

Debate on some elements of further adaptation of Russia's/Gazprom's gas export policy (after cancellation of South Stream, decisions on Turkish Stream & Nordstream-2), EU reaction & possible way forward

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- 5) Specificity of Russia’s “multiple pipelines” concept in Asia Pacific

Preconditions for new Russian gas supply model to Europe: commodities market

1) Changing contracting structures & pricing mechanisms – operation within new EU gas market architecture:

- a. From the **chain of three consecutive LTC** with supply and transportation contracts (first bundled, then unbundled, but to be mutually correlated) - to the system of “**entry-exit**” **market zones** with VTP (hubs) within unbundled commodity and capacity markets
- b. Unbundled **commodity** market: mature & oversupplied (either contractually or physically) market, “gas-to-gas” competition, two market segments – contractual & spot – in competitive coexistence
- c. Unbundled **capacity** market: supplier as a shipper only; capacity allocation: (i) auctions by default, (ii) more than 2 IPs/cross-border pipelines, conditional booking of new capacity by shipper – “open seasons” (Art.20(d))

New model for EU: Evolution of gas value chain & pricing mechanism of Russian gas to EU (1)

Past (Pre-2009) – growing EU market



Nowadays (Post-2009) – oversupplied (in NWE segment -?)
EU market with not yet clear future trends

Gazprom as price-taker from OIL market



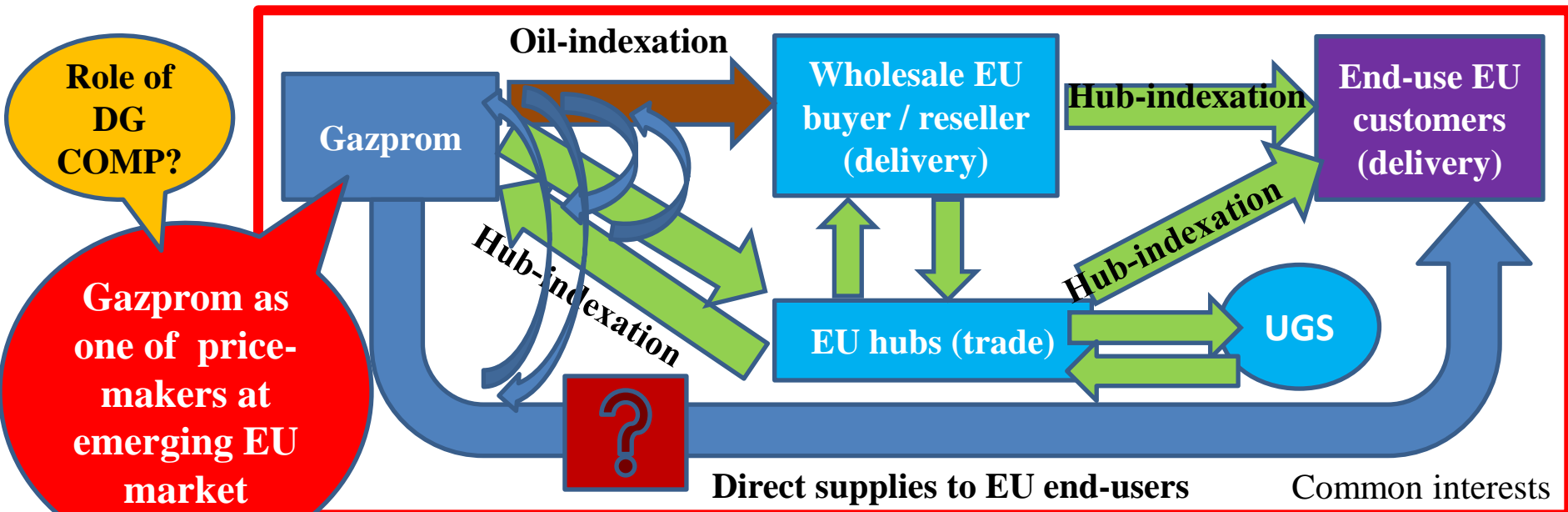
New model for EU: Evolution of gas value chain & pricing mechanism of Russian gas to EU (2)

Future (“NO GO” contractual scheme under any (?) supply-demand scenario)



