

ECONOMIC AND GEOPOLITICAL ASPECTS OF THE NORD STREAM 2 GAS PIPELINE

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The Nord Stream 2 gas pipeline project (NS 2) along the bottom of the Baltic Sea is aimed to increase gas supply from Russia to Germany and other EU countries. It serves mutual economic interests: the predicted growth in gas demand in the EU markets and the need to strengthen the energy security of the EU. The implementation of the NS 2 project is complicated by the need to allow for the EU energy legislation and by the expanding influence of geopolitical factors on EU – Russia cooperation, including those stemming from the aggressive US energy diplomacy seeking to prevent the project from being successful and thus promoting the geopolitical interests of Washington. In this work, we aim to study the economic and geopolitical stances taken by the project's supporters and opponents and to evaluate the prospects of NS 2. To this end, we carry out a factor analysis and employ the methods of economic, statistical and geopolitical analysis. We conclude that the project is high on the agenda of both EU-Russia economic relations and world politics. The project has good prospects despite counteraction from its geopolitical opponents. This is explained by it having a decided economic edge over alternative options for the EU. The launch of NS 2 may contribute both to providing the energy security of the EU and to easing the military tensions between NATO and Russia in the Baltic region. The need to ensure the reliable operation of gas supply infrastructure makes any military conflict in the region impossible.

Keywords:

Nord Stream 1, Nord Stream 2, third energy package, energy security, gas pipeline, NS 1, NS 2, geopolitical and economic factors

Introduction

Until recently, the global energy market was 90% dependent on economic factors and only 10% on geopolitical ones. Today, the situation has changed radical-

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ly: geopolitics dominates. It affects supply and demand, prices and the functioning of the oil and gas transportation infrastructure, as well as the implementation of several pipeline projects, including the Nord Stream-2.

Confirmation of how politics is trying to “steer” the economy and global energy is, for example, the actions of the United States, which has set the task of becoming an energy superpower, for which it is necessary to oust Russia from the markets and inhibit the modernization of the Russian energy sector using methods that aren’t traditional energy diplomacy and geopolitical factors. Recall the regular statements by American leadership that the United States is ready to fill Europe with liquefied natural gas, given the likely increase in export potential in the face of the declared continued growth in shale gas production. This is actually a bluff. Indeed, the production of shale hydrocarbons poses considerable problems: firstly, environmental, and secondly, economic — an increase in the cost of their production in the United States is expected in a few years.

Another issue is energy security of the West, which the United States is considering the importance to reduce its dependence on oil and gas supplies from Russia — primarily to Europe, declaring that the Kremlin can use energy weapons to achieve the necessary Moscow policy. However, Europe cannot refuse Russian hydrocarbons and rely on alternative LNG supplies from the USA, which Washington imposes on Europe. That alternative based on geopolitical considerations will be too expensive from economic point of view. Besides, in order to receive large amounts of LNG, Europe needs to develop a new gas transmission infrastructure designed for pipeline gas, which will lead to additional costs.

In recent months, given the Ukrainian crisis, as well as imposed and envisaged sanctions against Russia in the media of the West, as well as from a number of senior representatives of the EU and the USA, the question of the supply of Russian gas to EU countries is often raised. This primarily concerns the construction of the Nord Stream-2 gas pipeline. From a conventional economic project, implemented on the basis of projected demand for Russian gas in the EU, the leadership of the United States and several countries of Eastern Europe are trying to politicise it and portray it as a geopolitical project. The media and political circles of several Western countries launched a fierce information “do or die” war in order to prevent its implementation using, mainly, not economic, but geopolitical arguments. This is reminiscent of the actively promoted Polish initiative in 2004–05, supported by the United States, about the formation of an energy NATO to protect itself from Russian energy resources. To date, we observe the following situation. Firstly, in the EU itself, there are serious disagreements between the Federal Republic of Germany and some EU countries supporting Nord Stream-2, with a small group of East European states led by Poland — opponents of this project. Also, there has been a serious conflict between the US and EU countries regarding the project. The last fact is the speech of German Chancellor A. Merkel on February 15, 2019, at the Munich Security Conference, in which she stated that this pipeline, which is in line with the economic interests of Germany and

other EU countries, will be built, despite political difficulties. The implementation of this project will significantly contribute to ensuring EU energy security and security in Europe as a whole. This is especially true for the Baltic Sea region, in which there has been an increase in military tension, in recent years, between NATO and Russia. The development of energy infrastructure, including NS-1 and NS-2, on the reliable operation of which depends the economic well-being of many EU countries, can help mitigate the situation in the region.

In our research, we paid special attention to the analysis of economic and geopolitical factors in the EU-Russia energy relations and surveyed an extensive body of Russian and international research papers. In our opinion, the most acceptable theoretical approaches for research purposes are the work of neoliberals, especially the theoretical approaches of A. Goldtau and N. Sitter to the problems of the EU's external energy policy and ensuring the EU's energy security [1, 2].

