





THE EU – RUSSIA: GAS SUPPLY PROSPECTS AND PROBLEMS

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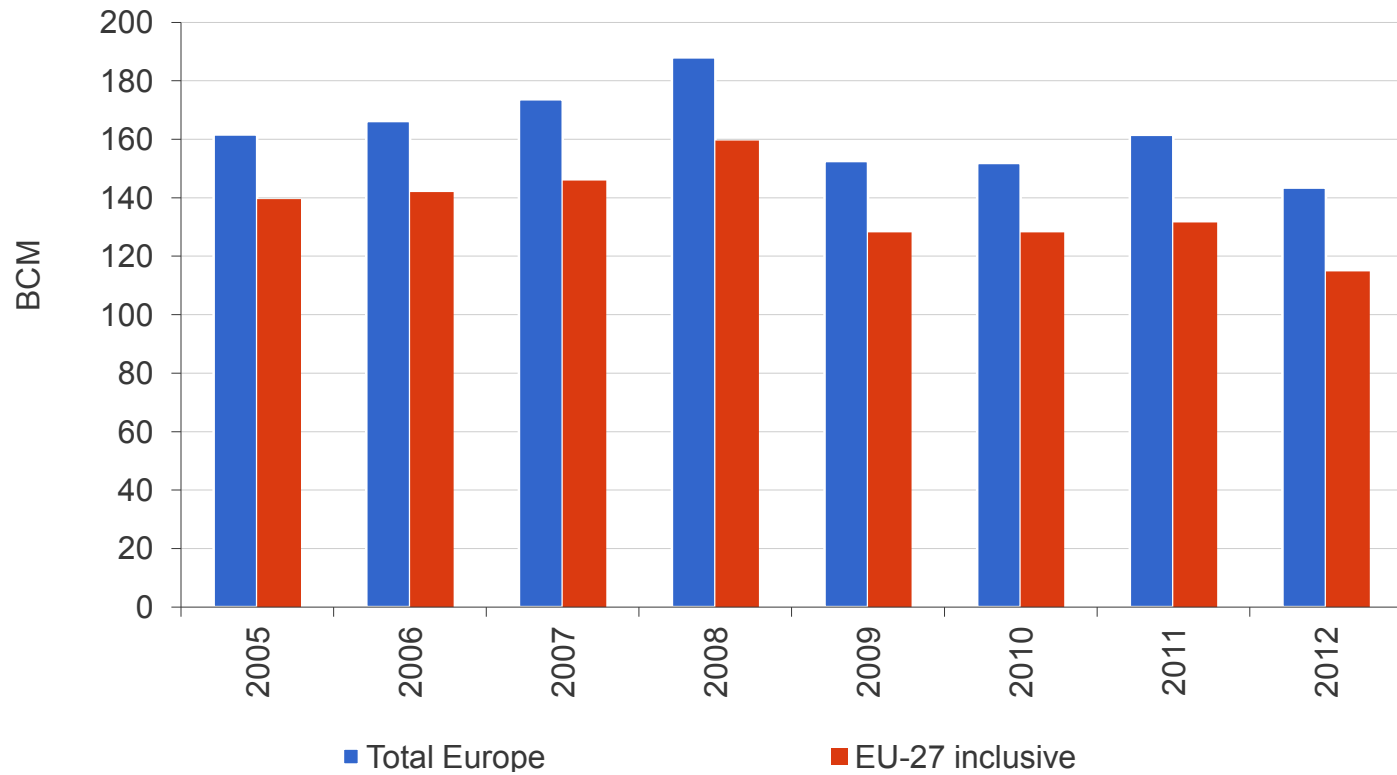