Gazprom as price-taker from GAS BUYER's market (with no participation on it)? => NO GO

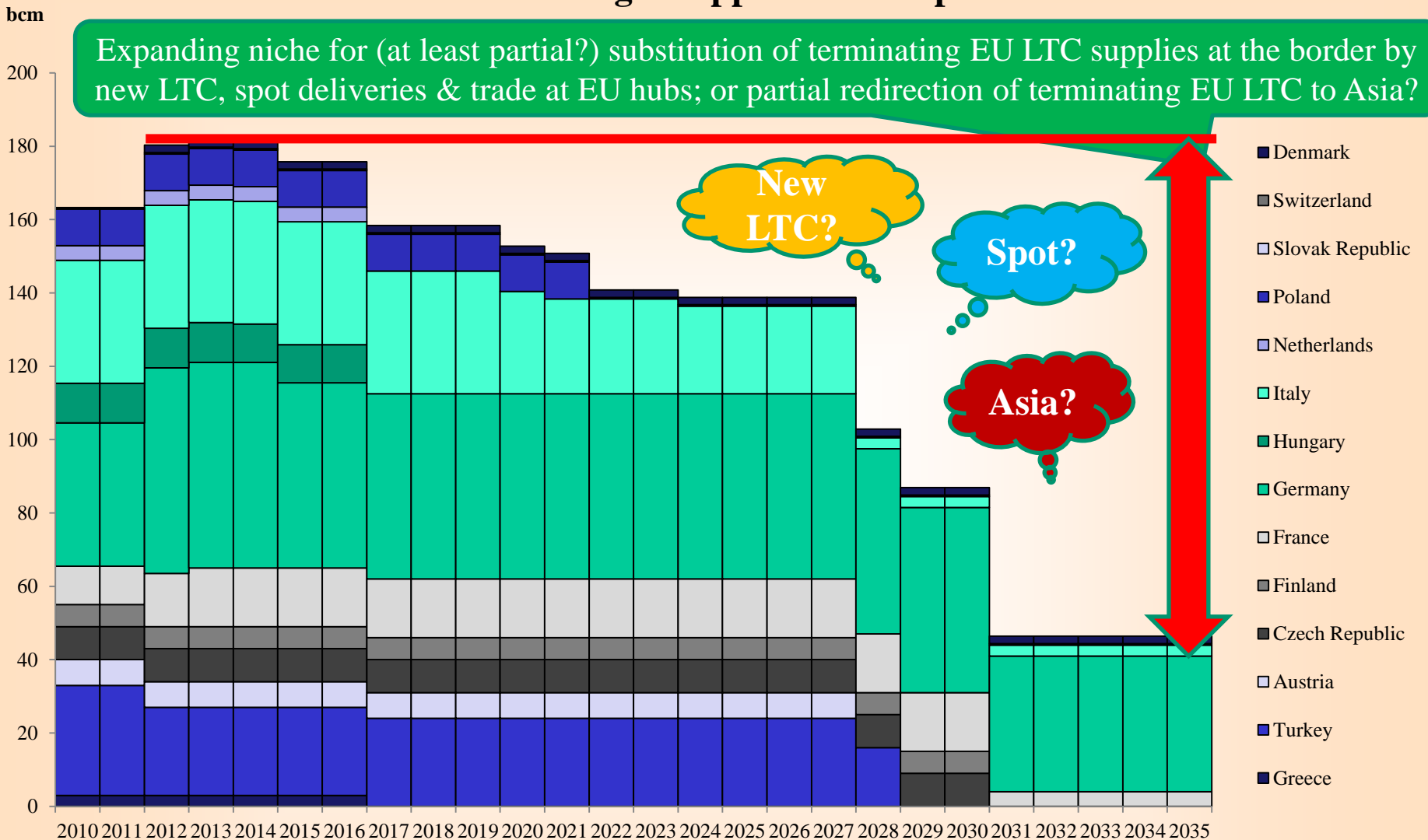
Future (what competitive niche for oil-indexed LTC & spot deliveries & trade to/within EU?)



Role of DG COMP?

