

Российский газ в Европу: от линейной (радиальной) к радиально-кольцевой системе поставок - и новая роль транзита

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Выступление на 14-м Российском Нефтегазовом Конгрессе (RPGC) в рамках 15-й Международной выставки «Нефть и газ» (MIOGE), Москва, 19 июня 2018 г.

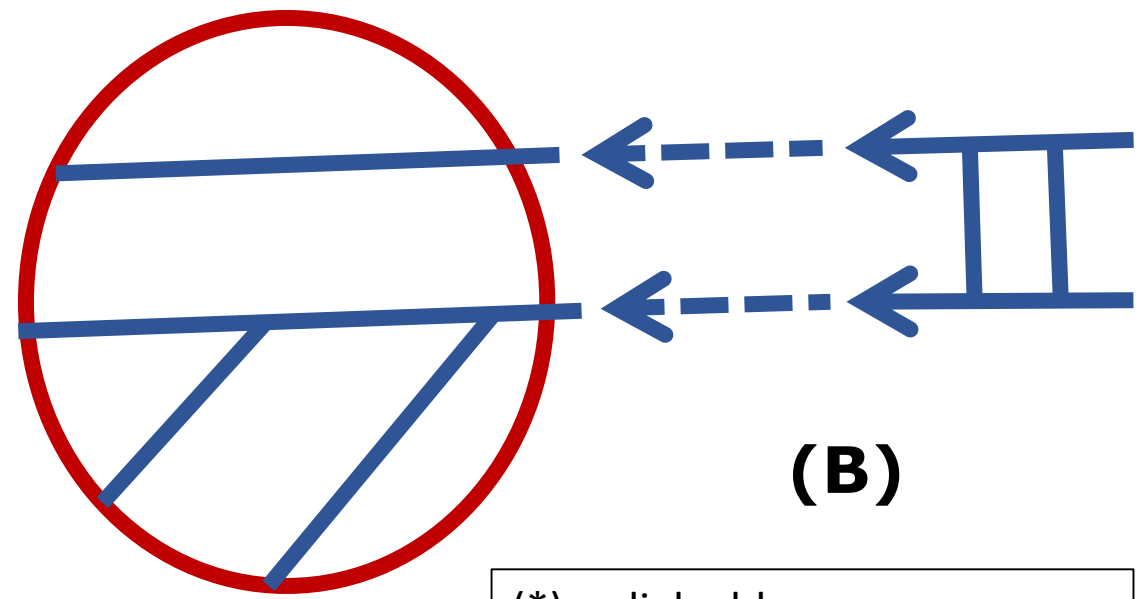
Russian gas to Europe: from linear (radial) to circle-radial gas supply system – and the new role of transit

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Presentation at the 15th MIOGE / 14th RPGC, Moscow, 19 June 2018

(A) Moscow metro network – an illustrative example of the circle-radial system;

(B) pre-2019 (radial*) and post-2019 (circle-radial) simplified vision of the Russian gas supplies to the EU**

