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Nord Stream 2: Inconvenient Questions

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As the European Union faces a range of pressing challenges, there is one issue that merits special attention: The Russian gas pipeline running on the Baltic Sea seabed. Although it is often portrayed as "purely commercial", the purpose of Nord Stream 2 is anything but that. It is intended to rewrite the politics of natural gas supply to Europe for years to come and to solidify Russia's position on the EU gas market. Beyond economic and market considerations, a number of issues leave no doubt that the "blue fuel", rather than becoming an increasingly tradable commodity, remains one of Russia's principal instruments of pressure and coercion, both political and economic.

It may seem that Nord Stream 2 (NS2)—the two additional strings of the direct gas pipeline between Germany and Russia—has already received sufficient coverage, both from expert and media circles. Still, the anticipated and much-hyped beginning of the construction phase of the pipeline and the mounting pressure on Gazprom to get it operational shed new light on old problems.

The case for revisiting the arguments in the NS2 debate seems all the more compelling given that the completion of the project may not be a foregone conclusion, contrary to what the pipeline's proponents and advocates claim. In fact, the opposite may be true, as new, unanswered questions are being raised. Apart from creating a record of the known issues,¹ this paper will identify new ones that have not been addressed and yet are crucially important. However, the task of resolving the issues these questions raise will belong to the supporters of NS2.

Nord Stream 2: The Continuation of Politics through Business?

Promoters of the Nord Stream pipeline extension argue that it is an entirely business-motivated enterprise and that its opponents, including the Baltic states, Central European members of the EU, the European Commission, and consecutive U.S. administrations, have politicised the project. Nothing could be further from the truth, despite NS2 advocates rolling out a number of arguments to prove their case. These can be summed up in six questions meant altogether to create an image of a project not only perfectly aligned with EU priorities and regulations but also indispensable to the future of Europe's gas supply. The reality, however, is much more nuanced.

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¹ This report is based primarily on PISM publications and unpublished works.

"Isn't Europe in need of cheap, clean natural gas, which Russia happens to have in abundance?"

In 2017, EU-Russia gas trade reached a record level of 160 billion cubic metres (bcm).² At the same time, alarm bells rang in Europe that it will need more gas sooner rather than later.³ The sense of urgency is amplified when one takes into account declining gas production in the UK and decisions to reduce supply from the Dutch Groningen field. It is also argued that gas is needed as a "transition" fuel towards the German Energiewende-style decarbonisation. That was music to Gazprom authorities' ears, allowing them to portray NS2 as the perfect solution to the EU's problems.

Not neglecting the fact that gas consumption is rising worldwide, including in the EU,⁴ it is somewhat astonishing that the public discussion has focused on the NS2 solution while overlooking at least three alternatives.

Russia already has sufficient capacity at its disposal to supply its European customers with "blue fuel". Back in 2012, when the first two strings of Nord Stream (NS1) reached full technical capability, the transmission capacity of Russian gas pipelines exporting gas to the EU amounted to ca. 250 bcm while utilization rate stood at only 45% (112 bcm). Although Russian gas supplies to the EU in 2017 were record high at about 155 bcm, the maximum transmission capacity was still far higher (with only 62% of capacity used) and did not justify the investment in an additional 55 bcm.

The European market is able to absorb significant volumes of liquified natural gas (LNG) from other exporters. The EU is home to about 20% of the world's regasification capacity, enough to import 223 bcm of LNG. Still, the utilization rate remains low (in 2016, terminals recorded 0-36%) and LNG accounts for only 12% of EU gas imports. Liquified gas can contribute to diversification, provides flexibility to the natural gas supply system, and allows for greater competition in both the upstream (production and supply of gas) and downstream sectors (distribution of gas to consumers). Indeed, as EU Member States have moved to buy more gas from the U.S., Qatar, and other producers, Gazprom felt it necessary to lower prices to protect its market share.

More generally, the question is whether the role of gas is overestimated? The answer may be akin to reading tea leaves, but look at the UK, for example. The British power sector counts as one of the most advanced in decarbonisation. Despite predictions that its withdrawal from coal would translate into a "dash for gas", this scenario did not materialise. Over the past five years, renewable sources have increased from 11% to 28% of the energy supply and coal has fallen from 40% to just 7%. In the same period, only one large gas power plant was put into operation (in 2016, the first since 2012) and it is anticipated to be the last of its kind built in the UK. Britain also was where the biggest decline in gas consumption was observed in Europe (1.7 bcm). The country may even consider phasing out gas altogether. 13

Thus, the huge additional capacity of NS2 may petrify the structure of the energy mix in some EU countries and slow the transition to renewables, demand-side management, and storage technology.

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² Volume regards only EU Member States. See: "Delivery Statistics, Gazprom Export," Gazprom, www.gazpromexport.ru.

³ J. Stern, "Europe is going to need more gas imports sooner than was expected," Financial Times, 20 February 2018.

⁴ Natural gas demand in the EU rose in 2016 and 2017 after declining between 2010 and 2014. See: Oxford Institute for Energy Studies, "Natural gas demand in Europe in 2017 and short-term expectations," Oxford Energy Insight, April 2018.

⁵ A. Gawlikowska-Fyk, "Nord Stream 2: gazociąg podziałów," *Biuro Analiz Sejmowych Infos*, nr 13(236), 16 listopada (November) 2017.

⁶ 2017 calculations based on: DG Energy, Market Observatory for Energy, "Quarterly Report Energy on European Gas Markets, 4th quarter of 2017," Vol. 10, Iss. 4, p. 3, https://ec.europa.eu.

⁷ "Mémo 2016," Gas in focus—Observatoire du Gaz, 18 October 2016, p. 11, http://www.gasinfocus.com.

⁸ European Commission, "Follow-up study to the LNG and storage strategy," 2017.

⁹ Council of European Energy Regulators, "Removing LNG barriers on gas markets," 1 December 2017.

¹⁰ H. Foy, "Russia's gas exports to Europe rise to record high," *Financial Times*, 3 January 2018.

^{11 &}quot;Coal to Clean. How the UK phased out coal without a dash for gas," Sandbag Report, May 2018. https://sandbag.org.uk.

¹² The Oxford Institute for Energy Studies, "Natural gas demand ...," op. cit.

