

Russia: Change in business model - opportunities and risks for development of gas infrastructure (difficult adaptation to new realities of the European gas market)

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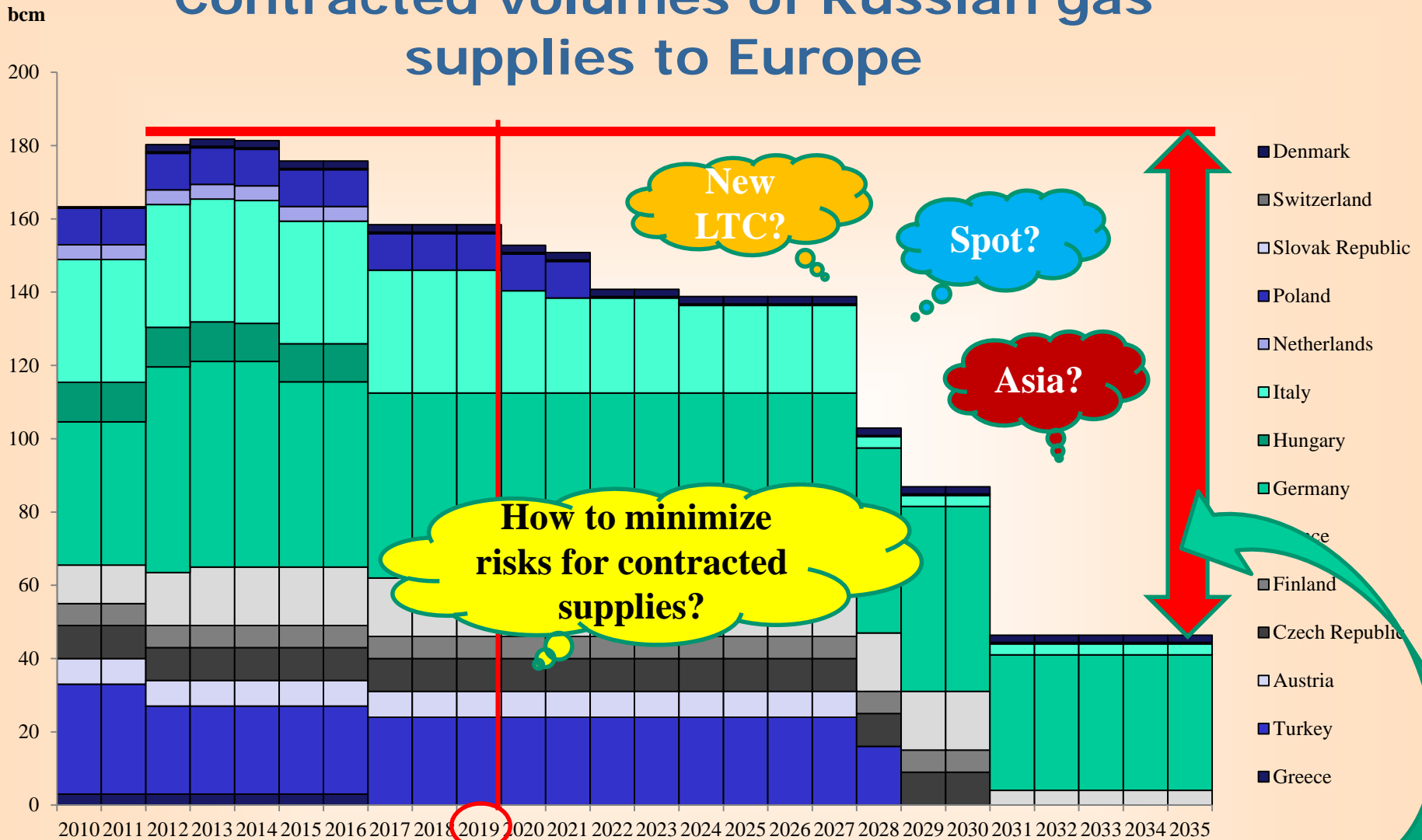
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Contracted volumes of Russian gas supplies to Europe



Source of primary graph:
T.Mitrova (ERI RAS) in: «The Russian Gas Matrix: How Markets Are Driving Change», Ed. by J.Henderson & S.Pirani, Oxford University Press, 2014, Fig.3.1/p.53.

