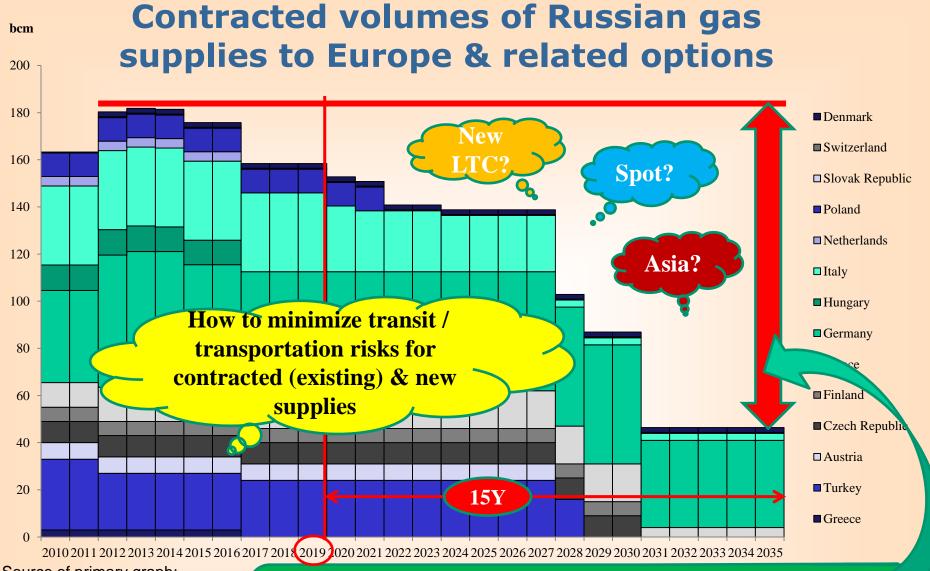
Transit risk minimization instruments for Russian gas supplies through Ukraine to the EU: arguments of the resource-owning sovereign state – and the motives of the opponents

Dr. A.Konoplyanik,

Adviser to Director General, Gazprom export LLC,
Professor, Chair "International Oil & Gas Business", Russian State Gubkin Oil & Gas University
Co-Chair, WS2 GAC/ Coordinator, Consultations

21st WS2 GAC meeting / 28th round of Consultations, Gazprom export, St.Petersbourg, 21.10.2016



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?

A.Konoplyanik, 21 WS2 GAC - 28 informal Consultations, GPE, SPB, 21.10.2016

Transit risks through the territory of Ukraine has increased post-2014 (1)

- Physical security of transit system has been worsening in the absence of necessary investments in its modernization (reports on damages & emergencies, panic repairs) & due to terrorist threats,
- Adopted UA laws enables to stop Russian gas transit as a means of sanctions against Russia and forbid Russian investments in UA GTS,
- Unilateral decision of UA NRA in 2015 to increase transit tariffs since 2016 (contrary to acting transit contract) in result of implementation of EU legislation within UA due to UA's membership in the Energy Community Treaty,

Transit risks through the territory of Ukraine has increased post-2014 (2)