Important theoretical provisions on the influence of geopolitical factors on international energy markets, problems of gas relations between Russia and the EU, on the energy dimension of world politics, and political risks of energy security are described in the works of N. A. Simonia and A. V. Torkunov [3, 4, 6], as well as in articles by S. A. Kravchenko and V. I. Salygin [5], S. Z. Zhiznin- about geopolitical and economic aspects of energy diplomacy [7]. We can also note the work of T. Casier on geopolitics and security in energy relations between Russia and the EU [8, 9].

In this article we will analyse the role of Russia in the gas supply to the EU, the economic aspects of the Nord Stream-2 project, the economic and geopolitical positions of the countries-supporters and opponents of the project, Ukraine's actions to preserve gas transit through its territory, and prospects for the project.

The role of Russia in the gas supply to EU countries

Despite internal contradictions and an ever-growing number of issues, the European Union (EU), will continue to be one of the main post-industrial centres of the world. [10, p. 54]. The consumption of natural gas in the EU largely depends on its imports from third countries, whose share in the EU energy balance is constantly growing, and in 2017 amounted to about 24%¹ (22% in 2015). This trend is likely to continue, due to drops in domestic gas production in the EU, which is only partially offset by a decrease in gas demand due to energy efficiency and decarbonisation policies.

The share of net gas imports compared to the total gas consumption in the EU in 2017 amounted to 74.5%, according to the European Commission (69.3% in 2015).²

¹ BP Statistical Review of World Energy. June 2018.

² European Political Strategy Centre, 2017// Nord Stream 2 — Divide et Impera Again? URL: https://ec.europa.eu/epsc/publications/other-publications/nord-stream-2-%E2%80%93-divide-et-impera-again_en (accessed 10.12.2018)

Russia is the largest exporter of gas to the EU, accounting for 42% of total EU imports in 2016, followed by Norway (34%), Algeria (10%) and imports via liquefied natural gas terminals (14%), for more details see [11].

The consumption of Russian gas in the EU in recent years is constantly growing. In 2015, 2016 and 2017, Gazprom's exports amounted to 158, 178, 192 billion cubic meters, respectively, of which about 50% went through the gas transmission system of Ukraine, and the remaining volumes — through the Yamal-Europe and Nord Stream-1 (SP-1) gas pipelines. Russian relations with Ukraine remain difficult; therefore, PJSC Gazprom is looking for new and reliable routes for gas supplies to Europe.

In 2005, an international consortium of five major European energy companies, Nord Stream AG, was created to design, build, and operate a gas pipeline consisting of two 1224-km long pipelines on the seabed of the Baltic Sea (the longest offshore gas pipeline in the world) with headquarters in Zug, Switzerland.

NS-1 — a gas pipeline between Russia and Germany runs under the Baltic Sea, bypassing the three Baltic countries, as well as transit countries such as Poland, Slovakia and Ukraine. The latter, in particular, was seen by Russia as an unreliable and problematic transit country, as gas supply disruptions showed in 2006 and 2009. NS-1 connects two cities — Novy Urengoy (RF) and Lyubim (Germany) through Vyborg. The main resource base is the Yuzhno-Russkoye oil and gas field. Off the coast of Germany, the Nord Stream-1 gas pipeline connects the German OPAL and NEL gas pipelines and provides gas to Germany and European countries (Fig. 1).

In Germany, Nord Stream gas enters the EU market via two land pipelines:

1) The North European gas pipeline (the so-called NEL pipeline) in the direction of Western and Northern Europe, owned by the partnership of Wintershall Holding GmbH and Gazprom (51%), E.ON Ruhrgas (10%), Gasunie (20%) and Fluxys (19%);

2) OPAL, in the direction of Central and Southern Europe, which connects the Nord Stream pipeline with JAGAL (the continuation of the Yamal-Europe pipeline), and STEGAL (transports gas from the Central European Russian gas transit system (Transgas) through the Czech Republic and the Slovak Republic pipelines in Germany).

To implement the Nord Stream-1 project, a consortium of companies received permission from each of the five countries the territorial waters of which the route crosses: Russia, Finland, Sweden, Denmark and Germany.

According to the operator of NS-1 gas pipeline, in 2017, 51 billion cubic meters (93% of the annual throughput) was delivered to consumers in the European Union via the Nord Stream-1 pipeline system.

The total investment in Nord Stream-1 was 7.4 billion euros. The shareholders provided 30% of the project budget in proportion to their shares in the consortium. The remaining 70% came from external sources — banks and export credit agen-

cies — in the form of project financing.³ Germany is a co-owner of the Nord Stream 1 project and is an important distribution centre for the Russian gas supplies.

For European countries, this project provides:

- a decrease in the volumes of domestic natural gas production by countries of North-West Europe and a relatively short route for its export to these countries;
- comparatively lower transportation costs for the export of natural gas and optimal logistics;
- as a result, the relatively low cost of gas;
- new jobs for EU citizens.

Despite significant political opposition from Poland and several other EU countries, economic feasibility has taken over political preferences. In this example, one can see that political factors did not stop purely economic energy projects, and some EU countries, such as Germany, are implementing mutually beneficial projects in cooperation with Russia. See [12] for more details.