Expanding niche for (at least partial?) substitution of terminating EU-destined LTC supplies at the border by new (adapted) LTCs, spot deliveries & trade at EU hubs; or partial redirection of terminating EU-destined LTCs to the East?

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- 1) How to minimize new risks for existing contractual obligations of Russian gas supplies to Europe?
 - a) Ukrainian risks
 - b) Turkish risks
- 2) Prospects of Russia – EU cooperation (how it can help)

Disclaimer:

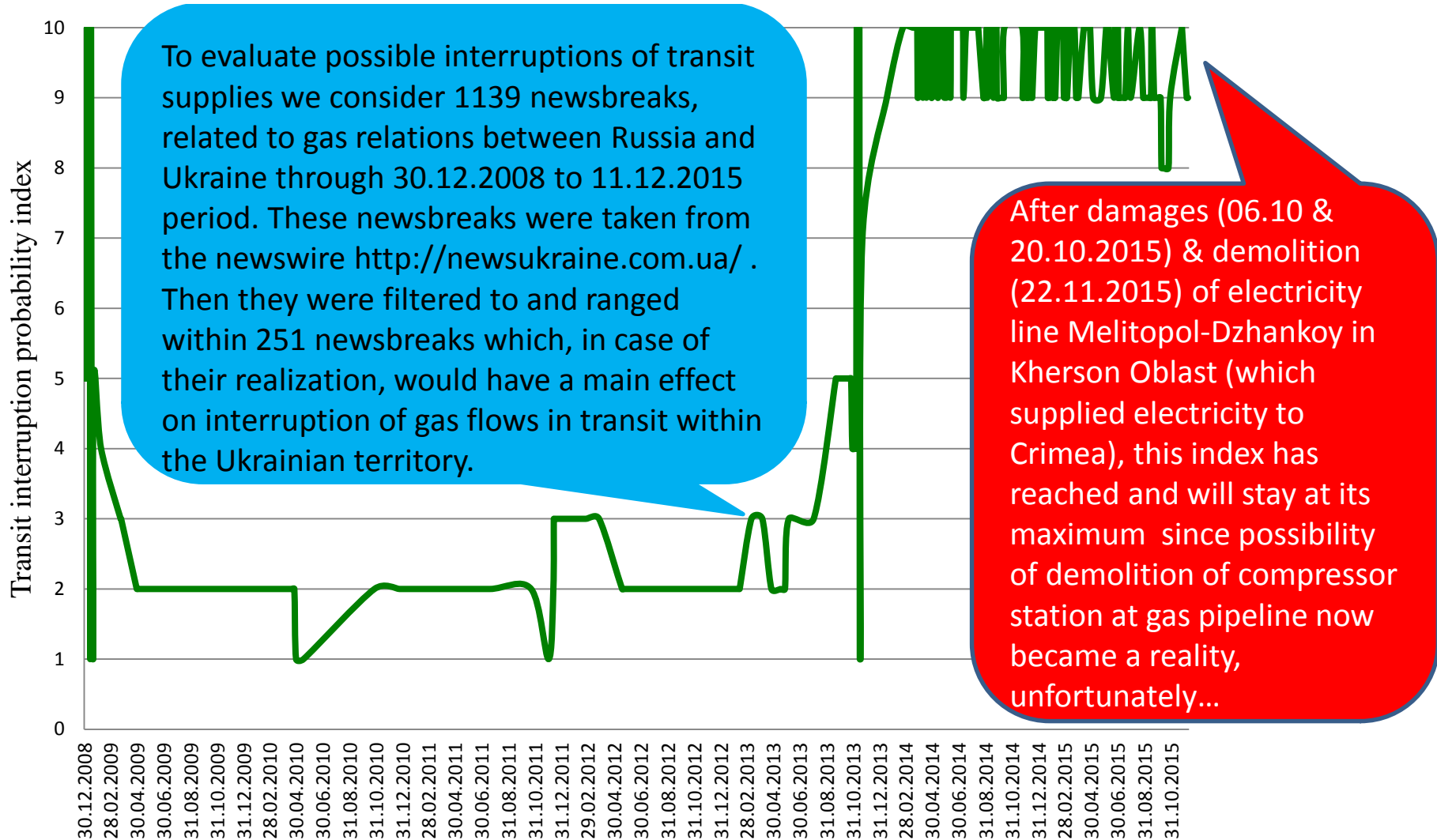
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**How to minimize new risks
for existing contractual
obligations of Russian gas
supplies to Europe?
(Ukrainian risks)**

