

# Gazprom's Refocus on Europe: The Replacement of the South Stream Pipeline with the Turkish Stream Pipeline

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Why did Gazprom cancel South Stream and replace it with Turkish Stream? In addressing this question, the author examines the debate surrounding the need for the Turkish Stream pipeline, which divided interviewees. Some regarded this project as part of Gazprom's profit-oriented approach in the context of the threat to its market share amidst liberalization in Europe, its largest export market. However, others believed there is no demand for the project. Based on interviews conducted with experts in the energy sector as well as through corporate data, the paper concludes that the decision to replace the pipeline was part of Gazprom's strategy to tackle the challenges it has faced in the European market in order to secure its position in that market.



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## Introduction

In October 2014 Russian natural gas supplied to Turkey via the Western Line pipeline declined almost by half. This sparked chaos in Turkey's Ministry of Energy, as the decline could have led to a winter crisis—a nightmare for the ruling government, which was preparing for elections in the summer of 2015. A winter crisis prior to Turkey's elections would have been disastrous for the ruling party. However, the gas volumes were suddenly restored after the signing of the Memorandum of Understanding between Russia and Turkey on Turkish Stream—the new pipeline project that would replace the cancelled South Stream. The incident gave rise to many questions about whether the cut in gas supply should be attributed to Gazprom's inability to use Ukraine as a safe transit route amidst the Ukraine crisis, or to Russia pressuring Turkey to accept a new project to replace its unsuccessful one?

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According to Aura Sabadus, senior reporter at ICIS, the advent of Turkish Stream right after the cut in supplies may have well been a “brilliant PR coup” aimed at forcing Turkey to enter an unnecessary project.<sup>1</sup> Others, such as Mehmet Dogan, founder of GazDay, have perceived such claims as speculation, saying that Russia would not want to portray itself as an unreliable supplier.<sup>2</sup>

Such claims have marked the debate over the cancellation of South Stream and the need for Turkish Stream. Some of the interviewees for this paper regarded this project as part of Gazprom's profit-oriented approach given the threat to its market share amidst liberalization in Europe, its largest export market. However, others such as Aura Sabadus believe that the project is “a complete waste of money” because there is no demand for it.<sup>3</sup>

This paper aims to address this divide by examining the changing market and political conditions, as well as Gazprom's adaptation of its strategy to those conditions. In doing so, the paper answers a crucial question: Why did Gazprom cancel South Stream, and replace it with Turkish Stream? The paper concludes that these decisions are part of Gazprom's strategy to tackle the challenges it has faced in the European market to secure its position in that market.

1 Aura Sabadus. Interview, July 17, 2015.

2 Mehmet Dogan, Interview, 21 July 2015.

3 Aura Sabadus. Interview, 17 July 2015.

### *Cancellation of South Stream*

The section argues that the Ukraine crisis only aggravated the existing challenges that Gazprom was facing in the European market. The real cause of the cancellation is rooted in the switch from oil-linked to hub-based pricing as well as in changes in market conditions. After analyzing these root causes, the section examines the direct impact of the crisis on South Stream, and explains the changing political and economic context that complicates the commercial aspects of the project.

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### *Switch from LTCs to Spot Pricing*

Three contract structures aligned the incentives of producer and supplier in the Russia-EU energy relationship:

1. Long-term contracts provided producers like Gazprom with a greater incentive to build gas infrastructure for the client.
2. Indexation of the price of natural gas to the price of oil was a solution to the absence of a market structure in piped gas (as there are only two market participants).
3. Take-or-pay (TOP) committed the customer to buying a specified volume of gas, the Minimum Annual Quantity (MAQ)—set at 85% of the annual contract quantity or the maximum volume that the provider committed to sell.<sup>4,5</sup>

This structure worked well in two scenarios: when oil functioned as a substitute for natural gas and when the USSR had no influence over the price of oil. By linking the price of gas to oil, the USSR established a structure in which neither the seller nor buyer could accuse the other of variations in price. Thus, the potential for exercising ad hoc political and/or economic leverage was reduced.

This relationship was shaken in the Ukraine gas crises of 2006 and 2009, when European firms had to decide whether these were crises of Russian gas supply (damaging Gazprom's reputation as a reliable supplier) or of Ukrainian transit. For the most part, Europeans experienced these as issues of Russian supply and not of transit. However, Gazprom decided these were crises of Ukrainian transit. EON, BASF, GDF Suez, EDF, and ENI agreed with

<sup>4</sup> Rawi Abdelal On Gazprom, 8 April 2015.

<sup>5</sup> Abdelal, R., Maugeri, L., and Tarontsi S., (2014) 'Europe, Russia, and the Age of Gas Revolution,' *Harvard Business School Case* 715-006.

Gazprom and built the Nord Stream pipeline to bypass Ukraine.

Furthermore, in 2009 as oil prices began to recover, the difference between oil-linked and hub prices increased. Given that midstream European utilities would buy oil-linked prices and sell at hub prices, and that the TOP still obligated the buyers to pay for MAQ, the lower gas prices pressured companies to renegotiate.