^{13 &}quot;Coal to Clean. ...," Sandbag Report, op. cit.

While the supply-demand trends in the EU may suggest that a "dash for gas" is just around the corner, and even if a fair share of that is to come from Russia, that does not by itself mean NS2 is necessary and justified.

"Won't the Third Energy Package solve the problem?"

Whether the EU's Third Energy Package (TEP) can be applied to offshore cross-border pipelines with third countries, like NS2, was open to debate. In September 2017, the Commission concluded it could not. Instead, the Commission put forward a proposal to amend the EU gas directive to make it perfectly clear that pipelines like NS2 also must comply with the rules provided for in the TEP. ¹⁴ Russian officials, however, have repeatedly questioned the rationale for the Commission's move. ¹⁵ Both the Russian government and state-owned Gazprom, together with its affiliates, oppose any regulatory measures aimed at ensuring NS2's compliance with EU energy law. ¹⁶ This is in line with the general Russian attitude to the TEP, which Russia has challenged at the World Trade Organisation (WTO) since the regulation was introduced. ¹⁷ Thus, it is highly unlikely, at least for the time being, that the fundamental rules of the EU energy market will be applied to the pipeline.

An outcome where NS2 remains outside EU regulation would be incompatible with EU energy policy and legislative steps undertaken by EU institutions in recent years. The so-called IGA decision¹⁸ adopted in 2017 clearly states that the "proper functioning of the internal energy market requires that the energy imported into the Union be fully governed by the rules establishing the internal energy market". And, as underlined by the Commission in 2016, "each of the potential new infrastructures can have a systemic impact on the entire European Union energy market. It is therefore essential that they are compatible with EU law". ¹⁹

If NS2's operation is not brought under the TEP, the regulatory regime applied to the pipeline will be reduced to the lowest common denominator imposed by a third country. In the end, Russian law would still govern the operation of the pipeline at its entry point, ²⁰ including access to the pipeline's capacity and other critical issues. This will negatively affect the operation of new pipelines built on EU territory and runs counter to the idea of a competitive and liberalised internal energy market.

The case of OPAL—a pipeline that connects NS1 to the existing grid in Germany and the Czech Republic—is illustrative in this regard. It clearly demonstrates that the application of the TEP to intra-EU pipelines is to a large extent rendered moot if they are used to transport gas imported to the EU through a pipeline that does not operate in line with EU gas rules. ²¹ In OPAL's case, Gazprom has a monopoly on gas transited through NS1 and requested the Commission exempt it from the TEP with respect to OPAL, in accordance with the EU gas directive. Upon receiving the exemption, which had been limited only to a certain portion of the pipeline's capacity, Gazprom claimed that the remaining portion was left unused because of a lack of interest among its competitors. This came as no surprise, since there was no other way to feed the pipeline

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¹⁴ A. Gawlikowska-Fyk, S. Zaręba, "Negotiations between the European Commission and Russia on Nord Stream 2," *PISM Bulletin*, No. 41 (981), 27 April 2017, www.pism.pl.

¹⁵ See, e.g.: "Russia Doubts EU Gas Directive Changes on Access to Nord Stream 2 Should Exist," *Sputnik News*, 24 November 2017, www.sputniknews.com.

¹⁶"Energy minister calls possible EC mandate for Nord Stream 2 talks 'undesirable precedent'," *TASS*, 27 September 2017, http://tass.com.

¹⁷"Russia takes EU energy rules to WTO arbitration," *euractiv*, 2 May 2014, https://www.euractiv.com.

¹⁸ Decision (EU) 2017/684 of the European Parliament and of the Council of 5 April 2017 on establishing an information exchange mechanism with regard to intergovernmental agreements and non-binding instruments between Member States and third countries in the field of energy, and repealing Decision No 994/2012/EU, 5 April 2017, https://eur-lex.europa.eu.

¹⁹ Commission Staff Working Document—Impact Assessment, Accompanying the Proposal for a Decision of the European Parliament and of the Council on establishing an information exchange mechanism with regard to intergovernmental agreements and non-binding instruments between Member States and third countries in the field of energy and repealing Decision No 994/2012/EU, 16 February 2016, https://eur-lex.europa.eu.

²⁰ A. Gawlikowska-Fyk, S. Zaręba, "Negotiations ...," op. cit.

²¹ Ibidem.

with gas from any other source than NS1. Gazprom was then allowed to "access" the remaining "under-utilised" capacity.

If such practice becomes the norm, the EU will end up with more pipelines being constructed on its territory designed to suit the needs of just one supplier and used only by that supplier. The fundamental rules of the TEP of third-party access to infrastructure, unbundling of transmission and gas supply, and transparent, non-discriminatory tariff regulation will be ignored. A similar pattern of behaviour is very likely to emerge with NS2 and the planned EUGAL pipeline (the land branch of NS2)—indeed, both will run parallel to NS1 and OPAL.

"Doesn't new infrastructure induce greater competition that benefits customers?"

The negative effects of NS2 on the gas markets of Central and Eastern Europe (CEE) will be twofold. First, the pipeline will prevent the diversification of gas supplies in the region. Second, it will petrify the division of the EU gas market into two parts, eastern and western.

NS2 will jeopardise the efforts already made by Central European Member States, such as Hungary, Poland, and Slovakia, to diversify their supplies. With abundant quantities of Russian gas available on German and other Western markets, they may be unable to reduce their dependence on gas from Russia. This will affect in particular those countries with no access to the sea, and thus unable to substitute their pipeline imports with LNG deliveries.²² The possibility of gas being diverted from its existing routes to NS2 would increase the uncertainty regarding the utilisation of transit infrastructure in Slovakia and Poland, negatively affecting planned development of the respective networks.²³

What is more, NS2 may undermine future diversification efforts by lowering the profitability and increasing the economic risk of some investments.²⁴ It may hinder the Baltic Pipe project, the aim of which is to bring natural gas from Norwegian gas fields to Poland and other countries in the region.²⁵ It also may adversely affect the construction of Eastring,²⁶ a pipeline project to connect the gas systems of Bulgaria, Romania, Ukraine, Hungary, and Slovakia.²⁷ Finally, NS2 may compromise the economic viability of planned gas interconnectors between Poland and Slovakia and between Poland and the Czech Republic, which would allow the delivery of gas from the Polish LNG terminal at the Baltic Sea.²⁸

With NS2 coming online, and in conjunction with the exemption for OPAL (and possibly also EUGAL), Gazprom would in fact gain another tool for energy blackmail—not for blackmail's sake, but to uphold its policy of price differentiation between the natural gas markets in Central Europe and those further to the west.