Legal & economic motivation for alternative (risk-avoidance) pipelines

- Sovereign right for producer/exporter to evaluate supply/transit risk since it is his responsibility to timely deliver contractual gas volumes to delivery point (legal motivation)
- EU unbundling (since 2nd EU Energy Package 2003) predetermines free choice for supplier to choose least risky transportation route, if he considers it to be necessary, to fulfill its supply obligation after expiration of existing transit/transportation contract (economic motivation)

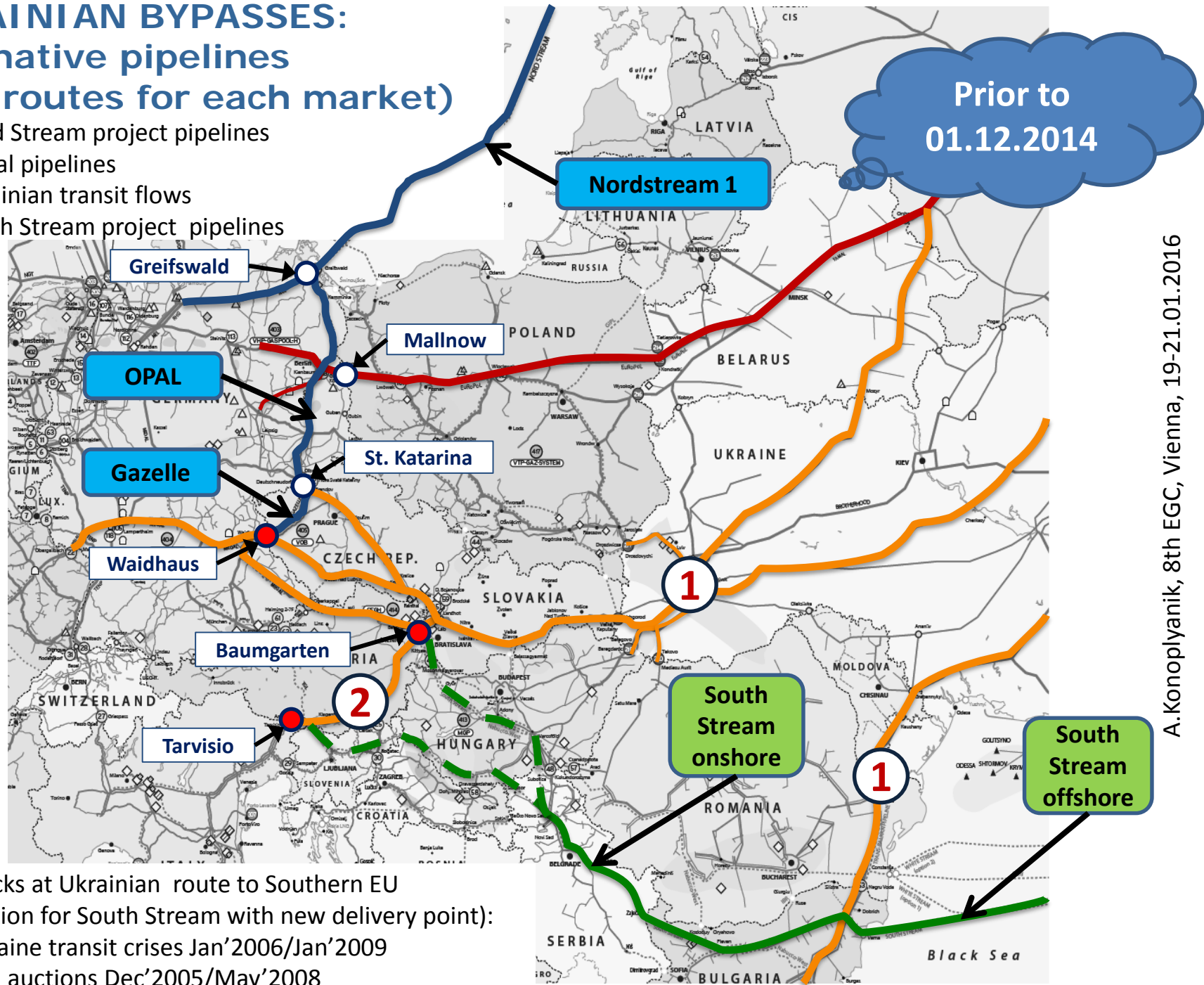
Ukraine: "transit interruption probability" index (2009–2015)