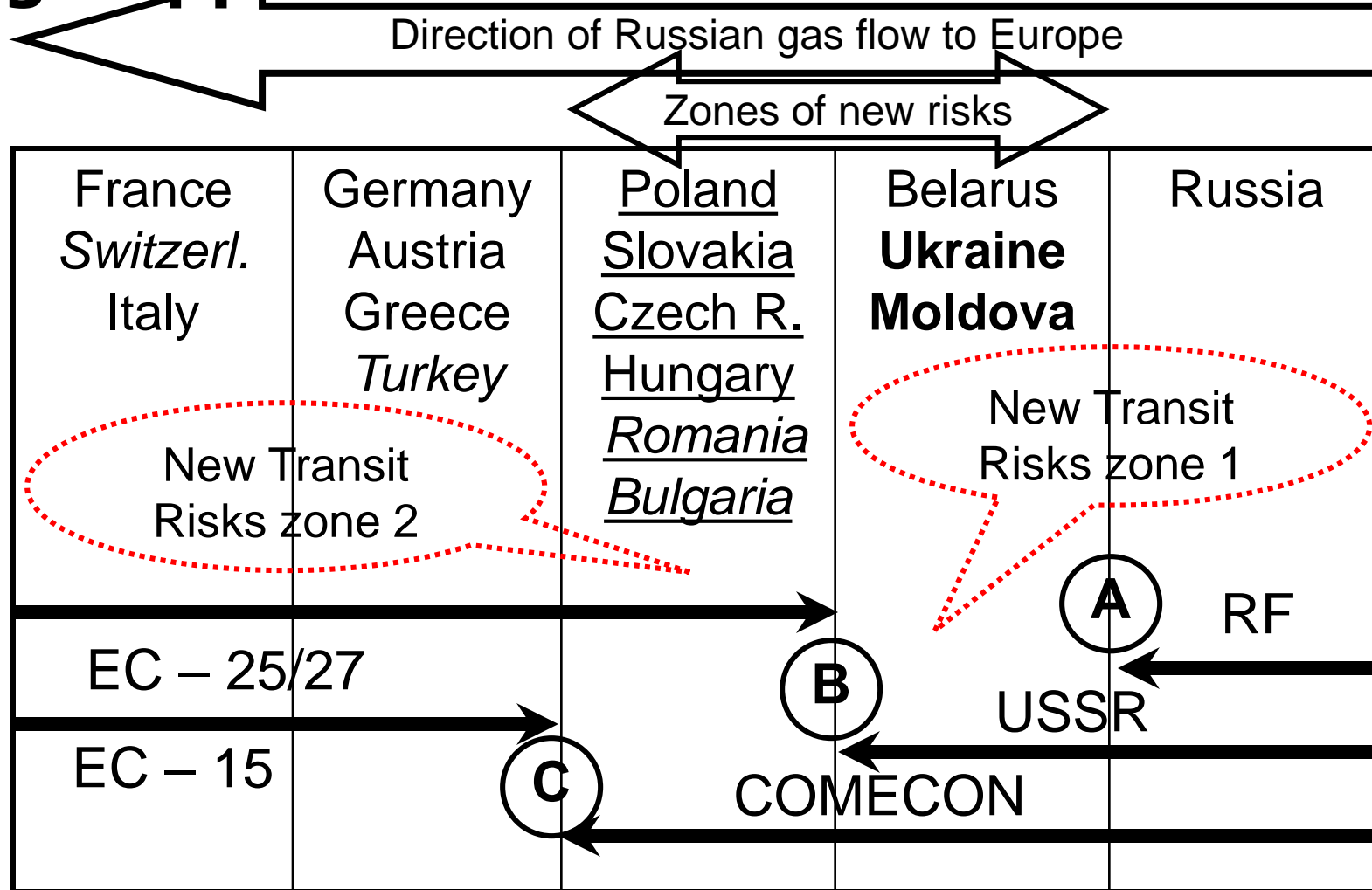


(A)

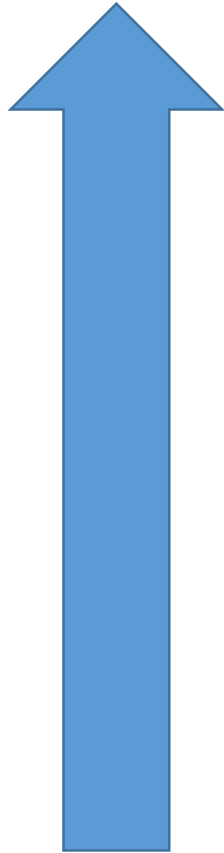
(B)

(*) radial = blue
 (**) circle-radial = blue + red

Russian Gas Supplies to Europe: Zones of New Risks for Existing Supplies Within Russia's Area of Responsibility



Italic – non-EU countries; New EU accession states: underlined – since 01.05.2004, underlined + italic – since 1.01.2007; **Bold** – FSU states members of ECOMT; A, B, C – points of change of ownership for Russian gas and/or pipeline on its way to Europe



Direction of logical chain in development of transit risks - **bottom-up approach**: *the name of the transit country is the element of last importance in the logical chain*

Change in **political** relations between transit states and its neighbors that can create interruptions of supplies through transit state

Technical component (adequate maintenance of transit system to provide technical stability and reliability of transit)

Legal (third country sovereign law), **regulatory** (adequacy of legal transit regime to fulfillment of supply obligations between parties to LTGEC from third countries), and **contractual** component to exclude appearance of “contractual mismatch” problem

