

5. The increased politicization of Russian gas supplies

INTRODUCTION

Russian gas has been considered politically problematic for many years, with the 2014 Ukraine crisis further entrenching such perceptions. Long forgotten were the early years of Soviet gas exports to Europe, when that new source of energy supply was welcomed as diversification away from the heavy dependence on oil from the Middle East, which had proven unreliable. True, there had been serious conflict over pipelines in the early 1980s when the United States imposed sanctions on equipment for new gas pipelines to Europe, but that may have done greater harm to relations between the USA and Europe than those between Europe and the Soviet Union, as Europe regarded the US initiatives as undue interference in European affairs rather than a matter of concern for European energy dependence.

However, after some years of stagnant demand, Soviet gas exports grew again. Now they were generally regarded as very reliable – given the growing importance of gas as a hard-currency earner for the Soviet economy, the USSR could not afford to jeopardize its standing in the market. This understanding of the reciprocal self-interest in stable gas supplies was carried over to Russia after 1991, when international tensions also lessened. New concerns emerged, as the critical financial situation made importers fear that Russia would not be physically able to deliver contracted volumes of gas. Nevertheless, Russian gas was delivered to Western Europe without significant interruptions, and export volumes grew from slightly over 100 bcm in 1990 to more than 160 bcm in 2005.

Changing Perceptions of Russian Gas

A transformational moment came in January 2006, when a long-standing dispute between Russia and Ukraine over gas price and transit arrangements became acute, and Gazprom turned off supplies to Ukraine for three days in the middle of winter. Gazprom had pressed for an immediate price increase in order to equalize the levels to Ukraine with exports to

Western Europe in 2006; Ukraine wanted a longer build-up period for the price rise (Pirani, 2007). Russia presented this dispute as bilateral and purely commercial, but it also had political undertones due to the 2004 'Orange Revolution' which had put a Western-leaning president and government in power in Kiev. The Ukrainian authorities responded to the cut-off by diverting some of the Russian transit gas for domestic use, thereby reducing the flow of Russian gas to countries further west. To Moscow's surprise, the affected countries, as well as the EU, placed the blame on Russia, not on Ukraine. Although it is not clear exactly who made the drastic decision to cut supplies, anecdotal evidence indicates that the export professionals at Gazprom Export were opposed, as they were aware of the serious repercussions that such action could have. It seems that the decision was taken high up in Gazprom, or by politicians less concerned about European market sentiments and more focused on getting gas – and perhaps political – relations with Ukraine on a new footing. It should also be noted that this occurred at a time of rising gas demand in Europe, when increasing exports from Russia seemed an obvious source of expanded supply. Seen from that angle, it might have been difficult for observers in Moscow to imagine that a dispute with Ukraine would disturb this picture.

They were mistaken. For the importing countries in Western Europe, the episode ended the prevailing impression of Russian gas as being totally reliable and not affected by political considerations. This impression was reinforced by the second, even more serious, Russia–Ukraine gas conflict in January 2009, when supplies to Ukraine as well as transit were cut off completely for three and two weeks, respectively, creating serious problems in some importing countries (Stern et al., 2009). The origins of the conflict involved pricing, transit fees, organization of sales as well as handling of accumulated Ukrainian debts to Gazprom. After supplies to Ukraine were halted, alleged Ukrainian diversion of transit gas also became a major issue. Gazprom, as well as the Russian government, made concerted efforts to explain their position before and during the crisis. Although these problems were ultimately resolved by the signing of a new long-term agreement, the crisis had a profound and lasting negative effect on European attitudes to Russian gas.

The main result was that the EU now aimed at reducing the region's vulnerability to high dependence on Russian gas. An important part of its new policy consisted of measures to integrate European markets, especially by building interconnectors and by ensuring more fuel-switching capacity that could be activated in case of a shortfall in supply. Also relevant was the development of an EU integrated energy and climate policy, which gained momentum after 2006, with general security-of-supply concerns, climate policy, and rising oil prices providing justification for new rules,

but partly also inspired by a growing distrust of Russian gas (Skjærseth et al., 2016: 53, 66).