General Overview

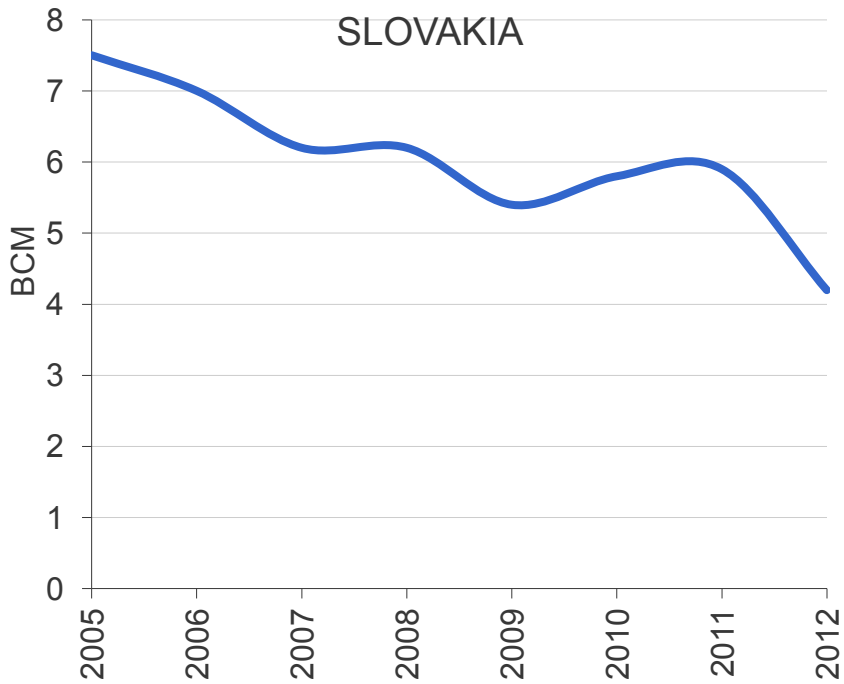
- **Russia's gas on the European energy market scene**
- **Gas transmission to Europe: enhancing stability of gas supply**
- **New gas infrastructure projects in place and under consideration:**
 - **The North Stream gas pipeline system expansion prospects**
 - **The South Stream project - abundant gas transmission capacity?**
 - **The Yamal – Europe – 2 gas transmission route rational**
- **Conclusion**



2012 GAZPROM GROUP'S GAS SUPPLIES TO EUROPE



Slovakia gas consumption = The 100% Russia's gas supplies



Whether Slovakia and other European countries could recover gas demand?



North Stream has indirect impact on the Slovak gas supply scheming



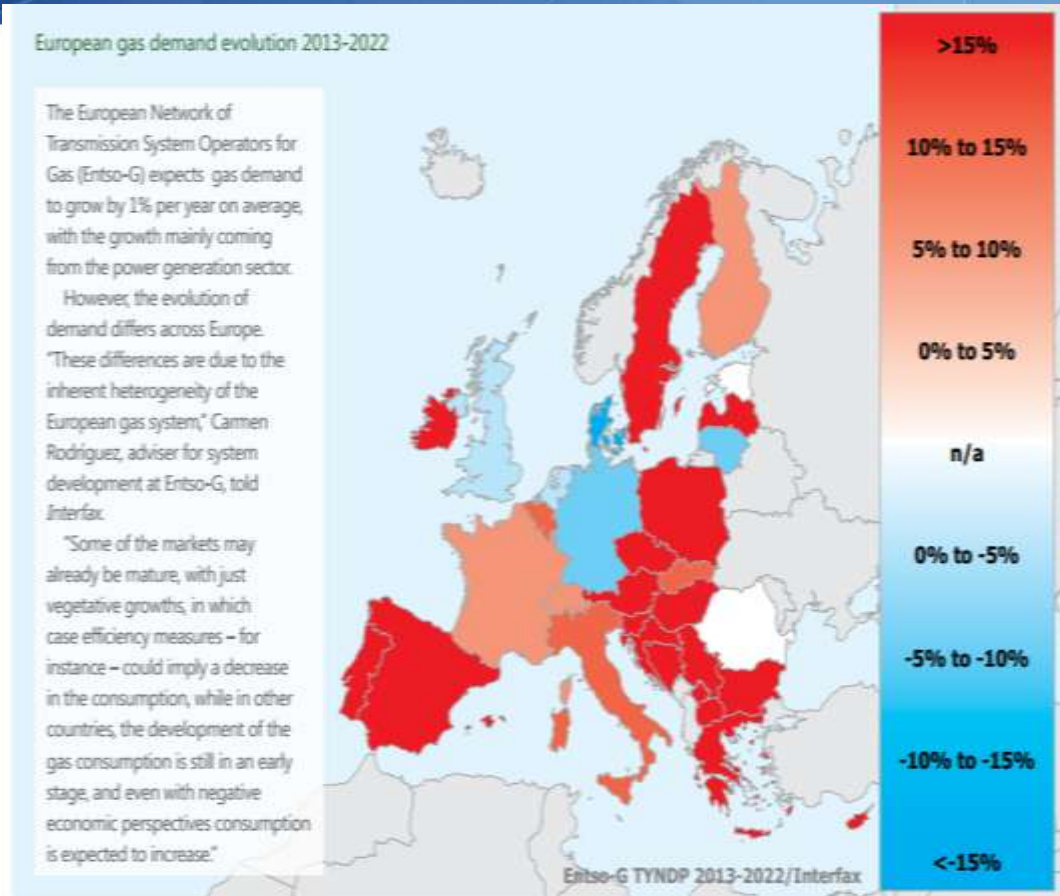
The RF major gas now flowing via the Ukraine to Slovakia and further to the West



