
Permitting	01/2016		Exemption Granted
Supply Contracts			
FID		12/2018	Exemption in entry direction
Construction	01/2021	12/2022	Exemption in exit direction
Commissioning	2022	2022	

Enabled Projects

Project CodeProject NameTRA-N-362Development on the Romanian territory of the Southern Transmission Corridor

TRA-N-1268 Romania-Serbia Interconnection

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Recaș - Horia		800	50	14	2022
	Total		50	14	
	Fulfilled Criteria				
Specific Criteria Fulfilled	Competition, Market Integration, Sustainability				
Specific Criteria Fulfilled Comr	nents Market integration, Sustainability, Competition				
	Time Schedule				
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

	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanatio	n		
Benefit Description			
	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received of decisio
	not	Grants for studies	Ye
Submissin Date		Grants for studies amount	Mln EUR
Decision Date		Grants for works	Ν
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	
Countries Net Cost Bea	arer	Other Financial Assistance	٨
Additional Comments		Comments	
		General Comments	

10 1

CS Ajdovščina, 1st phase of upgrade

TRA-N-92	Project	Pipeline including CS	Non-FID
Update Date	30/03/2018		Non-Advanced
Description	Adjustment to the operating parameters of the transmission system of the It	alian TSO and increasing the transmission capac	tity.
PRJ Code - PRJ Name	-		

Sponsors				General Information	NDP	and PCI Information
			Promoter	Plinovodi d.o.o.	Part of NDP	Yes (TYNDP for the period 2018-2027)
Plinovodi		100	% Operator	Plinovodi d.o.o.	NDP Number	C1
Paldiski LNG Terr	minal		Host Country	Slovenia	NDP Release Date	09/10/2017
Balti Gaas LLC		100	% 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	e Regulated
Feasibility					Considered Tariff Regin	me Regulated
FEED					Applied for Exemption	No
Permitting					Exemption Granted	No
Supply Contracts						
FID					Exemption in entry dire	ection 0.00%
Construction					Exemption in exit direct	tion 0.00%
Commissioning	2022	2022				
				Enabled Projects		

Project Code Project Name

TRA-N-108 M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

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

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

		Benefits	
Main Driver	Market Demand		
Main Driver Explana	ation		
Benefit Description			

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

	CBCA	Financial Assistance			
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF		
Decision	and we have not yet decided whether we will submit or	Grants for studies	No		
Submissin Date	not	Grants for studies amount			
		Grants for works	No		
Decision Date		Grants for works amount			
Website		Intention to apply for CEF	No decision yet taken		
Countries Affected		Other Financial Assistance	No		
Countries Net Cost Bear	27	Comments			
Additional Comments		General Comments			

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 pi assure additional necessary compressor power for the PCI 6.26 Cluster Croatia -	· •	on. The project aims to
PRJ Code - PRJ Name	-		

Sponsors			Ge	General Information		nd PCI Information
Plinovodi		100%	Promoter	Plinovodi d.o.o.	Part of NDP	Yes (TYNDP for the period 2018-2027)
1			Operator	Plinovodi d.o.o.	NDP Number	C5
			Host Country	Slovenia	NDP Release Date	09/10/2017
			Status	Planned	NDP Website	<u>NDP URL</u>
			Website	Project's URL	Currently PCI	Yes ()
					Priority Corridor(s)	NSIE
Schedule	Start Date	End Date			Third-F	Party Access Regime
Pre-Feasibility					Considered TPA Regime	Regulated
Feasibility					Considered Tariff Regim	e Regulated
FEED	07/2019	07/2021			Applied for Exemption	No
Permitting					Exemption Granted	No
Supply Contracts						
FID		07/2019			Exemption in entry direc	ction 0.00%
Construction	07/2021	12/2022			Exemption in exit directi	on 0.00%
Commissioning	2022	2022				
				Enabled Projects		
Project Code Proj	ject Name					

TRA-N-390Upgrade of Rogatec interconnection (M1A/1 Interconnection Rogatec)

TRA-N-389 Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)

Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
CS Kidričevo, 2nd phase of upgrade	Up to three compressor units with total power of up 30 MW.		(,	30	
	Total			30	
	Fulfilled Criteria				
Specific Criteria Fulfilled Market Int	egration, Security of Supply				
	It will contribute to the facilitation of market integration and provide inf Igrade of CS for higher operational pressure in the existing M1/1 and M Ins to assure additional necessary compressor power for the PCI 6.26 Clu	12/1 pipelines, hi	gher flow	and bidirectional op	
	grade of CS for higher operational pressure in the existing M1/1 and M	12/1 pipelines, hi	gher flow	and bidirectional op	
project ain	grade of CS for higher operational pressure in the existing M1/1 and M ns to assure additional necessary compressor power for the PCI 6.26 Clu	12/1 pipelines, hi	gher flow	and bidirectional op	
project ain	grade of CS for higher operational pressure in the existing M1/1 and M ns to assure additional necessary compressor power for the PCI 6.26 Clu	12/1 pipelines, hi	gher flow	and bidirectional op	
project ain Norway, Russia, LNG (HR)	grade of CS for higher operational pressure in the existing M1/1 and M ns to assure additional necessary compressor power for the PCI 6.26 Clu Expected Gas Sourcing	12/1 pipelines, hi	gher flow	and bidirectional op	
project ain Norway, Russia, LNG (HR) Main Driver <u>Market Demand</u>	grade of CS for higher operational pressure in the existing M1/1 and M ns to assure additional necessary compressor power for the PCI 6.26 Clu Expected Gas Sourcing Benefits	12/1 pipelines, hi	gher flow	and bidirectional op	
project ain Norway, Russia, LNG (HR)	grade of CS for higher operational pressure in the existing M1/1 and M ns to assure additional necessary compressor power for the PCI 6.26 Clu Expected Gas Sourcing Benefits	12/1 pipelines, hi	gher flow	and bidirectional op	

	CBCA	Fina	ncial Assistance
	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
Decision	and we have not yet decided whether we will submit or	Grants for studies	No
Culomiasia Data	not	Grants for studies amount	
Submissin Date		Grants for works	No
Decision Date		Grants for works amount	
Website		Intention to apply for CEF	No decision yet taken
Countries Affected		Other Financial Assistance	No
Countries Net Cost Bearer		Comments	110
Additional Comments			
		General Comments	



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M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

TRA-N-108			Project			Pipeline including	g CS 🛛 🛚	Non-FID	
Update Date			30/03,	/2018			Non	-Advanced	
Description	Intercor	nnector with the Italia	n TSO. Adjustment to operating p	parameters of the transmi	ssion s	ystem of the Italian T	SO.		
PRJ Code - PRJ Name	-								
Capacity Increments Vari	iant For Mod	elling							
Point	10		Operator		Year	From Gas System	To Gas System	Capacity	
Gorizia (IT) /Šempeter (S	sn		Plinovodi d.o.o.		2022	IT	SI	36.6 GWh/d	
	,,,,		Plinovodi d.o.o.	:	2022	SI	IT	39.2 GWh/d	
Sponsors			General Infor	mation		NDP and	PCI Information		
Plinovodi		100%	Promoter	Plinovodi d.o.o.	Part o	of NDP Yes	(TYNDP for the p	eriod 2018-2027)	
1			Operator	Plinovodi d.o.o.	NDP	Number		C2	
			Host Country	Slovenia	NDP	Release Date		09/10/2017	
			Status	Planned	NDP	Website		<u>NDP URL</u>	
			Website	<u>Project's URL</u>	Curre	ntly PCI		No	
					Priori	ty Corridor(s)			
Schedule St	tart Date	End Date				Third-Part	ty Access Regime		
Pre-Feasibility					Consi	dered TPA Regime		Regulated	
Feasibility					Consi	dered Tariff Regime		Regulated	
FEED					Applie	ed for Exemption		No	
Permitting					Exem	otion Granted		No	
Supply Contracts									
FID					Exem	otion in entry directio	n	0.00%	
Construction					Exem	otion in exit direction		0.00%	
Commissioning	2022	2022							

Current TYNDP :	: TYNDP 2018	FINAL - Annex A
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		Enabled Projects				
Project Code	Project Name					
TRA-N-92	CS Ajdovščina, 1st phase of upgrade					
Pipelines and	Compressor Stations					
Pipeline Sectio	on	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year