Russia reacted negatively to the policy initiatives introduced in the EU's Third Energy Package (see Chapter 4). The initiatives focused on increasing competition, liberalizing prices and the break-up of natural monopolies, especially the prevention of suppliers such as Gazprom from also investing downstream in energy markets. Such policies clashed with Gazprom's ambitions of establishing a strong presence in the transmission and distribution of gas inside Europe (Pashkovskaya, 2011), but Moscow's official argument against the new regulation was that EU policies were harmful to the EU itself, with Gazprom CEO Alexey Miller stating that 'the Third Energy Package in its current state demotivates investors . . .' (Miller, 2012). In 2013, President Putin strongly criticized the Third Energy Package, holding that implementation of the Gas Directive 'seriously limits the activities of traditional suppliers of gas to the gas market of the European Union . . .' (Putin, 2013). He also called for solidarity among gas exporters to 'oppose unjustified pressure'. Beneath this argumentation, however, it was clear that Russia had realized that an important objective of the new rules was the reduction of Russian leverage in the European gas market.

On the diplomatic level, the EU was keen on maintaining good working relations with Russia and Gazprom as Europe's largest external supplier of gas. The initiation and continuation of the EU–Russia Energy dialogue reflected a shared interest in stable gas trade. According to a joint statement between the Russian Energy Minister and the EU's Energy Commissioner dated November 2010 (thus, *after* the second Russian–Ukrainian gas crisis):

The EU confirms that the Russian Federation will remain a key supplier of fossil fuels to the European Union, and the Russian side confirms that it will remain a stable and predictable supplier to the European Union. On this basis, both sides agree to further develop their relations. (Oettinger and Shmatko, 2010)

NORD STREAM AND OPAL

The ambiguities in European policy towards Russian gas became evident in the case of the Nord Stream pipeline. There had been concern also in Western Europe about the reliability of pipeline routes through Ukraine, and some understanding of the Russian argument that transit through Ukraine involved risks for both Russia as an exporter and for West European importers. Arrangements that avoided transit countries would

eliminate that risk, and in the EU there was considerable support for new pipelines that could provide better security of supply. As a result, when Russia presented concrete plans in 2006 – after the first Ukrainian gas crisis – for construction of a subsea pipeline under the Baltic Sea to Germany, the EU Energy Commissioner commented:

I see this pipeline as very positive for the supply security of Europe . . . The more possibilities we have for the transport of gas, the better. The more pipelines we have, the securer is the supply. The question is only that in the course of construction all the relevant environmental factors will be respected, but that too I see positively. (Nord Stream Gas Pipeline Project, 2007: 2)

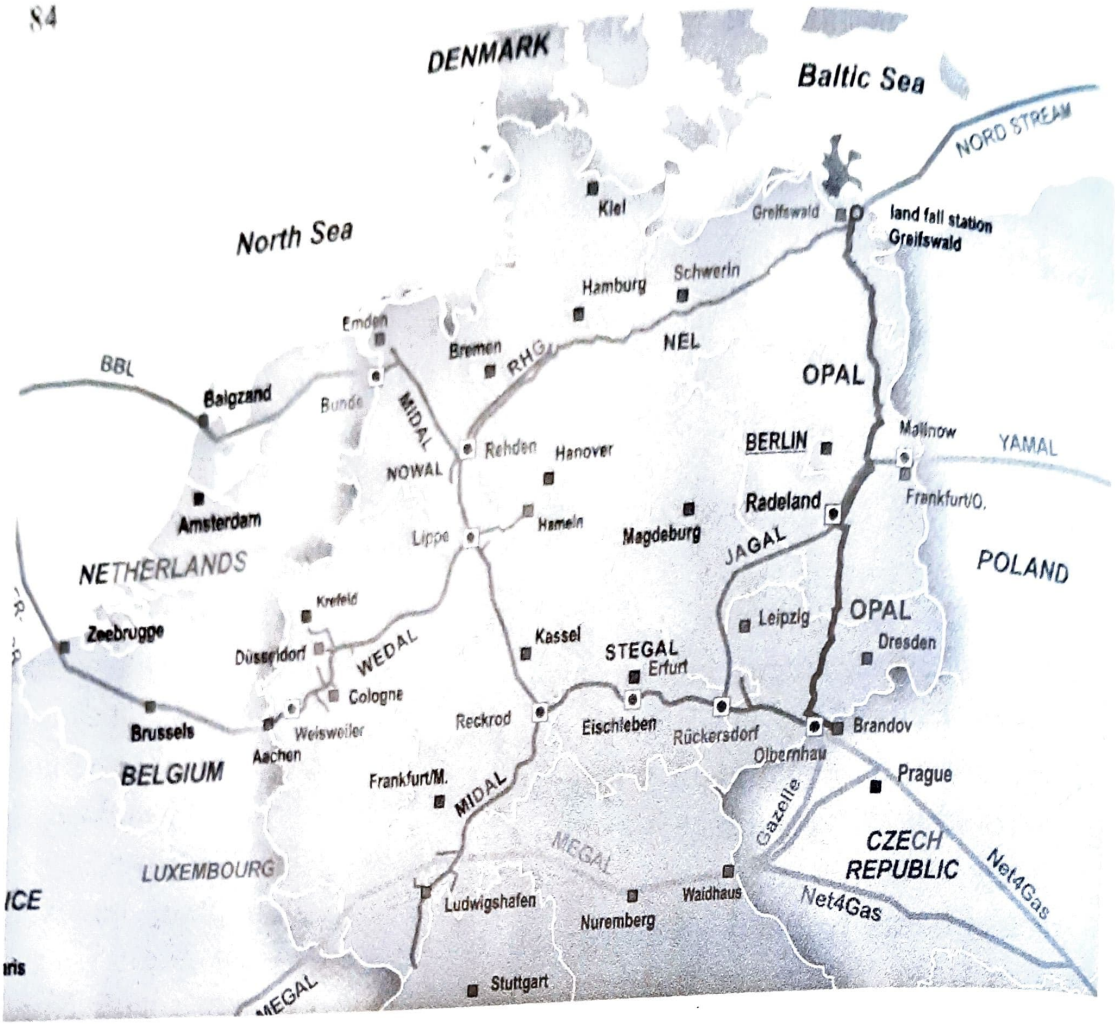
Nonetheless, construction of the new pipeline proved controversial within the EU. A key argument against it, voiced most strongly by Poland, was that it would limit the need for transit through Poland and Ukraine and could expose them to pressures from Russia, as disruptions in gas flows to them would no longer affect the important gas markets further west.

