Project	Phase	Techn. capacity	Expected commissi		of pre-const	ruction stag	es	Construction start/end		Additional information	
			oning	Pre- feasibility	FEED	FID	Start	End			
Trans-Adriatic Pipeline (TAP)		10 bcm/y	2020	2003	2006- 2007	03/2013	12/2013	2016	05/2016	12/2019	Capacity can be expanded up to 20 bcm/y. Such expansion is subject to an economically and technically feasible outcome of a market test.

Project	Phase	Techn. capacity	Expected commissi		Completion of pre-construction stages						Additional information
			oning	Pre- Feasibilit FEED FID Permitting feasibility y					Start	End	
Interconnector Greece – Bulgaria (IGB)		3 bcm/y	2018			03/2016	12/2015	11/2016	12/2016	3Q 2018	Possibility for future upgrade to 5 bcm/y by installation of compressor capacity

Project	Phase	Techn. capacity	Expected commissi		Completion	of pre-const	ruction stag	es	Construction start/end		Additional information
			oning	Pre- feasibility	Feasibilit y	FEED	FID	Permitting	Start	End	
Interconnector Bulgaria – Serbia (IBS)	Phase 1 (BG)	BG to RS: 1.0 (1.8) bcm/y RS to BG: 0.15	12/2020	02/2011	12/2012	02/2018	10/2017	10/2018	10/2018	12/2020	Phase 1 refers to a single pipe Nis – Dimitrovgrad of 108 km. BG/RS timelines to be harmonised in the MoU expected in 4Q2016. According to the joint
	Phase 1 (RS)	bcm/y	12/2020		12/2011	06/2017		10/2017	02/2019	12/2020	BG/RS roadmap, the capacity (incl. reverse capacity) of the pipeline will be increased in Phase 2 and Phase 3.

Project	Phase	Techn. capacity	Expected commissi		Completion	of pre-const	ruction stag	ges		ruction :/end	Additional information
			oning	Pre- feasibility	Feasibilit y	FEED	FID	Permitting	Start	End	
Phased Bulgarian system reinforcement	Stage 1 of modernisation of compressor stations		06/2016						09/2014	06/2016	Actions were in progress in the period 2013 – 2016 and are finalized as of June 2016 when CS Petrich was commissioned
	Stage 2 of modernisation of compressor stations		06/2020		08/2017	11/2018	11/2018	11/2018	11/2018	11/2020	Further modernization of CS Lozenets, CS Ihtiman and CS Petrich
	Rehabilitation and replacement of gas pipeline sections, 81 km, DN 700, consisting of:  Replacement of 58 km section Beglej-Dermantsi-Batultsi-Kalugerovo;  Replacement of 23 km section Valchi Dol-Preselka		11/2020			12/2017 09/2018	12/2017 09/2018	12/2017 09/2018	01/2018	11/2020 2020	Activities on the replacement of 23 km section shall start as of February 2017
	New gas pipeline Gorni Bogrov – Novi Iskar, 19 km, DN 700 and compressor station, 20 MW		11/2020	12/2016	06/2017	11/2018	11/2018	11/2018	11/2018	11/2020	Conditional infrastructure required for Phase 2 of the IBS project
	Conduction of planned inspections		11/2018						04/2015	11/2018	Planned as a staged process; started in 2015 and projected till 2018

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-constr	ruction stag	es		uction /end	Additional information
				Pre- Feasibility FEED FID Permitting feasibility					Start	End	
Phased Romanian system reinforcement	BRUA Phase 1: Stage 1 of the Romanian South Corridor	1.75 bcm/y	12/2019	12/2013	09/2015	11/2016 (pipeline) 03/2017 (CS)	11/2016	02/2017	08/2017	12/2019	

Project	Phase	Techn. capacity	Expected commissioning	1	Completion o	f pre-constr	ruction stag	es		ruction /end	Additional information
				Pre- Feasibility FEED FID Permitting feasibility					Start	End	
LNG terminal in Croatia (with phasing potential)	First stage: floating LNG terminal (FSRU)	2 bcm/y	12/2018		01/2014	02/2017	06/ 2017	10/2017	10/2017	11/2018	

Project	Phase	Techn.	Expected		Completion o	f pre-constr	uction stag	es	Constructi	on start/end	Additional information
		capacity	commissioning	Pre-	Feasibility	FEED	FID	Permitting	Start	End	
				feasibility							
LNG		10			08/2016	07/2017	04/2017	07/2017 –			
evacuation		bcm/y						03/2018			
system											
towards	Pipeline	Up to 2	10/2018						10/2017	10/2018	
Hungary	section Omišalj	bcm	(Omišalj-						(Omišalj-	(Omišalj-	
	Zlobin	towards HU	Zlobin)						Zlobin)	Zlobin)	
		(4.5	03/2020						04/2018	02/2020	
	Zlobin-Kozarac	towards HU)	(Zlobin-						(Zlobin- Kozarac)	03/2020 (Zlobin-	
									,		