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

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

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

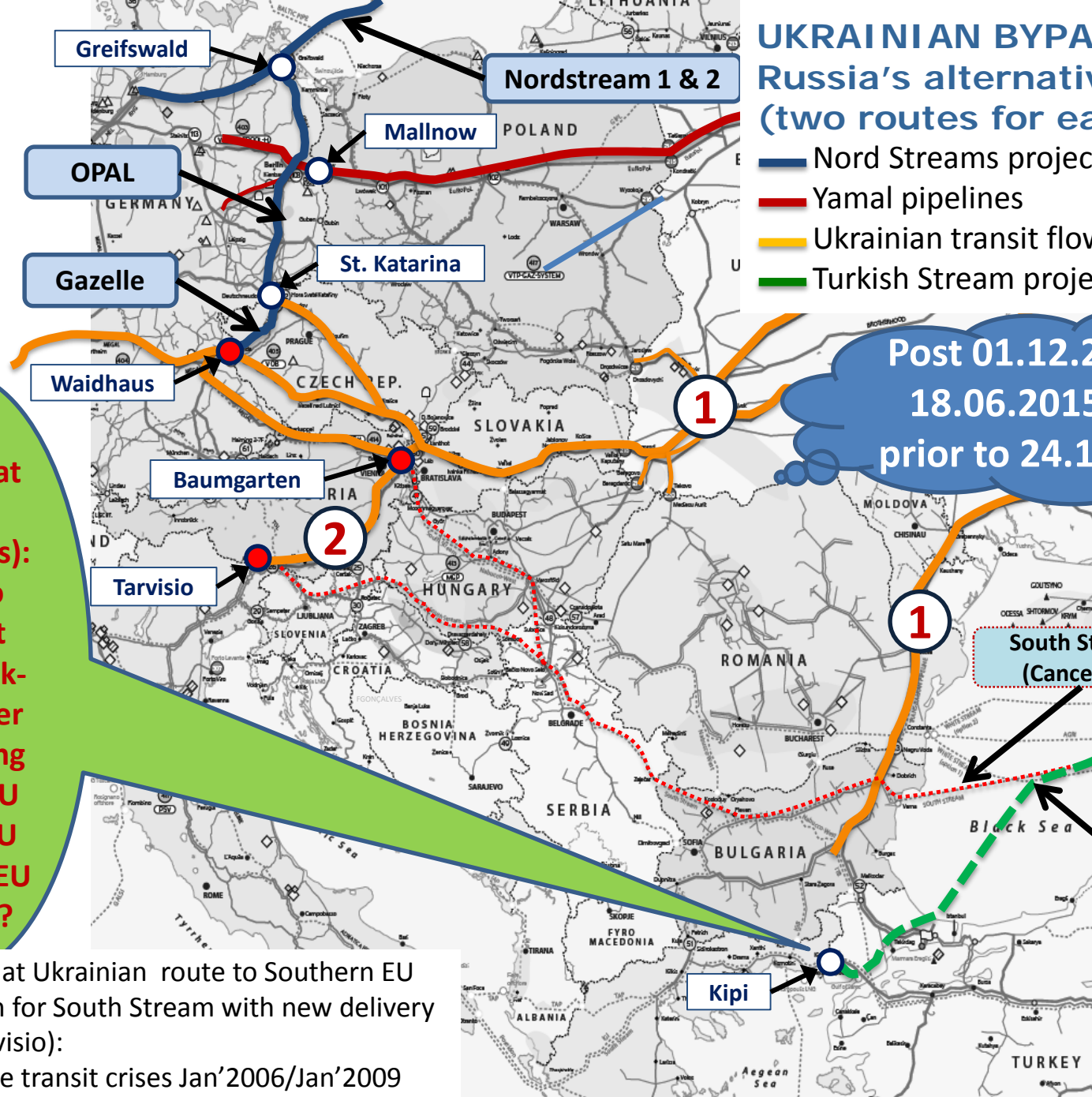


Bottlenecks at Ukrainian route to Southern EU
(justification for South Stream with new delivery point):

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

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

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



First 47BCM at 2019 (then less): How to move it from Turk-EU border to existing DPs in EU acc.to EU rules by EU entities?