Gazprom as one of price-makers at emerging EU market

Contracted volumes of Russian gas supplies to Europe



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

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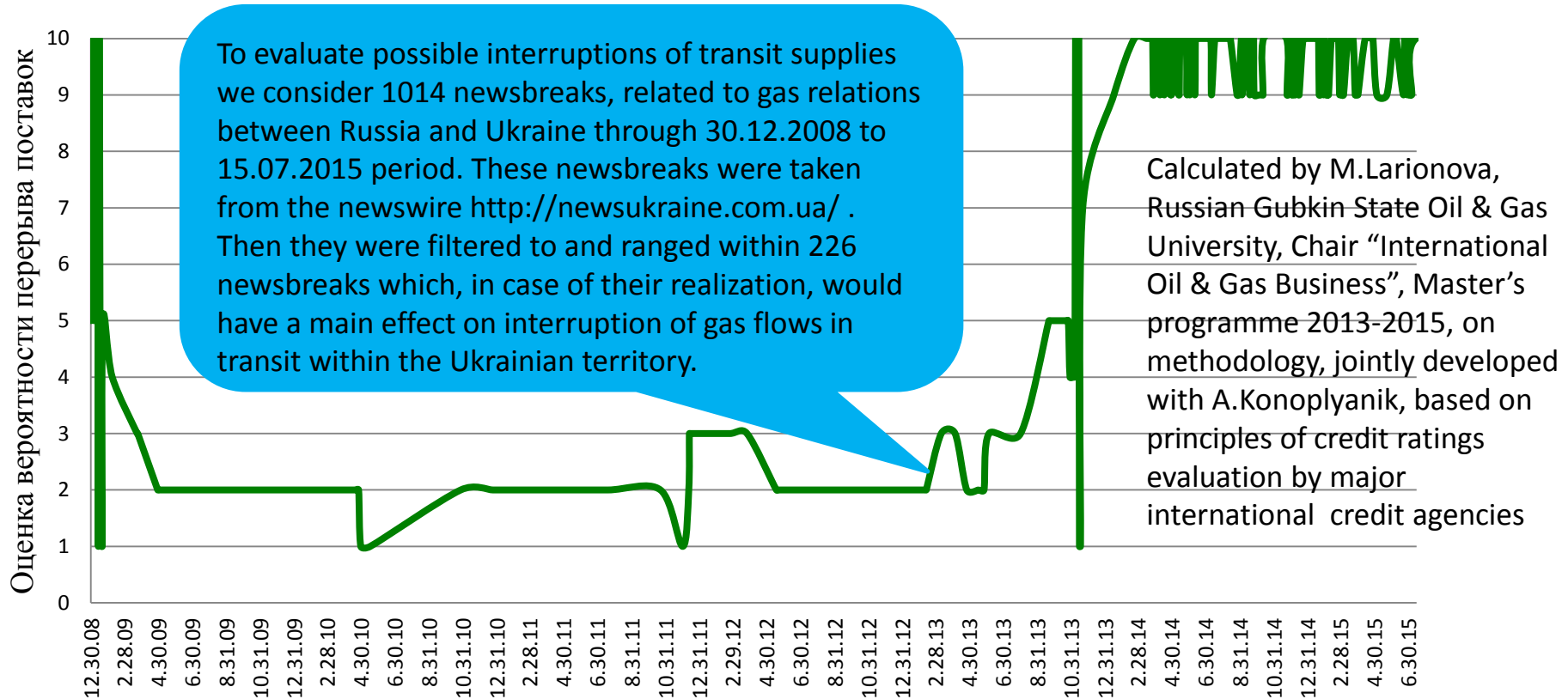
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Preconditions for new Russian gas supply model to Europe: capacities market

2) Diversification of routes/means of supplies: from GOSPLAN's (single pipe/corridor to export market) to “multiple pipelines” concept (at least two pipes / corridors or means of supply to each export market):

- a. Change of concept of risk assessment/minimization: from (cheaper) central planning & direct control on each export route through to delivery point – to (more costlier) competitive choice among few routes/means of supply (taking into consideration comparative costs & risks)
- b. Economic justification of new pipelines/means of supply to mature markets: not new gas, but transit risk mitigation & liquidation of transit monopoly