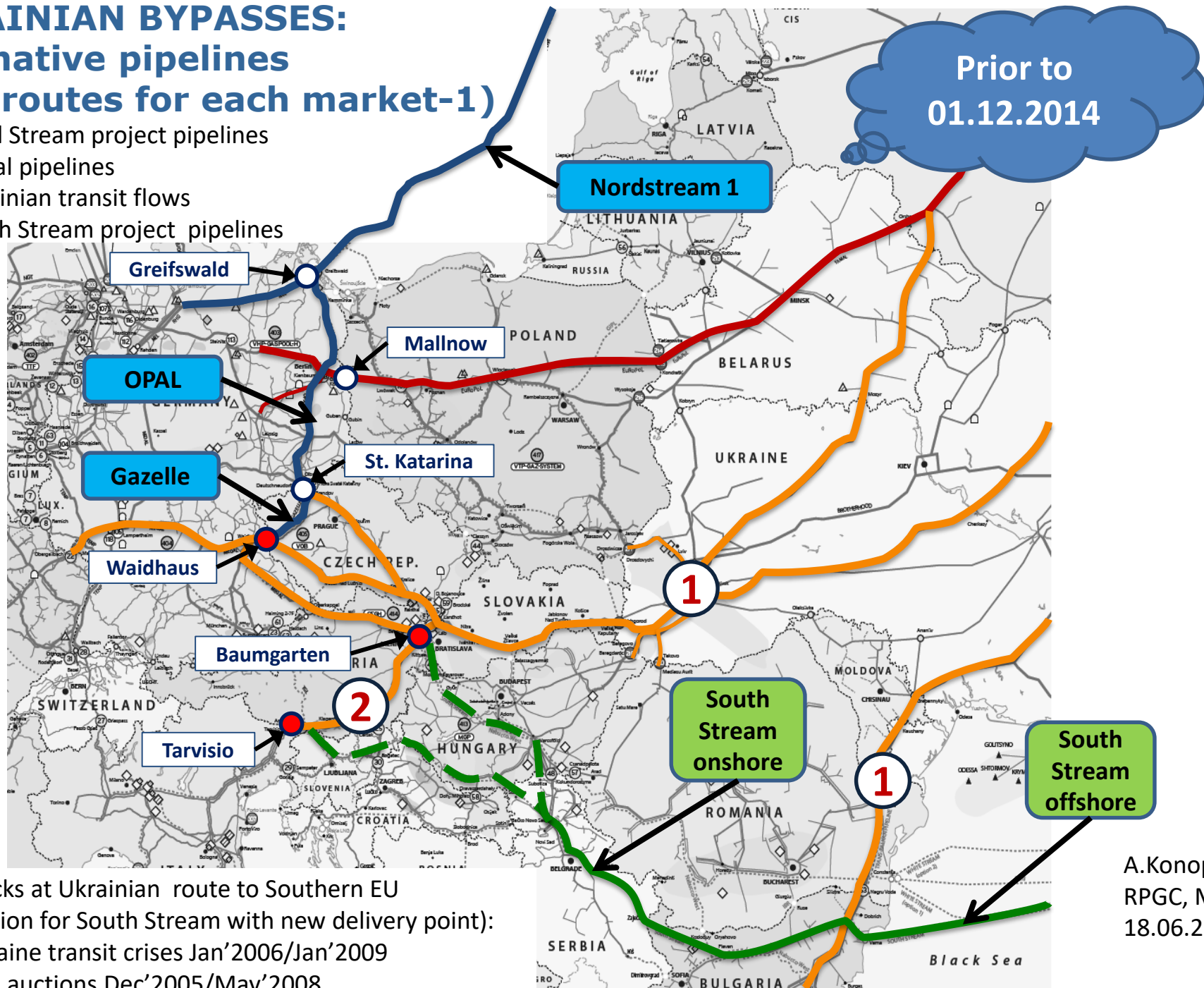
This author's vision of the nature and three major components of transit risk in the cross-border gas value chain

Russia-EU common interest & mechanisms for minimizing transit risks

- Prior to dissolution of COMECON/USSR:
 - Delivery points at COMECON-EU border, de facto no transit via COMECON, producer/exporter had full operational control on gas value chain from wellhead to delivery point
- After dissolution of COMECON/USSR:
 - New sovereign independent states between producer/exporter (Russia) and EU => producer has lost control on transit part of gas value chain => transit risks
 - To minimize transit risks for importer & exporter = to diversify:
 - For importer: multiple sources of supply, **routes** (+ suppliers)
 - For exporter: multiple markets, **routes** (+ importers)
 - => diversification of routes = common interest for producer/exporter & importer => to exclude transit totally or alternative pipelines (bypasses)

UKRAINIAN BYPASSES: alternative pipelines (two routes for each market-1)

- Nord Stream project pipelines
- Yamal pipelines
- Ukrainian transit flows
- South Stream project pipelines



Prior to 01.12.2014

Bottlenecks at Ukrainian route to Southern EU
(justification for South Stream with new delivery point):

- ① Ukraine transit crises Jan'2006/Jan'2009
- ② TAG auctions Dec'2005/May'2008

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UKRAINIAN BYPASSES: Russia's alternative pipelines (two routes for each market-2)

- Nord Streams projects pipelines
- Yamal pipelines
- Ukrainian transit flows
- Turkish Stream project (to EU border)