The expansion of pipeline capacity from Russia directly to Germany, with nominal annual capacity of 55 bcm, along with either existing or planned onshore infrastructure, would allow Gazprom to effectively halt deliveries via transit countries unless they agree to pay a premium for their gas or to otherwise secure

²² A. Rettman, "EU drafts tough conditions for Russia pipeline," euobserver, 14 September 2017, https://euobserver.com.

²³ A. Łoskot-Strachota, "The case against Nord Stream 2," energypost, 23 November 2015, http://energypost.eu.

²⁴ W. Jakóbik, "Race against Nord Stream 2," Central European Financial Observer, 24 August 2016, https://financialobserver.eu.

²⁵ Unlike NS2, Baltic Pipe has been recognised by the European Commission as a key EU infrastructure project, i.e., a Project of Common Interest. It has already received €33 million in support from the Connecting Europe Facility (CEF), the European support programme for trans-European infrastructure. See: Baltic Pipe Project, https://www.baltic-pipe.eu; "EU invests €79 million for gas and electricity projects in Central Europe," Central Europe Energy Partners, 1 February 2018, https://www.ceep.be.

²⁶ A. Łoskot-Strachota, "The case against Nord Stream 2 ...," op. cit.

²⁷ Just like Baltic Pipe, Eastring has been recognised as a Project of Common Interest and was granted €1 million by the CEF to fund the feasibility study. See: Eastring project, "The Eastring pipeline was confirmed as the EU's Project of Common Interest," 5 December 2017, http://www.eastring.eu.

²⁸ Both interconnectors, in contrast to the OPAL pipeline, are included as crucial elements of one of the four top-priority European gas corridors. See: *Commission Delegated Regulation (EU) 2016/89 of 18 November 2015 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest,* 18 November 2015, https://eur-lex.europa.eu.

Gazprom's position.²⁹ This would work similar to Gazprom's prohibited destination clauses, which the European Commission, using its prerogatives as competition policy watchdog, banned. Nord Stream's expansion will prevent market integration of Western and Eastern Europe, resulting in a greater price difference between the two regions. Central European consumers will suffer the negative consequences of the project.³⁰ Its expansion would amount to the creation of nothing short of a new and very real dividing line between Western Europe and the CEE.

"Don't Europeans benefit from NS2?"

Further expansion of Nord Stream will have a negative impact on the CEE but Germany will benefit from the doubling of direct supplies from Russia, its increased role as a hub, and tailored gas prices. Already now, both its physical capacity and the size of the domestic market makes Germany the largest gas consumer in Europe (92 bcm³¹) and, at the same time, the largest importer of Russian gas (53.44 bcm³²).

With NS2 doubling the 55 bcm per year of NS1, which has been operating at close to full capacity, ³³ as much as 110 bcm per year of natural gas will be pumped to Germany through the northern route. This will mean that nearly one third of EU 2017's imports of natural gas, amounting to around 360 bcm/year³⁴, will be supplied directly through that country³⁵.

At the same time, about 80% of the Russian gas supplied to Europe will flow through Germany. That puts Germany, where the onshore part of Nord Stream 2 terminates, in the position of middle man, especially to Central European countries. In 2017, whilst Germany increased its gas imports by 11.5%, exports grew by as much as 29%. ³⁶ Add to that the loss of British NBP (the most important gas hub in the EU) after Brexit and the expected merger of two German hubs (NetConnect Germany and Gaspool) in 2022 and one cannot miss what is at stake for the German gas market. As a result, Germany, already one of the most important gas hubs in the EU, will become even stronger.

For Germany, it is imperative to have predictable and stable access to energy, key to its manufacturing base.³⁷ The promise to keep privileged prices (NS1 lowered them for German companies, both energy-producing and energy-intensive industries³⁸), coupled with hopes to become a principal EU hub and expectations of a rise in gas demand because of Energiewende,³⁹ all strike a chord in Germany. This is the reason for both the support NS2 enjoys among energy companies and politicians alike, and why controversy over the project is limited in Germany.

²⁹ G. Zachmann, "Nord Stream 2: a bad deal for Germany and Eastern Europe," *Bruegel Opinion*, 18 July 2016.

³⁰ P. Kotek, A. Selei, B. Takácsné Tóth, "The Impact of the Construction of the Nord Stream 2 Gas Pipeline on Gas Prices and Competition," Regional Centre for Energy Policy Research, 24 February 2017.

³¹ The Oxford Institute for Energy Studies, "Natural gas demand ...," op. cit.

³² This volume regards only EU Member States. See: "Delivery Statistics, Gazprom Export," Gazprom, www.gazpromexport.ru.

³³ B. Bieliszczuk, A. Gawlikowska-Fyk, "Another Stage in the Russia-Ukraine gas conflict," *PISM Spotlight*, No. 13/2018, 5 March 2018, www.pism.pl.

³⁴ DG Energy, Market Observatory for Energy, "Quarterly Report ...," op. cit., p. 2.

³⁵ Supplies are transited also via the Jamal pipeline (36 bcm).

³⁶ Bundesamt für Wirtschaft und Ausfuhrkontrolle, "Entwicklung des deutschen Gasmarkets," www.bafa.de.

³⁷ S.F. Szabo, "Germany, Russia, and the Rise of Geo-economics," Bloomsbury Academic, London-New York 2015, p. 8.

³⁸ J. Grätz, "Russia's Pipeline Overstretch: Market Monopolization at the Expense of Reliability," *Russian Analytical Digest,* No 113, 15 May 2013, p. 9.

³⁹ Germany's automotive sector in parallel to electrification put forward the idea to convert diesel engines to natural gas (LNG/CNG). Some car manufacturers have already concluded strategic alliances with the gas sector (e.g., Volkswagen and Wingas). Like the power sector, natural gas is a transition fuel, one that is both cleaner than petrol or diesel and more accessible than charging stations for electric cars. See: A. Gawlikowska-Fyk, "Electric Cars in Germany—Drive against the Current," *PISM Bulletin*, No. 105 (1045), 6 November 2017, www.pism.pl.