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



(1) Very fact that Russia & Ukraine cannot solve issues between them bilaterally; at least one of them (UA) demands 3rd party (EU) as mediator/conciliator for searching temporary compromises + files a case against Russia in SCC, means its systematic mistrust to contractual partner ; (2) UA is in state of civil war, but considers RF as invader => **permanent transit risk for supplier since it is his responsibility to provide timely delivery of contracted volumes to delivery points** deep inside the EU non-dependent his issues with third parties => **sovereign right of resource owner (Russia) or its agent (Gazprom) to evaluate such risk & undertake adequate measures for its mitigation (incl. by-passes)**

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

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

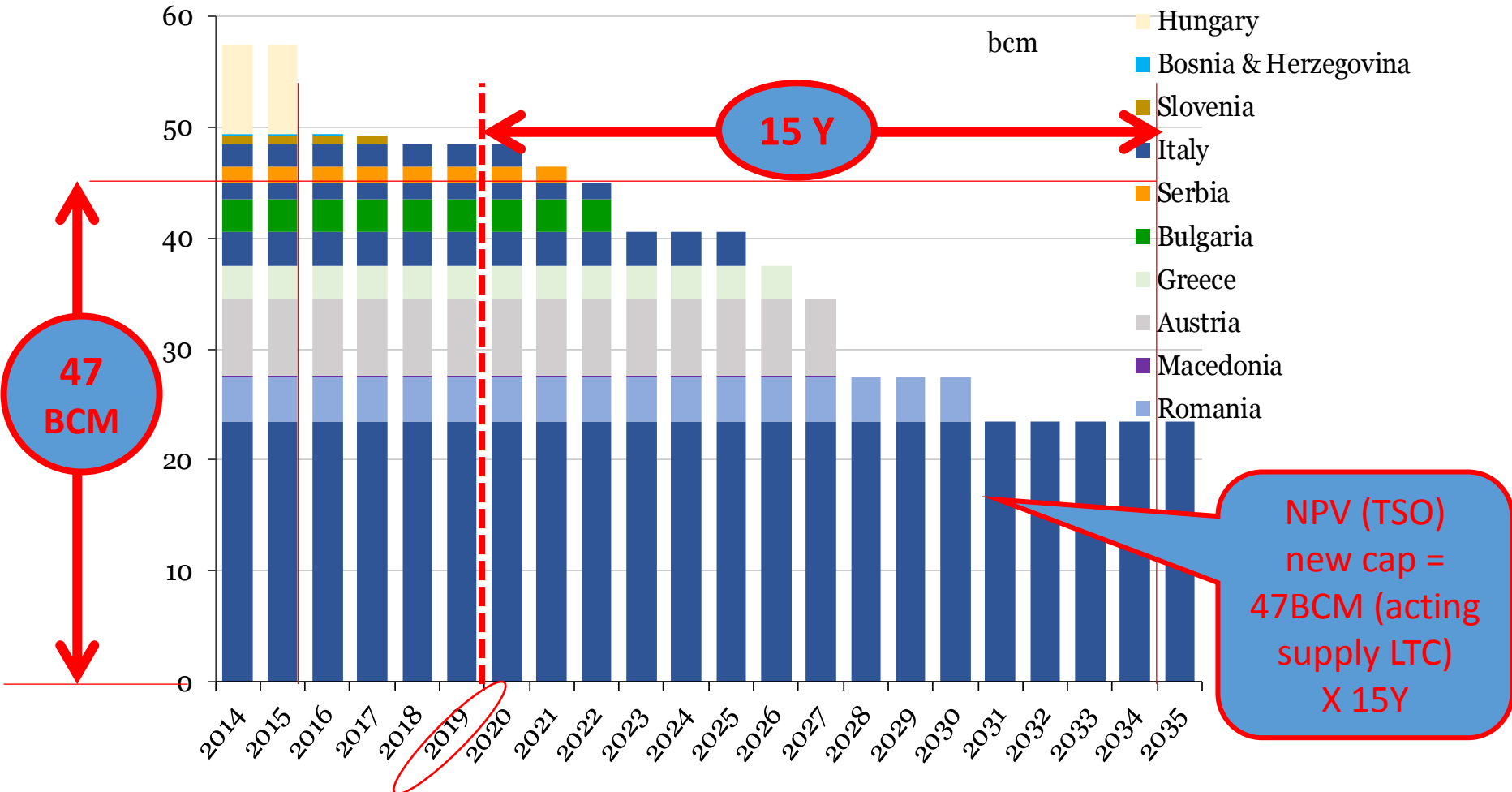


47BCM at 2019:
How to move from Turkish-EU border to existing DPs in EU acc.to EU rules?