Gas demand evolution over 2013 -2022 as presented by The European Network of Transmission System Operators of Gas (ENTSO (G))

According to this projections major decrease is forecasted in Germany and the United Kingdom

Generally, gas demand in the EU-27 might develop by 1% per year (on average)





LTC's gas price for individual EU countries and Turkey

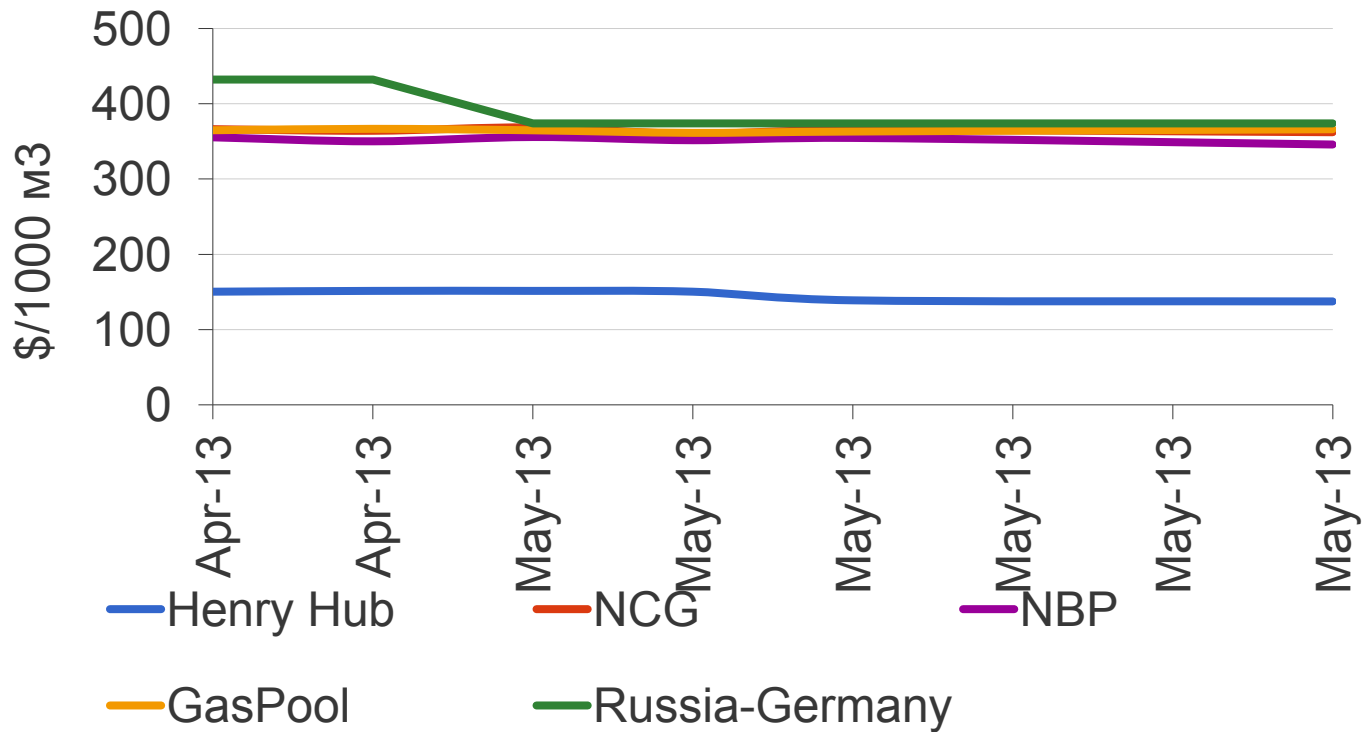
Russian gas supplies to individual countries, \$/Mcm

