Perspective for Turkish Stream Project: Possible Scenarios and Challenges

Ilgar Gurbanov*

Following the cancellation of South Stream, Russia announced its plans to reroute the pipeline to Turkey, instead of Bulgaria. The new pipeline was dubbed "Turkish Stream", with same capacity of South Stream, but less vulnerable to EU competition law. "Turkish Stream" has also experienced delays due to the crisis in Russia-Turkey relations. However, following the recent normalization of bilateral relations, the project regained its momentum. Russia's aim is to complete the construction of the pipeline as soon as possible, namely before the Southern Gas Corridor is finished, or acquires additional gas from Iraq, Iran, or Turkmenistan. This article examines the possible scenarios and challenges for the Turkish Stream gas pipeline project, and argues that Russian Gazprom's commitments to other pipeline projects, such as Nord Stream II and the pipeline to China, may prevent Gazprom from completing the pipeline in its entirety.

* Ilgar Gurbanov is a Research Fellow at the Center for Strategic Studies under the President of the Republic of Azerbaijan

Introduction

Turkey is the second largest gas market for Russian Gazprom, as it imports 55-60 percent of its gas from Russia. Currently Turkey imports Russian gas via Trans-Balkan Pipeline through Ukraine and via the Blue Stream pipeline, which runs under the Black Sea. The crisis in relations between Russia and Ukraine has affected energy partnerships. Thus, in 2007, Russia launched the "South Stream" gas pipeline project, which was to start from Russia's Black Sea coasts, running to Bulgaria, and then onwards to Serbia, Hungary, Bosnia and Herzegovina, Croatia, Austria and Italy, carrying 63 billion cubic meter (bcm) of natural gas. Under the initial vision, South Stream was to be routed through Ukrainian territory in the Black Sea, but due to political changes in Ukraine, Moscow and Ankara agreed to re-route South Stream through Turkish waters. However, because of the EU's unwavering stance on competition law, Russia cancelled the "South Stream" pipeline project. Russia's Gazprom and Turkey's BOTAS signed a memorandum of understanding (MoU) on the construction of an alternative gas pipeline across the Black Sea, dubbed "Turkish Stream". This article discusses the development, challenges and future prospects for this pipeline.

However, because of the EU's unwavering stance on competition law, Russia cancelled the "South Stream" pipeline project. Russia's Gazprom and Turkey's BOTAS signed a memorandum of understanding (MoU) on the construction of an alternative gas pipeline across the Black Sea, dubbed "Turkish Stream".

South Stream is down, Turkish Stream is up

On December 1, 2014, during his visit to Turkey, Russian President Vladimir Putin announced the suspension of the South Stream project, for which he blamed the European Commission's unconstructive position. In light of the new situation, Russia would build another pipeline to Turkey along with an additional gas hub for the South European customers on the Turkish-Greek border in Turkey.[1] Turkey's BOTAS and Russian Gazprom signed a new Memorandum of Understanding on the construction of a new offshore natural gas pipeline across the Black Sea to the Turkey-Greece border with an annual capacity of 63 bcm. Of this total, some 15.75 bcm would be supplied to Turkey in the first phase, with the remaining 47 bcm destined for the planned gas hub near the Turkish-Greek border in the second phase.[2] Turkish Stream will consist of four parallel lines, each with a capacity of 15.75 bcm/y and each running 900 km across the Black Sea from

1 President of Russia, (2014) *News conference following state visit to Turkey*, Available at: en.kremlin.ru/events/president/news/47126#sel= (Accessed: 10 July 2016).

2 Gazprom, (2014), *New gas pipeline towards Turkey*, Available at: www.gazprom.com/press/news/2014/december/article208505/ (Accessed: 10 July 2016).

the Russian port of Anapa to Kiyikoy, in Turkish Thrace, and then as an underground pipe to Ipsala, at the border with Greece. Turkish Stream will be developed by South Stream Transport BV, a subsidiary of Gazprom registered in the Netherlands.[3]

The first string of Turkish Stream will carry 15.75 bcm/a of natural gas to Turkey's domestic market, replacing the current volume of the Trans-Balkan Pipeline's (TBP) after the termination of the transit agreement between Russia and Ukraine.[4] Russia exports 14 bcm/year of gas to Turkey through the TBP via Ukraine through Moldova, Romania and Bulgaria. However, the current gas flow via TBP is vulnerable to possible disruptions due to the ongoing crisis between Russia and Ukraine.[5] Turkish Stream would enable Russia to redirect its export route via Turkey, without affecting the current volumes. By rerouting gas exports to Turkey, Russia can eliminate the extra tariff costs incurred along the Ukraine, Moldova, Romania and Bulgaria route, which make the gas expensive for Turkey. Gas export to Greece and Bulgaria through Turkey will be cheaper.[6] TBP could be used in reverse mode to supply gas to Bulgaria, Greece and Romania from Turkey.[7] However, under its existing contracts, Gazprom is obliged to provide natural gas to consumers to the exact point, but not any place in the EU border. The contracts state that gas delivery for the Central and Eastern European countries shall be via Ukraine.[8] Gazprom has a "ship or pay" transit contract with Slovak Eustream SA until 2028, which obliges Gazprom to pay transit fees for a minimum of 50 bcm/y, whether or not the commodity is shipped. Thus, Russia's plans to bypass Ukrainian may cost Gazprom hundreds of millions of Euros in fees.[9]

However, the current gas flow via TBP is vulnerable to possible disruptions due to the ongoing crisis between Russia and Ukraine.

3 Cutler, R. (2016) 'The Turkish Stream Agreement and What It Means', *Intersection*, Available at: intersectionproject.eu/article/economy/turkish-stream-agreement-and-what-it-means (Accessed: 22 November 2016)

4 Chow, E. (2015) 'New Russian Gas Export Projects – From Pipe Dreams to Pipelines', *Centre for Strategic and International Studies*, Available at: https://www.csis.org/analysis/new-russian-gas-export-projects-—-pipe-dreams-pipelines (Accessed: 20August 2016).

5 Apa.az, (2014) *SOCAR Stala Monopolistom Na Postavki Gaza V Yujnuyu Evropu: Putin Voshel v Yujniy Gazoviy Koridor,* Available at: http://abc.az/rus/news/85236.html(Accessed: 20August 2016)

6 Tsafos, N. (2015) 'Don't Fear Turkey's Energy Power Play', *The National Interests*, Available at: nationalinterest.org/feature/dont-fear-turkeys-energy-power-play-11947?page=show(Accessed: 20August 2016)

7 Szymon, K. (2014) 'The unwanted gas pipeline: Russia has halted the construction of South Stream', *OSW*, Available at: www.osw.waw.pl/en/publikacje/analyses/2014-12-03/unwanted-gas-pipeline-russia-has-halted-construction-south-stream (Accessed: 20August 2016).

8 Milov, V. (2015) 'Obkhod Kiyeva: smojet li Rossiya otkazatsya ot gazovogo tranzita?', *Forbes Rossiya*, Available at: www.forbes.ru/mneniya-column/gosplan/286537-obkhod-kieva-smozhet-li-rossiya-otkazatsya-ot-gazovogo-tranzita(Accessed: 22August 2016).