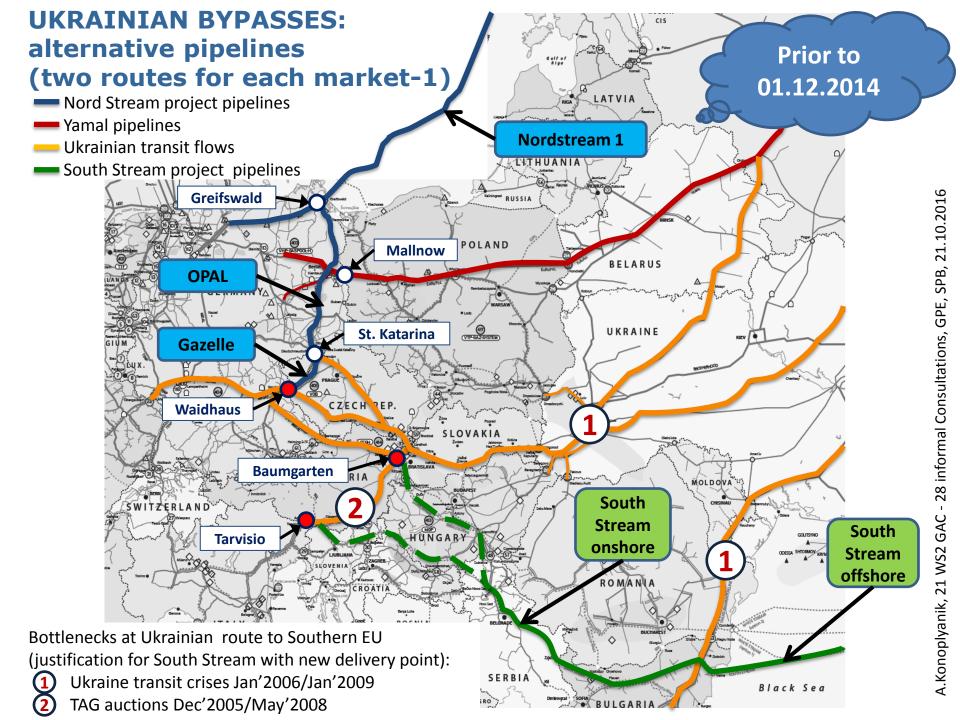
- Administrative pressure on Gazprom, incl. decision of UA antimonopoly body to penalize Gazprom (3+ USD bln) as if for "abuse of dominant position at the gas transit market of UA" (NB: Gazprom does not provide, but receives transit services)
- Lack of mutual trust between the two parties (crisis in relations) prevents to coordinate mutually acceptable conditions of transit after current transit contract expires
- Low level of gas injection into UA UGS (14.3 BCM early October contrary to appr. 19 BCM needed to safely pass through Winter season) increases the risk of unauthorized off-takes from transit flows (precedents at least in Jan'2006 & Jan'2009)
- => transit risks are still there & increasing

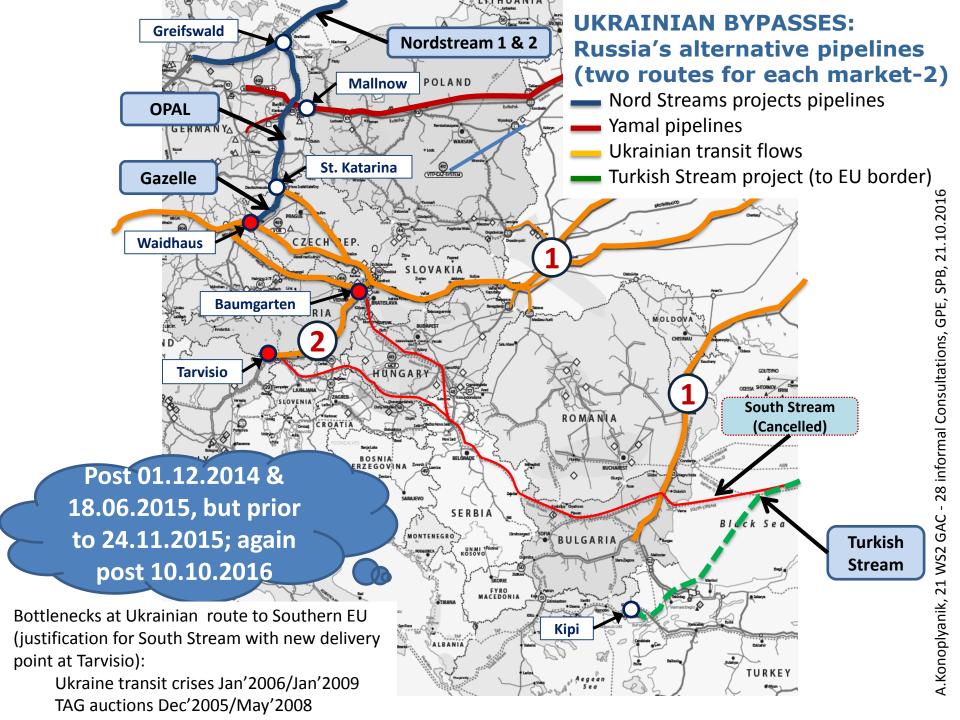
Minimization instruments of transit risks