"Isn't the project merely an expansion, so why the concern about environmental impact?"

NS2 is unlikely to benefit, either in the short or long term, the EU's environmental or climate policy priorities. With respect to short-term considerations, the pipeline is located near Natura 2000 conservation sites in eight countries. 40 Although in some of these countries environmental permits were issued based on the assumption that it will be nothing more than an expansion of existing infrastructure, the regulators seem to have turned a blind eye to the project's environmental impact assessment. For instance, during relevant proceedings in Finland, Gazprom expressly admitted it did not assess the impact of the construction of the pipeline on the migration routes of birds and marine mammals but still claimed that the project would not negatively affect the migratory movements of these animals. Surprisingly, this explanation was accepted. 41 Serious doubts also have been raised by environmental organisations in Germany. NS2 construction is claimed to pose a threat to the habitat of endangered harbour porpoises and sea ducks. It also will lead to the release of vast amounts of bioavailable phosphorus (BAP) into the Bay of Greifswald, prompting strong algal growth and creating large areas of oxygen-deficient dead zones. 42 Indeed, pipeline surveys by Gazprom in the Kurgalskii refuge, an area of Russia designated as a special protection zone with rare species, such as eagles and ringed seals, already have caused serious environmental damage. These preparatory works were undertaken without any permits whatsoever. In fact, Russian authorities altered the boundaries of the refuge to make it legally possible to even put the NS2 pipeline there. 43

Another grave environmental issue ignored by Gazprom and its affiliates has to do with the fate of post-World War II and Soviet-made munitions dumped into the Baltic Sea in various areas adjacent to the pipeline route. These include not only explosives but also large quantities of chemical warfare agents. For example, it is estimated in just the Bornholm Basin there are about 32,000 tonnes of Soviet chemical weapons lying on the seabed, in the Gotland Basin, about 3,000 tonnes of aerial bombs, mustard gas shells, and assorted chemical weapons, and in the Bay of Pomerania, more than 38,000 tonnes of shells and bombs containing agents such as tabun (GA), mustard gas, adamsite (DM), and Zyklon B used in the Nazi German death camps. Environmental protection organisations warn these dump sites may be disturbed during construction of the pipeline and call for an adequate mitigation strategy. This, however, has not been provided yet.⁴⁴

The NS2 project is also incompatible with long-term EU environmental policy goals, in particular the Union's climate policy, since it will deepen its fossil fuel dependence for decades. According to estimates based on publicly available data, Russian proven gas reserves are enough to suffice for about 80 years at current production and supply rates. Burning natural gas yields half as much carbon dioxide emissions as burning coal but is still a considerable amount. According to the estimates, the additional 55 bcm of natural gas brought to the EU each year will result in around 106 million tonnes of CO₂ a year, an amount roughly equal to the current greenhouse gas emissions of the Czech Republic. One needs also to take into account recent scientific studies showing that the extraction and production of natural gas frequently leads to leaks of methane, a greenhouse gas 30 times more potent than carbon dioxide as a heat-trapping gas. According

⁴⁰ "Nord Stream 2 'useless and illegal,' say environment experts," ClientEarth, 7 June 2017, https://www.clientearth.org.

⁴¹ "Kolejne problemy dla Nord Stream 2. Fundacja ClientEarth skarży w Finlandii zgodę na budowę gazociągu," *Forsal*, 12 May 2018, http://forsal.pl.

⁴² K.C. Detloff, "Pipeline passing through marine protected areas? Nord Stream 2 will cause damage to sensitive ecosystems," NABU, https://en.nabu.de.

⁴³ E. Chirikova, "The pipeline feeding billions to Putin ... evading sanctions on the way," *The Guardian*, 24 June 2017, www.theguardian.com.

⁴⁴ A. Allington, "Pollution, Politics, WWII Bombs Threaten Russian Pipeline," *Bloomberg*, 27 April 2018, www.bna.com.

⁴⁵ See: J. Josefson, A. Rotar, "Oil and gas regulation in the Russian Federation: overview," *Thomson Reuters*, 1 May 2018. https://uk.practicallaw.thomsonreuters.com.

⁴⁶ M. Stoczkiewicz, "EU should block Nord Stream 2 on climate grounds," *Climate Home News*, 20 April 2017, www.climatechangenews.com.

to these sources, the leaks greatly diminish or even negate the climate change benefits of using natural gas as a fuel.⁴⁷

In this context, it must be stressed that under the 2015 Paris Agreement, all parties, including the EU, must put forward new greenhouse gas reduction aims every five years, with each aim more ambitious than the previous one. The elimination of coal-related energy generation will soon not be enough to meet this requirement, so the EU will have to tackle the issue of the impact of natural gas. NS2 may instead lock it into fossil fuel dependency for years.

"Isn't Europe interested in greater diversification, something that NS2 offers?"

Once operational, NS2 and EUGAL will greatly increase the capacity of the northern gas supply route from Russia across the Baltic Sea to Germany. As evidenced by Gazprom's actions in the aftermath of the lifting of the OPAL pipeline capacity restrictions by the EU Court of Justice in July 2017, a considerable share of Ukrainian transit will be rerouted to NS2.

Such an outcome will be grossly inconsistent with EU initiatives aimed at increasing the diversity of sources and delivery routes of natural gas. One of them is the Energy Union project, which aims to ensure that Europe has secure, affordable, and climate-friendly energy. When introducing it in 2015, the Commission argued that the EU needed to diversify gas supplies and increase resistance to disruption by limiting dependence on dominant suppliers and finding alternative sources. A year before, in its 2014 energy security strategy—still in force—the Commission identified "the strong dependence from a single external supplier" as "the most pressing energy security of supply issue", expressly pointing to Russia as regards the gas supply to several EU Member States and calling on them to reduce this dependence.

In this context, NS2 diversifies neither the source, nor the delivery route for natural gas. It offers "fake diversification" and is squarely at odds with the European Union's year-long efforts in this area.