According to the International Energy Agency (IEA), by 2030, gas consumption in the EU will reach 400 billion cubic meters, which will require an increase in supplies from Russia. Further, we are going to look into the peculiarities of the Nord Stream-2 project and discuss the main problems that might arise in the process of its implementation.

The economic aspects of the Nord Stream 2 gas pipeline (NS-2)

The Nord Stream-2 project is an extension of the successful Nord Stream-1 project. The entry point of the gas pipeline to the Baltic Sea will be the Ust-Luga of the Leningrad Region, and the exit point will be the territory of Germany in the Greifswald area (Fig. 1, dotted line). The preliminary deadline for the construction of the gas pipeline is set at the end of 2019 — the beginning of 2020. According to the Russian Ministry of Energy, the cost of the construction is about \$ 11 billion.

NS-2 is a joint project of the PJSC Gazprom subsidiary Nord Stream 2 AG and five European companies: 1) ENGIE (France); 2) OMV (Austria); 3) Royal Dutch Shell (Holland); 4) Uniper (Germany) and 5) Wintershall (Germany).⁴

In terms of throughput and length, the project is similar to the current NS-1 gas pipeline, though it differs from it by the set of the shareholders of the underwater part. Along with the existing OPAL gas pipeline, German companies are building the Eugal gas pipeline to bring gas to the Central European gas hub near the town of Baumgarten (Austria).⁵

³ Nord Stream AG. URL: <https://www.nord-stream.com/en/o-nas/> (accessed 11.19.2018).

⁴ "Nord Stream 2. URL: <http://www.gazprom.com/projects/nord-stream2/> (accessed 10.11.2018).

⁵ The EC supported the extension of the third energy package to Nord Stream 2 // Glance. Business newspaper. URL: <https://vz.ru/news/2017/10/24/892177.html> (accessed 10.07.2018).

The main economic and geopolitical advantages of this project include:

1) the export route from the resource base in Yamal to the consumer in the north-west of Europe is 2,000 km shorter than the route through Ukraine;

2) the implementation of the project provides lower economic operating costs compared with other main gas pipelines;

3) Gazprom's transport tariff (as a shareholder) is set at \$ 2.1 per 1000 m³ per 100 km, while through Ukraine it costs \$ 2.5 per 1000 m³ per 100 km, which makes the operational costs of gas transit to Europe 1.6 times lower. As a result, in 25 years Gazprom will have received dividends of about \$ 7 billion;

4) a significant reduction in the amount of harmful emissions;

5) the absence of intermediaries between the producer and the consumer, which excludes the political component of the project.

6) the development of gas transportation infrastructure between the Russian Federation and the EU, which will contribute to strengthening the energy security of the EU, as well as geopolitical stability in the region.

According to Alexey Miller, the head of Gazprom, a fundamentally new flow scheme in the gas transmission system (GTS) of Russia has been introduced. Gazprom has launched a program to optimise the costs of the central corridor, which involves the elimination of 4,200 km of gas pipelines in the central region by 2020 and the closure of 62 compressor stations. It is important to note that, from a technical point of view, the pipeline is a single system that cannot simultaneously function under two legal regimes, and the pipeline operator company will also not be able to function without resolving these contradictions.



Fig. 1 Scheme of gas transportation from Russia to Germany.
Projects Nord Stream — 1, 2

Source: Gazprom website.

As part of the permitting process following German law, in the spring of 2017, the Nord Stream-2 operator published extensive project documentation for the public. These documents provide information on the need for additional gas supplies to Europe while reducing gas production in the EU; on the construction of a gas pipeline as the most economically and environmentally efficient way of supplying gas in comparison with the import of LNG from the United States; on the results of monitoring the Nord Stream operation, which show that the environmental impact of the pipeline is limited, local and short-term. It demonstrated that replacing coal with the gas from Nord Stream 2 in the production of electricity would reduce carbon dioxide emissions in an amount equal to emissions from 30 million cars.

The funding of the project is as follows: Nord Stream 2 AG finances half of the project while the other half is financed by the rest of the participating companies. At the end of December 2017, the Chairman of the Gazprom Management Committee informed that the company's European partners had fully complied with their obligations to finance the project.

Two NS-2 lines will allow the transportation of 55 billion m³ of gas per year to Europe for at least 50 years, which will bring gas to over 26 million European households. Implementation of the two projects, Nord Stream-1 and North Stream-2, will provide 110 billion cubic meters of gas to the EU.

Important stages in the development of the project are: 1) October 28, 2016, when the EC lifted the ban on Gazprom's access to the OPAL gas pipeline capacities; 2) July 21, 2017, when the European Court of General Jurisdiction dismissed the lawsuit of the Polish government and PGNiG; and 3) October 2017, when the Dusseldorf Court of Appeal finally revoked all bans on expanding Gazprom's access to the OPAL pipeline, which made it possible to increase gas supplies to the EU via NS-2 [13].