	2010	2011	2012	% change 2010-2012	% change 2011-2012
Austria	305	387	394	29.2	1.8
Bosnia and Herzegovina	339	429	500	47.5	16.6
Bulgaria	311	356	435	39.9	22.2
Czech Republic	326	419	500	53.4	19.3
Denmark	–	480	394	–	-17.9
Finland	273	358	373	36.6	4.2
France	306	399	398	30.1	-0.3
Germany	270	379	353	30.7	-6.8
Greece	359	414	475	32.3	14.7
Hungary	350	383	416	18.9	8.6
Italy	331	410	438	32.3	6.8
Macedonia	381	462	558	46.5	20.8
Netherlands	308	366	346	12.3	-5.5
Poland	331	420	433	30.8	3.1
Romania	325	390	424	30.5	8.7
Serbia	341	432	405	18.8	-6.25
Slovakia	371	333	428	15.4	28.5
Slovenia	312	377	400	28.2	6.1
Switzerland	296	400	333	12.5	-16.75
Turkey	326	381	416	27.6	9.2
Average	305.33	383.38	401.74		

Source: Gazprom



European LTC's gas price and spot gas prices conversion in May 2013





Gas transmission to Europe: enhancing stability of gas supply

Total capacity of GTSs for the Russian gas be exported to the European countries is comprised of three categories of transit transmission systems characterized by various stability factor, or reliability factor. These include:

- Direct gas flow capacities not requiring transit;
- Gas flow capacities with high transit factor
- Gas flow capacities with low transit factor



Direct gas flow capacities not requiring transit

FLOW	Cross - border point	BCM/Y
to Estonia	Narva	1.4
to Latvia	Korneti	5.4
to Lithuania	Kotlovka	10.5
to Finland	Imatra	7.4
to Turkey	Blue Stream	16
to Germany	North Stream Greifswald	55
<i>Subtotal</i>		95.7



Gas flow capacities via Byelorussia (high transit factor)

FLOW	Cross - border point	BCM/Y
to Poland	Teterovka	0.2
	Kondratki	33.5
	Vysokoye	5.4
	Drozdovichi	4.3
<i>Subtotal</i>		43.5



Gas flow capacities (low transit factor) - Major gas flow via Ukraine (route I)

to Slovakia	V.Kapushany	99.8
to Hungary	Beregovo	19.5
to Romania	Tekovo	3.7
	Orlovka	8
<i>Subtotal 1</i>		131



Gas flow capacities (low transit factor) - Minor gas flow via Ukraine (route II)

