

Project Group EAST_14A - Slovenia-Austria interconnection

Reasons for grouping [ENTSO G]

The project group is composed by projects to upgrade the existing interconnection between Austria and Slovenia at IP Murfeld (both sides of the interconnection), as well as the enabler project on the Slovenian side TRA-N-94.

Enabler project TRA-N-94 increases operational pressure in the Slovenian transmission network (M1/1 and M2/1 pipelines), allowing higher flows and bidirectional operation of Austria-Slovenia gas interconnection.

Objective of the project(s) in the group [Promoter]

The project group aims at: (1) Removing bottlenecks; (2) Allowing the bi-directional gas flow along the route HR-SI-AT; (3) Increasing the security of supply for Austria, Slovenia, Croatia and Hungary; (4) Improving N-1 for both Slovenia and Croatia; (5) Increase of the capacity along the route to provide enhanced access to Baumgarten and access of the gas from the LNG Krk toward Baumgarten as the most important trading hub in the region.



Projects constituting the group

TYNDP Project Code	Project Name	Promoter	Hosting Country	Project Status	4th PCI List Code	First Comm Year	Last Comm. Year	Compared to TYNP 2018
TRA-N-0094	CS Kidričevo, 2nd phase of upgrade	Plinovodi d.o.o.	SI	Less-Advanced	6.26.1.2	2023	2023	Rescheduled
TRA-N-0361	GCA 2015/08: Entry/Exit Murfeld	GAS CONNECT AUSTRIA GmbH	AT	Less-Advanced	6.26.1.4	2023	2023	Rescheduled
TRA-N-0389	Upgrade of Murfeld/Ceršak interconnection (M1/3 Interconnection Ceršak)	Plinovodi d.o.o.	SI	Less-Advanced	6.26.1.5	2023	2023	Rescheduled

Technical Information

TYNDP Project Code	Diameter [mm]	Length [km]	Compressor Power [MW]
TRA-N-0094	-	-	30
TRA-N-0361	600	26	-
TRA-N-0361	500	2	-
TRA-N-0389	800	0	-

Capacity Increment

The capacity increment values for each project are provided at all related Interconnection points (IP), both for “exit” and “entry” directions, being indicated the operator of the IP as well as the associated commissioning years of the capacity increments.

This information is presented in the table below and should be read per each line as follows: a certain project, TRA-N-123, can bring at a specific “Point Name” operated by “Operator X” an “exit” capacity increment “From System Y” “To System Z” which has associated an “Increment Commissioning Year”. Equally, for the same “Point Name” and operated by the same “Operator X”, an “entry” (reverse) capacity increment can be available to system “Y” from system “Z” which at its turn has associated an “Increment Commissioning Year”.

TYNDP Project Code	Point Name	Operator	From System	Exit Capacity [GWh/d]	Increment Comm. Year	To System	Entry Capacity [GWh/d]	Increment Comm. Year
TRA-N-361	Murfeld (AT) / Ceršak (SI)	Gas Connect Austria GmbH	Transmission Austria (CEGH)	105.2	2023	Transmission Slovenia	166.5	2023
TRA-N-389	Murfeld (AT) / Ceršak (SI)	Plinovodi d.o.o.	Transmission Slovenia	162	2023	Transmission Austria (CEGH)	78.5	2023

B. Project Cost Information

During the TYNDP 2020 Project Data Collection, promoters were asked to indicate whether their costs were confidential or not. The following tables display the costs provided by the promoters (as of June 2019, end of TYNDP 2020 project collection). The amounts provided can differ from the figures used by the project promoters in other contexts, where costs can be updated and/or evaluated using different methodologies or assumptions. For the purposes of this project fiche, in case promoters identified their costs as confidential, alternative costs have been provided by the promoter. The alternative costs are identified with “*”.