- To settle transit dispute/crisis after/in case it occurs :
 - International law instruments (Energy Charter Treaty, Art.7) are aimed at minimization of negative consequences of the dispute/crisis which is already in place (by accident), but
 - Availability of mutually agreed rules does not preclude that they will/might not be violated (like transit crises Jan'2006, Jan'2009)
 - Especially if there is no mechanism of inescapable punishment for violation of the mutually agreed rules => they oriented mostly on goodwill of the parties (sort of "idealization" of international law), => in the post-Cold War 1990-ies nobody can even imagine, after 30Y+ of stable and non-interruptible transit through the Cold War era, that transit flows can be interrupted by purpose
 - Risk that transit dispute/crisis will occur still remains
- To prevent (to exclude/decrease probability of) the very fact of transit dispute/crisis occurrence :
 - Diversification of routes ("multiple pipelines") = liquidation of transit monopoly => diminishment of transit risks, and/or
 - Full abandonment from transit routes = non-transit bypasses to the destined markets (escaping third countries, if possible)
 => nullification (total liquidation) of transit risks

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

- Russia: from historical USSR GOSPLAN's "single pipeline" concept of risk mitigation / minimization ("one market one pipe") to current "multiple pipelines" concept ("one market two pipes")
 - Historically: when producer/exporter (USSR) controlled both the pipe & gas in the pipe through the whole crossborder gas supply chain within USSR/COMECON territory to delivery points at the EU-COMECON border
 - <u>Currently:</u> when preconditions for such control does not exist anymore after dissolution of the COMECON/USSR, enlargement of the EU & evolution of institutional structure of the EU gas market (unbundling, MTPA, etc.)





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

- It is exporter's responsibility to timely deliver contractual gas volumes to delivery point/the customer (Groningen LTGEC concept)
- Sovereign right for producer/exporter to evaluate supply/transit risk by himself since:
 - Res.1803 UN GA of 14.12.1962 "Permanent Sovereignty over Natural Resources": "1. The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned." =>
 - International demand vs national supply
 - Maximization of the marketable resource rent (both Ricardian & Hotelling rents) = sovereign right of the resource-owning state =>
 - Maximization of the exporter's net-revenue = minimization of production and (especially within cross-border gas value chains like in Russia-EU case) transportation (transit) costs & risks leading to cost increase:
 - Maximization of revenue = commodity market (EU post-2003)
 - Minimization of transportation costs = capacity market (EU post-2003)

Legal & economic motivation for alternative (risk-avoidance) pipelines: EU legal system

- EU legislation (since 2nd EU Energy Package 2003) predetermines:
 - Unbundling (separation of commodity & capacity markets/contracts): free choice for supplier to choose less/least risky transportation route, if he considers it to be necessary, to fulfill its:
 - continued supply obligation after expiration of existing transit/transportation (capacity) contract while supply (commodity) contract continues (contractual mismatch), &/or
 - new supply obligations
 - Supply to the single EU MS = supply to the EU =>
 - This means: (Potential) transit states between RF & EU cannot force supplier to the EU to pass through their territory, but can only stimulate supplier to chose its transportation route to go via their territory =>
 - Transit states to work at diminishing transit costs & risks