Strong commercial players supported the pipeline plan, however. Agreement was reached on construction of the 1224 km Nord Stream pipeline from Vyborg in Russia to Greifswald in Germany, with Nord Stream AG, a company owned by Gazprom (51 per cent), E.ON Ruhrgas, BASF/Wintershall, and later joined by Gasunie and GDF Suez. Work started in April 2010; the two strings of the pipeline were put into service in November 2011 and October 2012, respectively, with a total capacity of 55 bcm (Nord Stream AG, 2014).

Project completion was not achieved without hitches, however. The plan was to connect Nord Stream to the OPAL pipeline running 470 km from the Baltic Sea coast in Germany to the border of the Czech Republic (Figure 5.1). When this was originally constructed, Gazprom applied for exemption from third-party access rules; although the German regulator initially granted this for gas to be supplied to the Czech market via Brandov, in 2009 the European Commission reduced the available capacity to 50 per cent of the exit capacity, meaning that half the pipeline capacity would have to be offered to third parties (Yafimava, 2013: 28, n. 101). That decision, grounded in internal market regulations, demonstrated to Russia that there would be limitations associated with the use of any new export pipeline projects.

GAS FROM THE SOUTH

The EU was also interested in diversification of supply sources (Umbach, 2010). An early example of this was the priority given to a southern



Source: OPAL Gas Transport (2018)

Figure 5.1 The OPAL pipeline

corridor project intended to bring gas from Azerbaijan and Central Asia to Europe. This became the Nabucco project – developed with EU support from 2003 – which was to bring gas from Azerbaijan to Europe via Bulgaria as part of a major diversification effort, even as the EU was also providing encouragement to Nord Stream.

However, in 2006 Russia launched the alternative South Stream project, a cooperative venture between Gazprom and Italian ENI, which would bring Russian gas into Bulgaria via the Black Sea and was intended to serve Southern Europe. This project was clearly in competition with Nabucco, but was initially not taken seriously by many in the West (Henderson and Pirani, 2014: 99). However, it soon became clear that this was serious, and was one reason why Nabucco was shelved in 2013 – even though at the time the official reason concerned not South Stream but rather a change in strategy by the resource owners of the Shah Deniz field in Azerbaijan. They now favoured another pipeline – the Trans-Adriatic Pipeline (TAP) – bringing their gas to Greece and Italy, with an initial capacity of 10 bcm. The demise of Nabucco meant that the Balkans north of Greece would naturally be served by South Stream; and development of

With a total proposed capacity of 63 bcm, the four South Stream pipelines would have enabled Gazprom to reduce its use of transit infrastructure through Ukraine significantly. Gazprom committed major resources towards implementing the project, spending US\$17 billion on infrastructure within Russia to bring West Siberian gas to the Black Sea coast via the Russian Southern Corridor. It also established a joint venture to construct the US\$14 billion sub-sea section and negotiated inter-governmental agreements (IGAs) with seven European countries for the onshore line into Southern and Central Europe (Stern et al., 2015: 2). However, the transit pipelines agreed under these IGAs were to become a key stumbling block with the European Commission: in their initial form they did not offer third-party access to alternative suppliers and were therefore in contravention of the Third Energy Package. In December 2013 the European Commission insisted that these bilateral deals be renegotiated, leaving the transit countries within the EU little choice but to comply or face infringement procedures (South Stream, 2014).