to Moldova	2
to Romania	6
to Turkey	15
to Bulgaria	5
<i>Subtotal 2</i>	28

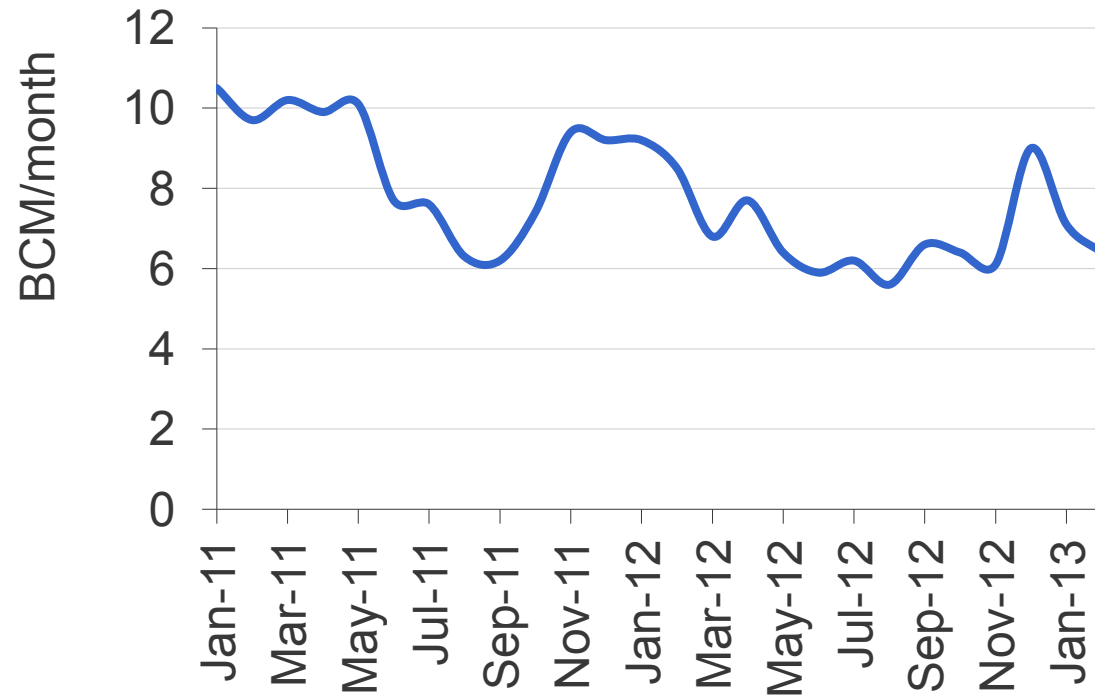


North Stream commissioning was the first stage of phasing out unreliable transit partner





Declining gas transit flow over 2011 - 2013 Ukraine (route I)



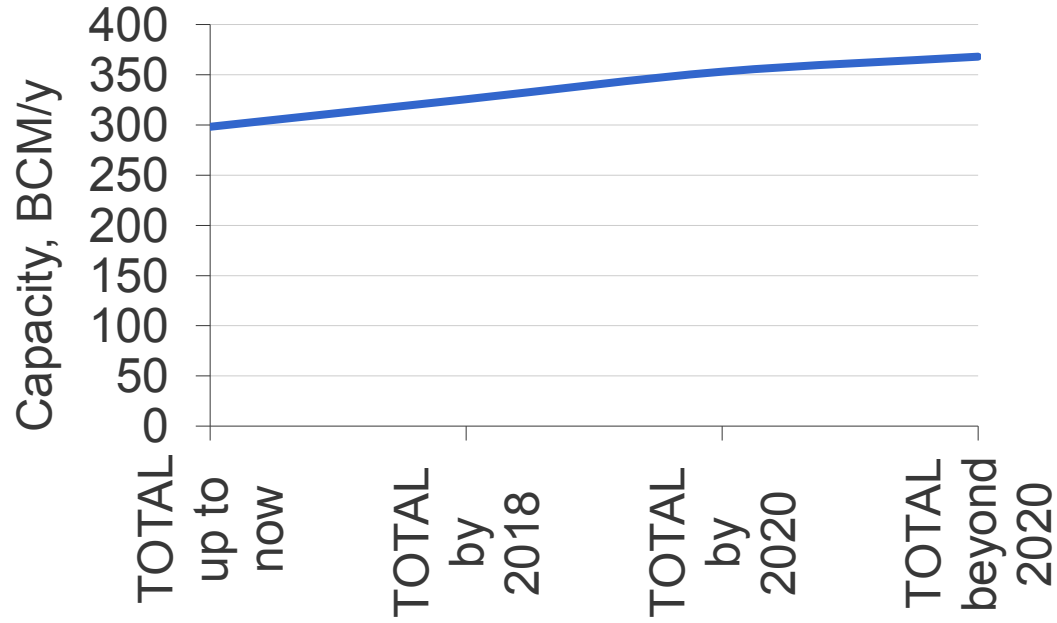


Measures to be taken to enhance Russia's gas transit reliability

Project	Status	Capacity, BCM/Y	Commissioning time
North Stream	In operation	55	
Case 1	Expansion under consideration	27.5	2018 – 2020 ?
Case 2	Expansion under consideration	55	2018 – 2020 ?
South Stream	Early stage		
Phase 1	1	31.5	By 2018?
Phases 1+2	2	63	By 2020?
Yamal - Europe - 2	Under consideration	15	Beyond 2018 ?
Subtotal 1	Case 1 + Phase 1	59	2018 – 2020?
Subtotal 2	Case 2 Phases 1+2	118	2018 – 2020?
Subtotal 3	Case 2 + Phases 1+2 and YE-2	133	Beyond 2018?