M3 pipeline reconstruction from CS Ajdovščina to Šempeter/Gorizia

Total

Fulfilled Criteria

500

12

12

Specific Criteria Fulfilled

Specific Criteria Fulfilled Comments

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

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

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

TRA-N-389			Project			Pipeline including		Non-FID
				1/2019				
Update Date	A 11 - 1			1/2018				dvanced
Description			meters of the transmission syst rt of the PCI 6.26 Cluster Croatia			g the transmission cap	bacity and enablin	ng bidirectional
PRJ Code - PRJ Name	•							
Capacity Increments Varia	nt For Model	ling						
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 Info	ormation		NDP and	PCI Information	
Plinovodi		100%	Promoter	Plinovodi d.o.o.	Part o	f NDP Yes	(TYNDP for the p	eriod 2018-2027
			Operator	Plinovodi d.o.o.	NDP	Number		C
			Host Country	Slovenia	NDP F	Release Date		09/10/2017
			Status	Planned	NDP \	Vebsite		NDP UR
			Website	Project's URL	Currei	ntly PCI		Yes (
					Priorit	y Corridor(s)		NSI
Schedule Star	t Date	End Date				Third-Part	y Access Regime	
Pre-Feasibility					Consid	lered TPA Regime		Regulated
Feasibility					Consid	lered Tariff Regime		Regulated
FEED 02	7/2019	07/2021			Applie	d for Exemption		No
Permitting					Exemp	otion Granted		No
Supply Contracts								
FID		07/2019			Exemp	otion in entry direction	٦	0.00%
Construction 02	7/2021	12/2022			Exemp	otion in exit direction		0.00%
Commissioning	2022	2022						

terconnection Rogatec) Pipeline Comment	Diameter		
	Diameter	S.	
	Diameter	5	
Pipeline Comment	Diameter		
Pipeline Comment	Diameter		
Pipeline Comment	Diameter		
	(mm)	Length Compressor Powe (km) (MW)	er Comissioning Year
Pipeline length: 160m.	800	0	
al		0	
Fulfilled Criteria			
ration, Security of Supply			
Expected Gas Sourcing			
Benefits			
of supply.			
	ration, Security of Supply nental capacity at the IP Murfeld/Ceršak in ving bottlenecks, improving N-1 for the SI acuation for Croatia through Slovenia to A Expected Gas Sourcing	ration, Security of Supply nental capacity at the IP Murfeld/Ceršak in both directions (from AT to SI ving bottlenecks, improving N-1 for the Slovenian TSO, improving SoS fo acuation for Croatia through Slovenia to Austria. Expected Gas Sourcing Benefits	ration, Security of Supply nental capacity at the IP Murfeld/Ceršak in both directions (from AT to SI and from SI to AT) and cont ving bottlenecks, improving N-1 for the Slovenian TSO, improving SoS for Austria, Slovenia and Croa acuation for Croatia through Slovenia to Austria. Expected Gas Sourcing Benefits

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

	System Enhancements - Eus	stream	
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 Techno projects rolling in a time period such as : enhancement of key technology overhaul of compressor technology, - redesign of compressor stations,e	y accessibility, improvement/ upgrade of pipelines ir	
PRJ Code - PRJ Name	-		

lopment Plan 2018- 2027) 4.2.1 30/11/2017 <u>NDP URL</u>
4.2.1 30/11/2017
30/11/2017
NDP URL
No
ne
Regulated
Regulated
No
No
0.00%
0.00%

Comments about the Third-Party Access Regime

The map is not uploaded as the Project consists of several different projects focuesed on modernization and upgrade of the network and replacement of technologies due to new environmental standards.

	Benefits
Main Driver	Others
Main Driver Explanatior	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	Finan	icial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CEF
	and we do not plan to submit it	Grants for studies	No
Submissin Date		Grants for studies amount	
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to apply
Countries Net Cost Bearer		Other Financial Assistance	No
Additional Comments		Comments	
		General Comments	

Underground Gas Storage Velke Kapusany

UGS-N-356	Project		Storage Facilit	y N	lon-FID
Update Date	28/03/2018			Ac	dvanced
Description	The Underground Gas Storage Velke Kapusany project aims to construct in close vicinity of Ukraine (1 km), Hungary (15 km) and Poland (70 km). The Kapusany, and at the center of the soon-to-be NSI East Gas corridor. The projected working gas volume of the UGS Velke Kapusany is 340 mc serve a number of purposes, such as: - Providing security of supply to countries with insufficient storage capac countries as well as providing domestic security of supply	The storage is located m with injection and ities along the north-	l directly at the Ukrair withdrawal rate set at south interconnector,	ne-Slovakia entry/e : 3.75 mcm/d. This , mainly Poland and	exit point Velke capacity will d the Balkan
	 Enhancing liquidity and facilitating gas trading at an emerging "gas hub Improving physical load factor of the existing and future gas transmission 		of the north-south an	nd east-west gas cc	orridors
PRJ Code - PRJ Name			of the north-south an	id east-west gas co	orridors
PRJ Code - PRJ Name Capacity Increments Varia	 Improving physical load factor of the existing and future gas transmission - 		of the north-south an	id east-west gas co	orridors
Capacity Increments Varia	 Improving physical load factor of the existing and future gas transmission - 		of the north-south an From Gas System	nd east-west gas co To Gas System	Capacity
	- Improving physical load factor of the existing and future gas transmissio	on infrastructure			Capacity
Capacity Increments Varia Point	- Improving physical load factor of the existing and future gas transmissio - ant For Modelling Operator	on infrastructure Year	From Gas System STcSK	To Gas System	Capacity 39.8 GWh/c
Capacity Increments Varia	- Improving physical load factor of the existing and future gas transmissio - ant For Modelling Operator	on infrastructure Year	From Gas System STcSK	To Gas System SK	Capacity 39.8 GWh/d

