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RISKS TO UKRAINE'S ENERGY SECURITY THROUGH THE PRISM OF NORD STREAM 2 GAS PIPELINE PROJECT

To effectively prevent and neutralize real and potential external threats to the national interests of Ukraine in the field of energy security, geopolitical, security, legal and strategic risks associated with the commissioning of the Russian gas pipeline Nord Stream 2 have been identified. The dynamics and correlation of price fluctuations in the natural gas market in Europe have been investigated. The analysis of risks of undermining the security of natural gas supplies to Europe, which is associated with the construction of gas transmission pipelines bypassing Ukraine has been conducted.

The analysis and review are used as basis for identifying a pathway towards enhanced energy security and energy resilience in the region.

Key words: *energy security, energy diplomacy, geopolitics, energy resources, natural gas market.*

Моргунова Е. С. **Ризики для енергетичної безпеки України крізь призму газового проєкту «Північний потік – 2»**

Для ефективного відвернення і нейтралізації реальних і потенційних зовнішніх загроз національним інтересам України у сфері енергетичної безпеки визначено геополітичні, безпекові, правові та стратегічні ризики, пов'язані із введенням в експлуатацію російського газогону «Північний потік – 2». Досліджено динаміку та кореляцію коливань цін на ринку природного газу в Європі. Проаналізовано ризики підриву безпеки постачання природного газу до Європи, що пов'язано з будівництвом газотранспортних трубопроводів у обхід України.

Аналіз та огляд використовуються як основа для визначення шляху підвищення енергетичної безпеки та енергетичної стійкості в регіоні.

Ключові слова: *енергетична безпека, енергетична дипломатія, геополітика, енергетичні ресурси, ринок природного газу.*

The concept of energy security is a complex category that combines geographical, political, economic, security, technological and

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environmental dimensions. The energy security per se is determined by the state of the energy sector, which ensures the implementation of national interests on the basis of minimizing threats to a sufficient and uninterrupted supply of energy carriers and energy to consumers.

Energy security is an integral part of national security and economic development. The global economic crisis dictates the need to develop new approaches to researching and assessing the role of energy security and energy sustainability in increasing the competitiveness of countries. Ukraine provides a particularly striking example of such interconnections: dependence on one major supplier of natural gas, Russia's annexation of Crimea, and military incursion into the energy-rich regions of eastern Ukraine have put energy security high on the national agenda.

Historically, Ukraine has been dependent on energy imports, but after two gas conflicts with Russia, the Ukrainian government has begun to focus on decreasing energy dependence as a matter of national priority. De facto, the government has significantly reduced Ukraine's energy dependence on Russian natural gas. Since November 26, 2015 Ukraine has not imported natural gas under a contract with PJSC Gazprom (Russia), replacing it with imports from Europe by purchasing the resource exclusively on the country's western border.

Meanwhile, Ukraine has been actively involved in the process of integration into the European Union in the energy sector on the basis of the EU-UA Association Agreement and the Energy Community Treaty. This legal framework obliges the parties – Ukraine and the EU – to adhere to certain rules and cooperation mechanism, notably related to the gas sector. However, the Nord Stream 2 gas pipeline project, which has been a source of friction in transatlantic relations for years, driving up European gas prices, poses a threat to not only compliance with these rules, but also to the energy security of the parties, forcing Ukraine and the EU to look for ways to strengthen cooperation using existing instruments [1].

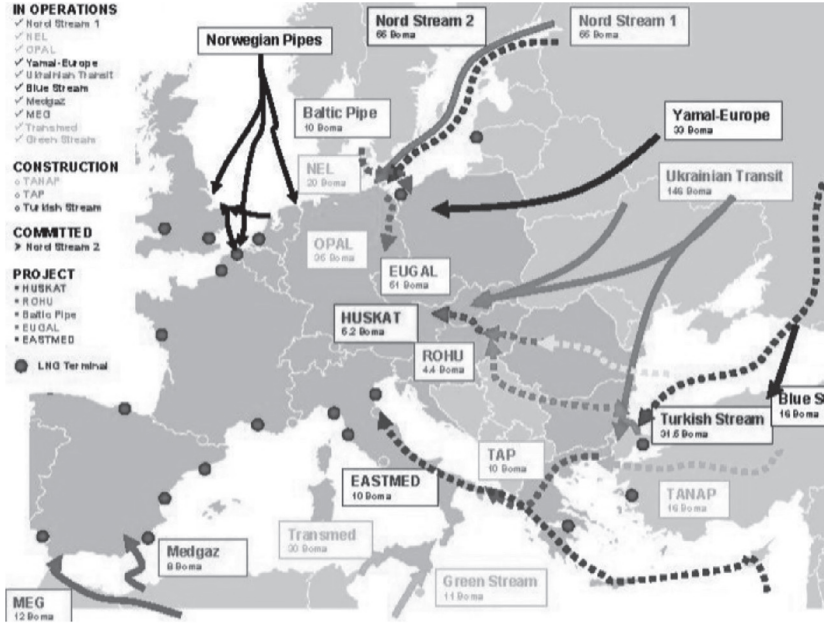
Energy security is one of Ukraine's key priorities, including diversification of energy supply routes, countering Russian gas blackmail and synchronization with the European ENTSO-E network. Ukraine strives to remain a reliable transit country for natural gas, stands for the preservation of transit and the conclusion of a new gas contract in accordance with European rules.