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

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

Russian gas supply contracts to Central & South-Eastern EU with UA transit till 2035 = 100% security for TSO project financing of new capacity

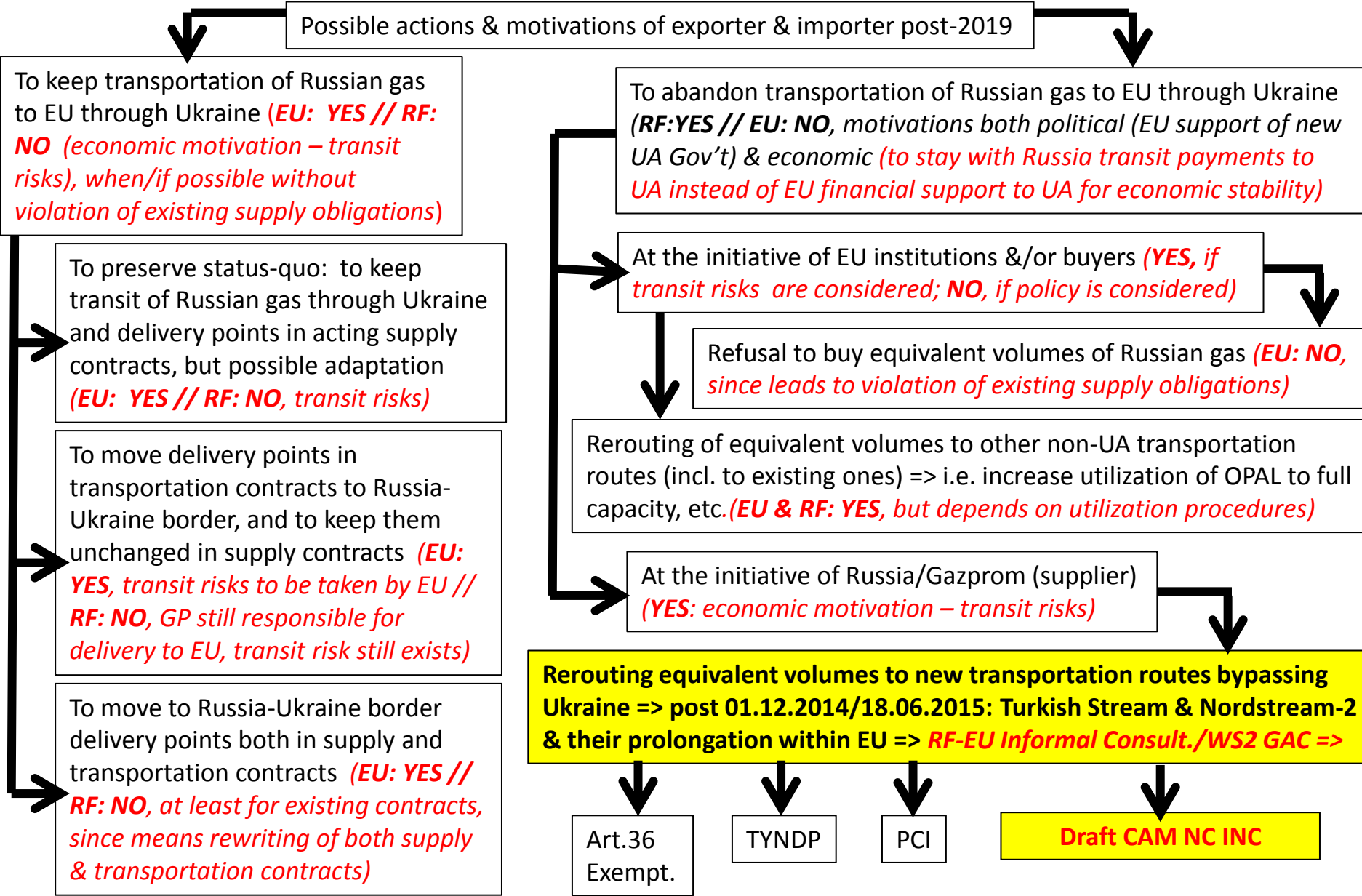


Source: calculated by E.Orlova (FIEF) based on based on: "Turkish stream": Scenarios of by-passing Ukraine and barriers of European Commission". Vygon Consulting, June 2015 (fig.4, p.30).