Sponsors			General Information	ND	PP and PCI Information
NAFTA a.s.	100%	Promoter	NAFTA a.s. (joint stock company)		Yes (Ten-Year Network Development
		Operator	NAFTA a.s.	Part of NDP	Plan of the transmission system of the
		Host Country	Slovakia		company Eustream)
		Status	Planned	NDP Number	chapter 3.3
		Website	Project's URL	NDP Release Date	30/11/2017
		Website	<u>Projects one</u>	NDP Website	<u>NDP URL</u>
				Currently PCI	No
				Priority Corridor(s)	

Page 560		- Annex A	3 FINAL - Ar	(NDP 2018 FINA	urrent TYNDP : TY
Regime	Third-Party Access Re	End Date	ate E	Start Date	Schedule
Re	Considered TPA Regime	11/2017			Pre-Feasibility
Neg	Considered Tariff Regime	09/2019	019	04/2019	Feasibility
	Applied for Exemption	04/2021	020	02/2020	FEED
Not F	Exemption Granted	04/2021	017	11/2017	Permitting
		09/2020			Supply Contracts
	Exemption in entry direction	01/2020			FID
	Exemption in exit direction	06/2023	021	06/2021	Construction
		2023	023	2023	Commissioning

			Technical Inform	ation (UGS)					
Storage Facility	Storage Facility Type	Multiple-cycle Facility	Project Phase	Working Volume (mcm)	Withdrawal Capacity (mcm/d)	Injection Capacity (mcm/d)	(%)	Comments	Commisioning Year
Underground Gas Storage Velke Kapusany	Depleted Field	Yes	Commissioning	340	3.8	3.8	100	none	2023

	Fulfilled Criteria
Specific Criteria Fulfilled	Competition, Market Integration, Security of Supply, Sustainability
Specific Criteria Fulfilled Comments	Market integration will be enhanced by: -supporting the emerging "gas hub" at Velke Kapusany -enhancing active trading in the border area of four CEE countries and supported by PL-SK interconnector and Eastring -improving physical utilization of existing and new pipeline interconnections and enhancing the overall flexibility of the system -contributing to price convergence between the countries in CEE region (mainly SK, PL, HU) and the Balkans Making its storage capacity available to Poland via the future PL-SK Interconnector will improve the fulfillment of the N-1 rule for Poland. Other benefactors will be Ukraine and also countries along the southern part of the NSI East Gas corridor and Eastring, notably Bulgaria and Romania. UGS Velke Kapusany will be designed as hydrogen-ready for mixtures with up to 10% hydrogen content. UGS Velke Kapusany will become an important component ensuring higher supplier competition for Poland, Ukraine and secondarily also for Balkan countries.

Expected Gas Sourcing

Caspian Region, Norway, Russia, LNG (PL)

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	Be	enefits	
Main Driver	Market Demand		
Main Driver Explanation	UGS Velke Kapusany aims at reinforcing the security of gas sup Poland, Slovakia, Hungary and Ukraine as well.	plies in the CEE region and enhancing the ma	arket integration of EU member states, namely
Benefit Description	Enabling reverse gas flow to Ukraine led to a sharp increase in a from Western Europe. As the PL-SK interconnector is moving al pursuing its goal of source diversification. Higher number of tra and if the storage is close to the point of destination. With the scale as natural gas from the North Sea, Caspian, Central Asia, I had long suffered from isolation and market stagnation.	nead, we can expect a similar scenario with Pading counterparties is, however, only possibl NSI East Gas corridor and Eastring in the wor	oland – another country that is relentlessly le when there is enough flexibility from storag ks, this can become a competition on a highe
	B	arriers	
Barrier Type	Description		
banner rype			
Market	Lack of market maturity		
	Lack of market support		
Market			
Market		Finan	icial Assistance
Market Market	Lack of market support CBCA No, we have not submitted an investment request yet,	Finan Applied for CEF	ncial Assistance (3) No, we have not applied for C
Market Market	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or		(3) No, we have not applied for C
Market Market Decision	Lack of market support CBCA No, we have not submitted an investment request yet,	Applied for CEF	
Market Market Decision Submissin Date	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies	(3) No, we have not applied for C
Market Market Decision Submissin Date Decision Date	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies Grants for studies amount	(3) No, we have not applied for C
Market Market Decision Submissin Date Decision Date Website	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF Grants for studies Grants for studies amount Grants for works	(3) No, we have not applied for C
Market Market Decision Submissin Date Decision Date Website Countries Affected	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount	(3) No, we have not applied for C
Market	Lack of market support CBCA No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or not	Applied for CEF Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF	(3) No, we have not applied for C Yes, for studies and wo