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*The unconventional revolution caused an oversupply of gas in the market.*

In 2012, the European crisis (demand shock) and unconventional gas (supply shock) ended the contractual relationship. With the European macroeconomic crisis, Europe's demand for Russian gas declined. But with TOP, European customers still had to maintain their promises. The unconventional revolution caused an oversupply of gas in the market. The US had wanted to build gasification terminals. Instead, some firms tried to build liquefaction terminals to liquefy existing gas supply. All of the liquefied gas that the US was supposed to buy was not bought, adding to the market surplus.

This combination of demand and supply shocks led to the overturning of hub prices. In 2011-2012 gas prices collapsed but oil prices remained the same. Western companies suffered economic loss for buying piped gas from Gazprom. German firms even opened coal-fired power plants. Losing its customers, Gazprom was forced to switch to hub pricing and move away from TOP pricing with cheaper gas prices.

Gazprom's stance against hub pricing was based on the following lines of argument:

1. Indexation of the gas price to a hub price is illogical as it is a daily price.
2. Abandoning oil indexation forever may have an adverse impact on European customers in the future. After the economy recovers, Russia said it would use its market power (through hub pricing) – which it did not have with oil indexed pricing.
3. With new pricing, the buyer eliminated the incentive of the supplier to buy the pipeline, as the customer no longer bore some of the risk that it did with TOP.<sup>6</sup>

Notably, after 2012, buyers sought contract revisions though formal arbitration – which was unusual for midstream and upstream companies. However, Gazprom settled most of the deals outside

<sup>6</sup> Rawi Abdelal presentation, 8 April 2015.

the arbitration tribunal. Gazprom agreed in certain cases to reduce TOP to 70% and sell in excess of TOP at spot prices for three years (from October 2009). It agreed to reduce the base price by 7-10% from 2012, and also to refund if the new price exceeded the hub price. Refunds and price cuts were made to companies like E. ON, and ENI.<sup>7</sup>

In this context, Gazprom does not want to invest in a customer (Europe) that no longer promises to pay.<sup>8</sup> The switch to hub pricing is particularly a long-term challenge for Gazprom.<sup>9</sup>

### *Changing market conditions*

Changing market conditions in Europe also affected the focus of the project. Weaker European demand and stronger Asian demand shifted Gazprom's attention to the East. In 2000, China's demand had been 28 bcm/y of gas and in 2013 it was 162 bcm/y of gas with insufficient domestic production of 117 bcm/y – thus China was in need of supply. Russia's Energy Strategy for 2030 demonstrates that the volume of gas supply to Europe will see little change, but supply to Asia will increase. An amendment to the strategy further indicates that traditional consumer demand including Europe will stagnate, whereas in areas where Russia has little presence, like the Far East, demand will increase.<sup>10</sup> In addition, increased LNG competition with new exporters in Asia, coupled with the anticipated growth of LNG demand in Asia, has pushed Russia to develop the untapped gas sources in Eastern Siberia.<sup>11</sup> Bearing this in mind, the freeze put on South Stream made strategic and economic sense, at least in the short-term.

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### *Ukraine crisis*

Almost half of Russia's gas deliveries to Europe go through Ukraine, meaning that Russia has had to rely on Ukraine's nego-

7 Abdelal, R., Maugeri, L., and Tarontsi S., (2014) 'Europe, Russia, and the Age of Gas Revolution,' *HBS Case 715-006*.

8 Rawi Abdelal presentation, 8 April 2015.

9 Ruchan Kaya. Interview, 23 July 2015

10 Ko-ouskova, H., and Jirusek M. (2014) 'Cancellation of South Stream makes economic sense.' *EurActiv* Available at: <http://www.euractiv.com/sections/energy/cancellation-south-stream-project-makes-economic-sense-310788>. (Accessed: 13 December 2015).

11 Boersma, T., Mitrova, T., Greving, G. and Galkinahttp A. (2014) 'The Impact of the Crisis in Ukraine on the European Market,' *Brookings* Available at: [www.brookings.edu/research/papers/2014/10/european-gas-market-import-dependence](http://www.brookings.edu/research/papers/2014/10/european-gas-market-import-dependence). (Accessed: 14 December 2015).

tiating position.<sup>12</sup> Thus, Gazprom's objective has been to bypass Ukraine as a transit country to ensure reliable supply, avoiding any recurrences of the gas crises of 2006 and 2009. Indeed, South Stream discussions immediately followed the January 2006 crisis—the shutdown of gas supplies to Europe due to Ukraine's failure to fulfill its payment obligations to Gazprom. A repeat of such an incident was probable given that the 2006 agreement concluding the crisis was not satisfactory to Ukraine. Therefore, Gazprom wanted to avoid another crisis and maintain its legacy as a reliable gas supplier to its largest market, Europe. In this context, South Stream met Gazprom's objective for bypassing Ukraine as a transit country.