9 Bauerova, L. (2015) 'Gas-Transit Deal Shows Cost to Russia of Bypassing Ukraine', *Bloomberg*, Available at: www.bloomberg.com/news/articles/2015-06-05/slovak-gas-transit-deal-shows-bypass-

The construction of Turkish Stream's first string is much easier from a legal point of view, because neither Russia nor Turkey belongs to the EU, and so neither is bound by the EU's "Third Energy Package" (TEP) rules. Otherwise, Russia would face same obstacle as it did in South Stream.[10]

The EU and the US position on South Stream and Turkish Stream

Between 2008 and 2010, Russia signed intergovernmental agreements (IGA) with Bulgaria, Serbia, Hungary, Greece, Slovenia, Croatia, and Austria on the implementation South Stream. Russia was relying on its close relations and bilateral energy agreements with EU member states to prevail over EU legislation against Gazprom's gas monopoly in Europe. However, the EU was unwilling to enable Member States' preferential relationship with Russia on South Stream, which was dividing them on the EU's common energy policy.

The EU demanded revision of those IGAs, which Russia could not agree with. Directive 2009/73/EC of the European Parliament and of the Council concerning common rules for the internal market in natural gas defines two major principles for the development of new gas infrastructures: 1) unbundling between the suppliers and the owners of infrastructure; and 2) granting of third party access to the transmission and distribution systems.[11] Therefore, Moscow shifted from South Stream to Turkish Stream because of the EU's opposition to the IGAs. The EU's position was based on the non-compliance of those IGAs with the EU's TEP rules (regarding "unbundling" and "third party access"), according to which, a single gas supplying company cannot own/control the pipeline and transport gas through it simultaneously.[12] Although Serbia is not an EU member, it is bound to implement EU energy regulations through its Energy Community membership.[13]

---

ing-ukraine-will-cost-russia (Accessed: 21August 2016).

10 Gurbanov, I. (2015) 'In the Search of New Partners: Putin's Turkic Stream for Turkey', *Natural Gas Europe*, Available at: http://www.naturalgaseurope.com/new-partners-putin-turkish-stream-turkey (Accessed: 19August 2016).

11 European Parliament and of the Council, (2009) *Directive 2009/73/ECof 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC*, Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:en:PDF(Accessed: 16August 2016).

12 European Union, (2016) *Market legislation*, Available at: ec.europa.eu/energy/node/50 (Accessed: 11August 2016).

13 Gurbanov, I. (2014) 'Who Buried the South Stream and Why? The EU or Russia?', *The GW Post*, Available at: https://thegwpost.com/2014/12/18/who-buried-the-south-stream-and-why-the-eu-or-russia/(Accessed: 12August 2016).

Judy Dempsey, Senior Associate from Carnegie Europe, wrote that the demise of South Stream would speed up the diversification of Europe's energy sources, and encourage transparency in the energy sector over prices and contracts.[14] Although Brussels considered it as a diplomatic victory, the European transit countries (Serbia, Bulgaria and Hungary) were considered the losers in terms of potential investment, job opportunities and price discounts, as well as an alternative supply route in case of supply disruptions through Ukraine.[15] According to Keith Johnson, "Putin seemed to acknowledge that European sanctions torpedoed the financial prospects of the project".[16] Fyodor Lukyanov, Editor-in-Chief of the "Russia in Global Affairs" magazine, writes that, Nord Stream was implemented because of political resources and strong position of Germany within the EU, through which former wanted to ensure itself from possible transit risks.[17] The partners and stakeholders of South Stream were unable to circumvent EU law, though German Wintershall (Nord Stream stakeholder) was participating in South Stream as well.

Although Brussels considered it as a diplomatic victory, the European transit countries (Serbia, Bulgaria and Hungary) were considered the losers in terms of potential investment, job opportunities and price discounts, as well as an alternative supply route in case of supply disruptions through Ukraine.

It is important to note that Turkish Stream will still come up against the TEP rules if Russia decides to export further beyond Turkey-Greece border, since Greece is an EU member state.[18] Any failure of Turkish Stream would be a major threat to Russian economy. However, the EU regards Turkish Stream as "an attempt to thwart the Southern Gas Corridor."[19] EU Vice-President, Maroš Šefčovič, has taken a clear stance against Turkish Stream, questioning the project's viability and citing unresolved divergences between the EU and Russia on TEP.[20] Šefčovič stated that

14 Dempsey, J. (2014) 'Europe's Energy Strategy and South Stream's Demise', *Carnegie Europe*, Available at: carnegieeurope.eu/strategiceurope/?fa=57386 (Accessed: 11July 2016).

15 Kahn, M. and Tsolova, T. (2014) 'Sinking of Kremlin gas project leaves south-east Europe high and dry', *Reuters*, Available at: uk.reuters.com/article/uk-russia-europe-pipeline-losers-idUKKCN0JG12W20141202 (Accessed: 10July 2016).

16 Johnson, K. (2014) 'Putin's Pipe Dreams', *Foreign Policy*, Available at: foreignpolicy.com/2014/12/02/putins-pipe-dreams-south-stream-russia-turkey-natural-gas/ (Accessed: 11July 2016).

17 Lukyanov, F. (2014), 'Vostochnaya Politika - Teper Rossiyskaya', *RossiyavGlobalnoyPolitike*, Available at: www.globalaffairs.ru/redcol/Vostochnaya-politika---teper-rossiiskaya-17160 (Accessed: 10July 2016).

18 Gurbanov, 'In the Search of New Partners'.

19 Pourzitakis, S. (2015) 'Turkish Stream: The energy security dilemma of the project', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/turkish-stream-energy-security-dilemma-24844 (Accessed: 15July 2016).

20 Levoyannis, C. (2015) 'Greece: A Backdoor to Fortress Europe: The Fallout of Tsipras' Visit to Moscow', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/greece-tsipras-vist-to-moscow-23129 (Accessed: 10July 2016).

the "decision on construction of Turkish stream should be made taking into account the views of the EU".[21] The EU Competition Commissioner Margaret Vestager did not exclude the examination of Gazprom's talks with the European countries through which Turkish Stream could pass in regard to compliance with EU antitrust legislation.[22] "All companies that operate in the EU market - no matter if European or not - have to play by EU rules," she said.[23] If the EU ill demonstrate same stance on energy regulations, then only first string of Turkish Stream will be built, which will make it a "Blue Stream-like" pipeline between Turkey and Russia.[24]

In May 2015, the US State Department's special energy representative Amos Hochstein, during his visit to Athens, urged Greece to embrace a [Southern Gas Corridor] project that would link Europe to natural gas supplies from Azerbaijan, which would reduce the EU's dependence on Russian gas supplies, rather than agree to a [Turkish Stream] gas pipeline pushed by Moscow. Hochstein said that "[this] is not an economic project, but is only about politics [and] So let's put that to the side and focus on what's important - the [Trans-Adriatic Pipeline] pipeline [to which] we already agreed."[25] He added that "The SGC through Greece would enhance its longer-term goals of diversification"[26], and that "TAP will draw in Greece €1.5 billion of foreign investment."[27] In the SGC Advisory Council's meeting in Baku in February 2016, Amos Hochstein noted that "South Stream, Turk Stream, Nord Stream, all the other streams are simply restatements of political projects that have questionable economic value."[28] The US

21 Rbc.ru, (2015), *Turetskiy Gambit: Kak Silno Riskuet Gazprom s Novim Gazoprovodom,* Available at: www.rbc.ru/economics/25/05/2015/555da0219a794742870f398b (Accessed: 11July 2016).

22 Serov, M., Tretyakov, P., Trentyeva, A., (2015) 'Evrokomissiya ne iskluchayet antimonopolnogo rassledovaniya po 'Turetskomy Potoku'', *Vedomosti*, Available at: www.vedomosti.ru/business/articles/2015/04/30/evrokomissiya-ne-isklyuchaet-antimonopolnogo-rassledovaniya-po-turetskomu-potoku (Accessed: 11July 2016).