On January 31, 2018, the NS-2 project was granted permission to build and operate an offshore section in the territorial waters of Germany and a land section in the Lubmin area near the city of Greifswald. Next came the permissions from Finland (April 5, 2018), Sweden (June 7, 2018) and Russia (August 14, 2018). Permission has not yet been issued by the Danish government due to concerns about national and environmental security. However, in October of the same year, Gazprom developed "Route B", which avoids the territorial waters of Denmark, not reaching them by 10–15 kilometres. Construction works have already begun in Germany and Finland. It is also important to note that the NS-2 project was practically not affected by the U.S. sanctions adopted on August 2, 2017,⁶ and in 2018.

Despite the issued building permits in 4 out of 5 countries and the possibility of bypassing Denmark in case of its refusal, this diversification project has caused and still causes disagreement not only at the political level but also in expert circles.

⁶ Donald Trump signed the law on anti-Russian sanctions // ria.ru. 2017. URL: <https://ria.ru/world/20170802/1499630941.html> (accessed 19.11.2018).

The launch of Nord Stream-2 is scheduled for 2019, then the contract between Gazprom and Naftogaz for gas transit through Ukraine to Europe will end. The laying of the Nord Stream-2 gas pipeline began in the Gulf of Finland on 09/05/2018, and by 01/01/2019 more than 800 km had been laid.⁷

The economic evaluation of the project “North Stream-2”

At the request of Nord Stream 2 AG, in October 2017, two studies were performed that confirmed the economic benefits of Nord Stream-2.

1) Arthur D. Little Management Consulting Agency investigated the impact of the Nord Stream-2 gas pipeline on the labour market and the economies of Europe.

Agency experts analysed the direct, indirect and induced effects created by the construction of a 1,200-kilometer gas pipeline to deliver Russian gas to the European market.

The results show that the overall economic effect of the pipeline will exceed 5.15 billion euros. Besides, over five years, investments in this project will create an equivalent of 31,000 equivalents of full-time jobs in the EU, which will bring additional 2.25 billion euros of GDP to various sectors of the economy of some EU countries and Russia. Most jobs will be created in Russia, Germany, Finland and Sweden — countries where the bulk of the work on the project is carried out. The Netherlands, Great Britain, Norway and Italy, where the contractors for the implementation of offshore operations are situated, will also benefit [15].

2) Ewi Energy Research & Scenarios, a non-profit research institute, has completed yet another study based on market simulation.

In the report published on September 20, 2017, the authors note that Nord Stream 2 reduces the cost of exporting Russian gas to Europe, and the construction of the new gas pipeline will lead to a drop in gas prices in Europe. According to the study “Impact of Nord Stream-2 on the EU Natural Gas Market”, the delivery of gas through a gas pipeline to Europe will increase competition and reduce the need to import liquefied natural gas (LNG). This, in turn, will lower LNG prices and gas prices in the EU market in general. If the pipeline is commissioned in 2020, the European consumers will be saving up to 8 billion euros per year. The Nord Stream-2 project will have an impact on all EU countries, where gas prices will drop by up to 13%, the authors of the study conclude.⁸

⁷ 800 km of Nord Stream-2 were laid along the bottom of the Baltic Sea // INFORU.NEWS. URL: <https://inforu.news/2019/03/01/po-dnu-baltijskogo-morya-prolozhili-800-km-severnogo-potoka-2/> (accessed 10.10.2018).

⁸ Nord Stream 2 decreases gas prices in the EU. 2017. URL: https://www.ewi.research-scenarios.de/cms/wp-content/uploads/2017/09/ewi_ERS_NORD_STREAM_2_Press_release.pdf (accessed 11.10.2018).

It is expected that by 2030, natural gas production in the EU will have decreased, while the demand for it will decrease only slightly. Forecasts show that gas imports from Norway and North Africa will also slow down, so the resulting shortage of supplies in the future can be compensated filled by combining LNG imports and additional imports from Russia, as Nord Stream-2 offers additional import volumes of Russian gas.

Thus, the NS-2 project will significantly reduce transit risks and will allow to “Europeanise” Russian gas. It would seem to form a new gas supplier within Europe, which can direct gas flows both to the Baltic countries and, for example, to the Czech Republic. Poland may also benefit from the project: when in Berlin, a Gazprom representative guaranteed the Polish side that they would receive gas from Germany [16].

Despite the obvious economic benefits of these projects, some Eastern European are strongly opposed to them.

They see an alternative to this project in the supplies of LNG from the United States, but this gas is much more expensive, and the supply volumes directly depend on the possibility of transportation by the sea with the gas tankers that have not been built yet. This scheme does not allow to cover the periods of peak loads in winter. For countries with less developed economies, pursuing a policy to block NS-2 means harming their economy for the benefit of the interests of a third party [17].

The project, directly or indirectly, affects the interests of a wide range of countries and companies and has caused a heated discussion in the media; therefore, we will consider the opinions of experts and leaders of various countries, supporters and opponents of the construction of NS-2.