As a footnote to the above, and in an attempt to soothe these concerns, NS2's patrons often argue that thanks to the changes both on the global gas market (increasing availability of spot-contracts, rapid development of LNG market) and in infrastructure (growing number of interconnectors, LNG terminals, various types of storage, etc.) dependence on any particular provider of gas becomes easy to break should a crisis occur. Consequently, even if NS2 is completed, Germany and all other major European gas consumers will be able to quickly find alternative supplies in case flow is interrupted. As attractive as this argument may be, it is impossible to know whether it actually holds water, as only a real-life crisis could prove it right or wrong. For the time being, is the EU—the European Commission, the Member States—comfortable with accepting such a risk? And if the answer is yes, then at whose expense exactly? The public needs clarity about this.

Russian Gas: No Political Strings?

To fully comprehend the shakiness of the argument about "a purely business-centred rationale for Nord Stream 2", let's turn to the other side of the equation: the Russian motivations behind the project. The Russian strategy is as political as it gets. With NS2, Russia will be able to achieve two strategic goals: independence from gas transit through Ukraine, followed by limitation of Ukraine's bargaining power in talks with Gazprom, and strengthening of German-Russian ties, both economic and political.

⁴⁷ See, e.g.: C. Roche, A. Simon, "Can the climate afford Europe's gas addiction?," *Friends of the Earth Europe*, 7 November 2017, www.foeeurope.org; C. Davenport, "Study Finds Methane Leaks Negate Benefits of Natural Gas as a Fuel for Vehicles," New York Times, 13 February 2014, www.nytimes.com; W. Stanek, R. Białecki, "Can natural gas warm the climate more than coal?," *Fuel*, Vol. 136, 2014, pp. 341-348.

⁴⁸ A. Gawlikowska-Fyk, S. Zaręba, "Negotiations ...," op. cit.

⁴⁹ Communication from the Commission to the European Parliament and the Council – European Energy Security Strategy, 28 May 2014 https://eur-lex.europa.eu.

Wandel durch (Gas)Handel?

The original German idea of developing close economic ties with Russia in part to encourage Moscow to adopt Western values ("change through rapprochement") lay at the core of *Ostpolitik*, developed in the late 1960s. At the policy level, commercial issues are the driving force behind Germany's external activities, thus translating directly into federal foreign policy. Yet, even before Russia's annexation of Crimea, that policy was confounded. Actually, the commissioning of NS1 proved that any change in Russian behaviour through extended cooperation (in this case, in gas) does not work. It didn't prevent Russia from aggression on Ukraine; on the contrary, it has been a source of financing for the Russian war machine, and it petrifies the authoritarian model of power in Russia, providing the Kremlin with much-needed political legitimisation.

In the aftermath of Russia's annexation of Crimea, it seemed that the project to strengthen EU-Russia energy cooperation had no chance of success. Russia then skilfully took advantage of German old sentiments and long-lasting assumptions towards the eastern giant. The ultimate symbol of this policy is the position of Gerhard Shröder, the former German chancellor who, immediately after stepping down from politics, joined the NS1 consortium as its head, and since 2017, is also the chairman of the board of Russian state-owned refiner Rosneft. So, while Russia-EU relations reached a post-Cold War low, Gazprom together with five companies rolled out a memorandum that foresaw an even closer relationship between Germany and Russia via the gas sector.

The limited effectiveness of *Ostpolitik* so far makes any hope of introducing more restraint into Russian behaviour via even more intensive cooperation rather far-fetched. At the same time, the relation between business and politics in Germany should be clear: "German Russia policy is seen as being driven largely by economic interests and change would likely come from the private sector. If the cost of doing business with Russia becomes too high then a change in German policies would follow".⁵¹ The same general observation applies to NS2.

Nord Stream 2 is Not about Ukraine—Or is It?

The big prize in the push behind NS2 is Ukraine. Russia has never really given up on its vision of Ukraine, and specifically on its gas system. The Ukrainian gas pipelines, with huge transit capacity to Europe and substantial storage to go with it, made the system indispensable for Russian gas exports westwards. It is worth remembering that not so many years ago Russia sought to gain control over the Ukrainian gas transportation system, not only to monopolise the market but also to impede Ukraine's integration with the EU in the energy field.⁵²

Simultaneously, Gazprom conducted a policy of discrediting Ukraine's reliability as a transit country.⁵³ Yet, the situation recently changed. The Stockholm Arbitration rulings—mostly in favour of Ukraine's Naftogaz—rendered this narrative obsolete. Gazprom decided to begin terminating all existing gas contracts with Ukraine, apparently with the aim of phasing out transit through Ukraine by the end of 2019. Rather unsurprisingly, this is when the current transit contract between Gazprom and Naftogaz is set to expire.⁵⁴ It is very likely that in a few years' time only residual volumes that cannot be transported via other routes will be shipped through the Ukrainian system.⁵⁵ If this comes to pass, it may put the EU in breach of

⁵⁰ R. Formuszewicz, "Germany's Policy towards Russia: New Wine in an Old Wineskin," *PISM Policy Paper*, No. 7 (90), April 2014;

J. Ćwiek-Karpowicz, "A New Stage in German-Russian Energy Cooperation?," *PISM Bulletin,* No. 80 (297), 3 August 2011. ⁵¹ S.F. Szabo, *Germany, Russia, and the Rise of Geo-economics,* Bloomsbury Academic, London-New York 2015, p. 56.

⁵² I. Lyubashenko, "Ukrainian-Russian Gas Negotiations: Consequences for the European Union," *PISM Bulletin*, 5 March 2012.

⁵³ See: E. Wyciszkiewicz, "Implications of the Russia-Ukraine Gas Dispute for the Construction of Nord Stream," *PISM Bulletin*, No. 7 (7), 28 January 2009; B. Bieliszczuk, A. Gawlikowska-Fyk, "Another Stage ...," op. cit.

⁵⁴ S. Pirani, K. Yafimava, "Russian Gas Transit Across Ukraine Post-2019: pipeline scenarios, gas flow consequences, and regulatory constraints," *OIES Paper*, February 2016, www.oxfordenergy.org.

⁵⁵ S. Pirani, "After the Gazprom-Naftogaz arbitration: commerce still entangled in politics," *Oxford Energy Insight*, March 2018, p. 13, www.oxfordenergy.org.

the Energy Charter's Article 7. The latter provides that parties to the Charter will not permit the construction or modification of energy transport facilities, including transmission pipelines, if doing so endangers the security or efficiency of the energy systems of other parties.