2014: A TURNING POINT?

The crisis in Ukraine, with the ousting of the Russia-friendly President Yanukovich from power, the Russian annexation of Crimea and the violent conflict between the Ukrainian government and Russian-backed secessionists in Eastern Ukraine, had an immediate impact on gas relations between the two countries. Outstanding issues were brought up and connected to the broader political conflict. On 10 April, President Putin sent a letter to 18 heads of state, including the major importing countries, warning of possible supply disruptions if Ukraine's payment problems were not solved (Barsukov and Chernenko, 2014). Despite the obvious attempt to ignore the European Commission in favour of bilateral talks, the letter was answered by the President of the Commission on behalf of the member countries, who demanded respect for the sanctity of the long-term gas contracts between Gazprom and European importers (Letter, 2014).

Gazprom halted deliveries of gas to Ukraine in June 2014, after Ukraine did not pay its accumulated debts following a significant increase in the gas price from Russia. In July 2014, the EU introduced sanctions on transfer of some technologies to the Russian energy sector (Statement, 2014), although these were specifically designed so as *not* to affect Russian gas exports. In the autumn of 2014, there were reports of disruptions in supplies to Poland, Slovakia and Germany (Russia's gas fight, 2014). These

disruptions were within the flexibility boundaries of Gazprom's long-term gas exports contracts, but were widely interpreted as a protest against the re-export of Russian gas to Ukraine, by way of reverse flows, from the West, and an implicit threat prior to decisions on possible new Western sanctions against Russia (Krajewski and Szary, 2014).

The increased tensions put the spotlight on the ambiguities and outright contradictions in the EU's gas relations with Russia, which had been brewing since 2006. Maintaining existing Russian gas supplies was an important priority; limiting future expansion of Russia in the European markets had now become an equally urgent goal. This latter goal had been, as argued above, part of the rationale for developing the internal energy market – but the specific implication, especially after 2014, was that the EU began to intervene in new gas pipeline projects that had been proposed or were already under construction by Gazprom. This shift in strategy raised the politicization of gas relations between Europe and Russia to a new level.

Concerns over Russian pipeline initiatives had been raised earlier but had been bypassed by important actors who found it attractive to engage in pipeline projects that could create new channels for Russian gas into Europe for commercial reasons. In addition, some politicians were more concerned about diversification of supply routes than about Russian gas as such: in this sense, both Nord Stream and South Stream offered alternative supply routes, albeit from the same source. The crisis in Ukraine did not fundamentally change the situation, as it highlighted the need for diversification of transit routes, but it did alter the balance of stakeholder opinion against Russia. By early 2014, the misgivings about South Stream had already started to gain momentum. In March of that year the EU Energy Commissioner announced that talks over the pipeline would be delayed, reiterating that the project would need approval from the EU for its onshore section from Bulgaria to Italy (Crooks, 2014). The British Foreign Secretary then encouraged EU members 'to back a British-led plan to wean Europe off Russian gas', with particular concern for south-eastern Europe (Stacey, 2014). And by May, the EU Energy Commissioner was cited as saying: 'These days, with Ukraine, we are more and more defensive related to Russian pipelines than one year ago . . . These days, exemptions are not my priority for Gazprom' (Oliver, 2014). Further, the EU objected to the procurement process for the onshore pipeline in Bulgaria, and initiated proceedings against the Bulgarian government, insisting that pipeline construction be halted (EU tells, 2014). The onshore section of South Stream was suspended while Gazprom raised its objections to the decision of the European Commission.