However, the annexation of Crimea in March 2014 hurt the project in three ways. First, the EU sanctions imposed on Russia on March 17 were a blow to the project. The sanctions restricted travel and froze assets, as well as the financing of certain oil companies and banks, and supply and export of oil-related goods and technologies to Russia.<sup>13,14</sup> Second, after a year the EU prolonged sanctions, further limiting Russia's access to certain technologies needed for production and exploration.<sup>15</sup> The third byproduct of sanctions was the reluctance of Western financial institutions to lend to South Stream's offshore section.<sup>16</sup>

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The Ukraine crisis broke the trust of some Central and East European countries, like Belarus and Romania, which began to actively vie for independence from Russian gas. Since the crisis, Belarus has been trying to strengthen its ties with the EU, and President Lukashenko has expressed concerns regarding extremist Russian groups and pro-Russian NGOs in Belarus. Romania has adopted a similar but even harsher position by pressuring the EU for a stronger stance against President Putin.<sup>17</sup> The crisis

12 Recknagle, C. (2014) 'Explainer: South Stream The Latest Victim Of the Ukraine Crisis?', *Radio Free Europe*, 11 June, Available at: <http://www.rferl.org/content/ukraine-south-stream-halted-bulgaria/25418146.html>. (Accessed: 1 December 2015).

13 Jansen, J. (2015) 'EU sanctions against Russia: New targets and state of play', *Dla Piper*, 11 February, Available at: <https://www.dlapiper.com/en/us/insights/publications/2015/02/eu-sanctions-against-russia/>. (Accessed: 11 December 2015).

14 Lester QC, M., and O'Kane M. (n.d.) 'Initial Imposition of EU sanctions and Subsequent Amendments', *European Sanctions* Available at: <http://europeansanctions.com/eu-sanctions-in-force/russia/>. (Accessed: 10 January 2016).

15 European Council (n.d.) 'EU restrictive measures in response to the crisis in Ukraine', *European Council* Available at: <http://www.consilium.europa.eu/en/policies/sanctions/ukraine-crisis/>. (Accessed: 15 December 2015).

16 Ko-ouskova, H., and Jirusek M. (2014) 'Cancellation of South Stream', *EurActiv*, 12 December, (Accessed: 13 December 2015).

17 Reuters (2014) 'Romania's Basescu Slams EU for Soft Putin Stance', *Voice of America*, 21 July

made EU law even more stringent than ever before (discussed below).

### *EU legislation*

All interviewees mentioned the TEP (Third Energy Package) as one of the main catalysts for the cancellation of the project. The EU describes the Package's aim as "to create a single EU gas and electricity market...to keep prices as low as possible and increase standards of service and security of supply."<sup>18</sup>

The package would ensure changes in the European energy market.<sup>19</sup> The unbundling principle (Article 9)<sup>20</sup> affected South Stream the most. Gazprom was no longer allowed to own both the gas it supplied and the pipeline it operated. Third party access (TPA) was another part of the package with which Gazprom had struggled, in that under this principle Gazprom was required to grant non-discriminatory access to any electricity or gas supplier – which the EU Commission argued that Gazprom had not been doing.<sup>21</sup>

Claiming that Gazprom had violated these provisions in its bilateral deals with Bulgaria, Hungary, Serbia, Croatia, Austria, Slovenia, and Greece, the EU Commission asked for renegotiations in late 2013.<sup>22</sup> Russia in turn challenged the package by filing a complaint in the WTO. The Director of the department on trade negotiations in Russia's Ministry of Economic Development, Maksim Medvedkov, explained the decision as one that challenges EU's obligations to the WTO of non-discriminatory market access, as the Package threatens the supply of Russian gas to Europe.<sup>23</sup>

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Available at: <http://www.voanews.com/content/romania-basescu-slams-european-union-for-soft-putin-stance/1962356.html>. (Accessed: 21 January 2016).

18 European Commission (2011) 'Questions and Answers on the third legislative package for an internal EU gas and electricity market', *European Commission*, 2 March Available at: [http://europa.eu/rapid/press-release\\_MEMO-11-125\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-11-125_en.htm?locale=en). (Accessed: 2 December 2015).

19 Ibid.

20 'Directive 2009/73/EC of The European Parliament and of the Council', *Journal of the European Union*, 211 Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:009:4:0136:en:PDF>. (Accessed: 13 January 2016).

21 "[T]o have effective competition the operators of transmission networks must allow any electricity or gas supplier non-discriminatory access to the transmission network."

From: European Commission (2011) 'Questions and Answers on the third legislative package', *European Commission*, 2 March, Available at: [http://europa.eu/rapid/press-release\\_MEMO-11-125\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-11-125_en.htm?locale=en). (Accessed: 2 December 2015).

22 EurActiv (2013) 'South Stream bilateral deals breach EU law, Commission says', *EurActiv*, 4 December Available at: <http://www.euractiv.com/section/competition/news/south-stream-bilateral-deals-breach-eu-law-commission-says/>. (Accessed: 8 December 2015).