Some undesirable consequences have already been noticed. German Chancellor Angela Merkel recently admitted that additional minimum supply guarantees for Ukraine are needed if NS2 is to come on-line. The estimates of what constitutes "minimum" levels vary between as little as 10 bcm per year to as much as 40 bcm per year. Still, even if the guaranteed levels are enough to keep the Ukrainian route operational, the uncertainty over its further usage may diminish the incentives for its maintenance and modernisation. This, in turn, could be considered a violation of Articles 337 and 338 of the Ukraine–EU Association Agreement. Together, they require both parties to cooperate in energy matters, including in the "enhancement and strengthening of long-term stability and security" of energy transit "on a mutually beneficial basis" and "modernisation and enhancement of existing energy infrastructures of common interests".

And yet, even if the European Commission, together with the EU Member States, manages to come up with some kind of guarantee for Ukraine that gas would continue to flow, is it reasonable to expect Kyiv to accept such a solution? Of course, on paper it will accept everything, but let's not forget that in the past quarter century Ukraine already gave up some of its trump cards—namely, its nuclear arsenal, which it inherited from Soviet times—in exchange for guarantees of territorial integrity and political independence. The Budapest Memorandum—a document many in the West would probably prefer to forget—did not survive the test that the so-called "little green men" put it through in Crimea back in 2014. That does not bode well for any future arrangements that would require Ukraine to (again) put its fate in the hands of the West.

Wait, Haven't We Imposed Sanctions on Russia?

The binding agreement to build NS2 was signed and announced on 4 September 2015, by members of a consortium then consisting of Russia's Gazprom and five companies. The impropriety of that announcement is that it was made while sanctions were in place against Russia. These measures had been introduced already in 2014 in response to Russia's continued violation of Ukrainian sovereignty and territorial integrity. The reaction to the Russian aggression could not have been different. Moreover, any hesitation or delay would have probably emboldened Russia to push forward, thus threatening not just Ukraine's very existence as an independent state but also the territorial integrity of its neighbours, including members of the EU and NATO.⁵⁸ The sanctions were designed to have a cumulative effect in the mid to long term but they did not target energy interconnections. And yet, there is a direct link between NS2 and the sanctions. The idea to conduct business as usual with Russian companies runs counter to the common political approach towards Russia and presents a serious challenge for the unity of the West.

But the EU's (or even transatlantic) unity and solidarity can become a target, evident from Russian reactions to the "Russia sanctions bill"—CAATSA⁵⁹—passed by the U.S. Congress in early August last year. CAATSA not only labelled Russia as "America's adversary" along with Iran and North Korea, but it foresaw, among others, the possibility to impose restrictions on the development of pipelines in the Russian Federation. Perhaps crucially, CAATSA could be used to target projects such as NS2. Advocates of the NS2 argued, contrary to the unfolding congressional debate, that the new sanctions were squarely about eliminating competition for U.S. LNG exports to Europe. They overlooked those elements of the debate that

⁵⁶ "Merkel: No Nord Stream 2 without guarantee for Ukraine's gas transit role," *euractiv*, 10 April 2018, www.euractiv.com.

⁵⁷ *Ibidem*; A. Łoskot-Strachota, "Nord Stream 2 is a challenge for EU energy policy," *Biznesalert*, 29 May 2018, http://biznesalert.com.

⁵⁸ S. Secrieru, "Russia under Sanctions. Assessing the Damage, Scrutinising Adaptation and Evasion," *PISM Report*, Warsaw, November 2015, www.pism.pl.

⁵⁹ "Countering America's Adversaries Through Sanctions Act," U.S. Treasury, www.treasury.gov/resource-center/sanctions/Programs/Pages/caatsa.aspx.

did not fit with what they claimed was the "anti-European" rationale driving the bill.⁶⁰ Intense lobbying from corporate actors already heavy involved in financing the expansion of the pipeline and from government officials from Germany and Austria (recall a June 2017 joint letter by former German Foreign Minister Sigmar Gabriel and the former chancellor of Austria, Christian Kern, who warned against U.S. "interference in the EU's energy security") led to watering down the sanctions bill's final wording.

What the CAATSA debate taught us is that while those EU Member States that provide political cover for NS2 will be unimpressed with criticism of the project from market and political positions, they probably will pay more attention to the possibility of sanctions and serious disturbances of their commercial interests. This actually is the threat of U.S. sanctions and the escalation of trade disputes, which merit more German attention in the debate on NS2. Therefore, the desire to prevent a trade war between the U.S. and the EU could turn NS2 into an area of concessions, with Germany playing a pivotal role in any accompanying deal. Indeed, there is very little that separates Germany's push for its national interests—and NS2 may indeed be in Germany's interest—at the expense of EU solidarity and security, on the one hand, and U.S. President Donald Trump's penchant for protectionist measures that jeopardise global trade on the other. As an old adage puts it, he who sows the wind, reaps the storm.

Is the West Willing to Support the Russian Energy-Defence Nexus?

Compared with the discussion about the economic and political consequences of NS2, the public and expert debate about the implications of the project in the military dimension is far less elaborate. If completed, NS2 would hamper a Western response to a crisis involving Russia in the Baltic Sea region. It seems that neither NATO nor the EU are currently seriously considering the impact of such a scenario and, by extension, thinking about possible countermeasures or policy responses. At the same time, Russia proved that its energy policy goes hand in hand with its political, economic, and military tools, all geared towards creating a zone of privileged interests in its neighbourhood.⁶²

Is there a link between defence issues and commercial hydrocarbon-related projects? The latter are said to be designed and developed following market logic and irrespective of threat perceptions, defence strategies, contingency planning, force postures, or military doctrines.

NS2 advocates argue that its implementation should proceed despite the current tensions between the West and Russia. ⁶³ Merely seen as temporary, these tensions are not considered a factor that should stand in the way of developing long-term economic cooperation with Russia. Yet, a glimpse at the very concept of NS2 is enough to understand that it does have a prominent defence dimension. Aside from its market impact, NS2 is likely to have a political-military one, changing the logic driving defence posture in the Baltic Sea region and beyond. It will further complicate the already difficult task of reaching compromise both within NATO and in the EU as far as responses to Russia's aggressive activity.