Post 01.12.2014 & 18.06.2015, but prior to 24.11.2015; again post 10.10.2016

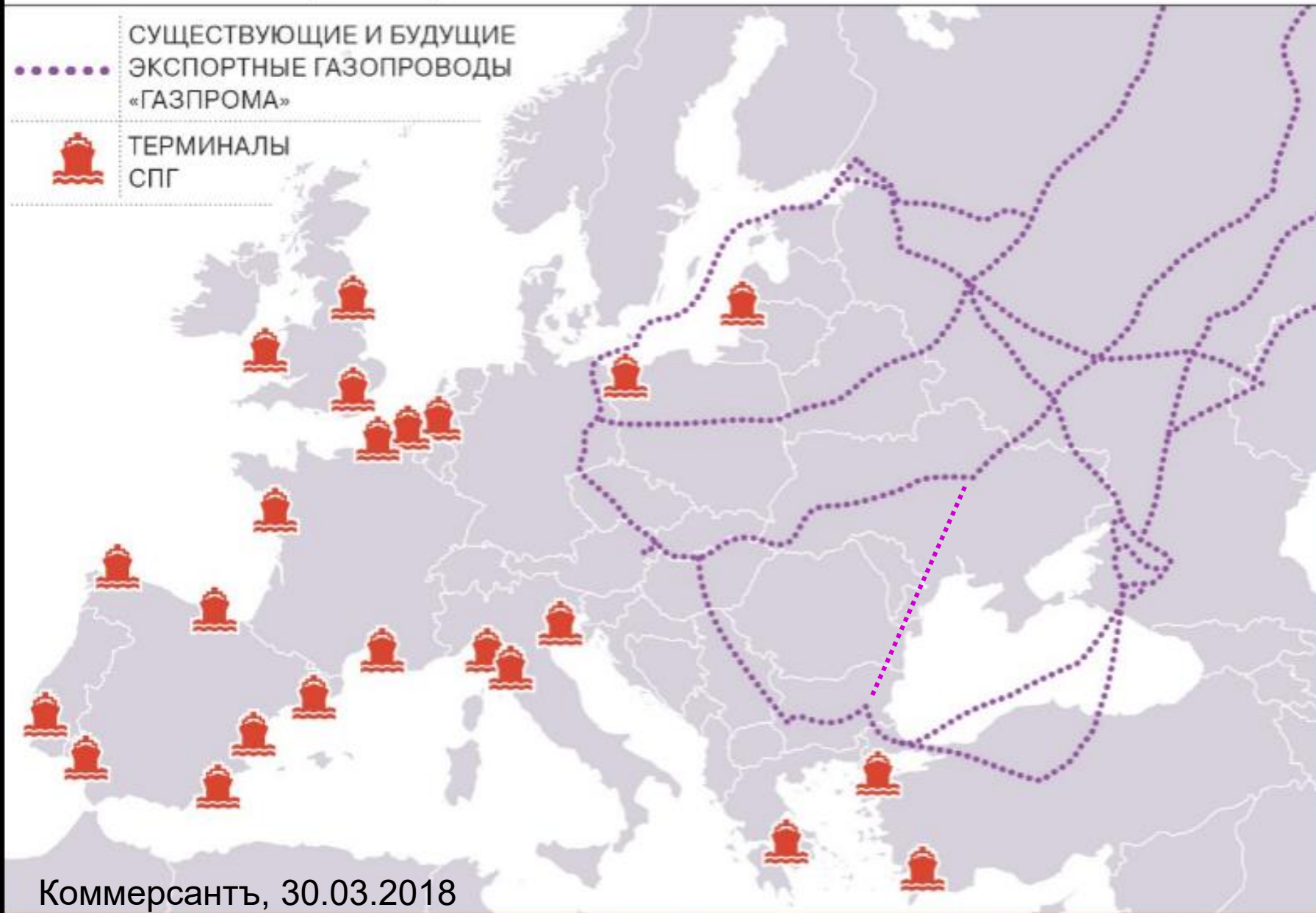
Bottlenecks at Ukrainian route to Southern EU (justification for South Stream with new delivery point at Tarvisio):

- ① Ukraine transit crises Jan'2006/Jan'2009
- ② TAG auctions Dec'2005/May'2008

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ЭКСПОРТНОЕ КОЛЬЦО «ГАЗПРОМА» И ТЕРМИНАЛЫ СПГ В ЕВРОПЕ

ИСТОЧНИК: «ГАЗПРОМ», ENTSOG, GNIIGNL.