23 RT (2014) 'Russia sues EU over "Third Energy Package" – report', *RT*, 30 April Available at:

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Indeed, TEP does grant exemptions under the condition that the projects are new – to which South Stream would seemingly apply. The promised approval was repeatedly postponed, first over technical issues and then over the Ukraine crisis. To make matters worse, in December 2014, the exemption overview for OPAL was terminated due to Gazprom’s failure to receive an extension for the exemption it had received from the German regulator. Apparently due to this, Gazprom did not apply for South Stream’s exemption, but instead signed separate intergovernmental agreements (IGAs) with EU members.<sup>24</sup>

*The EC and Gazprom then disagreed over the legality of such IGAs given the termination of the exemption review. Gazprom argued that the EC had failed to prove that the Third Energy Package overrides IGAs. This pressured EU countries partnering in the South Stream project to choose between the penalties imposed by the EC for violating TEP regulations, and the penalties for non-compliance with the IGAs.*

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The main question that arises for Russia is whether the TEP is discriminatory. The EC pressured South Stream to abide by TEP, when the regulation only applied to existing pipeline networks (i.e., the law addressing new pipeline networks would only be ready in 2017). The German regulator granted Gazprom an exemption from the regulation, allowing it to use 100% of OPAL (one of Gazprom’s Nord Stream pipelines). However, the EC Competition Authority only exempted 50% of the pipeline for use. Eventually the Authority and Gazprom negotiated on 100% access to be approved by March 2014.<sup>26</sup> Adding to this question was the exemption granted to the Trans Adriatic Pipeline (TAP) – another new gas infrastructure project. Article 45 of TEP can be viewed as discriminatory, given that the IGAs for South Stream were signed before the Package, and therefore should have been upheld.<sup>27</sup>

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<https://www.rt.com/business/156028-russia-sues-eu-energy/>. (Accessed: 2 January 2016).

<sup>24</sup> Aura Sabadus. Interview, 17 July 2015.

<sup>25</sup> Stern, J., Pirani, S. and Yafimava K. “Does the Cancellation of South Stream Signal a Fundamental Reorientation of Russian Gas Export Policy?” 3, no. 2 (2015): 30.

<sup>26</sup> Ibid.

<sup>27</sup> Maksim Malyshev (Counselor for Energy at Russia’s Permanent Mission to the European Union). Interview, 24 June 2015.



However, the aim of TEP is to create a European market that is more integrated, not one that is against Russian interests.<sup>28</sup> With this in mind, a more moderate view would be that Russia has had an impact on the formation of TEP: while TAP was granted exemption, Nord Stream was not.<sup>29</sup>

### *Advent of Turkish Stream*

This section first explains why Russia has chosen Turkey as a partner in its new project, and then describes the role of Turkish Stream within Gazprom's ongoing strategy to remain close to the European market, and to preserve its market share in Europe. It argues that Turkish Stream addresses Gazprom's concerns in Europe and thus is used as part of Gazprom's commercial strategy in Europe.

### *Why Turkey?*

Russia has significant leverage in Turkey; 60% of Turkey's gas imports are from Russia, which supplies Turkey through two pipelines, Blue Stream and the Trans Balkan. It is the second largest market for Russia after Germany. There have been three important turning points in Gazprom's relationship with Turkey. The first started with Turgut Ozal – introducing natural gas for industrial and residential usage. The second was the Blue Stream project. The third change would have been Turkish Stream if it came to being.<sup>30</sup>

Russia capitalizes on this relationship by taking advantage of Turkey's deteriorating relationship with the West. Turkey's relations with Europe and the US worsened due to Turkey's human rights abuses, the Syria crisis, and Turkey's stance towards the Kurdistan Regional Government. Russia was hoping to take advantage of this situation when it proposed the project to Turkey (whose appeal to join the Energy Charter has not been approved).

In this context, Turkish Stream provided Turkey with the necessary alternative to its Western allies, in light of the country's deteriorating relations with the West.<sup>31</sup> Europe's participation in the Turkish economy, particularly the energy sector, has been insufficient. One example is the Akkuyu nuclear power plant auction,

<sup>28</sup> Marco Giuli (Policy Analyst at the European Policy Center). Interview, 23 June 2015.

<sup>29</sup> Maksim Malyshev. Interview, June 24, 2015. Baxtiyar Aslanbeyli (Vice President at BP for Azerbaijan, Georgia, Turkey). Interview, June 2015.

<sup>30</sup> Ruchan Kaya. Interview, 23 July 2015.