23 Cohen, A. (2015) 'Will Greece–Russia Gas Deal Threaten EU Energy Security?', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/greece-russia-gas-deal-threaten-eu-energy-security-23487 (Accessed: 10July 2016).

24 Gafarli, O. (2016) 'Turkey and Russia Work on Normalizing Relations, Sign Agreement on Scaled-Back Turkish Stream Pipeline', *The Jamestown Foudation, Eurasia Daily Monitor Volume*: 13 Issue: 169, Available at: https://jamestown.org/program/turkey-russia-work-normalizing-relations-sign-agreement-scaled-back-turkish-stream-pipeline/ (Accessed: 11October 2016).

25 Rt.com, (2015) *US urges Greece to reject Turkish Stream, focus on Western-backed project*, Available at: https://www.rt.com/business/256981-greece-russia-us-gas/(Accessed: 12July 2016).

26 Kanter, J. (2015) 'U.S. Urges Greece to Reject Russian Energy Project', *The New York Times,* Available at: www.nytimes.com/2015/05/09/business/international/greece-us-russia-energy-pipeline.html?_r=2 (Accessed: 15August 2016).

27 Caspian Barrel, (2015) *Voyna troboprovodov: v delo nachalo vmeshivatsya SSHA*, Available at: caspianbarrel.org/?p=30621 (Accessed: 15August 2016).

28 Huseynaliyev, F. (2016) 'Gas Without Political Impurities', *Region Plus*, Available at: www.region-

is also worried about continuous delays of the Interconnector-Greece-Bulgaria project, the result of slow decision-making processes in Greece and Bulgaria.[29]

Turkish Stream versus Southern Gas Corridor[30]

"Turkish Stream" is planned to terminate in the Ipsala district of Turkey, near the Greek border, the also the planned endpoint of the Trans-Anatolian Pipeline (TANAP). The key question is whether Turkish Stream could be a competitor for either the TANAP or Trans-Adriatic Pipeline (TAP), which envisage the delivery of 16 bcm of Azerbaijani gas to Turkey and Europe by 2018 and 2020 respectively. The important consideration is whether the termination of both pipelines at the same location will create competition in terms of market share, given the possible expansion capacity of both TAP (from 10 to 20 bcm/a) and TANAP (from 16 to 23/31 bcm/a). There were similar tensions between the South Stream and Nabucco projects; while previously Nabucco was considered an alternative to South Stream, now Turkish Stream may play the same role in relation to TANAP/TAP.

In fact, theoretically Russia can export its gas via TAP from the Turkish Stream toward Europe, without Gazprom's presence in the TAP Consortium, and without breaching the TEP rules. Specifically: 1) Russia has no stake in TAP; 2) in the first stage, only 50% of TAP's total final capacity will be used for 10 bcm/a, and can expand its capacity up to 20 bcm/a (100% of total capacity) in the second stage; 3) the EU Commission's regulation left 50% of TAP's total (final) capacity open for third party access (TPA) for the expansion capacity; 4) the EU regulation also states that upon request of a third party, TAP is obligated to construct additional entry/exit points in Greece to receive gas from non-Shah-Deniz sources.[31] Thus, Russia can reserve a space in the TAP by requesting TPA to transport its gas

In fact, theoretically Russia can export its gas via TAP from the Turkish Stream toward Europe, without Gazprom's presence in the TAP Consortium, and without breaching the TEP rules.

plus.az/en/articles/view/5867 (Accessed: 15November 2016)

29 Natural Gas Europe, (2015) *Gas Diplomacy in the Balkans on the Move*, Available at: www.naturalgaseurope.com/gas-diplomacy-in-the-balkans-on-the-move-25129 (Accessed: 7 September 2016)

30 'Southern Gas Corridor' has four key components: Azerbaijan's Shah Deniz field's stage II, South Caucasus Gas Pipeline's extension (along Baku-Tbilisi-Erzurum pipeline); Trans-Anatolian Pipeline (from Turkey-Georgia border to Turkey-Greece border); Trans-Adriatic Pipeline (through Greece, Albania to Italy).

31 European Commission, (2013) *Decision of 16.5.2013 on the exemption of the Trans Adriatic Pipeline from the requirements on third party access, tariff regulation and ownership unbundling laid down in Articles 9, 32, 41(6), 41(8) and 41(10) of Directive 2009/73/EC*, pg.2, Available at: https://ec.europa.eu/energy/sites/ener/files/documents/2013_tap_decision_en.pdf (Accessed: 2August 2016)

(as a supplier, not an owner) at the second stage of gas delivery, or request the construction of additional entry/exit point for additional compressors at the expansion capacity of TAP. If Russia does not own the infrastructure, but simply sells its gas from the Turkey-Greece border, its actions will not contravene TEP rules. However, the Shah-Deniz Consortium has already secured 10 bcm of Azerbaijani gas with a 25-year-contract for the first stage of gas delivery via TAP. Under this contract, the Consortium has already secured 100% of TAP's initial capacity. The Consortium has been granted a TPA exemption by the EU Commission for 100% of initial capacity (for 10 bcm) of the pipeline for 25 years. This means that Russian gas cannot be transported via TAP for at least the next 25 years, unless there are either significant market or geopolitical changes, or sufficient gas demand to drive expansion. The long-term contracts of Shah-Deniz Consortium together with the relevant provisions of EU law make this option unlikely.[32]

TAP's expansion would enable Gazprom to deliver a maximum of 10 bcm/y, while the Turkish Stream's second string was to pump 15.75 bcm/y. The injection of Russian gas into TAP could create rivalry between Russian and Azerbaijani gas in terms of volume, and Russia gas could block the prospects for additional volumes of Azerbaijani gas in the TAP's stage II. Azerbaijan is expected to increase its gas flow via Azeri-Chirag-Guneshli, Umid, Babek, Shafag-Asiman, Zafar-Marshal, Absheron, Bulla-Deniz fields and Shah-Deniz stage III. Azerbaijan's increased gas volume can be distributed for other Balkan countries via Interconnector-Greece-Bulgaria (IGB) to Bulgaria and the Ionian-Adriatic Pipeline (from Albania) to Montenegro, Bosnia-Herzegovina and Croatia in the second stage.[33] However, the MoU between Gazprom, Edison and DEPA could divert Bulgaria's focus away from the IGB (developed by ICGB AD), which is supposed to receive Azerbaijani gas from Shah-Deniz II.[34] This is because Italian Edison and Greek DEPA are both shareholders of "IGI Poseidon" joint venture, which is also a 50% shareholder in the

32 Gurbanov, I. (2015) 'Repercussions of Turkish Stream for the Southern Gas Corridor: Russia's New Gas Strategy', *Caspian Centre for Energy and Environment,* No.15, Available at: http://ccee.ada.edu.az/files/articles/1956/CCEE%20Policy%20Brief-15--final.pdf (Accessed: 3May 2016).

33 TAP AG, (2013) 'Albania, Bosnia and Herzegovina, Croatia and Montenegro sign MoU supporting TAP and IAP', *official website of TAP project*, Available at: www.tap-ag.com/news-and-events/2013/05/23/albania-bosnia-and-herzegovina-croatia-and-montenegro-sign-mou-supporting-tap-and-iap (Accessed: 12August 2016).

34 Roberts, J. (2016) 'Bulgaria's Hub Ambitions and Revived South Stream', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/bulgarias-ambitions-28400 (Accessed: 12September 2016).