Коммерсантъ, 30.03.2018

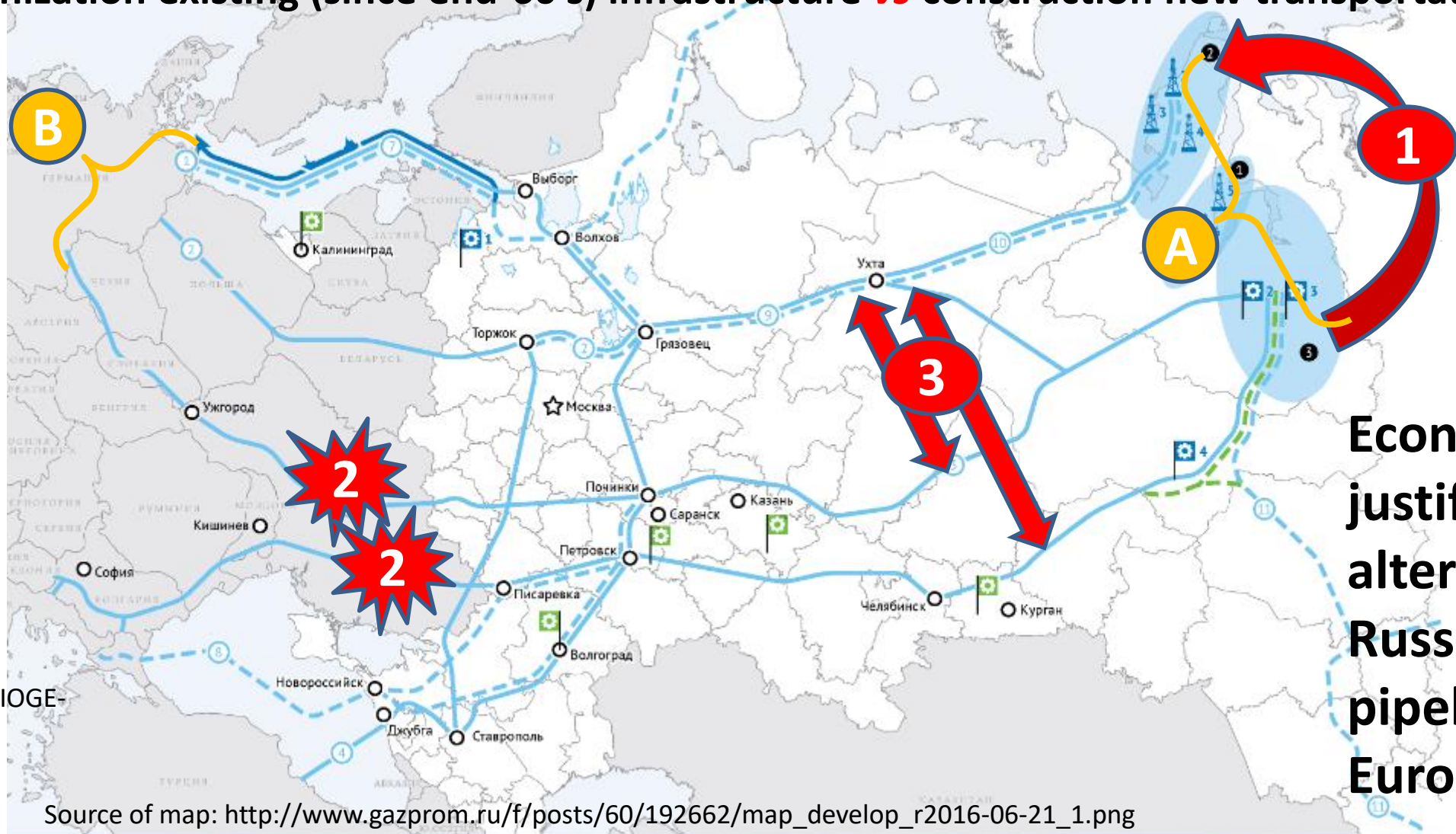
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Russia's existing/new supplies to Europe (to the unbundled EU gas market):

(1) resource base moves from Nadym-Pur-Taz to Yamal,

(2) Ukrainian transit risks & costs increases, =>

(3) modernization existing (since end-60's) infrastructure **vs** construction new transportation route