<sup>31</sup> Emre Erturk (founder of Enerji IQ-Turkey's first local market intelligence provider). Interview, 5 August 2015.

where only the Russian company Rosatom bid high enough to implement the project.<sup>32</sup>

Thus, it is hard not to notice Russia's increased economic involvement in Turkey. In addition to Turkish Stream and the Akkuyu nuclear power plant, Russian energy giants hold shares in seven Turkish private natural gas distributors.<sup>33</sup> The Russian Minister of Economy, Alexei Ulyukaev, even stated that there would be no constraints on conducting bilateral trade in the Turkish lira. The question was the large amount of Turkish lira that Russia would accumulate, and Ulyukaev's response demonstrated that Russia's long-term energy strategy involves Turkey. He responded that Russia will "bid on privatization tenders of Turkey's domestic pipe system or invest in planned underground storage in Turkey."<sup>34</sup>

Turkey has also made several investments in Russia during 2014-2015. Turkey's largest construction company, Renaissance Holding, agreed to work with Russia's Direct Investment Fund to invest in Russia's healthcare and infrastructure sectors.<sup>35</sup> Turkish Borusan Machinery acquired Caterpillar's Russian Far East operations in infrastructure and construction.<sup>36</sup> With this acquisition, Borusan now controls Amur Machinery and Services, Sakhalin Machinery and Technika Dolny Vostok – all of which are concentrated in construction, oil, gas, mining, and forestry. Turkey's Limak Construction also won a tender in Russia to build an airport in Rostov with a capacity of 8 million passengers.<sup>37</sup>

In addition to this strong economic relationship, Turkey's location and its political landscape benefit Gazprom's future projects in the region. In the context of the Ukraine crisis and Crimea's annexation, as well as international sanctions, Turkey was the

32 Cenk Pala (Strategist for BOTAS and the Nabucco Pipeline), Interview, 18 August 2015.

33 Emre Erturk. Interview, 5 August 2015.

34 'Hacioglu, N. (2015). 'Russia, Turkey may use own currencies in bilateral trade: Russian minister', *Hurriyet Daily News*, 21 April Available at: <http://www.hurriyetdailynews.com/russia-turkey-may-use-own-currencies-in-bilateral-trade-russian-minister-.aspx?pageID=238&nID=81354&NewsCatID=345>. (Accessed: 21 December 2015).

35 Hurriyet Daily News (2014) 'Turkey, Russia building new investment platform for joint projects across Russia's regions', 1 December Available at: <http://www.hurriyetdailynews.com/turkey-russia-building-new-investment-platform-for-joint-projects-across-russias-regions.aspx?pageID=238&nid=75046>. (Accessed: 2 January 2016).

36 Hurriyet Daily News (2015) 'Turkish company buys distributor companies operating in East Russia', 17 April Available at: <http://www.hurriyetdailynews.com/turkish-company-buys-distributor-companies-operating-in-east-russia.aspx?pageID=238&nid=81205>. (Accessed: 17 January 2016).

37 Hurriyet Daily News (2015) 'Turkish, Russian companies to build Rostov airport for 2018 World Cup', 22 June Available at: <http://www.hurriyetdailynews.com/turkish-russian-companies-to-build-rostov-airport-for-2018-world-cup-.aspx?pageID=238&nID=84331&NewsCatID=345>. (Accessed: 2 January 2016).

only country that could help Russia maintain its energy policy, as it is not part of the EU. More importantly, it is close to unexplored reserves in the Middle East (for example, Iraqi Kurdish and East Med gas).

Under the AKP government, Israeli gas supplies to Turkey are not possible. Strategically, for Gazprom it is important to become active in the region at a sufficiently early stage to ensure that when commercial planning begins, it could be a stakeholder in these projects. As soon as Gazprom joins a project in the region like Turkish Stream, it has a higher chance of becoming part of the blocking decision making mechanisms for the forthcoming projects. In fact, Gazprom sent a delegation to Cyprus and Israel to measure the potential for East Med gas. They discovered that the potential is only 8-10 bcm for export through Turkey. Significantly, for subsea passage from Israel to Turkey only 10 bcm of gas appeared feasible for export. BOTAS also calculated that the 4-5 bcm possible for export with Mediterranean gas was not cost-effective for export to Turkey. This came as a relief to Gazprom, as Mediterranean gas would not in the near time rival Gazprom's claims to Turkish transit. Furthermore, Gazprom also benefited from the fact that any aspirations for use of Iraqi gas supplies were halted with the threat of ISIS. In 2013 the necessary contracts were signed for Iraqi gas. However, without any green light from the US, the project with Iraq could not be developed.<sup>38</sup>

Thus, Turkey was also an ideal destination due to its natural gas power plants, which would not in the near term be dominated by gas supplies from the Mediterranean. This lack of imminent competition provided space for Gazprom to expand into the Turkish market. With Turkish Stream, Gazprom intended to dominate any future discussion of Mediterranean gas transit through Turkey.

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#### *Purpose of Turkish Stream: Holding on to the European market*

Given that Europe is Gazprom's largest market, it is important for Gazprom to maintain market share despite these challenges. Many interviewees believed that Turkish Stream signaled Gazprom's Euro-centric approach. Turkish Stream allows Russia to resolve the obstacles it currently faces in Europe so that it can

<sup>38</sup> Cenk Pala, Interview, 18 August 2015.

exploit the European market.<sup>39,40</sup> This sub-section argues that Turkish Stream is part of Gazprom's strategy for addressing challenges in the European market.