Ukraine: gas transit risks & costs for RF

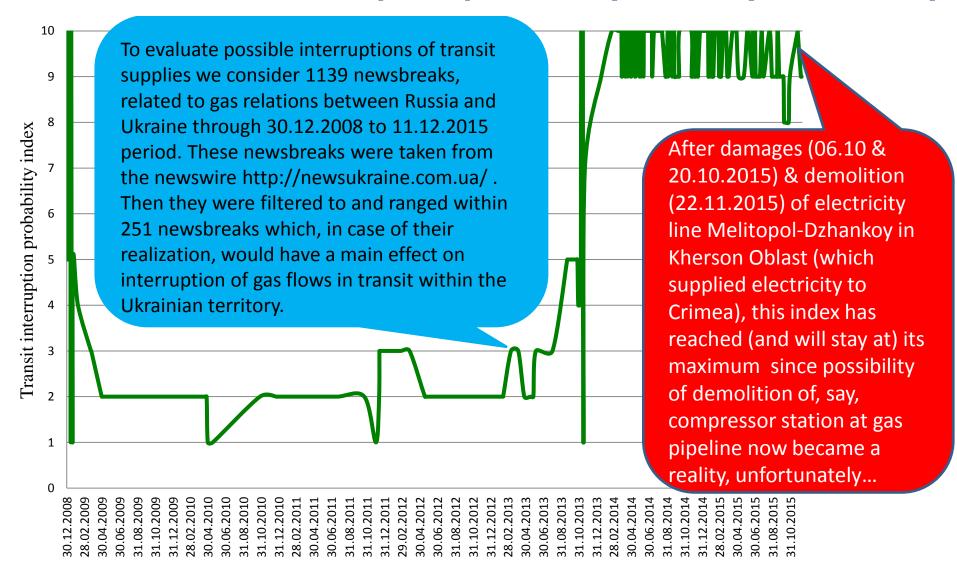
• Transit risks:

- "transit interruption probability index" at maximum,
- nevertheless EU (& US) insists on continuation of RUS gas transit to EU via UA, why?

Transit costs:

- UA is a member of Energy Community Treaty & thus implements EU energy rules domestically not being EU Member-State => from "distance tariffs" to "entry-exit tariffs" => UA NRA / Naftogas demanded for immediate (as of 01.01.2016) increase by (at least) 25-35% of acting transit tariffs for Gazprom, BUT:
 - "Pacta sunt servanda" = current transit tariffs governed by 2009-2019
 Gazprom-Naftogas transit contract (UA TSO = Ukrtransgas), but what about post-2019 transit tariffs level?
 - What means "European methodology"? If E-E tariffs, then:
 - How CAPEX in modernization & development of UA GTS were calculated (ingredients of tariff to cover the costs/ to pay back investment)?
 - Whether cumulative debt of NAK "Naftogas of Ukraine" was (or was not?) included in "investment" part of tariff? Etc.
- => Why Gazprom shall continue with UA transit after 2019 if it is more risky & more costly? If it has the legal (EU law) & sovereign (international law) right & economic motivation to choose?

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

EU & US support for RUS gas transit via Ukraine: why?

• EU (& US) has multiply stated their direct support for RUS gas transit via UA post-2019 & opposes redirection of RUS gas supplies to new non-UA transportation routes to EU post-2019 (indirect support of UA transit):

- EU (2016):

- 8 EU MS (March): letter against NS2 (CEE & Baltic)
- Matteo Renzi, PM Italy (April): against NS2 since it bypasses UA
- Maros **Sefcovic** (April-May): RF shall provide significant transit volumes via UA to EU to support UA GTS (10-12 BCMA is not enough). UA is reliable gas partner & transit state.
- Migele Kaniete (May): appeal to preserve UA transit. Confident that UA is reliable.
- Zigmar **Gabriel**, German Energy & Economy Minister (June): 3 conditions for NS2 (follow EU legislation, not threat UA transit, not limit supplies to CEE)
- July-Aug: Polish antimonopoly case against NS2 consortium
- NB: Continuing prohibition of OPAL full capacity use is of the same effect

- USA (2016):