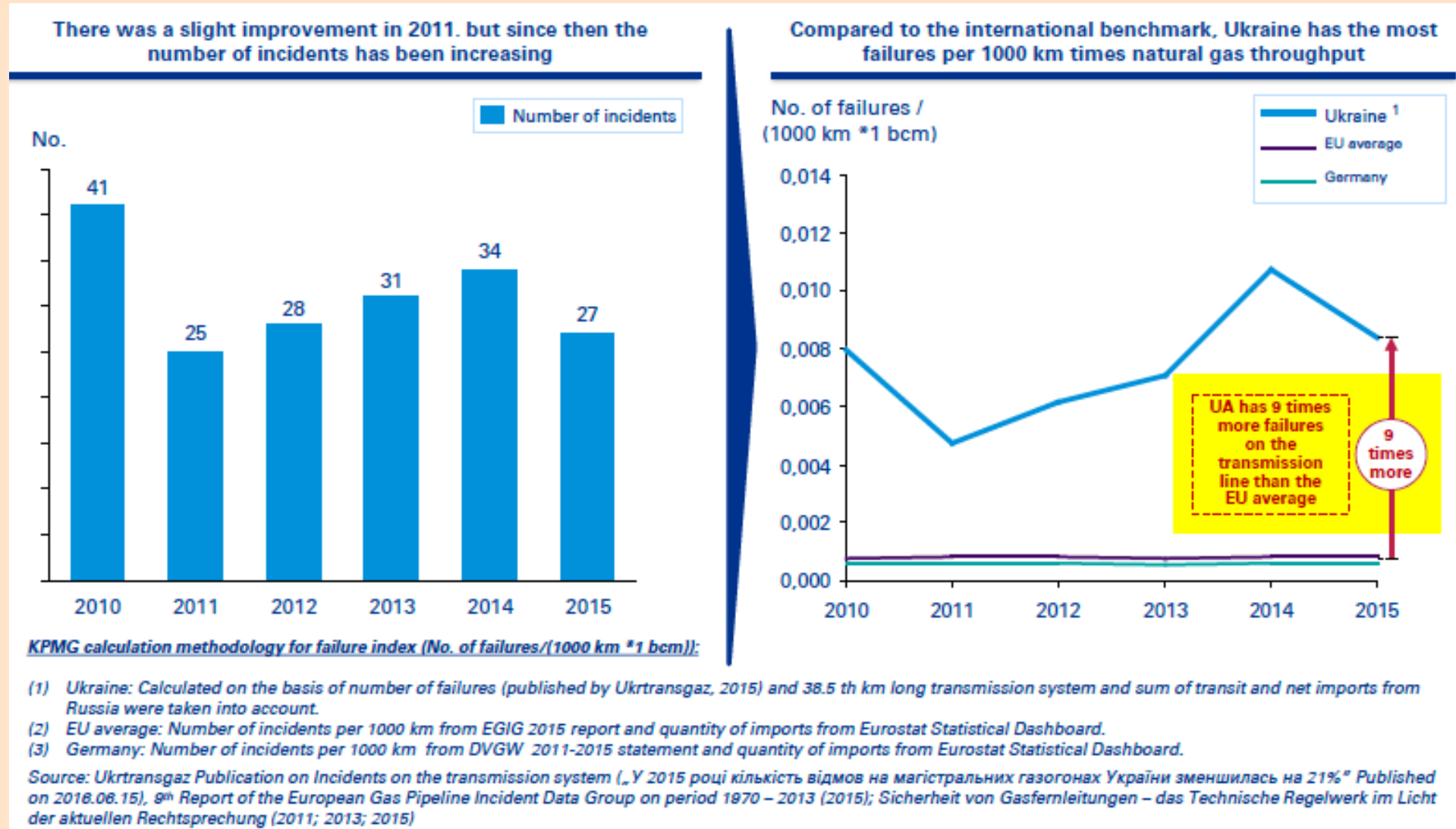


Economic justification of alternative Russian gas pipelines to Europe

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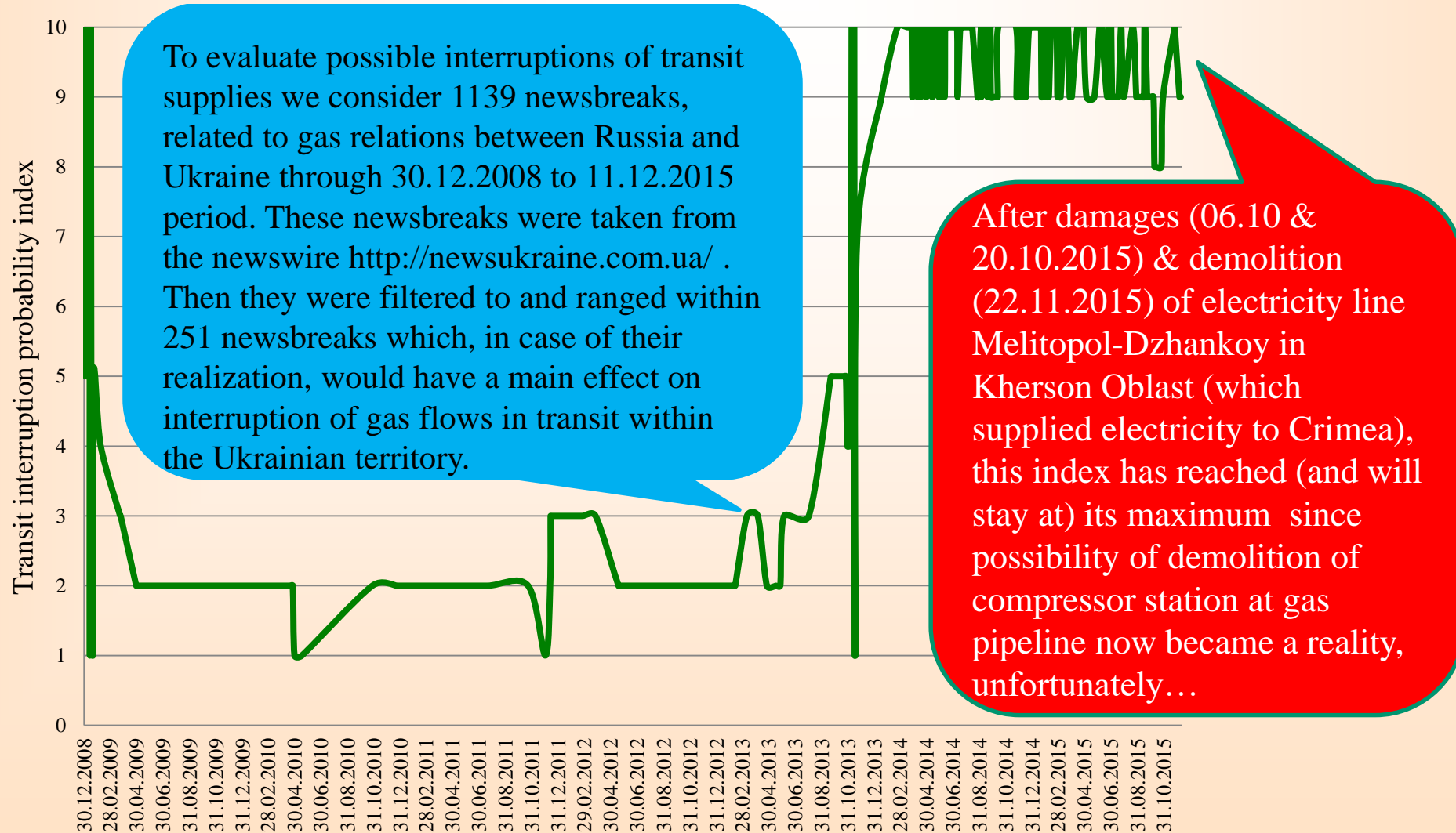
Source of map: http://www.gazprom.ru/f/posts/60/192662/map_develop_r2016-06-21_1.png