It is first important to note that Turkish Stream responds to changing market conditions and abides by EU law. An increase in LNG regasification capacity is possible in Europe's future via North American unconventional gas in the UK, Netherlands, and Belgium. Although this would not have a huge impact in terms of substituting Russian gas in the short-term, it is a cause for concern, as Gazprom cannot compete in LNG. In 2013, the Russian government cancelled Gazprom's monopoly over LNG exports in order to increase Russia's share of its global LNG market to 10% by 2020. Even so, Gazprom announced that it might expand its LNG export project, Sakhalin II. A roadmap was signed with Shell for building a third LNG liquefaction unit.<sup>41</sup> However, sanctions have hurt the LNG plant at Vladivostok, as potential customers fear consuming LNG from Russia.<sup>42</sup> The Russian government has also increased its support for alternative projects by Novatek and Rosneft (Russia's gas and oil producers). Gazprom's third LNG unit for Sakhalin 2 also came under the threat of sanctions.<sup>43</sup> Therefore, Gazprom has shifted away from LNG development to piped gas projects.

However, due to restrictions imposed on Russia by EU legislation, a focus on piped gas is possible only in a non-EU member state like Turkey, which does not need to comply with EU's unbundling principle. Gazprom could still sell its gas to Europe and sideline EU legislation by asking its end consumers to buy the gas at the Greek-Turkish border.

Turkey's location also allows Gazprom to secure all alternative gas routes to Europe, as Turkey neighbors major suppliers like the Caspian and Iran.<sup>44</sup> Constructing a gas hub in the Turkish-Greek border and a gas storage facility in Ipsala, Turkey (where TANAP will connect with TAP) would give Gazprom control of the flow of gas to Europe. Doing so, it could avoid IGA agree-

39 Gurkan Kumbaroglu, Interview, 24 July 2015

40 Efgan Nifti., Interview, 23 July 2015.

41 Boersma, T., Mitrova, T., Greving, G. and Galkinahttp A. (2014) 'The Impact of the Crisis in Ukraine,' *Brookings*, 14 October Available at: [www.brookings.edu/research/papers/2014/10/european-gas-market-import-dependence](http://www.brookings.edu/research/papers/2014/10/european-gas-market-import-dependence). (Accessed: 14 December 2015).

42 Henderson, J. and Mitrova T. (2015) 'The Political and Commercial Dynamics of Russia's Gas Export Strategy', *Oxford Energy Group*, 9 Available at: <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2015/09/NG-102.pdf>. (Accessed: 15 December 2016).

43 Ibid., 22.

44 Gurkan Kumbaroglu, Interview, 24 July 2015.

ments, which the EU Commission deemed in breach of EU legislation. However, Gazprom would no longer control the flow of gas from the fields to their final destinations. In doing so, Gazprom transfers the typical risks it had previously faced in transit countries to European gas companies.<sup>45</sup>

Gazprom indirectly controls Iranian gas export prices (as Iranians consult Russia on this question), and Algerian price offers to Europe (shaped by the MOU signed between Gazprom and Algeria). Thus control maintains the vacuum created by the absence of readily available Iraqi and Israeli gas for sale to Europe via Turkey. Furthermore, according to the Kyoto Protocol, the EU can only use a limited amount of coal and oil—making natural gas the optimal alternative. Europe has thus been in search of natural gas suppliers. After the Crimea annexation, Gazprom expected the EU to be more seriously committed to diversification. Thus, Gazprom began to view the Southern Corridor project, especially TANAP and TAP, as a serious challenge to its market domination in Europe.<sup>46</sup>

In both TANAP and TAP, Turkey is the main transit state linking gas supplies from the Southern Corridor to Europe. This concerned Russia, as it did not want to see any other gas suppliers in southeastern Europe. As of 2030, southeastern Europe is expected to consume no more than 19 bcm. Thus, if alternative suppliers reach southeastern Europe, Russia will see itself squeezed out of the EU market.

Putin expressed this position in his visit to Azerbaijan in 2013, pressuring France's Total to leave natural gas fields under its development to Russia. In return, he promised Azerbaijan fields in the Russian section of the Caspian Sea in a form of a swap agreement. Azerbaijan was expecting additional gas sources under these fields after 2025. With these new sources, Azerbaijan planned to increase TANAP's capacity from 16 to 23 bcm. Accordingly, Putin made an offer to the State Oil Company of Azerbaijan (SOCAR) to share the southeast European market and control prices. Given that there was no offer from SOCAR to BOTAS to partner in the operation of TANAP's leg in the Balkans, it appeared certain to BOTAS officials that promises were made to Russia in return for optional fields. Notably, Azerbaijan

*However, due to restrictions imposed on Russia by EU legislation, a focus on piped gas is possible only in a non-EU member state like Turkey, which does not need to comply with EU's unbundling principle.*

45 Henderson, J., and Mirova T. (2015) 'The Political and Commercial Dynamics,' *Oxford Energy Group*, 12.

46 Cenk Pala, Interview, 18 August 2015.

needed the additional gas, as an additional 4 bcm was necessary for TANAP to be a functional project.<sup>47</sup>

*This shows that with Turkish Stream, Gazprom communicated to Europe that it is the only gas supplier with long-term investment in the Mediterranean region.*

This shows that with Turkish Stream, Gazprom communicated to Europe that it is the only gas supplier with long-term investment in the Mediterranean region. Its plans to connect Turkish Stream with TAP would disrupt the strategic aim of the Southern Gas Corridor (SGC) to supply the EU with non-Russian gas.<sup>48</sup> If Turkish Stream comes online before TANAP, Gazprom could use TAP to replace Azerbaijani with Russian gas.<sup>49</sup>

With Turkish Stream, Gazprom would be able to control gas deliveries to Europe's south and southeast – a blow to the SGC with costs of about \$50 billion. Azerbaijan would have to deal with the fact that it may lose its market share in Europe. However, SGC's transport services would improve and its network costs would decrease with Russian gas, as Gazprom is a better supplier than SOCAR.