"ICGB AD" JV.[35]

According to energy consultant Mikhail Krutikhin, the construction of TAP is a painful blow to Gazprom. As Azerbaijani gas will flow to Italy via this route, it will be able to replace half of the volume that Italy receives from Gazprom. Without the EU's consent, Russia invested in bilateral agreements and spent billions of dollars on South Stream, which at the final stage proved to be inconsistent with EU regulations and therefore illegal. Along with the political ambiguity of the Turkish Stream, Russia is seeking to resurrect the long-discarded Poseidon project. Although the initial volume of TAP is not comparable to what Russia can supply, with flow of Turkmen and Iraqi gas in the future, TAP could play a significant role in the EU's energy diversification strategy.[36]

Without the EU's consent, Russia invested in bilateral agreements and spent billions of dollars on South Stream, which at the final stage proved to be inconsistent with EU regulations and therefore illegal.

According to Vitaly Baylarbayov, deputy Vice President of SOCAR, "to imagine that Turkish Stream could ruin the SGC is nonsense. Unlike the Gazprom's project, the SGC is about billions of dollars already being invested".[37] SOCAR Vice President Elshad Nasirov had earlier said that "Turkish Stream is not a rival to the SGC. If the Turkish Stream is constructed, we will be able to use its extension," given future increases in Azerbaijani gas production via the next generation of gas fields.[38] Turkish Foreign Minister Mevlut Cavusoglu has offered to connect the Turkish Stream pipeline to TANAP, since Turkey will buy 15.75 bcm/y of Russian gas via Turkish Stream, meaning that the remaining volume can be exported via TANAP (by connecting it to the Turkish Stream).[39]

35 ICGB AD, 'The shareholders of the Interconnector-Greece-Bulgaria', *official website of IGB project,* Available at: http://www.icgb.eu/about/shareholders; IGI Poseidon, 'The Shareholders of the IGI Poseidon', *official website of IGI Poseidon,* Available at: http://www.igi-poseidon.com/en/igb (Accessed: 12September 2016).

36 Krutikhin, M. (2016) 'Gazoprovod TAP: Chto on oznachaet dlya Gazproma', *Carnegie Moscow*, Available at: carnegie.ru/commentary/2016/05/19/ru-63625/iyfv (Accessed: 23November 2016).

37 Gotev, G. (2015) 'Interview with Vitaly Baylarbayov, SOCAR's deputy vice president - 'SOCAR: It is impossible to stop the Southern Gas Corridor', *Euractiv*, Available at: www.euractiv.com/section/europe-s-east/interview/socar-it-is-impossible-to-stop-the-southern-gas-corridor/ (Accessed: 12September 2016).

38 Trend.az, (2015) *Capacity of Turkish Stream can be useful to Azerbaijan - SOCAR*, Available at: en.trend.az/business/energy/2408950.html (Accessed: 4 August 2016).

39 Abbasova, N. (2016) 'Ankara offers to connect Turkish Stream, TANAP',*Azernews,* Available at: www.azernews.az/oil_and_gas/100692.html(Accessed: 4 August 2016).

Greece - a key country for Turkish Stream's extension

Technically, Greece is the optimal country to receive Russian gas from the Turkey-Greece border and to deliver it onwards to Europe. Both current and previous Greek energy ministers have been in favor of the construction of the "Greek-Russian gas pipeline" as an extension of Turkish Stream to Greece.[40,41]

In the light of the EU-Russia standoff, Greek Prime Minister Alexis Tsipras paid a visit to Moscow on April 8 2015. He and Vladimir Putin discussed Greece's role in the "Turkish Stream" project,[42] as well as the creation of a Joint Venture (JV) for the construction of the Turkish Stream's extension to Greece and Italy to transport Russian gas to the Balkans, Italy, and Central Europe.[43] Vladimir Putin said that the financing of the project still needed to be agreed upon between Russia and Greece.[44] To that end, the Russian side pledged financial support for the Greek government and private companies that will be involved in the project.[45] Regardless of warnings from the US and the EU to against joining the Turkish Stream project, Alexis Tsipras signed am MoU with Gazprom during a visit to St Petersburg on June 18 2015. The agreement, worth $2.3 billion, will set up a JV for the construction of the Turkish Stream's extension through Greece. The extension has been dubbed the "South European Gas Pipeline", and will allow the transit of 47 bcm of Russian gas further into Europe.[46] Russia's development bank Vnesheconombank would own 50 percent of the €2 billion link and provide all financing, and Greece would own the rest.[47] Both countries pledged to as-

Regardless of warnings from the US and the EU to against joining the Turkish Stream project, Alexis Tsipras signed am MoU with Gazprom during a visit to St Petersburg on June 18 2015.

40 Rt.com, (2015) *Turkish Stream pipeline priority for Greece, despite EU pressure – ex-minister*, Available at: https://www.rt.com/business/310283-greece-russia-pipeline-europe/ (Accessed: 4 August 2016).

41 Sputnik, (2015), *US Opposes Extension of Russia's Turkish Stream Pipeline – Greek Minister*, Available at: sputniknews.com/business/20150529/1022727025.html (Accessed: 8 August 2016).

42 Sputnik, (2015) *Greece Could Earn Hundreds of Millions of Euros From Turkish Stream - Putin*, Available at: sputniknews.com/business/20150408/1020618884.html (Accessed: 10 August 2016).

43 Rferl.org, (2016) *Greek Prime Minister To Meet With Medvedev*, Available at: www.rferl.org/content/russia-greece-putin-tsipras-talks/26944917.html (Accessed: 28 August 2016).

44 Michalopoulos, S. (2015) 'Tsipras: 'Turkish Stream' will have another name on Greek territory', *EurActiv*, Available at: www.euractiv.com/section/global-europe/news/tsipras-turkish-stream-will-have-another-name-on-greek-territory/(Accessed: 28 August 2016).

45 1prime.ru, (2015), *Putin: RF budet finasirovat prodoljenie v Grecii Turetskogo Potoka*, Available at: 1prime.ru/energy/20150507/809728096.html (Accessed: 20 August 2016).

46 Kardaś, S. and Łoskot-Strachota, A. (2015) 'Gazprom's call for proposals: how many new gas pipelines to Europe?', *The Centre for Eastern Studies*, Available at: www.osw.waw.pl/en/publikacje/analyses/2015-06-24/gazproms-call-proposals-how-many-new-gas-pipelines-to-europe(Accessed: 21 July 2016).

47 Mazneva, E. and Chrepa, E. (2015) 'Russia Strengthens Greece Ties With Gas Link Deal to Eu-

sist a proposed 50-50 joint venture of Russian and Greek investment banks for the feasibility study for the "South European Gas Pipeline".[48] Greece is hoping to start discussions with the European Commission for the construction of the South-European gas pipeline, and hopes also to involve Italy in the negotiations.[49]

Interconnector-Turkey-Greece-Italy

Greece had previously expressed its interest to transport Russian gas to Europe via the Interconnector-Turkey-Greece-Italy (ITGI), as an extension of the Turkish Stream.[50] The extension of the Turkish Stream would be divided into two routes, with first string passing through Greece to Italy (ITGI) and second string running northwards - via the Former Yugoslav Republic of Macedonia (FYROM), Serbia, Hungary - to Baumgarten, Austria. In February 2016, Russia's Gazprom, Italian Edison SpA, and Greece's DEPA signed an MoU in Rome on natural gas deliveries across the Black Sea from Russia via third countries to Greece and from Greece to Italy across the Ionian Sea via the ITGI/Poseidon pipeline.[51] The ITGI/Poseidon project was shelved in 2012 after it was opted out to Trans-Adriatic Pipeline (TAP) following the selection of latter pipeline. However, Bulgaria and Turkey were missing from the MoU. France's EDF and Italy's Edison expressed their unofficial support for the ITGI.[52]

The extension of the Turkish Stream would be divided into two routes, with first string passing through Greece to Italy (ITGI) and second string running northwards - via the Former Yugoslav Republic of Macedonia (FYROM), Serbia, Hungary - to Baumgarten, Austria.