Technical conditions of Ukrainian GTS (acc. to KPMG)



Source: Situation of the Ukrainian natural gas market and transit system. Market Study. // KPMG, 10.04.2017, p.37-38

Ukraine: "transit interruption probability" index (2009–2015)



Calculated by M.Larionova, Russian Gubkin State Oil & Gas University, Chair "International Oil & Gas Business", Master's programme 2013-2015, on methodology, jointly developed with A.Konoplyanik, based on principles of credit ratings evaluation by major international credit agencies

Comparison of length & some other parameters for different gas routes from Yamal to Germany/EU

	Yamal-Greifswald	NPTR-UA-Waidhaus
Pressure, bars	120/90	75/55
Distance between CS, km	240	120
Inner coating	Yes	No
Efficiency GCU	Twice high	18-25%
Gas-compressor units capacity, MWt	32, 25	12, 16 (new/UA)



Reminder: Since 2nd EU Gas Package supplies to the individual EU MS = supplies to the EU !

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Compiled from public sources, incl.: С.Правосудов. Почему Газпром не доверяет украинской трубопроводной системе. // «НГ-Энергия», 16.01.2018

	Yamal – Germany routes	km
1	Yamal – Greifswald:	4166
	Yamal – Ust-Luga (within RF)	2977
	Ust-Luga – Greifswald	1189
2	Yamal – NPTR – UA - Waidhaus:	6051
	Yamal – Sudja (within RF)	3987
	Sudja – Waidhaus	2064

Length of the route via Nord Stream is 1885 km shorter than through UA GTS, incl. that within Russian territory the distance is shorter by 1010 km. Route via Ukraine is 45% longer than via Nord Stream.

Thank you for your attention!