In effect, with competition from Russia, Azerbaijan's price and contract policy would have to be more flexible. Russia (with Turkish Stream) would then rely on a system already exempted from TEP and compliant with EU standards.<sup>50</sup> Although some argue that Gazprom would have achieved this with South Stream had it abided by TEP rules, this would have been impossible for two reasons: South Stream did not receive an exemption and unlike Turkish Stream, would have directly delivered gas to the EU as both the supplier of gas and pipeline operator. By establishing a hub in Turkey or even Greece, Russia will have power over price formation points for the SGC.<sup>51</sup> Likewise, Gazprom's acquisition of Turkey's distributors also signals the company's strategy to control gas flows to Europe by acting as a wholesaler in Turkey.<sup>52</sup>

Increasing the potential for Gazprom's control of gas deliveries through Turkey to Europe is the support that Turkish Stream has received from some EU member states. Austria, Bulgaria, Croa-

47 Cenk Pala, Interview, 18 August 2015.

48 Ibid.

49 Baxtiyar Aslanbeyli. Interview, June 2015.

50 Dudau, R. (2014) 'South Stream's Cancellation: The End of a Saga', *Natural Gas Europe*, 10 December Available at: <http://www.naturalgaseurope.com/south-stream-cancellation-the-end-of-a-saga>. (Accessed: 15 December 2015).

51 Emre Erturk. Interview, 5 August 2015.

52 Ibid.

tia, Greece, Hungary, Italy, Serbia, and Slovenia drafted a letter to the Commission in June 2014 in support of South Stream. Some European countries had even stated that they could help with building the infrastructure to carry Gazprom's gas to Europe through the Balkans. In addition, in March 2015 Hungary, Slovakia, Austria, Spain, Greece, Italy, and Cyprus expressed opposition to the sanctions.<sup>53</sup> Unsurprisingly, this support continued for Turkish Stream. Officials from southeastern member states (Italy, Hungary, Cyprus, and Greece) met with Russian officials about Turkish Stream.<sup>54</sup> Greece, Macedonia, Serbia, Hungary, and Turkey agreed to help facilitate the natural gas infrastructure in Turkey.<sup>55</sup> These countries along with Austria discussed the possibility of extending Turkish Stream to their home countries as a direct substitute for South Stream.<sup>56</sup>

*Increasing the potential for Gazprom's control of gas deliveries through Turkey to Europe is the support that Turkish Stream has received from some EU member states.*

Notably, Gazprom's choice of Turkish Stream is also motivated by another aim: to override the potential consequences of the anti-trust battle. Since 2012 Gazprom has been under investigation by European antitrust authorities for violating European competition law. Following the investigation, a "State of Objection" was presented to Gazprom. Gazprom was charged with dividing Central and East European gas markets with territorial restrictions of export ban clauses, unfair pricing (price of gas was higher than Gazprom's production costs), and in relation to its requirement that buyers invest in transport infrastructure. The penalty would be as high as 10% of Gazprom's annual revenues, meaning EUR 9.2 billion (based on 2013 revenue figures). With Turkish Stream, Gazprom may have responded to the case, as the route is outside of EU jurisdiction.<sup>57</sup>

*Notably, Gazprom's choice of Turkish Stream is also motivated by another aim: to override the potential consequences of the anti-trust battle. Since 2012 Gazprom has been under investigation by European antitrust authorities for violating European competition law.*

Finally, Turkish Stream allows Gazprom to address its concerns over long-term contracts (LTCs). After 2020 many of Gazprom's LTCs will begin to expire, marking a drop in volume to 113 bcm in annual contract quantity basis and 80 bcm in TOP basis by

53 Sputnik News (2015) 'Seven EU Countries to Oppose New Anti-Russian Sanctions at Summit', 18 March Available at: <http://sputniknews.com/europe/20150318/1019648159.html>. (Accessed: 19 December 2015).

54 De Micco, P. 'Changing pipelines, shifting strategies', *European Parliament*, July 2015, 14.

55 Leifheit, D. (2015) 'Budapest Meeting Supports Turkish Stream', *Natural Gas Europe*, April 8 Available at: <http://www.naturalgaseurope.com/budapest-meeting-supports-turkish-stream>. (Accessed: 10 January 2016).