	TRA-N-361	TRA-N-389	TRA-N-94	Total Cost
CAPEX [min, EUR]	100	6*	80.4*	186.4
OPEX [min, EUR/y]	6	0.03*	3.97*	10
Range CAPEX (%)	25	10	10	-
Range OPEX (%)	25	10	10	-

Description of costs and range [Promoter]

For project TRA-N-94 (CS Kidričevo):

Description of CAPEX: the compressor station CS Kidričevo (civil works, equipment and other costs) represents 100% of the cost.

Description of OPEX: 67% of costs represent the cost of own consumption of gas (for the operation of the compressor station – CS Kidričevo), 32% of costs represent operation and maintenance cost, and 1% are labor costs (extension of existing compressor station).

For project TRA-N-389 (Upgrade of Murfeld/Ceršak IP):

Description of CAPEX: the pipeline (construction, connections and other costs) represents 89% of CAPEX and BMRS Ceršak (civil works, equipment and other costs) represents 11% of the cost.

Description of OPEX: 100% of costs represent operation and maintenance cost. There are no additional cost of own consumption of gas and labor cost – upgrade of existing interconnection Rogatec.

The above provided descriptions depend on the project TRA-N-390 Upgrade of Rogatec IP.

C. Project Benefits

C.1 Summary of project benefits

This section provides a summarised analysis by ENTSG of the main benefits stemming from the realisation of the overall group and according to the guidelines included in the ENTSG 2nd CBA Methodology. More details on the indicators are available in sections D and E.

National Trends

Benefits explained (but Sustainability) [ENTSG]

> Security of Supply:

In the existing infrastructure level, the project group **increases the remaining flexibility** in Slovenia from 2025 up to 100% (its maximum level) for all climatic stress conditions (peak-day, 2-weeks cold spell and 2-weeks dunkleflaute).

In the low and advanced infrastructure levels, remaining flexibility in Slovenia has already improved with the implementation of FiD and Advanced projects, therefore, the project group increases the remaining flexibility only for peak-day climatic stress case from 2025.

Regarding disruptions of the main infrastructure, in case of **SLID-Italy** (Mazara del Vallo, Algerian interconnection), the project group **fully mitigates the risk of demand curtailment** in Slovenia in 2025 (Gas Before Coal scenario) in the existing infrastructure level.

Regarding supply route disruptions, in case of Algerian disruption, as per SLID-Italy, the project group **helps to fully mitigate the risk of demand curtailment** in Italy, Slovenia and Croatia in 2025 (Gas Before Coal scenario) in Existing infrastructure level.

> Competition:

The project group slightly **contributes to the diversification of entry points** (precondition for competition and arbitrage), by further reducing the LICD indicator value, in Austria in all infrastructure levels.

> Market integration:

The **bidirectionality is improved** with the creation of capacity between Slovenia and Austria at Murfeld (AT) / Ceršak (SI) in all infrastructure levels thanks to the increase of the operational pressure in the Slovenian transmission network, allowing more flow and bidirectionality.

Distributed Energy

Benefits explained (but Sustainability) [ENTSG]

> Security of Supply:

For Distributed Energy demand scenario, due to the lower gas demand and higher indigenous production considered in this demand scenario, the project group improves **remaining flexibility** in Slovenia in 2025 for all climatic stress cases and also for peak-day in 2040 in the existing infrastructure level. In the low and advanced in infrastructure levels, the project group improves only remaining flexibility during peak-day case.

Regarding Algerian route disruption, the project group **fully mitigates the risk of demand curtailment** in Slovenia, and slightly reduces this risk in Italy and Croatia in 2025. Similarly, under disruption of Italian main infrastructure (SLID-Italy indicator), the project group fully mitigates the risk of demand curtailment in Slovenia in 2025.

> Competition:

The project group **slightly contributes to the diversification of entry points** (precondition for competition and arbitrage), by further reducing the LICD indicator value, in Austria in all infrastructure levels.

> Market integration:

The **bidirectionality is improved** with the creation of capacity between Slovenia and Austria at Murfeld (AT) / Ceršak (SI) in all infrastructure levels thanks to the increase of the operational pressure in the Slovenian transmission network, allowing more flow and bidirectionality.