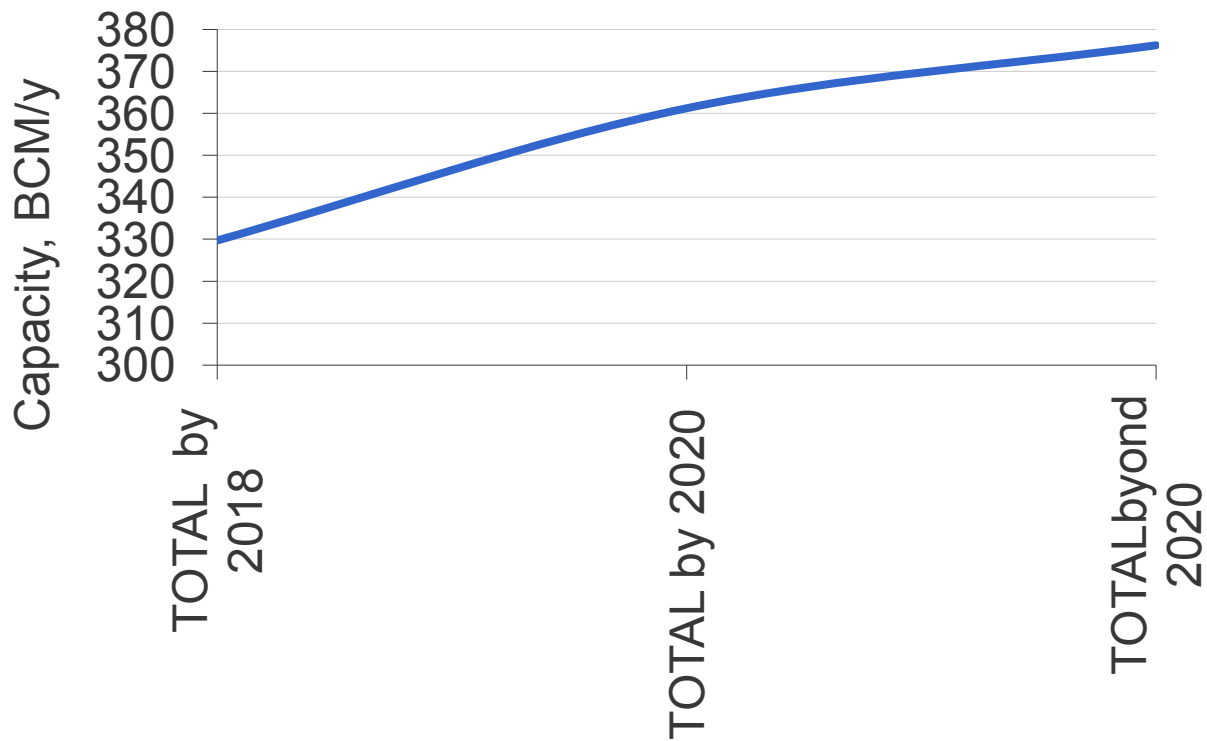


Capacity involving Ukraine's routes I and II plus NS case by case expansion by 2020



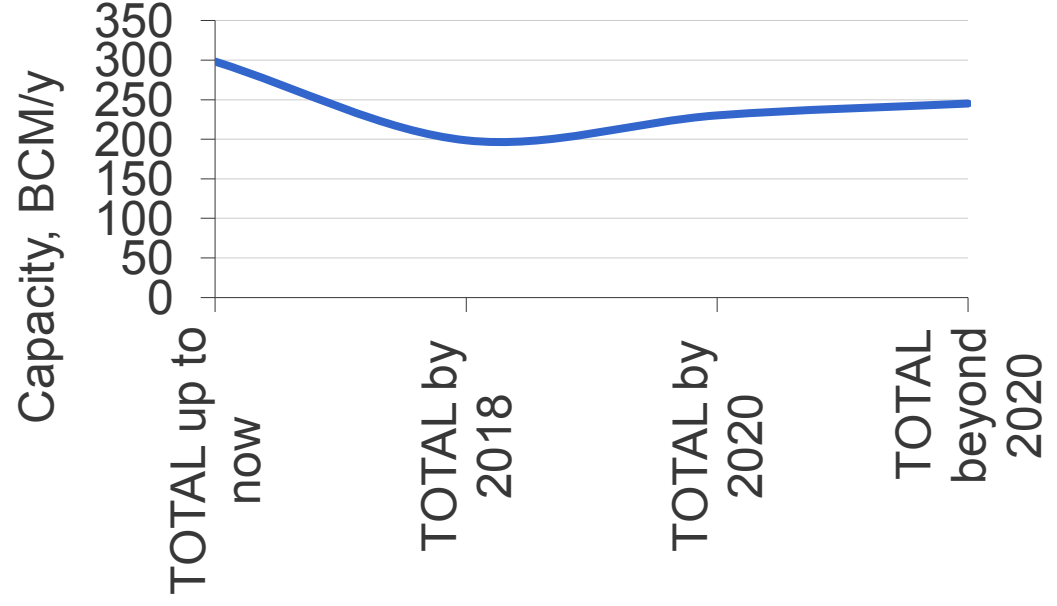


Capacity involving Ukraine's routes I and II with SS phase by phase commissioning by 2020