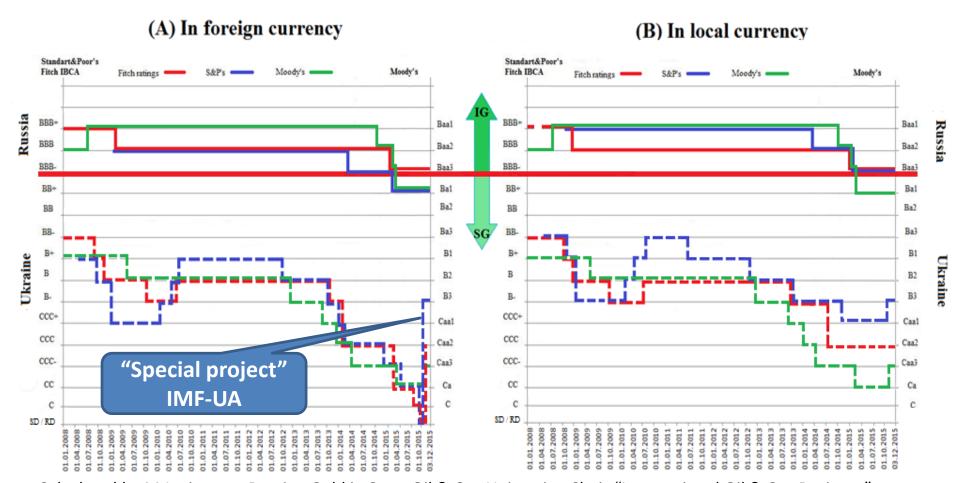
- US Atlantic Council: 01.04-05.05—4 video-conferences on NS2 as a threat to EU & UA
- Amos Hochstein, Special Envoy & Coordinator for International Energy Affairs, US Dep't of State:
 - June: NS2 is not a commercial project. Not needed. NS1 is half-full. UA GTS available for gas supplies to EU. UA transit worked & works well. When 80%+ RUS gas came to Germany – no sense for economic & energy security
 - Aug: RF deprives shaky UA economy (which international community tries to support) of USD 2bln which UA badly needs to survive. UA economy will just collapse. Slovakia will also loose USD 1 bln
- US Vice-President Joseph Biden:
 - Jan: to stop NS 2 (political project) together w Petro Poroshenko (UA)
 - Oct: appeal to Sweden against NS2 (not to provide permission to pass through its EEZ)

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

- It seems that EU & US 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 (USD 2bln/a) instead of donating corresponding EU/US financial aid to UA, and
 - to finance/guarantee pay-back of potential investment of trilateral UA-EU-USA GTS consortium (acc.to UA Law 4116a) in modernization of UA GTS (NB: continued transit of RUS gas is the only way to make consortium financeable;
 - either under existing formula of RUS supply to EU (RUS supplies directly to inside EU through UA transit) => RUS will continue taking transit risk via UA,
 - or by new CEC 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 a 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"] => whether this idea is still alive?
 - BUT: cost of debt financing for UA GTS modernization to be relatively higher (Russia to provide transit revenues to pay-back such higher costs?)

Why cost of debt financing for UA GTS modernization consortium will be too high (sum total of three ratings)? (1)

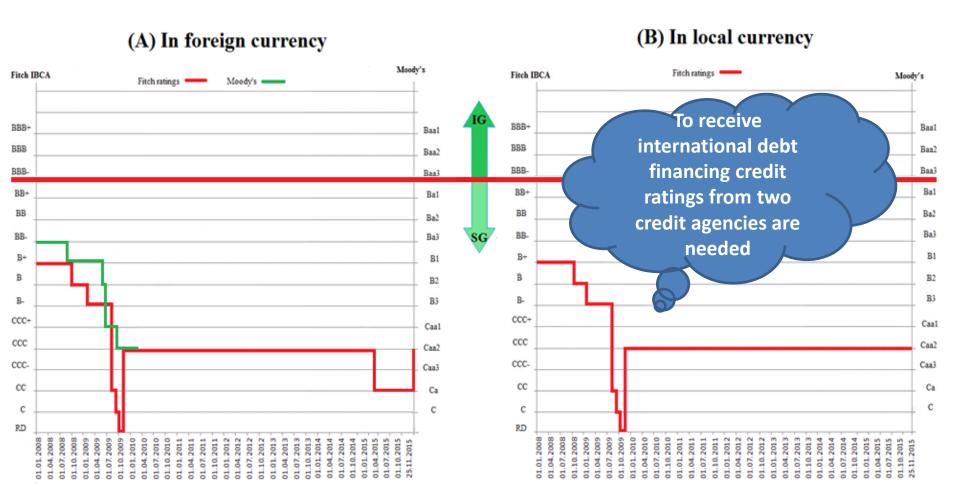
Russia & Ukraine: evolution of long-term credit ratings