56 Novinite (2015) 'Turkish Stream Route Might Be Extended Says Russian Energy Minister', April 15 Available at: <http://www.novinite.com/articles/167906/Turkish+Stream+Route+Might+Be+Extended+-+Russia+Energy+Min>. (Accessed: 10 December 2015).

57 De Micco, P. 'Changing pipelines, shifting strategies', *European Parliament*, July 2015, 11.

2020 (shown in Figure 2) in the case that contracts are not renewed. This would reflect on the European market in the form of increased LNG sales and a gradual switch away from Russian gas.<sup>58</sup>

Figure 1: Russian exports assuming expiry of LTCs at ACQ and 70% ToP (bcm)

Russian exports assuming expiry of long-term contracts at ACQ and 70% ToP (bcm)				
	2013	2015	2020	2030
Europe Demand	529	522	540	594
Europe Import Requirement	260	285	313	423
Gap for Russian Gas and LNG	218	243	260	339
<b>Outcome 3a: Russian contracts run down at ACQ</b>				
Russia		190	174	113
Implied Other LNG		37	59	171
Implied Total LNG		53	86	226
Implied Russia % Imports		67%	56%	27%
Implied Russia % Demand		36%	32%	19%
<b>Outcome 3b: Russia contracts run down at 70% ToP</b>				
Russia		133	122	79
Implied Other LNG		94	111	205
Implied Total LNG		110	138	260
Implied Russia % Imports		47%	39%	19%
Implied Russia % Demand		25%	23%	13%

Source: Nexant Energy, Authors' calculations

Source: Henderson J. and Mirova T., “The Political and Commercial Dynamics,” *Oxford Energy Group*, September 2015, 42.<sup>59</sup>

With a market in Europe, where energy trading companies are trying to balance oil-linked and hub-based contracts as well as the rise of renewables, operators will be pressured to change their business model—potentially precipitating the shift from oil-linked to hub-based pricing, and the eventual termination of LTCs for more flexibility in the marketplace. Thus, Gazprom understands that LTCs based on oil-linked prices may come to an end in its core customer base. With Turkish Stream there was potential for renegotiation of LTCs that pass through Ukraine, as the final destination of the gas would change.<sup>60</sup>

### Conclusion

Gazprom’s switch to Turkish Stream was strategic. As shown in this paper, the decision to partner with Turkey stemmed from Russia’s existing energy-based relationship with Turkey. Turkish

58 Henderson, J., and Mirova, T. ‘The Political and Commercial Dynamics,’ *Oxford Energy Group*, September 2015, 42.

59 Ibid.

60 Henderson J., and Mirova T. ‘The Political and Commercial Dynamics’, *Oxford Energy Group*, September 2015, 47.



Stream addressed Gazprom's challenges in the European market by: (1) adapting to EU's Third Energy Package; (2) securing control of gas flows to Europe by controlling Turkish gas transit; (3) garnering support of southeast European states; (4) overcoming consequences of anti-trust battles; (5) addressing the concerns with long-term contracts. Thus, Turkish Stream addressed all the loopholes of South Stream, and was a strategic replacement for South Stream.

Furthermore, Turkey and Russia could have pursued alternative paths to achieve their respective goals. In realizing its hub potential, Turkey could have engaged in swap deliveries with Turkmen gas. Turkey insisted that 23 bcm of the gas in Turkish Stream had to be Turkmen or Kazakh gas, and not exclusively Russian. But in order to ensure supply diversity, Turkey rather than Russia had to have the right to negotiate third party access. If Turkey had gained this control, then Gazprom would just deliver the gas and receive transport tariffs.<sup>61</sup>

In further capitalizing in the Turkish market, Gazprom could focus on the segmentation of gas. Natural gas has no price alternative in the context of residential usage, but in industrial usage it varies. Textile uses steam, which competes with coal. Steel and ceramic manufacturers rely on natural gas. Overall, because liquefied petroleum gas is too expensive, industry largely depends on natural gas.<sup>62</sup> Gazprom could also focus on Blue Stream II—a necessary project in Turkey with less significant geopolitical implications. Gazprom should capitalize on Turkey and Russia's discussions of the expansion of Blue Stream by 3 bcm by upgrading the compressors. This will force suppliers to use the existing network and thus comply with Turkish rules.<sup>63</sup>

However, more significantly, in order to avoid the confusion as to why Turkish Stream replaced South Stream, policymakers and experts in the energy industry should focus more on the feasibility of the pipeline and its economic implications, which are addressed in an extended version of the current paper.<sup>64</sup> Doing so would factor the transit risk diversification that the pipeline offers in comparison to existing transit routes. In turn, this would provide a comprehensive overview of the strategy behind replac-

61 Cenk Pala. Interview, 18 August 2015.

62 Mehmet Dogan, Interview, 21 July 2015.

63 Emre Erturk. Interview, 5 August 2015.

64 The longer version of this study that incorporates the transit risk assessment of South Stream and Turkish Stream could be found in the following link: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2828380](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828380)

ing South Stream with Turkish Stream. Omitting such an objective evaluation in discussions of the Turkish Stream project has led to unnecessary political speculation and the apparent puzzle that has inspired this paper.