

Central and South-Eastern European Gas Connectivity (CESEC) High Level Group: Indicative project-specific information as of April 2018 based on 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.

Project	Phase	Techn. capacity	Expected commissioning	Completion of pre-construction stages					Construction start/end		Additional information
				Pre-feasibility	Feasibility	FEED	FID	Permitting	Start	End	
Trans-Adriatic Pipeline (TAP)	Initial capacity	10 bcm/y	01/2020	2003	2003-2005	01/2008-03/2013	12/2013	Q3 2017 – Greece 05/2018 - Italy	05/2016	12/2019	In January 2018, TAP was 2/3 (two thirds) complete. This includes engineering, procurement and construction. Capacity can be expanded up to 20 bcm/y. Such expansion is subject to an economically and technically feasible outcome of a market test. The expected commissioning date is the expected construction end date. Operations are expected to start in 2020.

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Interconnector Greece – Bulgaria (IGB)		3 bcm/y	2020			03/2016	12/2015	11/2016	Q3 2018	Q3 2020	Possibility for future upgrade to 5 bcm/y by installation of compressor capacity

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Interconnector Bulgaria – Serbia (IBS)	Phase 1 (BG)	BG to RS: 1.0 (1.8) bcm/y RS to BG: 0.15 bcm/y	05/2022	02/2011	12/2012	05/2019	05/2018	12/2019	03/2020	03/2022	Phase 1 refers to a single pipe Nis – Dimitrovgrad of 108 km.
	Phase 1 (RS)		05/2022		06/2018	06/2019		01/2019	12/2021	05/2022	

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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		06/2021		04/2017	02/2020	04/2018	02/2020	03/2019	02/2021	Further modernization of CS Lozenets, CS Ihtiman and CS Petrich
	Rehabilitation and replacement of gas pipeline sections, 81 km, DN 700, consisting of: <ul style="list-style-type: none"> ▪ Replacement of 58 km section Beglej-Dermantsi-Batultsi-Kalugerovo; ▪ Replacement of 23 km section Valchi Dol-Preselka 		12/2021			10/2018	04/2017	10/2018	04/2019	04/2021	
						09/2018	04/2018	11/2018	06/2019	06/2021	
New gas pipeline Gorni Bogrov – Novi Iskar, 19 km, DN 700 and compressor			2022								Conditional infrastructure necessary after taking the FID for stage 2 of the Interconnection Bulgaria – Serbia.

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	station, 20 MW											
	Conduction of planned inspections		11/2018						04/2015	11/2018	Planned as a staged process; started in 2015 and projected till 2018	
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Phased Romanian system reinforcement	BRUA Phase 1: Stage 1 of the Romanian South Corridor	1.75 bcm/y Horia-Csanadpalota 1.5 bcm/y Giurgiu-Ruse	12/2019	12/2013	09/2015	11/2016 (pipeline) 03/2017 (CS)	11/2016	04/2018	01/2018 (pipeline) 03/2018 (cs)	12/2019		

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LNG terminal in Croatia (with phasing potential)	First stage: floating LNG terminal (FSRU)	2.6 bcm/y	2019		01/2014	02/2017	Q2/2018	2018	2018	2019	

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LNG evacuation system towards Hungary	Phase 1: Pipeline section Omišalj-Zlobin	2,6 bcm/y	2019		08/2016	07/2017	4/2018		3/2018	11/2019	
	Phase 2: Zlobin-Kozarac	3,5 bcm/y	2020		08/2016	07/2017			12/2018	12/2020	

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	Phase 3: Kozarac- Slobodnica	6,5 bcm/y	2023		08/2016	07/2017				2021	2023	
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Connection of off-shore Romanian gas to the Romanian system and further reinforcement of the Romanian system	BRUA Phase 2: Stage 2 of the Romanian South Corridor	4.4 bcm/y	2022	12/2013	09/2015	11/2016 (pipeline) 03/2017 (CS)	12/2018	2017	2021	2022	In its TYNDP, Transgaz has an expected commissioning approved for the end of 2020 but, on Hungarian side, FGSZ can only finalize in 2022. FID date depends on when the binding results of the Open Season Procedure are validated.
	Black Sea – Podisor pipeline	6.0 bcm/y	2020	2014	01/2016	03/2018	2018	05/2018	2019	2020	

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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.

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LNG Terminal in Northern Greece	Total project	5.5 bcm/y	09/2020	12/2010	06/2014	09/2017	09/2018	01/2015	10/2019	07/2020	

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Interconnector Bulgaria – Romania (IBR)	Construction of Ruse GMS	1.5 bcm/y	11/2016						08/2012	08/2014	
	Land section on the BG territory								08/2012	08/2014	
	Land section on the RO territory and Giurgiu GMS								06/2011	05/2013	
	Danube crossing								04/2016	11/2016	<i>In the beginning of November 2016 IBR was commissioned with the finalization of the construction works of the main pipeline.</i>

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Interconnector Romania – Republic of Moldova (Iasi-Ungheni) expansion		1.5 bcm/y - 2.2 bcm/y (depending on Onesti suction pressure)	06/2019	01/2014	01/2018 – update and finalization of the feasibility study	01/2018		01/2018 (review of the environmental permit)	06/2018	12/2019	