Calculated by M.Larionova, Russian Gubkin State Oil & Gas University, Chair "International Oil & Gas Business", Master's programme 2013-2015, on the data of international credit agencies

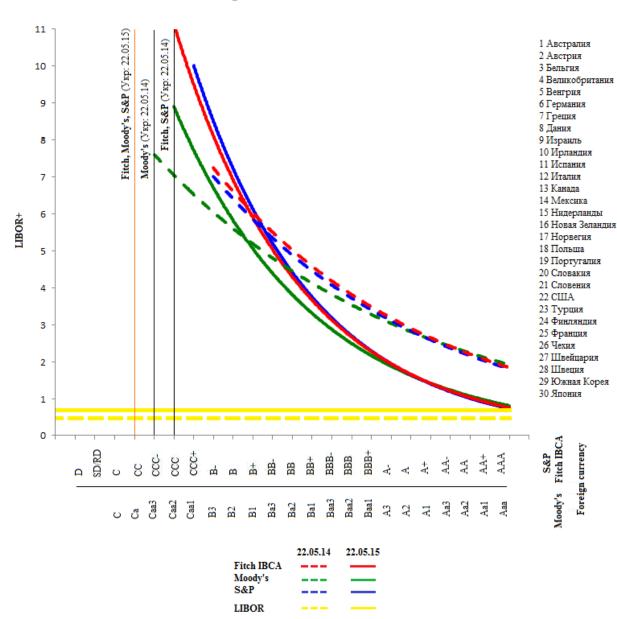
Why cost of debt financing for UA GTS modernization consortium will be too high (sum total of three ratings)? (2)

NJSC Naftogaz of Ukraine: long-term credit rating



Calculated by M.Larionova, Russian Gubkin State Oil & Gas University, Chair "International Oil & Gas Business", Master's programme 2013-2015, on the data of international credit agencies

LIBOR + для стран ОЭСР на 22.05.14 и 22.05.15



LIBOR-plus for **OECD** memberstates: correlation with their credit ratings – and the placement of Ukraine within this matrix (what would have been **UA** cost of debt financing)

Calculated by M.Larionova, Russian Gubkin State Oil & Gas University, Chair "International Oil & Gas Business", Master's programme 2013-2015, on the data of international credit agencies

EU/US support for gas transit via Ukraine: whether nontransit options for UA to earn money in gas available?

- Whether EU/US will change their opposition to UA bypasses if alternative means for UA to earn money in gas are available instead of gas transit revenues?
- An idea: "Russian gas circle" with expanded trade at the hub (Baumgarten) => this requires regular use of UGS to obtain flexibility from the market (UGS) under spot deliveries instead of contractual flexibility within LTGEC => role for UGS in Western UA?
 - 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 (DG COMP role?)

Thank you for your attention!

www.konoplyanik.ru andrey@konoplyanik.ru a.konoplyanik@gazpromexport.com

Disclaimer: Views expressed in this presentation do not necessarily reflect (may/should reflect) and/or coincide (may/should be consistent) with official position of Gazprom Group (incl. Gazprom JSC and/or Gazprom export LLC), its stockholders and/or its/their affiliated persons, or any Russian official authority, and are within full personal responsibility of the author of this presentation.