Economic and geopolitical positions of supporters and opponents of the NS-2 project

Supporters of the project. Minister of Economy and Energy, and since 2017, German Foreign Minister Sigmar Gabriel: “We need Nord Stream 2, but we also need the reliability of Ukrainian pipelines and the reliability of energy supplies for countries such as Slovakia, the Czech Republic and Poland. I feel that our Russian partners are quite ready for this”; “Europe must decide for itself whom to buy natural gas from, taking into account the security of supply and market conditions, rather than being guided by the political situation.”

According to Gabriel, it would be a mistake to consider Germany’s support for the implementation of this project as an action aimed at increasing Europe’s dependence on Russian gas supplies, and the Russian companies participating in the project adhere to EU rules.⁹

⁹ Ost-Ausschuss der Deutschen Wirtschaft äußert sich zu neuen US-Sanktionen gegen Russland. URL: <https://deutsch.rt.com/inland/54748-live-ost-ausschuss-deutschen-wirtschaft/> (accessed 20.11.2018).

Thilo Wieland, a member of the board of Wintershall, one of the largest German companies: “The gas pipeline is the shortest link between Russia and Europe and, thus, makes a positive contribution to the CO₂ balance, so environmental claims are also insolvent. As regarding the energy security of the Old World: Nord Stream-2 is a very important contribution to the European gas market, by 2030, exports are expected to reach 400 billion m³. And thanks to the gas pipeline, by this time we will have a high-quality infrastructure.”¹⁰

German Chancellor Angela Merkel also spoke out in support of the project. At a joint press conference with the Prime Minister of Poland Mr Morawiecki in February 2018, she announced that NS-2 is “a project that does not pose a danger to the diversity of energy supplies to Europe”.¹¹ Moreover, Angela Merkel entered into a heated *discussion on the topic of NS-2 with Mike Pence, the US Vice President, at the Munich Security Conference on February 16, 2019.*

This is an important step up, as previously Europe claimed that any Russian gas pipeline projects would increase Europe’s dependence, and this is bad. The rhetoric has changed, and the recognition that Nord Stream 2 is beneficial to Europe is a big step forward in cooperation, especially considering the environmental benefits of gas. [18].

In addition to Germany, Austrian governments joined the project, and the Czech Republic, in connection with the construction of NS-2, is expanding its gas transportation system and recognizes the project’s profitability for the country; Emmanuel Macron, the President of France, expressed support for all new gas pipelines if the current levels of gas consumption in the EU remain at the same level or increase in the future.¹²

Such statements provide the basis for a successful project. A general list of supporters of the project and their companies is the following: the Swiss-Maltese pipe-laying project NS-2 Pioneering Spirit; Russia (Gazprom); Germany (“E.ON”, “BASF”, “Wintershall”, “Uniper”); The Netherlands and the United Kingdom (Shell, Wasco Coatings Europe BV); Austria (“OMV”); France (“En-rie”); Czech Republic (NET4Gas); Finland (Fortum, Wasco); Switzerland (All-seas AG); Malta (Pioneering Spirit); Slovakia (conditional supporter in terms of negotiations between Eurostream and Gazprom); Norway (Kvaerner).

Supporters of the project believe that NS-2 is a purely economic project, but it also brings significant geopolitical benefits to the countries of Europe, primarily

¹⁰ Tregubova E. Drove into the pipe. Who in Europe supports Nord Stream-2, and who is against // Arguments and Facts. 03/21/2018. URL: http://www.aif.ru/money/economy/zagnali_v_trubu_kto_v_evrope_podderzhivaet_severnyy_potok-2_a_kto_protiv (accessed 22.11.2018).

¹¹ The Polish Prime Minister argued with Merkel on the Nord Stream-2 URL: <https://ria.ru/20180216/1514796022.html> (accessed 30.11.2018).

¹² Macron called the conditions for the implementation of new pipeline gas projects in Europe // Teknoblog.ru. 2018. URL: <https://teknoblog.ru/2018/07/28/91446> (accessed 30.11.2018).

Germany and Austria, therefore these countries are ready to sacrifice the interests of Ukraine and even challenge the US foreign policy in Europe [19].

Opponents of the NS-2. These include, as for NS-1: 1) transit countries that suffer losses for the lack of gas transit — Ukraine, Poland; 2) countries situated remotely from the gas supply pipeline: Hungary, Moldova and Romania, as for them transit payments may increase; Baltic countries: Estonia, Latvia, Lithuania, always speaking from Russophobic positions; and Denmark. A separate note must be made about the United States, which is strongly opposed to the project, primarily because of its own geopolitical interests [20].

Opponents of NS-2 believe that the new gas pipeline threatens Europe's energy security and runs counter to a strategy that implies diversification of energy supplies and a decrease in dependence on Gazprom, and it should also comply with the Third Energy Package [21].

In their fight against the NS-2 project, the authorities of Poland and the Baltic countries are hoping for political support from the United States and the US say on diversification of energy sources and strengthening EU energy security, in particular by the import of American LNG. At the same time they keep pointing out that this project could also harm Ukraine [22].