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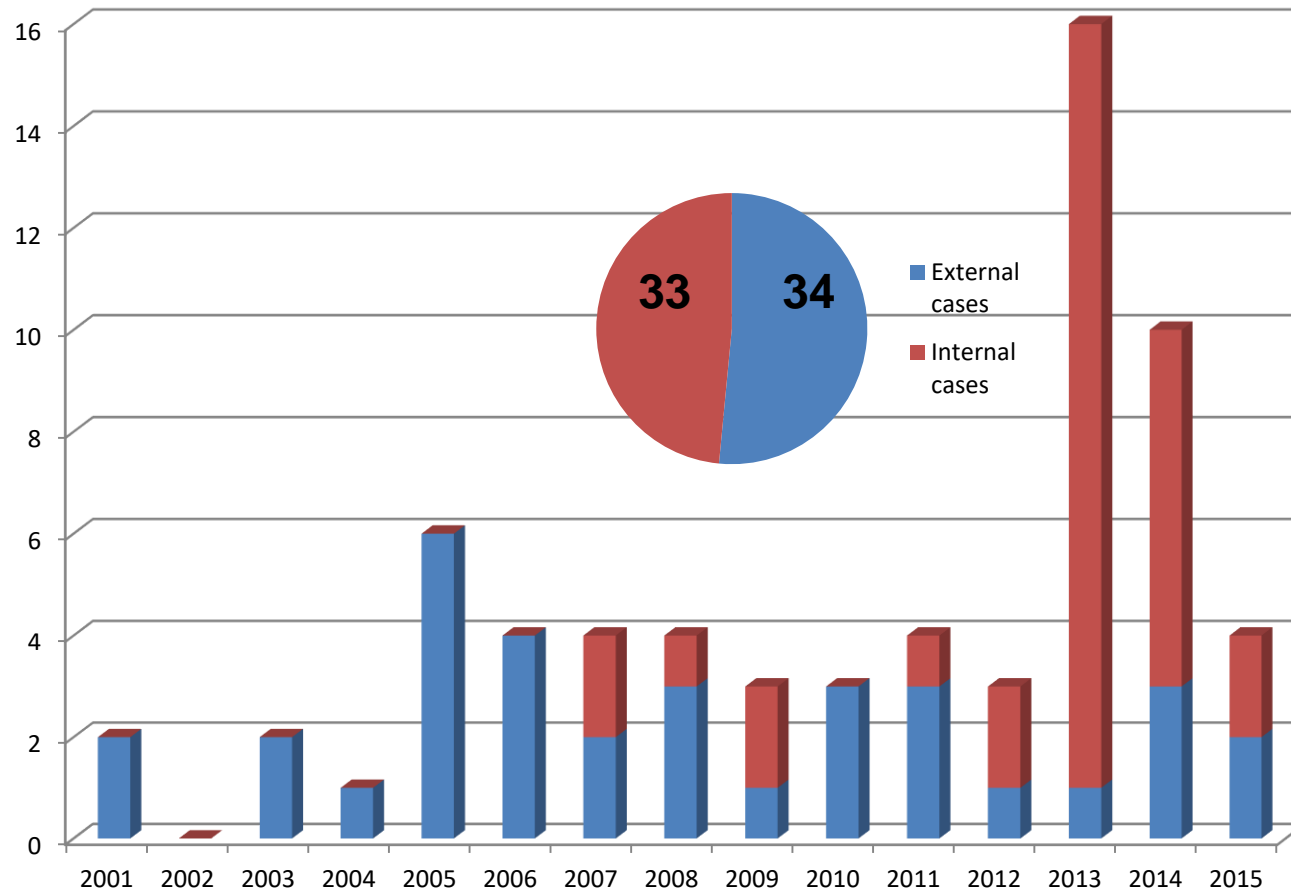
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Reserve slides

Fight against NS2: multilayer task for EU (& other players)

- To force Russia continue large-scale gas transit to EU via UA post-2019 => Russia's transit fees to UA vs financial support of UA from EU/US public finance
- Special Third Gas Directive amendments against NS2 (retroactive to investment already made): to slow down (if not to prevent) NS2 construction/start-up + to "export" EU acquis into Russia (MTPA => competition between Russian companies)
 - Export EU acquis upstream cross-border gas value chains = regular long-standing EU task in favour of EU business = mainstream of EU external economic policy
 - Most recent: new concept "upstream-downstream partnership" in Quo Vadis final report (16.02.2018) = proposal for implementation of 3rd EU Energy Package within Russia
 - Additional (hidden?) aim (?): to provoke further conflict between Gazprom & Rosneft (on Russian gas market "liberalization" issue):
 - Gazprom: state agent (sole pipeline exporter by law) on monetizing Russian pipeline gas (maximize marketable resource rent) => to escape Russian gas vs Russian gas competition
 - Rosneft: would like to monetize its large gas resources (preferably internationally), agent agreements on gas marketing at external markets: with GPE vs with BP
 - Political consequences: creation of [open] conflict between two Russian major state energy companies as a blow on prestige of "Putin's regime"?
- Russia has withdrawn from ECT provisional application (20.08.2009=>Signatory) and finally revoked its signature under ECT (14.04.2018=>Observer), but ECT can help Russia/Gazprom/NS-2 sponsors (investors from EU MSs) to sustain anti-NS2 legal initiatives of the Commission:
 - ECT Art.13 => Art.26: Investors of EU MSs against the EU (?) (30+ precedents in EU => reverse to "Yukos Case")

Increasing number of 'investor-state' disputes based on ECT Art.26 from investors of EU Member-States against EU Member-States



For the period since 2001 (since the first 'investor-state' claim based on ECT Art.26) till 21.04.2015 – total of 67 such claims, incl. 33 claims (half of the total) is from investors of the EU Member-States against the EU Member-States, notably, within the EU (internal cases) – de facto against EU “liberalization risks

Source: У.Руснак, А.Конопляник. Эволюция модели энергобезопасности. Россия и ДЭХ: не остаться на обочине. // «Нефтегазовая Вертикаль». 2015, №10, с.4-12 (7).

Based on: <http://www.energycharter.org/what-we-do/dispute-settlement/all-investment-dispute-settlement-cases/>