	Trans-Ca	spian			
TRA-N-339	Project		Pipeline including	g CS 🛛 N	Ion-FID
Update Date	30/03	/2018		Non	-Advanced
Description PRJ Code - PRJ Name	TCP will branch-off at a connection with the East-West pipelin Turkmenistan. It will feed into Sangachal terminal and then SC possible. The first stage associated with one pipeline string is i of 2022), the capacity is intended to be increased to up to 30- towards Baumgarten) directions. We are currently evaluating a Estimated costs for 2x32 in. pipelines + one compression stati	P. Several economically justified intended to transport 8-15 bcm/ 32 bcm/y and feed both Turkish an option of 2 phased developm	scenarios of TCP's st /y towards Turkey (TA (TANAP) and cross-B	ep by step expans NAP). For the seco Black Sea (via White	ion are and stage (end e Stream
Capacity Increments Variar Point	t For Modelling Operator	Year	From Gas System	To Gas System	Capacity
	White Stream	2022	TM/SCP	RO	500.0 GWh/
Constanta (White Stream)	Comment: Second pl	hase (2nd string) of TCP towards Str	White Stream (N.B. O eam Caspian pipeline		
	White Stream	2021	ТМ	TM/SCP	500.0 GWh/

South Caucasus Pipeline / White Stream

Comment: Fisrt phase of TCP to SCP/TANAP/TAP,(N.B. Operator will be W-Stream Caspian Pipeline Company Limited

Sponsors	General Information		NDP and PCI Information		
W-STREAM PIPELINE COMPANY LIMITED	90%	Promoter	W-Stream Caspian Pipeline	Part of NDP	No ((2) no NDP exists in the country)
Georgian Oil and Gas Corporation (GOGC)	10%	i i oniotei	Company Ltd	NDP Number	
deorgian on and das corporation (dode)	1078	Operator	W-Stream Caspian Pipeline Company Ltd	NDP Release Date	
		Host Country	Turkmenistan	NDP Website	
		5		Currently PCI	Yes ()
		Status	Planned	Priority Corridor(s)	SGC
		Website	<u>Project's URL</u>		

urrent TYNDP : TYNDP 2018 FIN	AL - Annex A				Pag	ge 563 of 575
Schedule Start Date	End Date			Third-Pa	arty Access Regime	
Pre-Feasibility	01/2013		Considered TPA	Regime		Regulated
Feasibility 03/2018	02/2019		Considered Tari	ff Regime	2	Negotiated
FEED 02/2019	11/2019		Applied for Exer	mption		No
Permitting 06/2019	11/2019		Exemption Gran	nted		Not Relevant
Supply Contracts	11/2020					
FID	12/2019		Exemption in en	ntry direct	ion	0.00%
Construction 04/2020	09/2021		Exemption in ex	it directio	on	0.00%
Commissioning 2021	2022					
		Enabled Projects				
Uroloct (odo Uroloct Namo						
Project Code Project Name						
TRA-N-53 White Stream						
, , , , , , , , , , , , , , , , , , ,						
, , , , , , , , , , , , , , , , , , ,	5					
TRA-N-53 White Stream		Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
TRA-N-53 White Stream Pipelines and Compressor Stations	Ρ	Pipeline Comment 175 MW total for two strings			•	0
TRA-N-53 White Stream Pipelines and Compressor Stations Pipeline Section	P 1		(mm)	(km)	(MW)	0
TRA-N-53 White Stream Pipelines and Compressor Stations Pipeline Section sub-sea (string 1)	P 1	75 MW total for two strings	(mm) 812	(km) 300	(MW) 175	0
TRA-N-53 White Stream Pipelines and Compressor Stations Pipeline Section sub-sea (string 1)	P 1 1	75 MW total for two strings	(mm) 812	(km) 300 300	(MW) 175 175	0
TRA-N-53 White Stream Pipelines and Compressor Stations Pipeline Section sub-sea (string 1)	P 1 1	75 MW total for two strings 75 MW total for two strings Fulfilled Criteria	(mm) 812	(km) 300 300	(MW) 175 175	0