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Russia-Ukraine transit contract to EU will expire in 2019. What then? Possible scenarios & motivations for exporter & importer



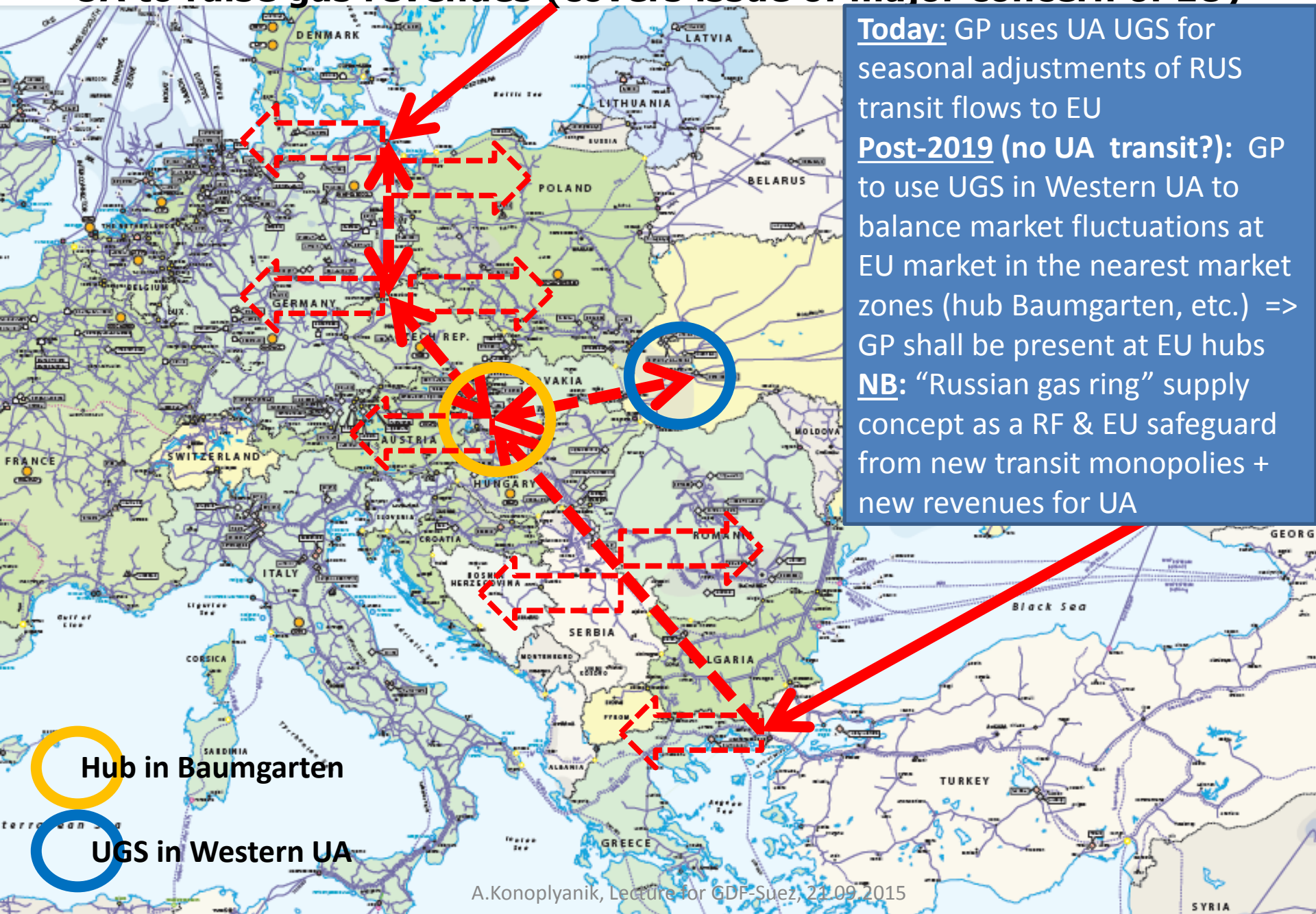
EU support for transit via Ukraine: the end or the means? (1)