		Kozarac)						Kozarac)	
Pipeline section Kozarac- Slobodnica	6.5 bcm/y (10 towards	12/2023	08/2016	12/2020	01/2021	06/2021	07/2022	12/2023	
	HU)								

Project	Phase	Techn. capacity	Expected commissioning	Completion of pre-construction stages					Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Connection of off-shore Romanian gas to the Romanian	BRUA Phase 2: Stage 2 of the Romanian South Corridor	4.4 bcm/y	2020	12/2013	09/2015	11/2016 (pipeline) 03/2017 (CS)	06/2018	02/2017	2019	2021	
system and further reinforcement of the Romanian system	Black Sea – Podisor pipeline	6.0 bcm/y	2020	08/2014	01/2016	12/2017	06/2018	12/2017	2018	2021	

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-consti	ruction stag	es		ruction /end	Additional information
				Pre- Feasibility FEED FID Permitting feasibility					Start	End	
Interconnector Croatia – Serbia	Construction of the pipeline Slobodnica – Sotin – Bačko Novo Selo	6-7 bcm/y	12/2023			12/2020	01/2021	06/2021	07/2022	12/2023	Capacity to be downsized.

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-constr	ruction stag	es	Constr start	uction /end	Additional information
				Pre- Feasibility FEED FID Permitting feasibility					Start	End	
New Greek LNG terminal	Total project	6.1 bcm/y	10/2019	12/2010	06/2014	04/2017	10/2017	01/2015	10/2017	10/2019	The official name of the project according to the 2015 PCI list (reg.2016/89) is "LNG terminal in northern Greece".

Project	Phase	Techn. capacity	Expected commissioning		Completion o	of pre-const	ruction stag	ges	Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Interconnector Bulgaria – Romania (IBR)	Construction of Ruse GMS								08/2012	08/2014	
Nomana (izity	Land section on the BG territory								08/2012	08/2014	
	Land section on the RO territory and Giurgiu GMS	1.5 bcm/y	11/2016						06/2011	05/2013	
	Danube crossing								04/2016	11/2016	In the beginning of November 2016 IBR was commissioned with the finalization of the construction works of the main pipeline.

Project	Phase	Techn. capacity	Expected commissioning	(	Completion o	f pre-consti	ruction stag	es		ruction /end	Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	

Interconnector	1.5	06/2019	01/2014	07/2016	07/2017	07/2017	2018	2019	
Romania –	bcm/y								
Republic of									
Moldova (lasi-									
Ungheni)									
expansion									

Project	Phase	Techn. capacity	Expected commissioning		Completion of pre-construction stages						Additional information
				feasibility				Start	End		
Physical reverse flow Romania – Ukraine (at inter- connection point Isaccea)		2.2 bcm/y	2019	01/2015	2017	2018		2018	2018	2019	

Project	Phase	Techn. capacity	Expected commissioning					ges		ruction t/end	Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Compressor station in Kipi, Greece and reinforcement of Greek system	Compressor station in Kipi	2-11 bcm/y									This project will be further examined only if at least one of the conditions below is fulfilled:  1. Significant increase of flow from Turkey to Greece through the IP "Kipi" is planned and respective capacity upgrade is requested  2. The LNG terminal in Northern Greece is sanctioned and will be connected to the DESFA network  FID for the project will be taken according to the provisions of the Greek

									Network Code
Metering and Regulating Station at Nea Mesimvria for the connection of the Greek transmission	At least 3.65 bcm/y	2019	2016	2017	Q1 2017	2017	2017	2019	
system with									
Komotini Metering and Regulating Station									This project will be further examined only if its need is confirmed or requested by a User according to the Greek Network Code

Project	Phase	Techn. capacity	Expected commissioning		Completion o	of pre-const	ruction stag	es	Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Reinforcement of the Hungarian	Csanádpalota CS Phase I	RO/HU 1.75 bcm/y	01/2020	06/2014	07/2017	06/2018	05/2017	09/2018	10/2018	12/2019	The project "Romanian- Hungarian reverse flow: Hungarian section"
network		HU/AT 0 bcm/y									contains 3 CSs at Csanádpalota. With the first two CS in
	Városföld- Ercsi-Győr pipeline and	RO/HU 4.4 bcm/y	12/2022	06/2014	07/2017	01/2020	05/2018	04/2020	05/2020	12/2022	Csanádpalota, 1.75 bcm/y capacity could be ensured at the RO/HU IP, the third
	Városföld CS and Csanádpalota CS Phase II	HU/AT 5.2 bcm/y	12/2022	06/2014	07/2017	01/2020	05/2018	04/2020	05/2020	12/2022	CS will enable 4.4 bcm/y capacity. The related IPs capacities depend on RO and AT developments.