	Time Sc	hedule	
Grant Obtention Date	25/01/2018		
Delay Since Last TYNDP			
Delay Explanation			
	Expected G	as Sourcing	
Caspian Region, Turkme	nistan/Central Asia		
	Bene	ofite	
Main Driver	Market Demand		
		and the manufact in the Fourier and	Line and the Freener Community TCD and the forther
Main Driver Explanation	Gas from Turkmenistan can be the most competitively priced gas improve the economics of Azeri gas transportation via TANAP and competition and security of gas supply.	the second se	
Benefit Description	TCP 1st and the 2nd string will indirectly and directly improve corr of gas supply and market integration in the EU as well as in the Er		he EU and the Energy Community, improve the security
	Barr	iers	
Barrier Type	Description		
Permit Granting	The project is at a too early stage at the moment regarding permit	it granting	
1			
	CBCA		Financial Assistance
Decision	No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
	not	Grants for studies	Yes
Submissin Date		Grants for studies amount	Mln EUR 0
Decision Date		Grants for works	No
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No decision yet taken
Countries Net Cost Bear	er	Other Financial Assistance	No
	TCP 1st and 2n string are not located in any of the EU-	Comments	
Additional Comments	MS nor do they impact any of the EU-MS respectively Contracting Parties to the Energy Community directly.	General Comments	

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Trans-Balkan Bi-directional Flow

TRA-N-1169		Project		Pipeline including	g CS N	Ion-FID
Update Date		22/05/2018			A	dvanced
Description	Corridor. The Trans-Balkar some reconstructions. The with Romania. In case of c of Balkan Region and wou Romania to CEE Region, in	ey element of energy security of the Balkans and a route consists of three high diameter pipelines, a Ukrainian GTS and Moldavian GTS can transport onstruction of TANAP and Turkish stream, this pr Id ensure utilization of the existing infrastructure ater alia to provide the offshore gas production co reconnectivity in the Balkan and CEE regions; - to a	which can transpo up to 20 bcm fror oject would becon . The key overall ol ompanies with the	rt bi-directionally up t n/to UA-PL, UA-SK an ne a strategic one as in pjectives are: - to faci access to the gas infr	o 20 bcm of natura d UA-HU borders t could ensure secu litate export of nat astructure and the	al gas after to/from the IPs urity of supply ural gas from
PRJ Code - PRJ Name	2					
Capacity Increments V	/ariant For Modelling					
	Variant : Phase 1	Phase 1 - establishment of physical year, which would not require build			p to 1.5 bcm per	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Grebenyky		Ukrtransgaz	2019	UA	MD	43.1 GWh/d
Стеренуку				Comment: Entry to U	kraine-reverse flow	,
Capacity Increments V	/ariant(s) For Information Only					
	Variant : Phase 2	Phase 2 - establishment of physical capacity of 5 bcm per year	and virtual flow v	ia Transit 1 pipeline u	ıp to its maximum	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Grebenyky		Ukrtransgaz	2021	UA	MD	143.5 GWh/d
Стеренуку				Comment: Entry to U	kraine-reverse flow	,
Capacity Increments V	/ariant(s) For Information Only					
	Variant : Phase 3	Phase 3 -establishment of physical maximum capacity (approximately		a Transit 1-2-3 pipeli	nes up to their	
Point		Operator	Year	From Gas System	To Gas System	Capacity
Grahanyky		Ukrtransgaz	2024	UA	MD	574.1 GWh/d
Grebenyky				Comment: Entry to U	kraine-reverse flow	,

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Sponsors				General Information	NDP	and PCI Information
JSC "UKRTRANSG	iAZ"	57%	Promoter	PJSC "UKRTRANSGAZ"	Part of NDP	No ((2) no NDP exists in the country
			Operator	Ukrtransgaz	NDP Number	
			Host Country	Ukraine	NDP Release Date	
			Status	Planned	NDP Website	
			Website		Currently PCI	N
					Priority Corridor(s)	
Schedule	Start Date	End Date			Third-	Party Access Regime
re-Feasibility					Considered TPA Regim	e Regulate
easibility					Considered Tariff Regin	ne <i>Regulate</i>
EED					Applied for Exemption	N
ermitting					Exemption Granted	N
upply Contracts						
D					Exemption in entry dire	ection 0.009
onstruction					Exemption in exit direct	tion 0.009
ommissioning	2019	2019				