Global Ambition

Benefits explained (but Sustainability) [ENTSOG]

> Security of Supply:

For Global Ambition demand scenario, due to the lower gas demand and higher indigenous production considered in this demand scenario, the project group improves **remaining flexibility** in Slovenia in 2025 and 2040 for 2-weeks cold spell and 2-weeks dunkelflaute climatic cases and from 2025 for peak-day case in the existing infrastructure level. In the low and advanced in infrastructure levels, the project group improves only remaining flexibility during peak-day case from 2025 and in 2040 for 2-weeks dunkelflaute and 2-weeks cold spell.

Regarding Algerian route disruption, the project group **fully mitigates the risk of demand curtailment** in Slovenia, and slightly reduces this risk in Italy and Croatia in 2025. Similarly, under disruption of Italian main infrastructure (SLID-Italy indicator), the project group fully mitigates the risk of demand curtailment in Slovenia in 2025.

> Competition:

The project group **slightly contributes to the diversification of entry points** (precondition for competition and arbitrage), by further reducing the LICD indicator value, in Austria in all infrastructure levels.

> Market integration:

The **bidirectionality is improved** with the creation of capacity between Slovenia and Austria at Murfeld (AT) / Ceršak (SI) in all infrastructure levels thanks to the increase of the operational pressure in the Slovenian transmission network, allowing more flow and bidirectionality.

Sustainability benefits explained [ENTSOG]

Project groups EAST_14A does not show significant benefits from fuel switch under flow-based allocation.

Sustainability benefits explained [Promoter]

No additional benefits were provided by promoters.

C.2 Quantitative benefits [ENTSOG]

The following tables display all the benefits quantified by ENTSOG through specific indicators and stemming from the realisation of the considered project group. Some of those benefits are measured through quantitative indicators (i.e. SLID and Curtailment rate) and monetised ex-post. Their monetised value is displayed in section E. When assessing those type of benefits, it is important to avoid any double counting considering them both in quantitative and monetised terms.

EXISTING Infrastructure Level – National Trends

Sum of Value		Column Labels											
		2025			2030			2040					
		CBG			GBC			NT			NT		
Row Labels		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,355	2,550	-806	3,349	2,541	-808
Security of Supply													
Algeria Pipe Disruption Curtailment Rate Peak Day (%)													
Croatia					-2%	-1%	1%						
Italy					-2%	-1%	1%						
Slovenia					-2%	0%	2%						
Remaining Flexibility 2-Week Cold Spell (%)													
Slovenia		53%	100%	47%	40%	100%	60%	71%	100%	29%	67%	100%	33%
Remaining Flexibility 2-Week Cold Spell (%) --- DF													
Italy					28%	29%	1%	72%	73%	1%			
Slovenia		46%	100%	54%	35%	100%	65%	57%	100%	43%	61%	100%	39%
Remaining Flexibility Peak day (%)													
Italy		19%	20%	1%	14%	15%	1%	44%	45%	1%			
Slovenia		20%	100%	80%	13%	100%	87%	33%	100%	67%	39%	100%	61%
Spain					43%	44%	1%						
Single Largest Infrastructure Disruption (SLID)-Italy													
Slovenia					2%	0%	-2%						
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

LOW Infrastructure Level – National Trends

Sum of Value		Column Labels											
		2025						2030			2040		
		CBG				GBC				NT			
Row Labels		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,355	2,550	-806	3,349	2,541	-808
Security of Supply													
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%	89%	100%	11%	89%	100%	11%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

ADVANCED Infrastructure Level – National Trends

Sum of Value		Column Labels											
		2025						2030			2040		
		CBG				GBC				NT			
Row Labels		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		2,517	2,033	-484	2,533	2,050	-483	2,516	2,032	-484	2,511	2,027	-484
Security of Supply													
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%	89%	100%	11%	89%	100%	11%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