- EU has multiply stated its support for continuation of RUS gas transit via UA post-2019 => (it seems that) this is why EU opposes redirection of RUS gas supplies to new transportation routes to EU post-2019
- But (it seems that) EU (CEC) support for existing & future transit of RUS gas via UA is not the end, but just the means; the real goal is:
 - to provide UA with steady financial flow of transit revenues from RUS supply contracts to EU via UA (with currently “unfriendly” to RF political regime in UA) – instead of donating corresponding EU financial aid to UA, and
 - financing/guaranteeing pay-back of UA-EU-USA GTS consortium (acc.to UA Law 4116a) in modernization of US GTS (*RUS participation in consortium forbidden by UA law, but transit of RUS gas is the only way to make consortium financeable*):
 - either under existing supply formula (RUS supplies directly to inside EU through UA) => RUS will continue taking transit risk via UA,
 - or by newly EUC proposed formula: delivery of RUS gas at RUS-UA border, in which case:
 - either EU companies will take the transit risk via UA by themselves (*which they are not willing yet*),
 - or there might be possible role for de facto EU *Single Purchasing Agency* mentioned in the Energy Union Package ? [*“options for voluntarily demand aggregation mechanisms for collective purchase of gas during a crisis and where Member States are dependent on a single supplier”*] ?

EU support for transit via Ukraine: the end or the means? (2)

- Whether EU will change its opposition to US by-passes if alternative means for UA to earn money are presented instead of gas transit revenues?
- An idea: “Russian gas circle” with expanded trade at the hub (Baumgarten) which requires regular use of UGS => role for UA UGS ? =>
- UGS in Western UA to be used not for seasonal adjustment of RUS transit flows to EU, but to adjust market fluctuations at the hub (Baumgarten),
 - this will also make Mr.Shevkovich happy since Slovak system will be fully utilized for direct &/or reverse flows both for supplies and UGS use
 - UA will be further integrated into EU energy system

Russian gas ring diminishes UA transit risk + a non-transit way for UA to raise gas revenues (covers issue of major concern of EU)



Today: GP uses UA UGS for seasonal adjustments of RUS transit flows to EU

Post-2019 (no UA transit?): GP to use UGS in Western UA to balance market fluctuations at EU market in the nearest market zones (hub Baumgarten, etc.) => GP shall be present at EU hubs

NB: "Russian gas ring" supply concept as a RF & EU safeguard from new transit monopolies + new revenues for UA