Current	TYNDP	:	TYNDP	2018	FINAL -	Annex A
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Pipelines and Compressor Stations					
Phase 1	Phase 1 - establishment of physical and virtual flow via Transit 1 pipeline up to 1.5 bcm per year, which would not require building additional infrastructure				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissionin Year
Phase 1	From the Ukrainian side it is necessary to reconstruct the CS and GMS Orlovka, CS Berezivka and the GMS Grebenyky. On the Moldavian side, it is necessary to reconstruct the CS Vulkaneshty and the GMS Kaushany.	1,200	320	0	2019
	Total		320	0	
Pipelines and Compressor Stations - Alternative Var	iant				
Phase 2	Phase 2 - establishment of physical and virtual flow via Transit 1 pipeline up to its maximum capacity of 5 bcm per year				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
Phase 2	Phase 2 also requires some reconstruction works by Romanian TSO.	1,200	320	0	2021
	Total		320	0	
Pipelines and Compressor Stations - Alternative Var	iant				
Phase 3	Phase 3 -establishment of physical and virtual flow via Transit 1-2-3 pipelines up to their maximum capacity (approximately 20 bcm per year)				
Pipeline Section	Pipeline Comment	Diameter (mm)	Length (km)	Compressor Power (MW)	Comissioning Year
	Phase 3 -establishment of physical and virtual flow via				
Phase 3	Transit 1-2-3 pipelines up to their maximum capacity (approximately 20 bcm per year)	1,200	320	0	2024
	Total		320	0	

Expected Gas Sourcing

Caspian Region, LNG (!,GR), Romanian gas production

	Ben	efits	
Main Driver	Market Demand		
Main Driver Explanation	Romanian gas producers in Black Sea offshore fields are planning project will open for them Ukrainian market	to start gas production in 2020. They are le	ooking for the ways to export gas and the
Benefit Description			
	Barı	riers	
Barrier Type	Description		
Financing	Availability of funds and associated conditions		
Financing	Amortization rates		
	CBCA	Finan	cial Assistance
Decision	No, we have not submitted an investment request yet,	Applied for CEF	(3) No, we have not applied for CE
	but we do plan to submit it	Grants for studies	N
Submissin Date	01/07/2018	Grants for studies amount	
Decision Date		Grants for works	N
Website		Grants for works amount	
Countries Affected		Intention to apply for CEF	No, we do not plan to appl
Countries Net Cost Door	er	Other Financial Assistance	Ν
Countries Net Cost Bear			
Additional Comments		Comments	

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Physical reverse flow from NI to GB and IE via SNIP pipeline

TRA-N-27			Project			Pipeline including	CS N	lon-FID
Update Date		1		30/05/2018			Non	-Advanced
Description				and to Northern Ireland pipeline (SNI risation point to a new point(s) downs				
PRJ Code - PRJ Nar	ne -							
Capacity Increment	s Variant For M	odelling						
Point			Operator		Year	From Gas System	To Gas System	Capacity
Twynholm			Premier Tr	ansmission Ltd	2021	UKn	Y-UKm	131.0 GWh/d
Sponsors			(General Information		NDP and	PCI Information	
Premier Transmissio	on Ltd	100%	Promoter	Premier Transmission Limited	Dort	of NDP	es (Northern Irela	nd Gas Capacity
	77		Operator	Premier Transmission Ltd) NDP		Statement)
			Host Country	United Kingdom	NDP	Number		n.a.
			Status	Planned	NDP	Release Date		26/10/2017
			Website	<u>Project's URL</u>	NDP	Website		<u>NDP URL</u>
					Curre	ntly PCI		Yes ()
					Priori	ty Corridor(s)		NSIW
Schedule	Start Date	End Date				Third-Part	y Access Regime	
Pre-Feasibility		10/2018			Consi	dered TPA Regime		Regulated
Feasibility	10/2018	10/2018			Consi	dered Tariff Regime		Regulated
FEED	01/2019	01/2019			Applie	ed for Exemption		Not Relevant
Permitting	10/2018	09/2019			Exem	otion Granted		Not Relevant
Supply Contracts		01/2019						
FID		12/2019			Exem	ption in entry direction	n	0.00%
Construction	01/2021	09/2021				ption in exit direction		0.00%
Commissioning	2021	2021						
1								

Pipeline Section		Pipeline Comment	(mm)	(km)	Compressor Power (MW)	Comissioning Year
SNIP-Scotland to Nort	thern Ireland		600		10	
		Total		5	10	
		Fulfilled Criteria				
Specific Criteria Fulfille	ed	Competition, Market Integration, Security of Supply, Sustainability				
Specific Criteria Fulfille	ed Comments	This project will open up the GB-NI-Republic of Ireland corridor, and the three markets would have the ability for physical bi-directional links for Ireland to be accessed by GB and RoI. The project will allow GB and RoI essential for Northern Ireland gas storage to be feasible.	the first time. The project we	ould allo	ow future gas finds in	Northern
		Time Schedule				
Grant Obtention Date						
Delay Since Last TYND	P	Approx 2 years				
Delay Explanation		This project is linked to the Islandmagee gas storage project and has be delayed – caused by the absence of competitive transmission tariffs for		line wit	h the gas storage pro	ject being
		Benefits				
Main Driver	Market De	emand				
Main Driver Explanatio	on Required k	by Islandmagee Gas Storage Project				
Benefit Description	would hav Rol. The pr feasible. Th	ct will open up the GB-NI-Republic of Ireland corridor, and the Republic of we the ability for physical bi-directional links for the first time. The project roject will allow GB and RoI to access flexible gas storage planned for No the planned upgrade will allow security of supply benefits due to the ability or renewable generation.	will allow future gas finds in rthern Ireland – which is ess	Northei ential fo	rn Ireland to be acces r Northern Ireland ga	sed by GB and s storage to b