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-const	ruction stag	es	Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Interconnector Slovenia – Hungary	SI: R15/1 Pince – Lendava – Kidričevo	Up to 38.1 GWh/d	12/2020	04/2010	12/2017	06/2019	12/2017	12/2019	06/2019	12/2020	
	HU: Hungary- Slovenia inter- connection (Nagykanizsa – Tornyiszent- miklós)	Up to 38.1 GWh/d	12/2020	12/2015 (update)	12/2017	11/2019	02/2018	12/2019	06/2019	12/2020	

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-const	ruction stag	es	Construction start/end		Additional information
				Pre- Feasibility FEED FID Permitting feasibility						End	
Firm capacity	HU-UA reverse	6.1									
upgrade on the interconnector	flow	bcm/y									
Hungary – Ukraine											

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-consti	ruction stag	es	Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Reverse flow on the Slovenia – Austria interconnector (from Slovenia	SI: Upgrade of Murfeld/Cerša k inter- connection	5.64 bcm/y (LF=1); 4.51 bcm/y (LF=0.8)	12/2020		10/2008	12/2017	12/2017	12/2019	01/2020	12/2020	SI: Two projects.  Adjustment to operating parameters, increasing the transmission capacity and enabling bidirectional operation. The SI part is
to Austria)	SI: CS Kidričevo, 2nd phase of upgrade	Up to 30 MW	12/2020		12/2017	12/2018	12/2018	12/2018	01/2019	12/2020	related to the interconnection HR-SI (and AT project Murfeld) and depends on a new source of gas in the south.
	AT: Entry/Exit Murfeld	5.38 bcm/y	10/2019	03/2016	08/2016	04/2017	05/2017	03/2018	04/2018	11/2019	

Project	Phase	Techn. capacity	Expected commissioning						uction /end	Additional information	
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Inter- connection Croatia – Slovenia (Lučko-Zabok- Rogatec,	HR: Construction of new inter- connection pipeline Lučko- Zabok-Rogatec	5 bcm/y	12/2019		12/2014	10/2017	03/2018	03/2018	07/2018	12/2019	
bidirectional)	SI: Upgrade of Rogatec inter- connection	5 bcm/y	12/2020			2019	2017			2020	SI: Enabling bidirectional operation. The data for "Upgrade of Rogatec interconnection" is given for the SI part of the cluster connecting Croatia-Slovenia-Austria (including the project "Reverse flow on the Slovenia-Austria interconnector" above).

Project	Phase	Techn. capacity	Expected commissioning		Completion o	f pre-consti	ruction stag	es	Construction start/end		Additional information
				Pre- Feasibility FEED FID Permitting					Start	End	
				feasibility							
Interconnector	HR:	1.5	12/2019		01/2017	07/2017	07/2017	04/2018	07/2018	12/2019	
Croatia –	Construction	bcm/y									
Bosnia and	of new inter-										
Herzegovina	connection										
	pipeline										
	Slobodnica										
	(HR) - Bosanski										
	Brod (B&H)										

Project	Phase	Techn. capacity	Expected commissioning						ruction :/end	Additional information	
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Interconnector Greece - former Yugoslav Republic of Macedonia	Part in former Yugoslav Republic of Macedonia – Evzoni/Gevgelij a-Stip Part in Greece: Nea Mesimvria- Evzoni/Gevgelij a	1.1 – 1.7 bcm/y	10/2020	2016	2011	2017	2017	2017	2017	2020	
Interconnector former Yugoslav		0.5 – 0.7 bcm/y	10/2022	06/2010	2011	2018	2018	2018	2019	2021	
Republic of Macedonia – Bulgaria				2017	2018						

Project	Phase	Techn. capacity	Expected commissioning	Completion of pre-construction stages					Construction start/end		Additional information
				Pre- feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Eastring		20 bcm/y	09/2021	02/2016	03/2018	12/2019		08/2020	08/2020	09/2021	In agreement with its promoters, the Eastring project is not part of the current phase of the CESEC work as it substantially differs from the other, more regionspecific projects considered, particularly as regards its size, objective
	Expansion	40 bcm/y	12/2024	01/2021	06/2021	06/2022		02/2023	02/2023	06/2024	

					and scope and can
					therefore not be
					appropriately assessed in
					a CESEC regional
					modelling framework.

data from the project promoters and with reference to the list of all CESEC projects in the Appendix to the CESEC Action Plan of 10 July 2015.

Central and South-Eastern European Gas Connectivity (CESEC) High Level Group: Indicative project-specific information as of November 2016 based on