The following questions about NS2's impact on the EU's and NATO's ability to respond to a potential military crisis must be answered: First, could Russia aim to improve its position in a conflict by halting or limiting gas flows through NS2 to sharpen divisions in the EU and/or NATO, thus delaying or weakening the Western response; second, could NS2 itself become a trigger, amplifier, or game-changer during a crisis; third, how would the loss or undermining of Ukraine's status as a transit country following the commissioning of NS2 broaden the geographic reach of a crisis?

⁶⁰ A. Gawlikowska-Fyk, B. Wiśniewski, "US sanctions and Nord Stream 2: Every dog has its day?," *euractiv*, 8 August 2017, www.euractiv.com.

⁶¹ S. Płóciennik, "Preventing a Trade War: Germany's Dilemma on U.S. Tariffs on Steel and Aluminium," *PISM Bulletin,* No. 79 (1150), 8 June 2018, www.pism.pl.

⁶² "Nordic-Baltic Security in Times of Uncertainty: The Defence-Energy Nexus," A. Gawlikowska-Fyk, M. Terlikowski (eds.), *PISM Report*, March 2018, pp. 10-18, www.pism.pl.

⁶³ This is the position of the incumbent German government, expressed also in the context of the poisoning of Sergei Skripal and his daughter in the British city of Salisbury, which was followed by a common decision of EU and NATO member states to expel Russian diplomats. See: "Baltic, German foreign ministers split on Nord Stream pipeline," Estonian Public Broadcasting (EER), 12 May 2018, news.eer.ee; "May: EU Council may return to Nord Stream-2 issue in June," *TASS*, 26 March 2018, tass.com

Have We Given Enough Attention to Russia's Potential for Crisis-Escalation?

The general assumption holds that trade (not just in hydrocarbons) will bring about deeper interdependency between Europe and Russia, thus leading to a mellowing of Russia's foreign and defence policy. Accordingly, Russia's dependence on the German and wider EU gas market makes a crisis in the Baltic region less likely, since it would put at risk both its revenues from sales of energy resources and its image as a reliable supplier. However, there are limits to this kind of reassuring narrative often deployed in defence of the pipeline.

Once completed, NS2, having strategic importance as a shipping route to key clients in Europe, could broaden Russia's options for increasing its military presence and activity in the region. This would go well beyond the usual risk of falling victim to Russian energy blackmail, for example, in the form of halting gas supplies. For reasons both real and imaginary, Russia could announce the need to "protect" NS2 (e.g. "in the name of Europe's energy security") by deploying extra naval capabilities to the Baltic region, increasing the readiness of its numerous Anti-Area/Access Denial (A2AD) systems or stepping up the pace and scale of military exercises. ⁶⁵ Such augmented force posture could then serve as a springboard for further aggressive steps against either a member of NATO or partners such as Sweden or Finland, even without crossing the threshold of open military conflict. The case of Crimea in 2014 proves that hybrid warfare scenarios require the support of a proper military force, nuclear weapons included, as an enabler and augmentation through cyberattack, terrorist, or criminal activities. ⁶⁶ Thus, NS2 may become for Russia a convenient way to trigger a conflict if it makes a decision to escalate the tensions with the West.

However, building up its force posture in and around the Baltic Sea can also play a role in conflict scenarios that start outside this specific region. Namely, military assets amassed in the Baltic could allow Russia to more credibly signal the threat of so-called horizontal (geographic) escalation. ⁶⁷ This region would inevitably play a pivotal role in case of any conflict originating either in the High North (e.g., possible tensions over maritime energy resources) or down to the Southern Flank of NATO, particularly around the Black Sea, which is under Russian operational control to a much higher degree than the Baltic). In these scenarios, NS2 could allow Russia to almost automatically escalate the crisis, again based on the argument of the need to protect critical energy infrastructure. Further, Russia could up the ante in the escalating crisis and introduce both greater unpredictability and increased costs of an open military stand-off. NS2 could be a game-changer in a number of crisis scenarios.

Another escalation scenario focuses on Ukraine. Today, a fragile ceasefire endures. Russia would find it costlier to openly and blatantly violate it for fear of either a more decisive response from the West or inadvertently buttressing Western unity. Ukraine still wields one of the few trump cards it has left vis-a-vis Russia, namely its status as a transit country for Russian gas. However, with NS2 in place, nothing would stand in Russia's way of escalating the situation in eastern Ukraine on short or no notice. Perhaps crucially, it would allow Russia to continue uninterrupted gas supplies to Europe, making it easier for its clients to believe it is alright to follow the "business as usual" logic and that Russia is indeed a reliable supplier. In another words, NS2 could lead to Ukraine's alienation in the perception of decision-makers in the West. The acknowledgement that ending Russian dependency on gas transfer through Ukrainian territory may open new ways for Russia to coerce Ukraine into ultimately forfeiting its European aspirations is gradually entering the mainstream thinking. What is necessary is a greater awareness of the need to come up with proper responses to such a scenario.

⁶⁴ J.M. Godzimirski, U. Sverdrup, "Russia: Strategic Challenge in the North," in: M. Terlikowski et. al., "The Security Policy of Poland and Norway in the National, Regional and European Dimensions," *PISM Report*, September 2015, www.pism.pl.

^{65 &}quot;Nordic-Baltic Security ...," op. cit., pp. 26-30.

⁶⁶ See: J. Durkalec, "Nuclear-Backed 'Little Green Men," PISM Report, July 2015.

⁶⁷ For more, see: A. Kacprzyk, K. Friis, "Adapting NATO's Conventional Force Posture in the Nordic-Baltic Region," *PISM Policy Paper*, No. 3 (156), 29 August 2017, www.pism.pl.

⁶⁸ "Nordic-Baltic Security ...," op. cit., p. 18.

In Case of Escalation, What Would Be the Western Response?