The Interconnector-Turkey-Greece-Italy (ITGI) pipeline comprises the following sections: Turkish grid (operational, needs to be upgraded for extra gas volume); Interconnector Turkey-Greece/ITG (operational since 2007; transport capacity - 11.5 bcm/y); Interconnector Greece-Italy/IGI project (capacity 12 bcm/y). The IGI pipeline includes: IGI Onshore (600 km onshore pipeline in the Greek territory, to be developed by Greek Transmission System Operator/DESFA) and IGI Poseidon (200

rope', *Bloomberg*, Available at: www.bloomberg.com/news/articles/2015-06-19/russia-clinches-greece-accord-to-build-gas-pipeline-to-europe (Accessed: 21 August 2016).

48 Krutikhin, M. (2016) 'Turkish Stream: Imaginary and Real', *Bulgaria Analytica*, Available at: bulgariaanalytica.org/en/2016/09/14/турски-поток-илюзия-и-реалност/ (Accessed: 28 October 2016).

49 Komrakov, A. (2016) 'Perspektivi 'Turetskogo Potoka' zavisyat ot Evrokomissii', *Nezavisimaya*, Available at: www.ng.ru/economics/2016-09-12/4_stream.html (Accessed: 28 November 2016).

50 Natural Gas Europe, (2015) *Interconnector Greece-Bulgaria in the Spotlight*, Available at: www.naturalgaseurope.com/interconnector-greece-bulgaria-spotlight (Accessed: 28 August 2016) .

51 Gazprom, (2016) *Gazprom, DEPA and Edison sign Memorandum of Understanding*, Available at: www.gazprom.com/press/news/2016/february/article267671/ (Accessed: 28 August 2016).

52 Michaletos, I. (2015) 'The Turkish Stream Mystery', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/turkish-stream-future-prospects-development-26795 (Accessed: 28 August 2016).

km offshore pipeline across the Ionian Sea, under development by IGI Poseidon SA, a joint venture between Italian Edison and Greek DEPA).[53] The ITG from Karacabey (Turkey) to Komitini (Greece), launched in 2005, was intended to enable third suppliers to bring additional natural gas to Greece. The construction of the Greece-Italy undersea pipeline (Poseidon) is an extension of ITG.[54] The Poseidon pipeline has been included in the EU's Project of Common Interest (PCI) list and the project has received all the necessary authorizations for construction and operation and third party access exemption for 25 years.[55] ITGI shareholders Edison and DEPA planned to boost the throughput capacity of pipeline from planned initial 12 bcm/y up to 20 bcm/y (equal to TAP's maximum capacity in the second stage).[56]

Gazprom's preference for ITGI was linked with the fact that both Italy and Greece are long-term importers of Russian gas and both Edison and DEPA have shares in ITGI/Poseidon. The final plan was to connect the ITGI and Turkish Stream in the Turkey-Greece borders.[57] The Greek government favors the ITGI for three reasons: 1) it bypasses Albania as a transit country, which requires more pipelining in Greek territory, and thus more investment; 2) Greece will be able to use Poseidon to receive Mediterranean gas;[58] 3) Greece does not own any shares in the TAP project, and its previous demands for a stake in TAP, revision of transit fees, and price discounts did not yield positive responses from the SDC.[59]

Vladimir Socor, a senior research fellow at the Jamestown Foundation, writes that, "Geography and capacity make ITGI-Posei-

53 Edison, 'ITGI pipeline', *the official website of Edison company,* Available at: http://www.edison.it/en/itgi-pipeline (Accessed: 28 August 2016).

54 Gurbanov, I. (2015) 'Gas Policy of Greece under New Government: Russia, Turkic Stream and Diversification', *Newtimes.az*, Available at: newtimes.az/en/views/3406/ (Accessed: 20 August 2016).

55 European Commission, (2016) *Regulation (EU) 2016/89 of 18 November 2015 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of Projects of Common Interest*, Available at: eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL_2016_019_R_0001&from=EN; Poseidon, *Development status of Poseidon*, www.igi-poseidon.com/en/poseidon (Accessed: 28 August 2016).

56 Mustafayeva, K. (2016) 'Gazprom, Edison, Depa Renew South Stream Vows', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/gazprom-proposes-a-third-southern-gas-project-o-eu-28344 (Accessed: 28 September 2016).

57 Vukmanovic, O.& Jewkes, S. (2016) 'Pipe dreams: Gazprom courts southern Europe to exclude Ukraine', *Reuters*, Available at: www.reuters.com/article/gazprom-europe-gas-idUSL8N16C3N1(Accessed: 28 August 2016).

58 Roberts, 'Bulgaria's Hub Ambitions'.

59 Liaggou, C. (2015) 'Athens to ask for TAP stake, transit fees', *Ekathimerini*, Available at: www.ekathimerini.com/167221/article/ekathimerini/business/athens-to-ask-for-tap-stake-transit-fees (Accessed: 23 August 2016).

don almost a mirror image of TAP."[60] He also states, "Gazprom will use it to promote a Russian gas transit route and obstructing the [TAP] via Greece to Italy", like the previous South Stream was meant to block the Turkmen gas flow to Europe and the Nabucco project. Moscow was seeking to confuse and divide EU countries through promises of "gas hub" and "intergovernmental contracts"[61] According to John Roberts, "the one of the key reasons for raising the prospect of an ITGI/Poseidon is simply to cause damage to current EU plans to develop the SGC", though the technical, financial, feasibility and cost efficiency of ITGI/Poseidon is still under question.[62] However, the Turkey-Greece section of ITGI is operated by DESFA as part of the national gas transmission system in Greek territories.[63] Since SOCAR seeks to purchase 49% of DEFSA, the company could potentially control Russian gas flow through ITGI, if it were realized.

TESLA - a new branch for Russian gas to Europe

It is also possible to transport Russian gas via a new pipeline through FYROM and Serbia to Hungary and Austria (Baumgarten hub) after gas entered Greece through Turkish Stream's extension or via ITGI. This proposal was put forth by Hungarian Premier Minister Victor Orban,[64] and the infrastructure was dubbed "Tesla pipeline".[65] The 1,400 km-long "Tesla", which will have a capacity of 27 bcm/y, is expected to be completed in 2019.[66] From Baumgarten hub, the northern regions of Italy and Germany can be supplied via the Tesla pipeline.[67] The route

60 Socor, V. (2016) 'Gazprom Promotes Greece–Italy Transit Route to Obstruct European Corridor', *The Jamestown Foundation, EDM*, Vol.13, Issue 43, Available at: www.jamestown.org/single/?tx_ttnews%5Btt_news%5D=45166&tx_ttnews%5BbackPid%5D=7&cHash=b33acfbeaa26e3723cb89d1c845ead8f#.V8A4YvmLSUn (Accessed: 25 August 2016).

61 Socor, V. (2016) 'Turkey-Greece-Italy Interconnector: South Stream's Latest Avatar?', The Jamestown Foundation, EDM, Vol.13, Issue 44, Available at: www.jamestown.org/single/?tx_ttnews%5btt_news%5d=45171&tx_ttnews%5bbackPid%5d=7&cHash=b90b8919f10455659452a72607c0ba88#.V8A4ofmLSUn (Accessed: 25 August 2016).