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

Islandmagee Gas Storage Facility

UGS-N-294	Project	Storage Facility	Non-FID	
Update Date	29/03/2018		Advanced	
Description	IMSL plans to create seven caverns, capable of storing up to a total of 500 million a ability to meet the increasing peak gas demand, whilst also providing a greater dep	J		
PRJ Code - PRJ Name	-			

Capacity Increments Variant For Modelling							
Point	Operator	Year	From Gas System	To Gas System	Capacity		
	Islandmagee Storage Ltd	2022	UKn	STcUK	132.0 GWh/d		
Islandmagee	Comment: The project is a gas storage facility. Due to this the facility can provide a peak incremet as stated. The facility is planned to inject at 12mcm a day and withdraw at 22mcm a						
	lay so the increment could be as low as 0 per day or peak at the stated 132. This will depend on local demand and it has been difficult to state an increment for this other than the peak.						

Sponsors		G	eneral Information	NDP	and PCI Information
Islandmagee Storage Limted	100%	Promoter	Islandmagee Storage Limited	Part of NDP	Yes (Northern Ireland Gas Capacity
		Operator	Islandmagee Storage Ltd		Statement)
		Host Country	United Kingdom	NDP Number	n.a.
		Status	Planned	NDP Release Date	
		Website	<u>Project's URL</u>	NDP Website	<u>NDP URL</u>
			2	Currently PCI	Yes ()
				Priority Corridor(s)	NSIW

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Schedule Start Date		End Date
Pre-Feasibility		
Feasibility		
FEED	01/2018	12/2018
Permitting		
Supply Contracts		06/2019
FID		05/2019
Construction	09/2019	05/2022
Commissioning	2022	2022

			Technical Information	n (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
Islandmagee Storage Facility	Salt Cavern	Yes	Project Construction	420	22.0	12.0	20	The project is currently at the FEED stage so the technical information is likley to change as this process materialises.	2019

Fulfilled Criteria

Specific Criteria Fulfilled

Competition, Market Integration, Security of Supply, Sustainability

Specific Criteria Fulfilled Comments The Islandmagee facility will enhance physical and price security of supply for the Northern Ireland, Republic of Ireland and Great Britain gas markets. It will also enable a number of renewabnle energy projects to become more viable because the gas facility can be used to support rapid injection of gas during periods of peak volatility and also during periods of low renewable generation.

urrent TYNDP : TYNDI	P 2018 FINAL - Annex A	Page 574 of 575
	Time Schedule	
Grant Obtention Date	17/06/2016	
Delay Since Last TYNDP	approx 3 years	
Delay Explanation	The project has been rescheduled due to the availability of final	nce and the difficult trading conditions within the UK gas market.
	Expected Gas Sourci	ng
The project will source i	ts gas from the main UK network supply	
	Benefits	
Main Driver	Others	
Main Driver Explanation		eland and the ability to enable better stability of price for the gas consumers. At any disruption to this would have major implications. With this facility the Island
Benefit Description	two networks, by enabling the pressures within NI to be sufficient to enable greater connectivity with ROI and Great Britain (GB) markets. NI is currently enhancing free flow of gas to meet localised demand. An alternative source	fully import dependent. The facility will permit exports to be delivered from NI e of gas supply to the island of Ireland. The facility will enhance physical and will provide support to renewable electricity generation in both ROI and NI by
	Barriers	
Barrier Type	Description	
Political	The UK government does not place enough importance on the availability difficult to manage.	of gas storage and as such the economic conditions for such a facility are
Market	The Islandmagee gas storage facility requires competitive gas storage trans	smission tariffs in order to compete against GB storage facilities.
Regulatory	Low or zero-priced short-term capacity	
Regulatory	Low rate of return	
Financing	Availability of funds and associated conditions	
Market	Lack of market support	

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No, we have not submitted an investment request yet, and we have not yet decided whether we will submit or	Applied for CEF	(1) Yes, we have applied for CEF and we have received a decision
not	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	
	and we have not yet decided whether we will submit or	and we have not yet decided whether we will submit or not Grants for studies Grants for studies amount Grants for works Grants for works amount Intention to apply for CEF Other Financial Assistance Comments