Due to sharp fluctuations in daily transit orders ("nominations") and persistently insufficient incoming gas pressure in pipelines, Russia is testing the reliability of Ukraine's route on a daily basis. In March 2018, Russia made an attempt to create a gas crisis in Europe by deliberately not providing Ukraine with prepaid gas, while simultaneously reducing pressure on the Russian side of the gas transmission system to 20% below the contractual norm – all in the middle of a severe cold snap in Europe. Nevertheless, under such manufactured circumstances, created by Russia to undermine Ukraine's system and advance Nord Stream 2 gas pipeline project, the Ukrainian gas transit system has performed flawlessly [2].

The Nord Stream 2 gas pipeline is one of the most debatable international gas pipeline projects. Officially, it is planned to transport natural gas produced in the Russian Federation from the gas fields of the Jamal peninsula in Siberia to the European Union. The approximately 1,234 km long pipeline consists of two separate strings, running in parallel with a distance of 55 to 100 m, having a joint capacity of 55 billion m3 / year. The pipeline runs from Ust Luga in the Russian Federation through the Baltic Sea to Lubmin in the Federal Republic of Germany, where it will be connected with the onshore European Gas Connection Line (Europäische Gas-Anbindungsleitung – EUGAL). Together with two strings of Nord Stream 1, the new combined capacity would reach 110 bcm. Such high volumes mean that the project will inevitably have grave consequences for the EU since all four strings of Nord Stream could transport nearly 70% of Russian gas export to the European Union [3].

De facto, the gas pipeline does not necessarily lead to more Russian gas in the European market, but it might result in major changes in gas flows in Europe, particularly in its central and European parts. The current routes via Belarus and Poland (the Yamal gas pipeline) and via Ukraine (the western corridor through Slovakia and the southern corridor through Romania) may be significantly affected. Depending on the distribution of capacities in Opal and Eugal (onshore extensions of Nord Stream 1 and Nord Stream 2) and the construction of the Turkish Stream, they may even be completely shut down. There is clear evidence of competition between routes: when Russia began to use more capacity in Opal (following new exemptions granted

Transit of Russian gas to Europe [4]



in October 2016), the volumes of gas shipped through Yamal and Ukraine decreased.

In security and foreign policy circles, there are grave reservations with regard to Nord Stream 2. Notably, calls for a moratorium on the pipeline have become more pronounced to build consensus in the EU and assess the project's impact on the security situation and transatlantic relations.

Although the legal and economic conditions have already been set, yet, Nord Stream 2 has found itself entangled into an international energy security drama, in which all parties pursue their own security interests and prepare for the worst. Speaking of Germany, sharing gas relations with Russia has been its long-standing paradigm that banks on a market-based approach and a desire to depoliticize the pipeline. The German government has regarded the project through an economic and regulatory prism since 2015, as it shared the approach that Nord Stream 2 would somewhat enhance the flexibility and liquidity of the European gas market.

Despite the fact that the European Union has enunciated an ambitious energy diversification strategy, some European governments have not reduced dependence on Russian gas, which accounted for about 48% of EU natural gas imports in 2020. Russian gas exports to the EU in the first quarter of 2021 grew by 18% year-on-year [5]. The factors underlying dependence on supplies from Russia include gas supplies reduction, coal phase-out commitments alongside with Russian investments in European infrastructure. Whereas in reality, Nord Stream 2 would give Russia greater political and economic leverage over Germany and other countries that are dependent on Russian gas, leave some countries more vulnerable to supply cutoffs or price blackmail by Russia, and increase Ukraine's vulnerability to Russian military aggression [6]. Suffice it to recall Russia's reluctance at the end of 2021 to increase gas flows to Europe amid renewed demand and a sharp rise in prices [7].