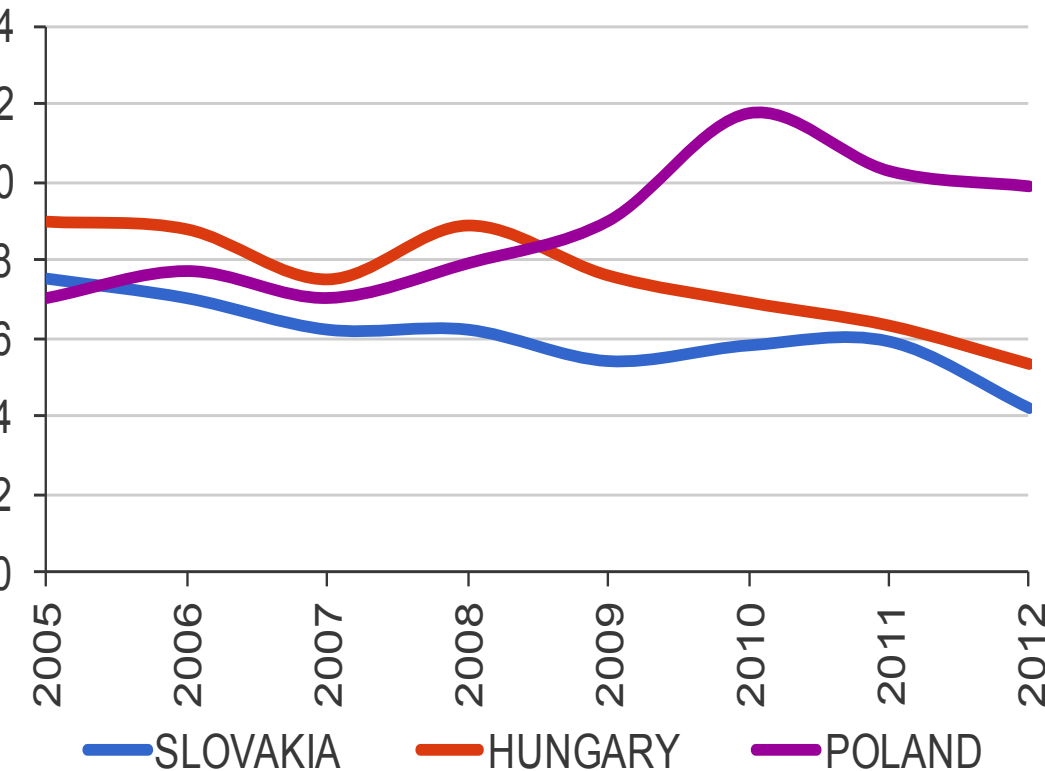


Capacity without Ukraine's route 1 plus SS with phase by phase commissioning by 2020 and YE-2 operational beyond 2020





The Yamal Europe – 2 gas routing rational



In 2012 Russia's gas supply of Slovakia, Hungary and Poland exceeded 19 BCM. Slovakia and Hungary consume some 10 BCM of gas coming from Russia (2012)



The Yamal Europe - 2 project rational

The Yamal Europe 2 project will be needed only in case South Stream is completely put in place phase by phase. Some Central European countries will require new routing of gas coming from Russia around Ukrainian territory



Conclusion

- Russian gas under recent developments on the global gas markets, particularly in Europe, is becoming more attractive alternative compared to other gas sources capable to substantially meet European energy needs
- Today, Key European LTCs' prices are comparable with spot gas market indicators making spot market mechanisms more exposed to gas price fluctuations with S/D equilibrium in the middle ground market
- Under these circumstances gas transmission, specifically gas transit via unstable territories is becoming more a factor of economy in global gas business
- Reliability of gas flow over multi thousand kilometers distances require diversity of transmission routes, as well as stronger political control over gas transit infrastructure
- Commissioning South Stream gas transmission project works for these ideals and substantial rearrangement of conventionally organized routing of pipeline gas going from Russia to Europe



Thank you for your time!