Post 01.12.2014 & 18.06.2015, but prior to 24.11.2015

Bottlenecks at Ukrainian route to Southern EU (justification for South Stream with new delivery point at Tarvisio):
Ukraine transit crises Jan'2006/Jan'2009
TAG auctions Dec'2005/May'2008

Russian gas supply ring for Europe? (proposal for discussion/consideration/evaluation)



Nordstreams 1 & 2

First South Stream, then Turkish Stream, then ...

Hub in Baumgarten

UGS in Western Ukraine

“Russian gas supply ring” for Europe?

- Today: GP uses UA UGS for seasonal adjustments of RUS LTC transit flows to EU
- Post-2019 (after GP-Naftogas transit contract is over): *maybe* GP can use UGS in Western UA to balance market fluctuations at EU gas market in the nearest market zones (hub Baumgarten, etc.) => then GP *shall* be present at EU hubs, incl. wider presence in spot segment
- “Russian gas supply ring” concept for Europe:
 - a mutual RUS & EU safeguard from new transit monopolies +
 - new revenues for UA (a way for UA to raise gas-related revenues without transit of RUS gas) =>
 - addresses issue of major concern for EU (how to finance UA economy without/with minimum involvement of EU money) +
 - solve the issue of utilization of Slovak GTS

**What to do
after
24.11.2015?**

**How to minimize new risks
for existing contractual
obligations of Russian gas
supplies to Europe?
(**Turkish** risks)**

Black Sea delimitation prior to and after reunification of Crimea with Russia



The new reality:
Turkish &
Ukrainian EEZs
do *not* interlock
anymore

Map source:
http://img1.liveinternet.ru/images/attach/c/0/113/415/113415843_large_16012_102020_54593033675_5644072863940384821_n.jpg

Black Sea delimitation prior to and after reunification of Crimea with Russia: consequences for risk-avoidance offshore pipelines