EXISTING Infrastructure Level – Distributed Energy

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG	GBC			DE			DE				
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,352	2,546	-806	3,335	2,520	-816
Security of Supply													
Algeria Pipe Disruption Curtailment Rate Peak Day (%)													
Croatia					-2%	-1%	1%						
Italy					-2%	-1%	1%						
Slovenia					-2%	0%	2%						
Remaining Flexibility 2-Week Cold Spell (%)													
Slovenia		53%	100%	47%	40%	100%	60%						
Remaining Flexibility 2-Week Cold Spell (%) --- DF													
Italy					28%	29%	1%						
Slovenia		46%	100%	54%	35%	100%	65%						
Remaining Flexibility Peak day (%)													
Italy		19%	20%	1%	14%	15%	1%						
Slovenia		20%	100%	80%	13%	100%	87%				95%	100%	5%
Spain					43%	44%	1%						
Single Largest Infrastructure Disruption (SLID)-Italy													
Slovenia					2%	0%	-2%						
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

LOW Infrastructure Level – Distributed Energy

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG	GBC			DE			DE				
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,352	2,546	-806	3,335	2,520	-816
Security of Supply													
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%				95%	100%	5%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

ADVANCED Infrastructure Level – Distributed Energy

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG	GBC			DE			DE				
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		2,517	2,033	-484	2,533	2,050	-483	2,513	2,030	-484	2,501	2,013	-488
Security of Supply													
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%				95%	100%	5%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

EXISTING Infrastructure Level – Global Ambition

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG			GBC			GA			GA		
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,336	2,521	-815	3,333	2,508	-825
Security of Supply													
Algeria Pipe Disruption Curtailment Rate Peak Day (%)													
Croatia					-2%	-1%	1%						
Italy					-2%	-1%	1%						
Slovenia					-2%	0%	2%						
Remaining Flexibility 2-Week Cold Spell (%)													
Slovenia		53%	100%	47%	40%	100%	60%				95%	100%	5%
Remaining Flexibility 2-Week Cold Spell (%) --- DF													
Italy					28%	29%	1%						
Slovenia		46%	100%	54%	35%	100%	65%				88%	100%	12%
Remaining Flexibility Peak day (%)													
Italy		19%	20%	1%	14%	15%	1%						
Slovenia		20%	100%	80%	13%	100%	87%	73%	100%	27%	63%	100%	37%
Spain					43%	44%	1%						
Single Largest Infrastructure Disruption (SLID)-Italy													
Slovenia					2%	0%	-2%						
Ukraine Disruption Curtailment Rate Peak Day (%)													
Switzerland								-3%	-2%	1%			
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

LOW Infrastructure Level – Global Ambition

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG	GBC			GA			GA				
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		3,356	2,551	-805	3,376	2,575	-800	3,336	2,521	-815	3,333	2,508	-825
Security of Supply													
Remaining Flexibility 2-Week Cold Spell (%)													
Slovenia											95%	100%	5%
Remaining Flexibility 2-Week Cold Spell (%) --- DF													
Slovenia											88%	100%	12%
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%	81%	100%	19%	63%	100%	37%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

ADVANCED Infrastructure Level – Global Ambition

Sum of Value		Column Labels											
		2025			2030			2040					
Row Labels		CBG	GBC			GA			GA				
		WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA	WITHOUT	WITH	DELTA
Competition													
LNG and Interconnection Capacity Diversification (LICD)													
Austria		2,517	2,033	-484	2,533	2,050	-483	2,501	2,014	-487	2,500	2,006	-494
Security of Supply													
Remaining Flexibility 2-Week Cold Spell (%)													
Slovenia											95%	100%	5%
Remaining Flexibility 2-Week Cold Spell (%) --- DF													
Slovenia											88%	100%	12%
Remaining Flexibility Peak day (%)													
Slovenia		93%	100%	7%	93%	100%	7%	81%	100%	19%	63%	100%	37%
Market Integration													
Bi-directionality - Country													
AT <=> SI		0%	74%	74%	0%	74%	74%	0%	74%	74%	0%	74%	74%
Bi-directionality - Point													
Murfeld (AT) / Ceršak (SI)		0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%