The EU market regime that has been favoring European consumers over the past decade did not changed the fact that the three main pipeline suppliers - Russia, Norway and Algeria - dominate the market or that Europe is the market of last resort for liquefied natural gas (LNG). In the current drawn market, Russian Gazprom is examining its market position not only to profit from high prices, but also to implement its long-term strategy to defend and strengthen its market share in the EU, while supporting the so-called 'Northern Route' from Bovanenkovo across the Baltic Sea to North-West Europe (NWE).

Surpassing competition can also take place in the Central and Eastern Europe (CEE) region, but at a different trade level. In place of competing on the price index, Gazprom can capitalize on underdeveloped infrastructure and reduce the investment incentives needed to attract new suppliers. Therefore, attempts to boost competition in the CEE region may be phased out and market development may be called into question.

As a result, the already existing divide between Western markets hub and isolated Eastern markets might be deepened, which would ultimately lead to record-breaking gas prices in Central, Eastern and Southern Europe. When assessing the impact of the Nord Stream gas pipeline on the internal energy market, it has to be highlighted that Gazprom has been subject to an investigation due to the abuse of its dominant position in the CEE region, which poses a grave threat with regards to diversification, energy security, isolation of strategic gas

infrastructure and even lead to the disintegration of some markets from the rest of EU markets.

Not to mention that Nord Stream 2 will severely affect Ukraine, a member of Energy Community, which might lose significant gas transit revenues and be exposed to grave security risks. During recent years, Russia has sought to downsize the amount of natural gas flows via Ukraine. By way of illustration, before Nord Stream 1 became operational in 2011, nearly 80% of Russia's gas exports to Europe crossed Ukraine. By contrast, in 2019, approximately 45% of such exports transited Ukraine [8].

In December 2019, following the imposition of new sanctions by the United States on Nord Stream 2, Russian Gazprom and Ukrainian Naftogaz extended the contract for the transit of Russian natural gas to Europe from 2020 to 2024 [9]. The contract provided for the transit of at least 65 billion cubic meters (bcm) in 2020 and 40 billion cubic meters per year from 2021 to 2024. In 2020, Russia supplied about 56 billion cubic meters to Europe via Ukraine, although Ukraine reportedly received the full contractual amount of $ 2.1 billion from transit revenues.

That said, Russia has a long history of using energy sources as a geopolitical tool to exert, maintain and enhance its political influence over and pressure on its perceived sphere of influence and consumers. The Russian regime has leveraged energy supplies to Europe in the part to exert its political goals, almost always at Ukraine's expense. Russia chopped off gas transit to Europe through Ukraine in 2006, 2009, 2014, 2015, and 2018 to create external pressure, and used revenues and connections from Russian energy projects to aid efforts of malevolent influence and strategic corruption in the transatlantic community.

In the endgame, more twists and turns played into the hands of Russia. During the first half of 2021, security of supplies in the EU gas market increasingly caused headaches as it evolved from an oversupplied into a tight gas market. In 2021 the European gas demand is on par with the pre-pandemic 2018-2019 levels, while Russian gas production has grown by 19% but gas exports to Europe are down. Moreover, instead of shipping additional volumes, Russia is taking gas out of its European storage facilities so that it can issue a blanket "delivering on contractual obligations". The effect if such "delivering" is a formidable market signal that generates fears in Europe of possible shortages in winter.

The missing pieces of the puzzle goes to gas prices in Europe, which surged to a record high on supply consumers [10]. Every time Ukraine's transit network offered additional transit capacities, the gas prices got triggered to the highest jump.

But security of supply is a legal requirement, not purely a political matter. The goal of ensuring security of supply is spelled out in the EU primary law in the Treaty of Lisbon. Secondary legislation explicitly refers to it in many instances. Hence, ensuring security of supply belongs to the regulatory framework that the Nord Stream 2 gas pipeline should follow.

Referring to the discussion on legal framework, one should remember that the EU internal market regulation, which has proven the most effective instrument for Brussels to pursue energy policy objectives, is shared between the bloc per se and its Member States [11]. While the latter possess national sovereignty over their energy mix over their energy balance, the Union sets standards devised to ensure a proper functioning of the EU energy market and security of supply through a legislative process.