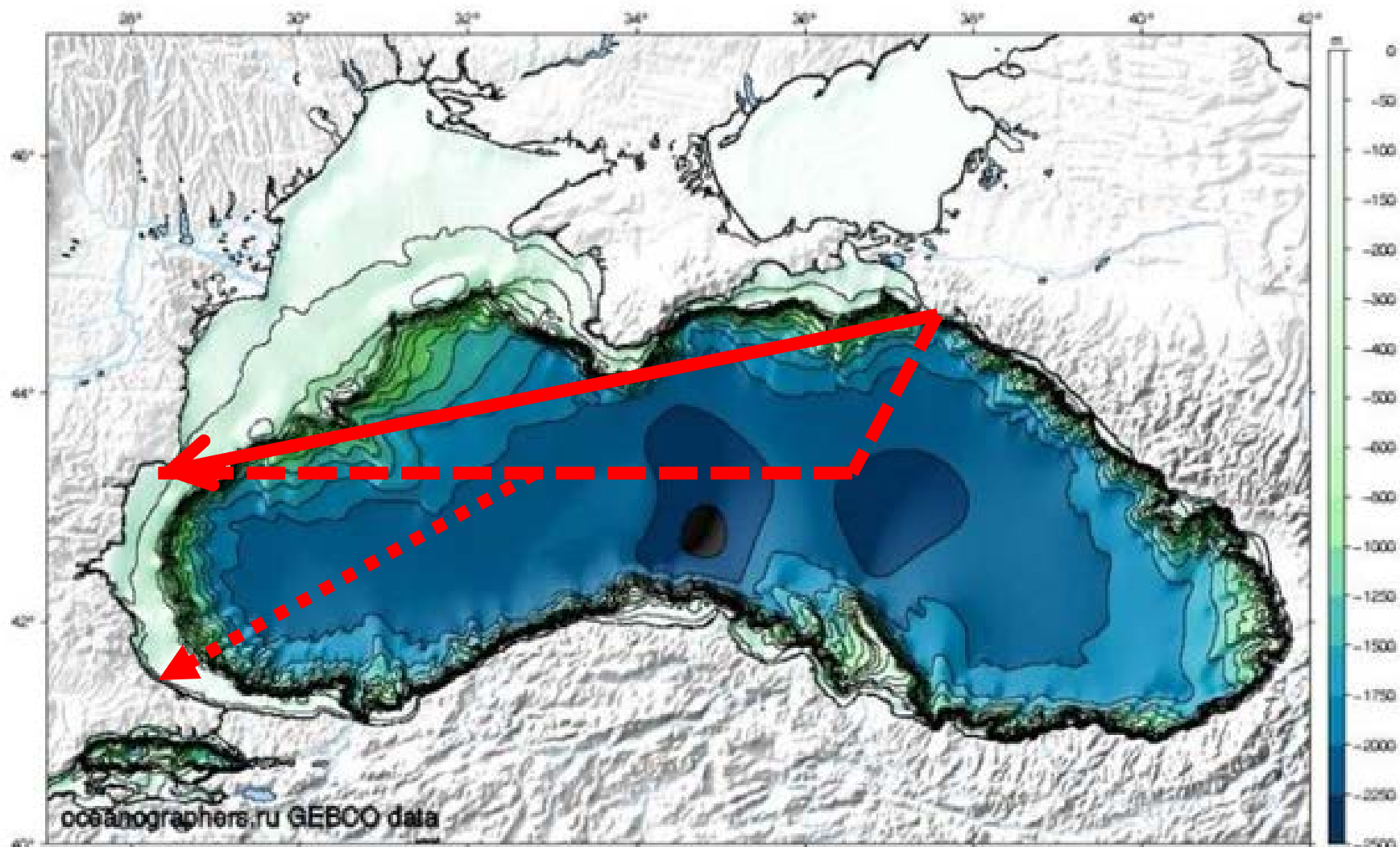
- - - - - South Stream (via Turkish EEZ)
- Turkish Stream
- Possible "New" Stream (?) (via new / expanded Russian EEZ)



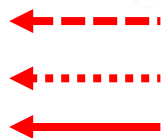
Reunification of Crimea opens opportunity (& 24.11.2015 incident votes for its use) to avoid Turkish transit => offshore pipeline route to Bulgaria/Varna directly via new (expanded) RF EEZ in Black Sea, now by-passing Turkish EEZ, with all its positives: shorter lime via shallower waters => benefits to both RF & EU

Map source:
http://img1.liveinternet.ru/images/attach/c/0/113/415/113415843_large_16012_102020_54593033675_5644072863940384821_n.jpg

Black Sea: map of water depths & offshore routes



Map source:
<http://www.perekop.info/black-sea-history/>



South Stream (via Turkish EEZ)

Turkish Stream

Possible "New" Stream (?) (via new/expanded Russian EEZ)

Romania-Ukraine EEZ Black Sea demarcation dispute results: no consequences for possible "New" Stream

Results of Romania-Ukraine dispute on demarcation of their EEZ in Black Sea do NOT touch *possible* new (instead of Turkish Stream) route of offshore part of *possible* new risk-avoidance gas pipeline in EU - a part of southern wing of *possible* Russian gas supply ring for Europe

← Possible "New" Stream

Map source:

http://img0.liveinternet.ru/images/attach/c/11/116/349/116349424_large_0301e1_5cdb3fac_orig.gif