In 2017, the US Congress voted in favour of legislation imposing sanctions on firms cooperating with Russian companies in energy projects. If implemented, the law will lead to the imposition of sanctions on any company that is engaged in the development, maintenance, modernisation or repair of export energy pipelines in Russia (CAATSA law). This law is clearly aimed at Nord Stream-2, but it can affect other transport infrastructure, including the gas transportation system of Ukraine. The US has announced that it will publish guidelines for these sanctions that will bring greater clarity to their scope. Subsequently, in the USA, additional legislative and executive measures were taken against the project. In particular, on July 31, 2019, the US Senate Committee on Foreign Affairs adopted a draft bill on European Energy Security, which provides for additional sanctions against the project.

The US believes that the project undermines the energy security and stability of Europe, makes Europe dependent on Russian energy and gives Russia another tool to use energy for political purposes. Donald Trump, Mike Pompeo and other representatives of the US administration, as well as members of the US Congress, are actively participating in the diplomatic fight against NS-2.

One of the main reasons for the United States is that Russian control of European pipelines and low gas prices in the EU may impede future US LNG supplies to the EU [23]. This factor is perhaps the main one since deliveries of American liquefied gas to European consumers will cost them significantly more than Russian pipeline gas.

The geopolitical goal of the Nord Stream 2 pipeline, according to the United States and its allies, is to enable Moscow to transport and sell its natural gas to

the West, bypassing Ukraine's pipeline system. See details in [24]. The idea of its construction is to deliver an economic blow to the government in Kyiv, which Moscow is trying to destabilise, as well as to prevent any interruptions in the supply of natural gas to Europe if Russia decides to expand the scale of "military intervention" in the affairs of Ukraine. Former Ukrainian President Petr Poroshenko believes that the construction of NS-2 is a purely geopolitical project of the Kremlin, which has nothing to do with economic and private interests but only seeks to undermine the unity of Europe and, in the end, to destroy it.

The position of the European Commission is contradictory. On the one hand, according to Anna Kaisa Itkonen, the representative of the European Commission, the commission has no legal grounds for banning Nord Stream 2. The European Commission is ready to act as an intermediary in concluding a deal with Russia, "which will determine the legal regime for Nord Stream 2 and bring it into line with Brussels' priorities" [25].

On the other hand, the implementation of NS-2 is contrary to the objectives of the EU:

— 1) energy efficiency policy (reduction in gas demand); 2) the development of renewable energy sources (sources of heat and biogas); 3) research and innovation in the field of electricity storage, which in the future will lead to a further reduction in gas imports in the EU after 2030;

— EU sanctions policy. The construction of Nord Stream 2 will affect the coherence of EU foreign policy and economic sanctions against Russia. The main reason for imposing sanctions against Russia in 2014 is related to the events in Ukraine. According to the European Commission, Russia should pay a "high price" for violating the territorial sovereignty of Ukraine and change its policy. Nord Stream 2 provides Russia's clear economic benefit at a time when EU sanctions are still in force, and the reasons for these sanctions remain.

At the same time, the construction of Nord Stream 2 will lead to a decrease in transit revenues for Ukraine, which currently earns revenue of about \$ 3 billion a year for the transit of Russian gas through its territory to the EU market. Since the EU, the USA and the International Monetary Fund are currently the main financiers of the Ukrainian government, they will also indirectly incur losses from the losses of Ukraine.

Nord Stream-2 will also impede the efforts of the EU and the international community (economic and financial) to support the modernisation of Ukraine's gas infrastructure and return the allocated investments. Some of the arguments are presented in [26].

Thus, it can be noted that the opponents of the construction of NS-2 put forward mainly their geopolitical arguments against the project based on Russophobic policies pursued by Western countries, led by the United States, and not the economic benefits the gas pipeline will bring for the EU.

The European Union is interested in using the Ukrainian GTS, but on condition of the stable operating of the Ukrainian gas pipeline and underground stor-

age facilities. In fact, underground storage facilities are Ukraine's key to success in this matter, since this is something which neither Nord Stream nor the Belarusian gas transportation system has.

The struggle of Ukraine to maintain the transit of Russian gas via the Ukrainian gas transportation system

The transit of natural gas through Ukraine is significantly reduced in the presence of other transportation routes. At the same time, the technical capacity of the Ukrainian transmission system is approximately 142 billion m³ per year. However, if, in 2011, transit through Ukraine amounted to 104 billion m³, then in 2015 it decreased to 67 billion m³ (47% of the technical capacity). Although in 2016 and 2017 transit volumes have grown, the main question is what will happen after 2019, when the agreement between Gazprom and Naftogaz ends.

The European Energy Community, in accordance with the solidarity policy towards EU member states and non-EU countries, supports the EU's intent to maintain Ukrainian transit after 2019,¹³ and the EU's reluctance to reduce the number of routes (Yamal, NS-1 or Ukraine) through which gas enters the EU from Russia [27]. However, this does not comply with the plans of Russia to secure the reliable transportation of gas to European consumers.