The legal context of Nord Stream 2 is defined by the EU gas market rules in shape of the 2009 Third Energy Package [12]. In November 2017, the European Commission initiated a revision of the Gas Directive [13] in order to make it applicable to pipelines from third non-EU counties, aiming specifically at Nord Stream 2. The amended Directive, which eventually entered into force on May 23, 2019, requires compliance of the pipeline operator with ownership unbundling, third party access and non-discriminatory, transparent and cost-reflective regulated tariffs provisions.

Ownership unbundling means that gas producers and suppliers are completely cut off from the operation of gas pipelines, preventing any preferential treatment of one pipeline use by the operator. This is not the case of Russian Gazprom that is the only shareholder of the Nord Stream 2 gas pipeline. Third party access, in turn, means all gas producers and suppliers can access the pipeline on equal terms, providing a level playing field for competition between different suppliers. Finally, non-discriminatory tariff setting means similarly provide for tariffs for gaining access to a pipeline required to be published and apply objectively without discrimination to all eligible suppliers.

The cold hard fact that Nord Stream 2 is wholly owned by Gazprom that has all along opposed the EU policy of unbundling and marketization, preferring long-terms "ship-or-pay" contracts, leads to the conclusion that Nord Stream 2 violates the EU market-oriented energy policy, and that the pipeline operator Nord Steam 2 AG does not fulfil the requirements to be certified pursuant to the applicable European law [14].

Given the planned route of Nord Stream 2, including of territorial waters and exclusive economic zones, it should be noted that the pipeline legal situation primarily hinges on being in or outside EU territory. However, the EU and non-EU part of the pipeline cannot be legally disconnected due to the way Nord Stream 2 is constructed. From the basic technical point of view, the gas pipeline constitute one whole, and there is single entry point in Russian Federation and one exit point in the EU.

There is no doubt that the EU part, which constitutes almost 140 km of the pipeline (Denmark – 88 km of territorial waters; Germany – 50 km of land territory, internal and territorial waters), and the remaining 950 km non-EU part of Nord Stream 2, which is located in exclusive economic zones of Germany, Finland, Sweden and Denmark are not legally disconnected and regulating one part influences the other. Consequently, it is not therefore possible to apply rules for one part of the pipeline without consequences for the other [15].

To ensure security of supply through diversification of routes, the alternative transport corridor through Russia to the European Union through Ukraine must remain operational. Subsequently, this requires that the Ukrainian gas transmission system is put on an equal footing with Nord Stream 2 which has been opened up for use by non-Gazprom parties for gas transportation between Russia and Europe, as required by European law.

The gas transmission system (GTS) operator of Ukraine is one of the largest transmission systems in Europe. Given the technical characteristics of 33,079 km of main gas pipelines, Ukrainian GTS has interconnections with the gas transmission systems of Belarus, Slovakia, Poland, Hungary, Romania, Moldova and Russia and has historically been used for transit of Russian gas to the EU.

The Ukrainian gas transmission system is already governed by European gas market rules, with ownership unbundling, third party

access and non-discriminatory cost-reflective tariffs in principle opening the system for use by non-Gazprom parties for gas transportation between Russia and Europe. De facto, however, such use is blocked by Gazprom's abuse of its monopoly on cross-border pipeline gas transportation and its ownership of the Russian gas transmission system to block access to the Ukrainian system at the Russian border.

Besides, continued use of the Ukrainian gas transmission system to transport natural gas to Europe is likely to deter further Russian military aggression against Ukraine, and is therefore beneficial from a wider long-term European security perspective.

Broadly speaking, it is also the declared intention of EU leaders to keep Ukraine a transit state for Russian gas, and to integrate the country into the European energy network. This is a political goal of the EU, the main motivation for which is the stabilization of the domestic and foreign policy of the Ukrainian leadership and closer linking of the country to the EU through a strategic energy partnership.

From Ukraine's perspective, opposing the Nord Stream 2 gas pipeline project should go hand-in-hand with preparing pragmatic contingency plans. By persevering to oppose Nord Stream 2 and lobby for the U.S. sanctions, Ukraine should increase pressure on Russia, thus creating a room for manoeuvre referring to its contingency plans [16].

Be as it may, it is to be bet that the combination of legal process and the prospect of further U.S. sanctions will push for a reconsideration of the Nord Stream 2 gas pipelines project that would otherwise be particularly to the EU's security of supplies and the integrity of the European Union per se.

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