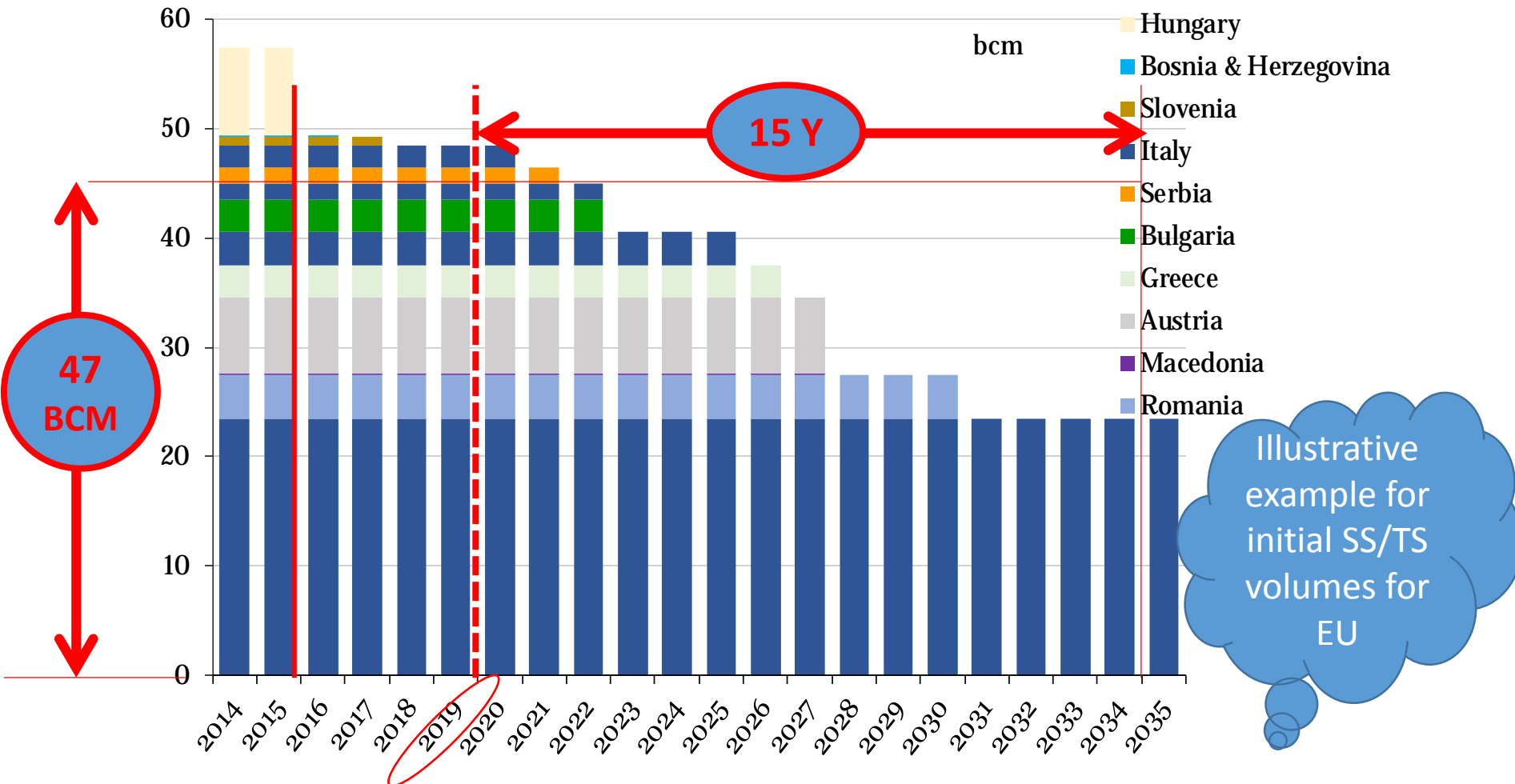


Prospects of Russia – EU cooperation (how it can help)

Russia-EU GAC: expert discussions continues

- Whatever will happen *offshore* EU, new regulatory EU rules for development new transportation capacity *onshore* EU (CAM NC INC + NC Tariffs) to be tested, preferably before Comitology will fix this rules in stone:
 - Proposed “reality check” for new EU regulatory rules for new onshore infrastructure development based on “as if” approach & realistic (not need to be real) case in SEE => CAM NC INC Art.20(d) procedure,
 - To be discussed by experts, inter alia, at the next WS2 RF-EU GAC meeting(s)
 - This might enable improvement of EU internal procedures in the process of Comitology

Russian re-routed gas supply contracts to Central & South-Eastern EU from UA transit last till 2035 = 100% security for TSO project financing of new capacity in SEE



Source: calculated by E.Orlova (FIEF) based on based on: "Turkish stream": Scenarios of by-passing Ukraine and barriers of European Commission". Vygon Consulting, June 2015 (fig.4, p.30).

Thank you for your attention!

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