Thus, Alexey Miller, the President of Gazprom PJSC, and Viktor Orban,¹⁴ the Hungarian Prime Minister, questioned the reliability of Ukrainian transit in February 2017; and in February 2018, Sergey Lavrov, the Russian Foreign Minister, talked about the economic disadvantage of natural gas transit through the Ukrainian gas corridor in comparison with the NS-2 project [28,29].

The Russian Foreign Minister noted the positive position of Germany on NS-2, drew attention to disagreements within the EU regarding this project, and agreed that the EU member states have the right to choose to purchase energy taking into account their commercial or ideological approaches.¹⁵

The management of the Ukrainian company NAK Naftogaz immediately responded to this statement, noting that "in 2020, Ukrainian gas transit tariffs will

¹³ Sefcovic: 'Everybody wants to be on good terms with us' // 2017. URL: <http://www.euractiv.com/section/energy/interview/sefcovic-everybody-wants-to-be-in-good-terms-with-us/> (accessed 30.10.2018).

¹⁴ Gazprom doubted the reliability of gas transit through Ukraine // Lenta.ru. 02/13/2017. URL: <https://lenta.ru/news/2017/02/13/gaz/> (accessed 29.11.2018).

¹⁵ The transit of gas to Europe via Nord Stream-2 will be twice as cheaper than through Ukraine — Lavrov // OIL. Capital. URL: <https://oilcapital.ru/news/export/19-02-2018/vd-voe-deshevle-budet-tranzit-gaza-v-evropu-po-severnomu-potoku-2-chem-cherez-ukrainu-lavrov> (accessed 29.09.2018).

decrease by ten times and, thus, will be 3–4 times lower than NS-2 tariffs.¹⁶ Due to this fact, Ukrainian transit will be able to compete economically with NS-2. In our opinion, this statement of Naftogaz is a populist one aimed at hampering the construction of NS-2 in any way. Even more harsh statements are made by Ukrainian experts who give their recommendations on how to stop NS-2.

It is also important to note the decision of the Stockholm court of February 28, 2018, according to which Gazprom was obliged to pay the Ukrainian company Naftogaz the final amount of compensation of \$2.56 billion for insufficient transit gas in the period from 2009 to 2013. Arbitrators justified that decision by a sharp deterioration in the state of the Ukrainian economy. According to experts, is a politicised decision and a possible threat of Ukraine syphoning gas from the pipeline.¹⁷

After these events, Gazprom began the appeal process, as well as the process that should lead to the termination of the contract of 2009, or the introduction of additional amendments to it. The enforcement of the Stockholm arbitration award dated February 28, 2018, was suspended by the Swedish Court of Appeal on June 13, 2018.¹⁸

As for the further contract after 2019, Alexey Miller, the head of Gazprom, back in April 2018, proposed to preserve Ukrainian transit in the amount of 10–15 billion m³, despite the launch of projects NS-2 and Turkish streams TP-1,2.

Vladimir Putin, the President of Russia, at a meeting with Donald Trump, the President of the USA, on July 16, 2018, in Helsinki, expressed his readiness to continue gas supply via the Ukrainian route and conclude a new agreement. The statement of the President of the Russian Federation was later confirmed by Alexander Novak, Minister of Energy, who also did not rule out the continuation of Ukrainian transit after 2019.¹⁹ The future gas supply volumes announced by Gazprom in case of continued transit after 2019 still cause considerable disagreement among the actors.

According to Igor Nasalik, the Minister of Energy of Ukraine, gas transit is economically beneficial only with volumes of more than 40 billion m³ per year.²⁰ The problem also lies in the necessary repairment and modernisation of the Ukrainian gas transportation system [13], one of its many problems being significant methane leaks into the environment during gas transportation. The economic

¹⁶ Naftogaz: gas transit through Ukraine will be 3–4 times cheaper than Nord Stream-2 // Neftgaz.Ru. 02.21. 2018. URL: <https://neftgaz.ru/news/view/169360-Naftogaz-tranzit-gaza-cherez-Ukrainu-budet-v-3-4-raza-deshevle-Severnogo-potoka-2> (accessed 29.10.2018).

¹⁷ Gazprom and Naftogaz launched a new series of gas confrontation // TASS. 01.03.2018. URL: <http://tass.ru/ekonomika/5000506> (accessed 29.11.2018).

¹⁸ The appeal confirmed the suspension of the court decision in the case of Gazprom and Naftogaz // TASS. 06/28. 2018. URL: <https://tass.ru/ekonomika/5332839> (accessed 27.11.2018).

¹⁹ Gas transit through Ukraine. Everyone is waiting for a change of power in Kiev // Ukraina.ru. 09/12. 2018. URL: <https://ukraina.ru/exclusive/20180912/1021103358.html> (accessed 15.11.2018).