62 Roberts, 'Bulgaria's Hub Ambitions'.

63 Thanos Dokos & Theodoros Tsakiris, (2012) 'A Strategic Challenge: The role of Greece in Europe's Southern Gas Corridor Strategy', *Hellenic Foundation for European & Foreign Policy*, p.18, Available at: www.eliamep.gr/wp-content/uploads/2012/02/policy-paper.pdf (Accessed: 25 August 2016).

64 Natural Gas Europe, (2015) *The Resurrection of South Stream*, Available at: www.naturalgaseurope.com/the-resurrection-of-south-stream-22337(Accessed: 25 August 2016)

65 Geropoulos, K. (2015) 'Greece could funnel gas through Italy', *New Europe*, Available at: https://www.neweurope.eu/article/tap-on-tap-russias-turkish-stream-picks-up-steam/(Accessed: 25 August 2016).

66 Daily Sabah, (2015) *EU approves construction of link roads for Turkish Stream*, Available at: www.dailysabah.com/energy/2015/11/20/eu-approves-construction-of-link-roads-for-turkish-stream(Accessed: 25 August 2016)

67 Natural Gas Europe, (2015) *The Interconnector Greece-Italy is Back on Track*, http://www.naturalgaseurope.com/itgi-back-on-track-26367 (Accessed: 25 August 2016).

of "Tesla" resembles that of "South Stream" pipeline, although it excludes Bulgaria, but gives an enhanced role to Greece and FYROM.[68]

On 7 April 2015, Hungary, Serbia, Macedonia, Greece, and Turkey signed a declaration on the formation of a working group to facilitate natural gas deliveries to their markets, including the participation in the Turkish Stream project. The representatives of five countries expressed their intent "to create a commercially viable option of route and source diversification for delivering natural gas from Turkey through their territories to the countries of Central and South Eastern Europe".[69] It called for the EU to co-fund related infrastructures and the interconnecting the natural gas infrastructures of their countries.[70] Thereafter, in August 2015, Hungary, Serbia, Macedonia and Greece discussed the possibility of signing a MoU for the construction of the so-called "Tesla" pipeline, in order to realize it by 2019. The project had been already included in the EU's PCI list.[71]

However, the "Tesla" project only exists on paper as a non-binding Memorandum of Understanding, and it may experience the fate of "South Stream", due to TEP rules.

However, the "Tesla" project only exists on paper as a non-binding Memorandum of Understanding, and it may experience the fate of "South Stream", due to TEP rules. Moreover, it will be hard to find non-Russian financing for the pipeline, writes Robert Cutler, a senior researcher in the Institute of European, Russian and Eurasian Studies at Carleton University.[72] But even if the "Turkish stream" is realized, the Tesla will have a rival – the Eastring pipeline (also included in EU's PCI list). If Russia suspends gas transit through Ukraine, the Eastring project can help Ukraine.[73] The "Eastring" project was proposed by Slovak gas pipeline operator Eustream as a means of linking Bulgaria, Romania, Hungary, Slovakia, and Balkan states by modernizing their gas infrastructures to bring western European gas to them. With its 20 bcm/y capacity, the Eastring project is scalable up to

68 Natural Gas Europe, (2015) *Greece Seemingly Gets Closer To Turkish Stream*, Available at: www.naturalgaseurope.com/greece-moves-towards-turkish-stream-23013 (Accessed: 25 August 2016).

69 Official website of Greece's MFA, (2015) *Joint Declaration on the Strengthening of Energy Cooperation,* Available at: www.mfa.gr/en/current-affairs/top-story/joint-declaration-on-the-strengthening-of-energy-cooperation-budapest-april-2015.html (Accessed: 22 June 2016).

70 Rettman, A. (2015) 'Greece and Hungary sign up to Russia gas pipeline', *EUobserver*, Available at: https://euobserver.com/energy/128261 (Accessed: 22 June 2016).

71 Serov, M. and Peschinskiy, I. (2015) 'Prodlenie'Turetskogo Potoka'v Evropeobsudyat osenyu', *Vedemosti*, Available at: https://www.vedomosti.ru/business/articles/2015/08/19/605369-balkanskie-strani-osenyu-hotyat-dogovoritsya-o-prodlenii-turetskogo-potoka-v-evrope (Accessed: 3 July 2016).

72 Cutler, R. (2015) 'Russia Turkey Energy Conflict Keeps Azerbaijan Gas on Target for Europe', *Eurasian Security*, Available at: www.eurasiansecurity.com/energy-security-geopolitics/russia/russia-turkey-energy-conflict-azerbaijan-europe/ (Accessed: 3 July 2016)

73 Serov, M. and Peschinskiy, I..

40 bcm, and might challenge the extensions of Turkish Stream, carrying even Azerbaijani gas via interconnectors.[74]

Evolving Russia-Turkey relations

In July 2015, Gazprom halved the capacity of Turkish Stream pipeline from the original 63 bcm/a to 32 bcm, because of the expansion of its Nord Stream gas pipeline from Russia to Germany.[75] "The rest of the amount will flow to the EU via the "Nord Stream-2", [therefore], southern direction is now no longer necessary for the construction of gas transportation capacities more than 32 bcm/y," said Alexei Miller.[76] In September 2015, Turkey's Energy Ministry deputy undersecretary Sefa Sadik Aytekin said that "talks with Russia on Turkish Stream are frozen, because of Russia's hard-line attitude on gas price discount, which is the perquisite for Turkish Stream talks."[77] Shortly thereafter, Gazprom announced it was in agreement with Turkish partners that they would only be working on the first line [between Russia and Turkey] of Turkish Stream.[78] In October 2015, Alexander Novak said "Moscow will wait for the formation of a new government for the granting of construction licenses for two of the four-stages of Turkish Stream", because Turkey has thus far only awarded licenses for the first line.[79] However, after the "jet incident", when Turkey shot down a Russian fighter jet near the Turkey-Syria border, Russian Energy Minister Aleksandr Novak announced on November 24, that "negotiations on Turkish Stream have been suspended."[80] Turkish President Erdogan said that "It was not Russia, but Turkey [which] froze the Turkish Stream project, [even] before the crisis."[81]

However, after the "jet incident", when Turkey shot down a Russian fighter jet near the Turkey-Syria border, Russian Energy Minister Aleksandr Novak announced on November 24, that "negotiations on Turkish Stream have been suspended."

74 Gurbanov, I. (2015) 'Resurrection of Nabucco Pipeline: Real or Myth?', *Newtimes.az,* Available at: newtimes.az/en/views/3485/ (Accessed: 3 July 2016).

75 Lossan, A. (2015) 'Is Gazprom cutting the Turkish Stream in half?', *Russia Beyond the Headlines*, Available at: rbth.com/business/2015/07/17/is_gazprom_cutting_the_turkish_stream_in_half_47821.html (Accessed: 4 July 2016).

76 VestiEkonomika, (2015) *Turtsiya zaprosila 32 mlrd kub.m po Turetskomu Potoku*, Available at: www.vestifinance.ru/articles/63119 (Accessed: 3 July 2016).

77 Tinas, M. (2015), 'Turkish Stream Talks will Get Boost after Elections', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/turkish-stream-talks-will-get-boost-post-elections-ali-riza-alaboyun-25722 (Accessed: 5 July 2016).