Hub in Baumgarten

UGS in Western UA

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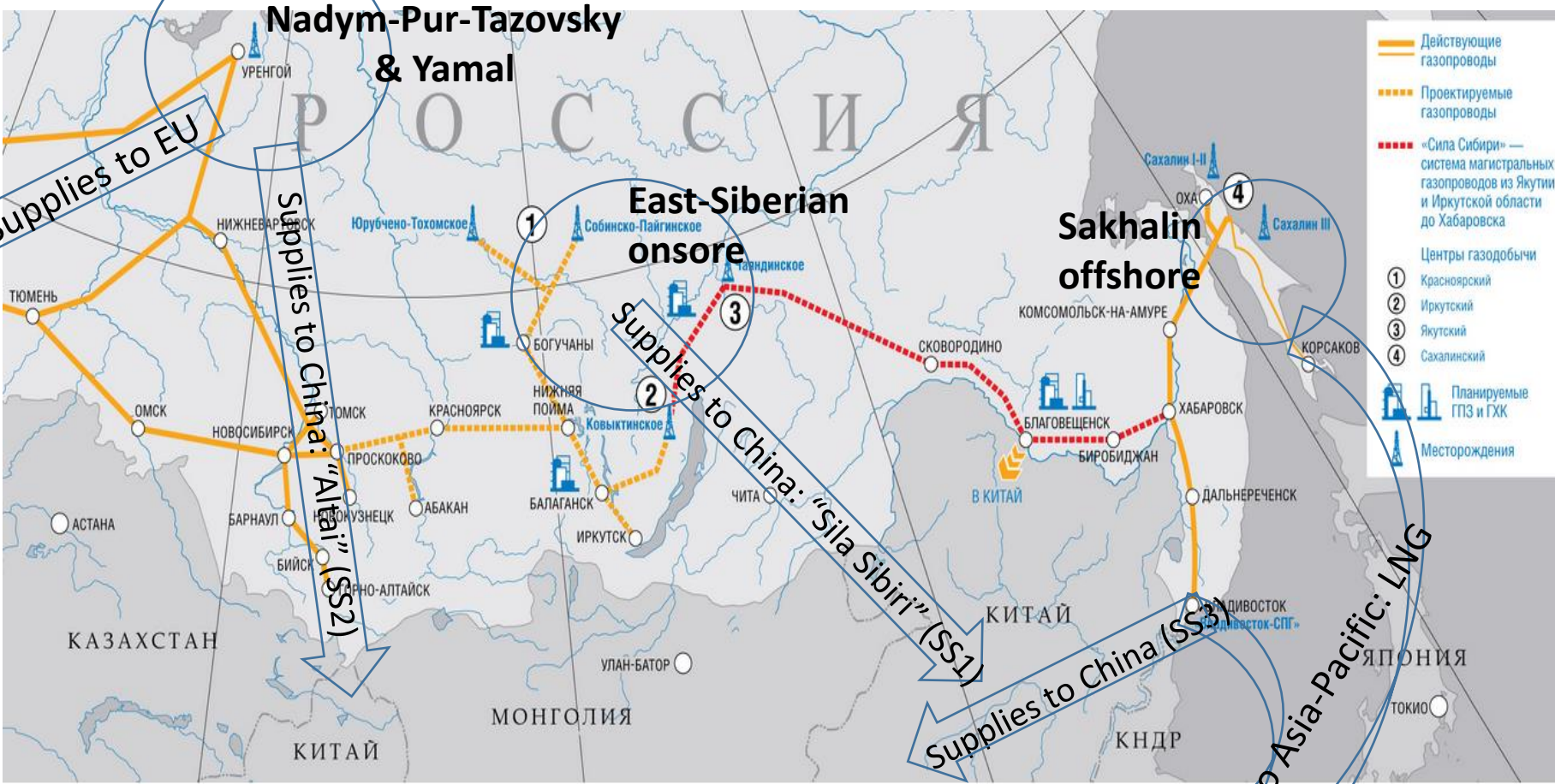
Project-oriented & regulatory options

- Project-oriented respond from business & EU authorities: fragmented approach (not full compliance with stated demand for new capacity (“spaghetti pipelines”):
 - DG ENERGY: Central East South Europe Connectivity (CESEC)
 - Eastring (Routes A &/or B), Tesla, TAP expansion, etc.
 - Vertical Gas Corridor
- Available regulatory EU options and new respond:
 - Exemptions route (Art. 36 Third Gas Directive)
 - TYNDP/PCI procedure
 - Draft CAM NC INC (draft Amended Regulation 984/2014 Art. 20(d):
 - From draft Art.20(h) – RUS/GG experts proposal to ACER’s draft Art. 20(d) => the latter de facto presents updated version of RUS/GG experts’ proposal on “Coordinated Open Season Procedure”
 - Proposal at WS2 RF-EU GAC for “Early implementation” of Art.20(d) procedure => test study either for Turkish stream or/and Nordstream-2 extensions inside EU

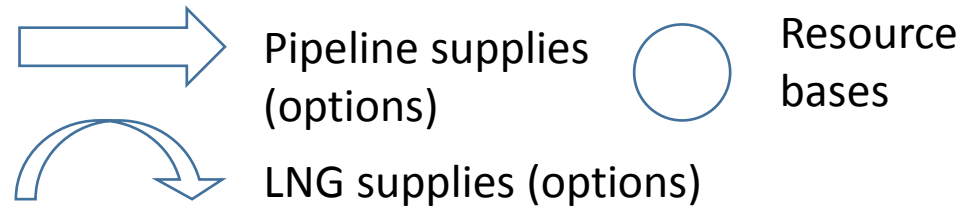
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Russia & Europe *in the past* vs Russia & Europe & Asia *in the future* (new factual Russia's gas export model)



Source of original map: <http://www.gazprom.ru/about/production/projects/pipelines/ykv/>



Thank you for your attention!

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