²⁰ Media calculated how much gas transit will allow Ukraine to avoid losses // RIA NEWS. 04/12/2018. URL: <https://ria.ru/economy/20180412/1518445378.html> (accessed 27.11.2018).

and ecological aspects of that problem are described in more detail in our works [30, 31]. Modernisation of the Ukrainian gas transportation system will require financial resources comparable with the construction of NS-2.²¹

On July 17, 2018, tripartite EU-Russia-Ukraine negotiations were held in order to resolve these issues. With the European Union supporting Ukraine, the parties agreed on the need to conclude new contracts. A second meeting took place in Brussels on September 12, 2018, at which the parties agreed on the preparation of a new contract for the transit of Russian gas to the EU.²² In January 2019, another meeting was held, but it also did not lead to any results. The next tripartite meeting is planned in September this year.

Prospects for the Nord Stream 2 project

According to Gunther Oettinger, European Budget Commissioner, statement of December 30, 2018, concerning the NS-2 allows us to come to a conclusion — “threats by US President Donald Trump cannot stop the construction of the gas pipeline”,²³ which indicates the removal of the last obstacle to the Nord Stream 2 route. This signal is also important for Kyiv. It is also important that Gazprom concludes a fair agreement on the further use of existing pipelines which cut through Ukraine.

As indicated above, the United States gave itself the right to impose sanctions against the Russian gas pipeline construction, so there was only one uncertainty factor — whether the United States is going to act on that right. Brussels also covered this topic, and Gazprom overcame all other obstacles to ensure the permit for the construction of NS-2. Mr Oettinger gives a clear signal that if the US tries to stop Nord Stream 2, this will lead to a fierce conflict, primarily between the US and Europe.

It is also important to note that, for political reasons, the European Union is in opposition to NS-2, but in reality, economically, the EU is for the implementation of this project, taking into account all the present issues, such as a drop in gas production in Europe, energy security risks due to the unreliability of Ukraine as a transit country since the gas transportation system of Ukraine requires significant modernisation and the fact that the Ukrainian government, despite their Russophobic rhetoric, does not want to change anything. Also, the EU does not like Donald Trump’s alternative to buy more expensive American liquefied natural gas as opposed to Russian gas from Nord Stream 2.

²¹ Ukrainian GTS is approaching a critical degree of wear. SIGHT. Business newspaper. 09/09/2016. URL: <https://vz.ru/economy/2016/9/9/831561.html> (accessed 21.11.2018).

²² Ukraine — EU — Russia gas talks start in Brussels today // UKRIN-FORM.NET. 2018. URL: <https://www.ukrinform.net/rubric-economy/2536067-ukraineeurussia-gas-talks-start-in-brussels-today.html> (accessed 27.11.2018).

²³ Europe removed the last obstacle to Nord Stream-2. URL: <https://news2.ru/story/559168/> (accessed 20.01.2019).

Conclusion

To date, the NS-2 project is at the forefront of the political agenda not only in the EU but also in international politics. The fact remains that NS-2 is causing disagreement between the EU and the USA; between participating energy companies and EU member states; in relations between the EU and its international partners; in an academic/expert environment.

Germany is the leader in the group of supporters of the project in the EU, while Poland is the main opponent, supported by the USA. At the moment (March 2019), work on NS-2 is ongoing, and from official statements we can conclude that the project is going to be successfully completed.

The efforts of the EC in a tripartite dialogue along with statements by Gazprom's management, Vladimir Putin and Alexander Novak's energy experts suggest that despite the initial uncertainties regarding the preservation of the Ukrainian route after 2019 in connection with the construction of NS-2 and TS-2, transit will continue.

Most experts also advocate maintaining the Ukrainian gas corridor. The EC is interested in maintaining this route in connection with the negative economic consequences for Ukraine, the countries of Eastern Europe and the bilateral relations of the EU and Russia in the opposite case. Only the volumes of exported natural gas remain in question as the parties have different ideas about them. To a large extent, the volumes of gas supply from Russia, as well as the preservation of the route itself, will depend on the new Ukrainian home and foreign policy after the results of the presidential and parliamentary elections in Ukraine.

From the vantage point of Russia's energy interests in the EU, the current situation is far from calm because of geopolitical turbulence around Ukraine. The concrete result of such "negativity" was the introduction of sanctions against our country, which affected, among other things, the implementation of the NS-2 project. In our opinion, it is difficult to say how long it will take until a balance of geopolitical interests is found between Russia and the USA, as well as between Russia and the EU.

When assessing potential threats to the export supplies of Russian hydrocarbons, it is necessary to find the answer to the main question: can the demand for our gas in Western Europe decrease due to negative geopolitical changes? In our opinion, the demand will not change significantly.

The alternative for the Europeans is the unstable Persian Gulf, or Libya, or the mythical and also expensive American LNG. So, Europe is likely to increase gas supplies from Russia via the new NS-2 gas pipeline. Decisions, based on geopolitics, cannot dominate for long, because they cause economic losses to both companies and countries.

The implementation of the NS-2 project can turn into a significant contribution to ensuring the energy security of Europe, as well as a means of relaxing military tensions between NATO and Russia in the Baltic region, given the need for reliable functioning of the gas supply infrastructure, which excludes military conflicts in the region.

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