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Physical reverse flow Romania – Ukraine (at inter-connection point Isaccea)		2.2 bcm/y	2019	06/2017	11/2017	02/2018		2018	2018	2019	

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Compressor station in Kipi, Greece and reinforcement of Greek system	Compressor station in Kipi	2-11 bcm/y									<p>This project will be further examined only if at least one of the conditions below is fulfilled:</p> <ol style="list-style-type: none"> 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 <p>FID for the project will be taken according to the provisions of the Greek Network Code</p>
	Metering and Regulating Station at Nea Mesimvria for the connection of the Greek transmission system with TAP	At least 3.65 bcm/y	2019		2016	2017	Q1 2017	2017	2017	2019	
	Komotini Metering and Regulating Station										<p>This project will be further examined only if its need is confirmed or requested by a User according to the Greek Network Code</p>

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Reinforcement of the Hungarian network	Csanádpalota CS Phase I	RO/HU 1.75 bcm/y	01/2020	06/2014	07/2017	04/2018	06/2017	05/2018	10/2018	12/2019	The project "Romanian-Hungarian reverse flow: Hungarian section" contains 3 CSs at Csanádpalota. With the first two CS in Csanádpalota, 1.75 bcm/y capacity could be ensured at the RO/HU IP, the third CS will enable 4.4 bcm/y capacity. Implementation timeline of the "Városföld-Ercsi-Győr pipeline" depends on the results of the incremental capacity auction related to the HU/AT interconnection point and exercise of the step-back-right of the bidders regarding to the RO/HU Open Season.
		HU/AT 0 bcm/y									
	Városföld CS and Csanádpalota CS Phase II	RO/HU 4.4 bcm/y	10/2022	06/2014	07/2017	01/2020	03/2019	04/2020	05/2020	10/2022	
	Városföld-Ercsi-Győr pipeline	HU/AT 5.2 bcm/y	10/2024								
	HU-SK capacity enhancement	HU/SK 5.2 bcm/y	10/2022								
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Bulgaria – Romania – Hungary - Austria Phase 1	GCA Mosonmagyaróvár (TRA-N-423): Reverse Flow at the HU-AT Border	5 bcm/y	05/2022	12/2018	09/2019	12/2019	08/2019	07/2019	01/2020	05/2022	

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Interconnector Slovenia - Hungary	SI: R15/1 Pince - Lendava - Kidricevo	59.4 GWh/d (up to HU capacity)	12/2023	4/2010	12/2017	6/2019	07/2019	12/2019	2020	12/2023	The 1st phase of the project could enable 12.8 GWh/d bi-directional capacity by 10/2022. The project will be realised in phases in the frame of project group Bidirectional gas route Italy-Slovenia-Hungary.
	HU: Hungary-Slovenia interconnection (Nagykanizsa - Tornyiszentmiklós)	Up to 64 GWh/d	12/2023	12/2015	12/2017	10/2020	07/2019	06/2022	10/2020	12/2023	

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Firm capacity upgrade on the interconnector Hungary – Ukraine	HU-UA reverse flow	6.1 bcm/y									Investments related to the project are incorporated to the projects "Csanádpalota CS Phase I" and "Városföld CS and Csanádpalota CS Phase II". Besides that an additional metering station at the HU/UA interconnection point might be needed.

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Reverse flow on the Slovenia – Austria interconnector (from Slovenia to Austria)	SI: Upgrade of Murfeld/Ceršak 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 related to the interconnection HR-SI (and AT project Murfeld) and depends on a new source of gas in the south.
	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	
	AT: Entry/Exit Murfeld (TRAN-361)	5,43bcm/y Entry 7,1bcm/y Exit	06/2022	12/2018	09/2019	12/2019	09/2019	07/2019	01/2020	06/2022	

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Inter-connection Croatia – Slovenia (Lučko-Zabok-Rogatec, bidirectional)	HR: Construction of new inter-connection pipeline Lučko-Zabok-Rogatec	5 bcm/y	2021		12/2014		2019	2019	2019	2021	
	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).

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Interconnector Croatia – Bosnia and Herzegovina	HR: Construction of new inter-connection pipeline Slobodnica (HR) - Bosanski Brod (B&H)	1.5 bcm/y	2020				2019	2019	2019	2020	

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Interconnector Greece - former Yugoslav Republic of Macedonia	Part in former Yugoslav Republic of Macedonia – Evzoni/Gevgelija-Stipa	2.5 bcm/y	10/2020	06/2010	2018	2017	2018	2018	2019	2020	The preparation of the new feasibility study for the interconnector Greece- former Yugoslav Republic of Macedonia is underway.
	Part in Greece: Nea Mesimvria-Evzoni/Gevgelija	1.1 – 1.7 bcm/y	10/2020	2016	2017	2018	2017	2018	2018	2020	
Interconnector former Yugoslav Republic of Macedonia – Bulgaria		1 bcm/y	10/2022	06/2010	2011	2019	2019	2019	2020	2022	
				2017	2019						

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Eastring		20 bcm/y	09/2021	02/2016	09/2018	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 region-specific projects considered, particularly as regards its size, objective and scope and can therefore not be appropriately assessed in a CESEC regional modelling framework.
	Expansion	40 bcm/y	12/2024	01/2021	06/2021	06/2022		02/2023	02/2023	06/2024	