Russia is probably aware of not just the extra room for manoeuvre NS2 creates for it but also the dilemmas it would create for the members of NATO and the EU. It goes without saying that NS2 would increase the susceptibility of Germany and other major gas consumers in the EU to any Russian attempts to turn gas supplies into a political tool and treat them as a factor in the context of their decision-making processes during a crisis. Greater vulnerability translates into diminished risk acceptance, invites greater caution, and leads to more conciliatory policies. NATO and EU member states already vary with respect to their assessment of the extent of the challenge Russia poses to European security. Consensus is shaky and difficult to achieve. NS2 would only amplify these problems. This is not to say that Western unity would be irreversibly shattered; however, reflection about and negotiations over a proper response to an unfolding crisis would take more time and involve one more variable. Delayed and sub-optimal response of the transatlantic community could allow Russia to solidify its gains, be they political, military, or territorial. Moscow knows how to play the "divide and rule" game like no other.

Are Germany and its NATO Allies Aware of the Changes in and Implications on Germany Defence Policy because of Nord Stream?

Arguably no other NATO/EU member state will be more exposed to changes in defence policy as a result of the commissioning of NS2 than Germany. It has traditionally favoured a balanced policy towards Russia, including during the period of the highest tension following the annexation of Crimea and, later, the downing of Flight MH17 over Donbas. It is a widely held view in the German foreign-policy establishment that a stable European security environment is achievable if and only when Russia is reassured that the West will not aim for regime change there and is engaged in economic cooperation. That Germany has included deterrence to this approach and as a consequence agreed to contribute to NATO's Enhanced Forward Presence (being a framework nation for a battlegroup in Lithuania) is indeed a sea change in its security policy.⁶⁹ In 2018, the decision was made to establish a new NATO logistics command in Ulm, the so-called JSEC, tasked with enabling an Allied response to a potential crisis in the Baltic region. At the same time, the German army announced it would heavily invest in new capabilities needed for credible defence of NATO's Eastern Flank. In this way, Germany has gradually become a pivotal state, not only as regards the political dimension of the Russian relations with the West but also in the military aspect. The credibility of NATO defence and deterrence towards Russia is very much dependent on what Germany decides to do (or not do) when faced with a crisis involving that country.⁷⁰

Consequently, Germany's increased dependency on Russian gas and greater role as a gateway for it to the European market will add another layer to German internal decision-making, likely making it more protracted and less willing to counter aggressive Russian behaviour with firm countermeasures. Consider the following: An escalating crisis in the Baltic region forces NATO and the EU to seek options for a fast and effective response, including a military one while Germany struggles to identify the ramifications of a halt in supplies from NS2 for its own industry and external recipients and to find options for quick diversification.

Are We Blowing the Threat from a Single Energy-Related Project Out of Proportion?

Awareness about the magnitude of the challenge created by NS2 is uneven across Europe. Still, some EU members, including Germany, appear to be waking up to the Russian influence and blatant geopolitical manoeuvring. However, both the cautious and the increasingly alarmed should move beyond the usual arguments and start asking additional questions about NS2.

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⁶⁹ A. Kacprzyk, K. Friis, "Adapting ...," op. cit.

⁷⁰ "Nordic-Baltic Security ...," op. cit., p. 17.

- In the context of the security of the Baltic Sea region, will Russia take advantage of the growing dependence of certain NATO members on Russian gas imports to delay and/or weaken those states' decisions about the Alliance response to a crisis?
- Will energy dependence negatively impact NATO's capacity to deter Russia and protect its member states?
- Will new infrastructure projects aimed at reducing dependence on Russia become a target of aggressive, military activities?

Then there are the political costs.

- Will it impact the EU's ability to speak with one voice on a wide range of issues, for instance, on sanctions towards Russia?
- What will be the impact on the EU's policy towards Ukraine?
- Can a values-based approach be sustained or will it be overshadowed by a business-driven one?
- If the U.S. sanctions NS2 companies, what will be the impact on the EU?
- Will the controversial pipeline squander all the efforts to create a European energy policy, with its main aims of prosperity, sustainability and security?
- Finally, will the logic of *Wandel durch Handel* turn on its advocates and lead to a vastly different outcome, namely, instead of socialising Russia in the international community and lowering its appetite for coercion, blackmail, and other forms of aggressive behaviour, won't NS2 actually corrupt Germany via the transfer of Russian business practices and everything else that goes along with the close interactions between the gas sector and the Russian ruling elite?

Questions that still have not been properly addressed concerning the market/economic impact of NS2 are no less profound.

- What will be the net impact on competition of 55 bcm of additional capacity which will not be used by any other third party?
- What will be the consequences of Russian gas flooding the CEE markets?
- Given Gazprom's usual lack of transparency when it comes to setting prices, what is going to be the difference in price for its CEE partners and those in the Western part of the EU?
- How can those differences be reconciled with the Commission's efforts to root out anti-competitive behaviour?
- If NS2 creates winners, what happens to the losers?
- Do we agree to watch idly as Gazprom introduces price divergence mechanisms, thus affecting the competitiveness of individual Member States and negatively impacting the functioning of the internal market?
- What will be the cost—and who will bear it—of increased economic divergence among the Member States?
- How can such outcomes be reconciled with the logic of the internal market?

Last but not least, NS2 will create challenges for the EU with respect to the Third Energy Package.

- Even if TEP is applied to NS2, how will it and intergovernmental agreements affect the rules (or rather politics) of the gas market in Russia?
- Will it enforce competition in Russia?

- Who would step in to provide guarantees? (The same question is valid with regard to sustaining transit via Ukraine.)
- And on the EU market, is TEP enough to enforce competition on EU territory?
- Will it prevent Gazprom from abusing its dominant position and exploiting (to the detriment of its "foes") all the loopholes or un-regulated areas?
- Will gas auctions organised by Gazprom have winners other than Gazprom?
- Will transit via OPAL and EUGAL be accessible to other suppliers?
- Finally, there's Gazprom's strategy of taking over German (and European) companies in both the German domestic sector, including storage capacity. Is it in line with the TEP, the efforts to unbundle and create competitive markets, and with the effort to shield sensitive sectors from foreign dominance, as evidenced by the introduction of screening procedures by the Commission?

The general assumption that accompanied the development of EU-level energy regulations was that market solutions would strengthen the Union's hand when dealing with suppliers. If completed, NS2 will effectively nullify those efforts. This is an outcome that the EU cannot afford, no matter the benefits for individual Member States. In other words, NS2's effects at the strategic level, encompassing policy, economics, and defence, may put the West into such an inferior position with respect to Russia that no individual interests of any state will justify this investment.