78 Novinite, (2015) *Gazprom Says Will Build Only Russia-Turkey Leg of Turkish Stream*, Available at: www.novinite.com/articles/170713/Gazprom+Says+Will+Build+Only+Russia-Turkey+Leg+of+Turkish+Stream (Accessed: 6 July 2016)

79 Tinas, 'Turkish Stream Talks will Get Boost after Elections'.

80 Rt.com, (2015) *Russia halts Turkish Stream project over downed jet*, Available at: https://www.rt.com/business/324230-gazprom-turkish-stream-cancellation/ (Accessed: 10 July 2016).

81 Trend.az, (2015) *Not Russia, but Turkey froze Turkish Stream, Erdogan says*, Available at: en.trend.

After several months of tension, on June 27, Russian President Vladimir Putin received a letter from President of Turkey Recep Tayyip Erdoğan, expressing Turkey's willingness to restore ties with Russia.[82] Immediately, Gazprom spokesperson Sergey Kupriyanov announced his company's openness to dialogue with Ankara on the construction of the "Turkish Stream" natural gas pipeline.[83] Turkish Prime Minister Binali Yıldırım also expressed Ankara's support for the project.[84] Russian Deputy Prime Minister Arkady Dvorkovich said that Turkey confirmed its willingness to resume dialogue with Russia on the construction of Turkish Stream.[85] Energy Minister Alexander Novak reported that Russia has submitted to Turkey its road map for building the Turkish Stream to sign an intergovernmental agreement (IGA) in October 2016 to launch works on the first string with 15.75 bcm/y capacity. The working group would be established to negotiate the draft of IGA.[86]

On October 10, Turkey and Russia signed an IGA on the construction of Turkish Stream. The agreement foresees the construction of two lines (15.75 bcm each) from Russia across the Black Sea, with construction forecast to start by the end of 2017 and be completed by 2019.

On October 10, Turkey and Russia signed an IGA on the construction of Turkish Stream. The agreement foresees the construction of two lines (15.75 bcm each) from Russia across the Black Sea, with construction forecast to start by the end of 2017 and be completed by 2019.[87] One of the lines is intended to deliver gas to Turkey while the other would branch off toward the Turkish–European Union border to carry gas to Europe. The cost of the project is estimated at $6 billion. Both lines are supposed to be completed by December 2019.[88] The agreement also envisaged special tax exemptions for the offshore section and a second land line of "Turkish stream". Moreover, Turkey

az/business/economy/2465693.html (Accessed: 10 July 2016).

82 Kremlin.ru, (2016) *Vladimir Putin received a letter from President of Turkey Recep Tayyip Erdogan*, Available at: en.kremlin.ru/events/president/news/52282 (Accessed: 22 November 2016).

83 Rt.com, (2016) *Gazprom ready to restart Turkish Stream dialogue after Erdogan apology*, Available at: https://www.rt.com/business/348613-gazprom-turkish-stream-gas/ (Accessed: 22 October 2016).

84 Sputnik, (2016) *Implementation of Akkuyu NPP, Turkish Stream Projects Important - Ankara,* Available at: sputniknews.com/business/20160715/1043046317/npp-turkish-stream-yildirim.html (Accessed: 19 November 2016).

85 News.az, (2016) *Turkey ready to resume Turkish Stream project, says Russia*, Available at: news.az/articles/turkey/110756 (Accessed: 19 November 2016).

86 Natural Gas Europe, (2016) *Turkish Stream IGA to be Signed in October*, Available at: www.naturalgaseurope.com/turkish-stream-iga-to-be-signed-in-october-31046 (Accessed: 19 November 2016).

87 Daily Sabah Energy, (2016) *Erdoğan, Putin sign agreement on Turkish Stream gas pipeline project*, Available at: www.dailysabah.com/energy/2016/10/10/erdogan-putin-sign-agreement-on-turkish-stream-gas-pipeline-project(Accessed: 19 November 2016).

88 Anar Valiyev, (2016) 'Azerbaijan Strengthens Its Energy Position in Turkey', *The Jamestown Foundation, Eurasia Daily Monitor* Volume: 13 Issue: 168, Available at: https://jamestown.org/program/azerbaijan-strengthens-energy-position-turkey/(Accessed: 19 November 2016).

will release Gazprom from the tax revenues for the marine section of pipeline. The import of vehicles and equipment and other necessary materials are exempt from the payment of customs duties in Russia and Turkey. The Turkish side also eliminated the value added tax on gas transportation. According to Energy Minister Alexander Novak Gazprom will build and own the offshore section of Turkish stream, the first line of land section (including receiving terminal and connection lines) for the delivery of gas to Turkey will be built and owned by Turkey's BOTAS. The second line towards Turkey-Greece border for gas transit to Europe will be owned by joint venture between Gazprom and BOTAS.[89] According to Russia's Energy Ministry, Turkey has agreed to a second line in exchange for a discount for a discounted gas price promised by Moscow.[90]

Turkey has already granted Gazprom the first permits for the development of the Turkish Stream via Turkey, which likely relates to feasibility studies for the final section of pipeline on Turkish territories. Actually, main sections of the offshore pipeline in Turkey's exclusive economic zones in the Black Sea were previously approved within the framework of South Stream's implementation, and Gazprom has completed the environmental impact assessment for the offshore and landfall sections of Turkish Stream pipeline.[91]

Challenges and perspectives for Turkish Stream

The Turkish Stream project will face dozens of challenges. Falling oil prices, the economic sanctions against Russian companies and banks, the cost of the project, etc. make it difficult to find financing for the gas pipeline. Gazprom faced serious financial losses as a result of South Stream's suspension. The company had to pay fines worth $1 billion to Italian ENI, German Wintershall, and Electricite de France for their stakes in the consortium.[92] Russia had rented two pipe-laying vessels

The Turkish Stream project will face dozens of challenges. Falling oil prices, the economic sanctions against Russian companies and banks, the cost of the project, etc. make it difficult to find financing for the gas pipeline.

89 1Praym.ru, (2016) *Rossiya i Turtsiya predostavyat nalogovie lgoti proyektu 'Turetskiy Potok'*, Available at: 1prime.ru/energy/20161011/826640070.html(Accessed: 19 November 2016).

90 Krutikhin, M. (2016) "Turkish Stream: The Cost of Russia's Stubbornness", *Carnegie Moscow Center*, Available at: carnegie.ru/commentary/?fa=64904(Accessed: 19 November 2016).

91 David O'Byrne, (2016) "Gazprom's Turkish Stream Gains First Turkish Permits", *Natural Gas World*, Available at: www.naturalgasworld.com/gazproms-turkish-stream-gains-first-turkish-permits-31521(Accessed: 1 November 2016).