C.3 Monetised benefits [ENTSOG]

This section includes all benefits stemming from the realisation of a project that are quantified and monetised. Some benefits are monetised ex-post while others directly as a result of the simulations and are impacted by the modelling assumptions chosen (e.g. tariffs or supply price assumptions). Monetised benefits are showed at EU level. In order to keep the results in a manageable number, those have been aggregated per Infrastructure Level and Demand Scenarios. In line with the CBA Methodology, promoters could provide additional benefits related to Sustainability or Gasification. In the tables below these benefits are displayed separately from the ones computed directly by ENTSOG and are labelled as “(Promoter)”. More information on how to read the data in this section is provided in the Introduction Document.

		EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION	NATIONAL TRENDS	DISTRIBUTED ENERGY	GLOBAL AMBITION
EU Bill benefits	Reference Supply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
With Tariffs	Supply Maximization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Security of Supply	Design Case	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	Additional benefit (Promoter)	0	0	0	0	0	0	0	0	0

Comparison between the assessed SCENARIOS

ENTSOE runs the assessment for 5-year-rounded years (2020, 2025, 2030 and 2040) and interpolates these results to compute the benefits for the 25-years economic lifetime of projects. The following tables show the benefits as computed in the specific assessment years.

Year of assessment		2020									2025								
		EXISTING			LOW			ADVANCED			EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA
EU Bill benefits With Tariffs	Reference Supply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Supply Maximization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	13.1	2.4	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Year of assessment		2030									2040								
		EXISTING			LOW			ADVANCED			EXISTING			LOW			ADVANCED		
Benefits (Meur/year)		NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA	NT	DE	GA
EU Bill benefits With Tariffs	Reference Supply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Supply Maximization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Security of Supply	Design Case	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2-weeks Cold Spell DF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainability	CO2 and Other externalities savings	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	Additional benefit (Promoter)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C.4 Sensitivities analysis on monetised benefits [ENTSOG]

In line with ENTSG Adapted 2nd CBA Methodology, ENTSG has also run sensitivities on some relevant assumptions such as tariffs, commissioning year and lower supply source price differential. The results included in the tables below have to be compared with the ones included in section C.3. Further information is available in the common introduction (Pages 1-6) to all project fiches. Independently from the source of the input as described in C3 (ENTSG or Promoter), the sensitivity analysis has been carried out by ENTSG and according to the criteria in the approved CBA Methodology.

[illegible]

D. Environmental Impact [Promoter]

Any gas infrastructure has an impact on its surroundings. This impact is of particular relevance when crossing some environmentally sensitive areas. Mitigation measures are taken by the promoters to reduce this impact and comply with the EU and National regulations. The tables have been filled in by the promoter.

TYNDP Code	Type of infrastructure	Surface of impact	Environmentally sensitive area

Potential impact	Mitigation measures	Related costs included in project CAPEX and OPEX	Additional expected costs

Environmental Impact explained [Promoter]

Environmental impact assessments for the projects have not indicated any substantial and irreversible impacts on the environment. In order to ensure that environmental assessments are correct, environmental monitoring is carried out before, during and after the construction of the infrastructure.

E. Other Benefits [Promoter]

Missing benefits are all benefits of a project which may be not captured by the current application in TYNDP 2020 of the 2nd CBA Methodology.

As a necessary condition a missing benefit cannot have discrepancies with the benefits already covered by the assessment run by ENTSOG and this condition needs to be proved and justified.

Other benefits explained

No other benefits were provided by the promoters.

F. Useful Links

Network Development Plan:

Plinovodi National Development Plan 2020-2029 link:

<http://www.plinovodi.si/en/transmission-system/development-plan/>

Gas Connect Austria National Development Plan 2020-2029:

<https://www.gasconnect.at/fileadmin/Fachabteilungen/ST/NEP/02-KNEP2019-EN.pdf>

PCI Fiche:

<http://www.plinovodi.si/en/transmission-system/projects-of-common-interest-pci/>