92 Gurbanov, I. (2016) 'Turkey-Russia Rapprochement and Prospects for Turkish Stream', *The Jamestown Foundation, EDM,* Vol.13, Issue 140, Available at: www.jamestown.org/programs/edm/single/?tx_ttnews%5Btt_news%5D=45706&cHash=d303eecdce1ce9110a60716b2d880169#.V7xTH_mLSUl (Accessed: 19 November 2016).

from Italian Saipem to lay pipelines for South Stream; however, following the suspension of "South Stream" pipeline project in 2014, Gazprom had to pay Saipem €25 million per month, despite not using them.[93] The pipes initially purchased for the South Stream can be used to lay the Turkish Stream's first line.[94] In July 2015, Gazprom cancelled its contract with Italian Saipem, involved in construction of the Turkish Stream's offshore portion,[95] and agreed to pay penalties (around $300 million) to Saipem.[96] In November 2015, Saipem Stream Transport B.V., a subsidiary of Italy's Eni, sued Gazprom for €759 million in damages for severing the contract on the construction of the underwater segment of the South Stream.[97]

According to a report by the Russia's Ministry of Economic Development and the Sberbank, Russia's natural gas production, notably that of Gazprom, demonstrated an unpredicted fall in2015 compared to 2014. The export revenues also experienced a rapid decline due to decreases in the price of natural gas exports, according to Russia's Federal Customs Service. Sberbank's report indicates that lower exports would also reduce Gazprom's revenues. Gazprom's lavish expenditures on infrastructure, costly diversification plans, etc., have cost it billions of dollars.[98]

Reportedly, the cost of the Turkish Stream's four-line pipeline will amount to €11.4 billion (half the cost of South Stream, €23.5 billion), with the cost of the first line estimated around €5 to 6 billion. However, given the fluctuating oil prices, the costs may overrun. Since most of the revenue is generated by energy export and the company's costs are in rubles, falling oil prices have heavily affected the Russian economy and market value of the Russian ruble.[99]

Russia would not be able to influence Turkey in the same way it has Ukraine, and consequently there is little room for Moscow

93 Shaban, I. (2015) 'Why Russia is Planning Turkish Stream and Not Waiting for Turkey', *Natural Gas Europe*, Available at: www.naturalgaseurope.com/russia-turkish-stream-without-waiting-for-turkey-23812 (Accessed: 12 August 2016).

94 Novinite, (2016) *Russia 'Mulls Directing Part of New Gas Project to Bulgaria'*, Available at: www.novinite.com/articles/173280/Russia+'Mulls+Directing+Part+of+New+Gas+Project+to+Bulgaria' (Accessed: 11 October 2016)

95 Trend.az, (2015) *Turkish stream not to reach European market – expert*, Available at: en.trend.az/business/energy/2427864.html (Accessed: 19 July 2016).

96 Lossan.

97 Krutikhin, "Turkish Stream: Imaginary and Real".

98 Gurbanov, "Turkey-Russia Rapprochement".

99 Gurbanov, "Turkey-Russia Rapprochement".

to politicize Turkish Stream.[100] Apart from that, the EU's increasing options for diversification, economic sanctions etc., are serious challenges to Russian gas exports. Amidst the withdrawal of sanctions on Iranian oil and gas exports, Turkish Stream could lose its significance for Russia's European clients.

Russia would not be able to influence Turkey in the same way it has Ukraine, and consequently there is little room for Moscow to politicize Turkish Stream.

If Gazprom goes forward with the construction of the third and fourth strings of the Turkish Stream, beyond the Turkey-Greece border, the company will encounter the same regulatory obstacles, namely the TEP rules.

Conclusion

The Ukraine crisis left Russia little room to maneuver for South Stream, which was hindered by the EU's Third Energy Package rules along with the economic sanctions that blocked financing capabilities of Russian banks. Russia abandoned the South Stream to avoid falling under EU energy legislation. Russia used the TEP as an excuse for the suspension of South Stream, but in reality is was obvious that Gazprom would not be able to proceed with project because of political and financial obstacles. The EU is not eager to import additional Russian gas; rather it wants to diversify routes and sources. South Stream was intended as a means of entirely bypassing Ukraine, like the Nord Stream.

The Ukraine crisis re-emphasized the role of Turkey not only for the EU, but also for Russia, in preventing supply disruption to Europe. Turkey also wants to avoid dependence on a single supplier, and to meet its energy demands with lower prices from reliable sources. The best way which is considered the SGC, which will carry Azerbaijani gas. Turkey seeks to take advantage of its geography– i.e. turning itself into a regional hub by hosting the Turkish Stream and transporting Turkmen, Iraqi, Iranian and Mediterranean gas. Fully eliminating reliance on Russian gas exports is unlikely, given its significant export role at present and noting that Turkey does not have an alternative supplier to substitute this volume. Whereas, the crisis between Russia and Turkey could divert latter to diversify its gas imports away from former.

The Ukraine crisis re-emphasized the role of Turkey not only for the EU, but also for Russia, in preventing supply disruption to Europe. Turkey also wants to avoid dependence on a single supplier, and to meet its energy demands with lower prices from reliable sources.

100 Gurbanov, 'In the Search of New Partners'.

If Turkish Stream is realized, Turkey will play a larger role in the region's energy map. "Turkish Stream" can bring Turkey and Russia together, regardless of their disagreements on many issues. Both Russia and Turkey were vindictive towards the EU, due to EU-led sanctions toward Russia and delays on Turkey's EU membership, respectively. With Turkish Stream, Russia wanted to demonstrate to the world that it is not totally isolated. The rejection of Turkish Stream by Turkey would weaken Russia's position vis-à-vis Ukraine. Russia knows that after suspension of the gas flow through Ukraine, Gazprom's European partners will have no other option than to import gas via the Turkish Stream.

As the implementation of the Southern Gas Corridor gathers pace, Russia is pushing forward its own options. The Turkish Stream might be a potential challenger to Azerbaijani gas exports to Southeast Europe. On the other hand, by transporting Russian gas via ITGI, and Azerbaijani gas via TAP, Greece wants to pursue a balanced energy policy, playing to both Russia and Azerbaijan. However, the realization of ITGI remains doubtful given its previous failure on financial grounds. The question that remains is how Greece will come up with the financing for ITGI, given its precarious economic situation. The transportation of Russian gas via ITGI is matter of time and financing, while the planned "Tesla" pipeline might encounter TEP rules.

Russia is seeking either to target potential markets for Azerbaijani gas, or to use the additional capacity of Azerbaijan's gas export routes. At first glance, it might seem that the timeline and capacity of Turkish Stream will hinder Azerbaijan's gas strategy in Southeast Europe, given that Azerbaijani gas will reach Turkey in 2018 and Europe by 2020. However, the 16 bcm of gas from Shah-Deniz's Phase II that TANAP/TAP will carry to Europe has already been sold, based on a 25-year contract with European companies, and the initial capacity of TAP has been secured via a TPA exemption. The long-term agreements protect SOCAR from the risk of competition from other gas suppliers.

Russia could focus on the expansion of the existing Blue Stream by laying additional lines across the already functioning pipeline, which would be more cost-effective than laying new pipelines underwater. However, with the extension of the Blue Stream, Russia will not be able to reach the Turkey-Greece border directly, and the pipeline would supposedly have a smaller capacity.

Since Gazprom prioritized "Nord Stream II" to compensate for its political and economic losses, the company will only implement the first line of Turkish Stream to feed Turkey's domestic market without relying on Ukraine's transit status after the suspension of the Trans-Balkan Pipeline. In the most optimistic scenario, the second string of the Turkish Stream will be realized in order to replace the TBP's current delivery to Bulgaria and Greece, and onwards. The move from South Stream to Turkish Stream will not change Russia's energy market, as the latter might be extended into Greece or Bulgaria via different pipelines. However, it is not yet clear which will be the second string in Europe: ITGI (Poseidon), or TAP, or a new onshore pipeline. The second string will definitely need to tackle the EU's regulatory obstacles.

Gazprom understands that financing constitutes the biggest challenge in finalizing the entire Turkish Stream project. Gazprom's financial situation remains worrisome; the declining gas exports and decreasing gas prices have been a serious blow to the company. Greece is not in a position to fund the pipeline alone, and the Greek government can hardly convince the EU that Turkish Stream is important for Europe's long-term diversification plans. This means the entire four-line "Turkish Stream" is unlikely to come on-stream anytime soon. Until Russia finalizes the construction of Turkish Stream's first or second strings, Ukraine will remain a major transit country for Russian gas exports to Europe, supplying Romania, Bulgaria, and Greece - even after the termination of the transit agreement.