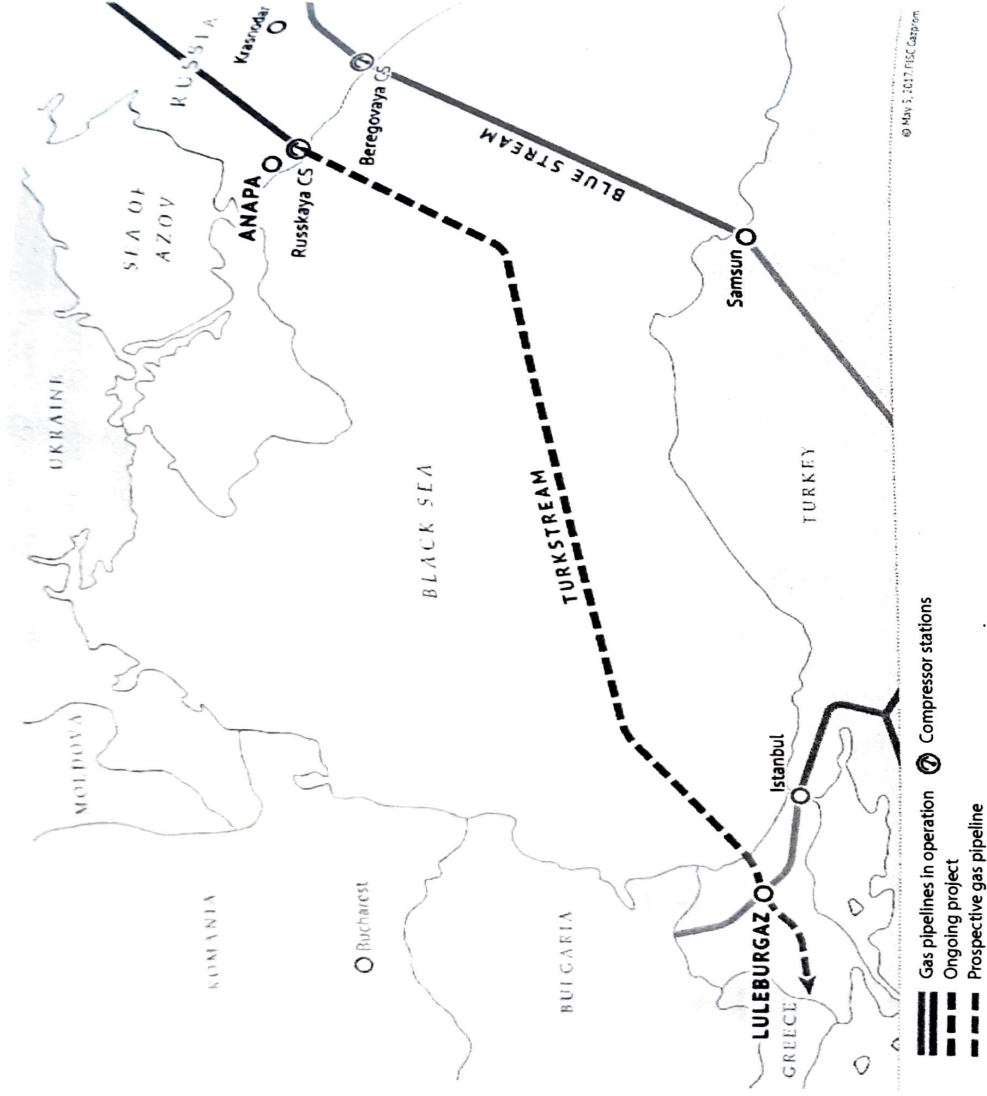
However, resistance to the plans for South Stream proved substantial; Gazprom and the Kremlin ultimately concluded that pipeline construction

should not proceed, primarily because the Bulgarian onshore section could not be built. A second reason was that, even if that section were to be completed, a situation similar to that seen at Nord Stream and OPAL could have evolved, in which billions of dollars were invested in a new pipeline which would then have to keep 50 per cent of its capacity free for non-Gazprom gas. This new regulatory issue gave the final blow that undermined the viability of the project. On 1 December 2014, Gazprom CEO Alexey Miller announced that South Stream had been cancelled. The decision was interpreted as a major defeat for President Putin, who had seen the project as a prestigious addition to Russia's gas export options, although some analysts maintained that the economics of the project were uncertain and that cancelling it was the correct decision for commercial reasons (Farchy and Oliver, 2014). Further, EU resistance made it possible to shift all the blame. News of the cancellation was combined with a positive message: following a meeting of the Russian and Turkish presidents, it had been decided to build an alternative line to Turkey (South Stream project closed, 2014).

TURKSTREAM

The TurkStream pipeline (also referred to as Turkish Stream) was initiated in December 2014 as the successor to the South Stream project (TurkStream, n.d.). Like South Stream, TurkStream was aimed at bringing Russian gas across the Black Sea, but to Turkey rather than Bulgaria and thence potentially onto the European market (Yafimava, 2016) (Figure 5.2). Another key difference was that South Stream included plans for onshore sections on EU territory, whereas TurkStream would terminate in Turkey. The project was put on hold after a Russian fighter jet was shot down by Turkey on 24 November 2015. Later, political relations between Russia and Turkey were restored, and an agreement for construction of the pipeline was signed in October 2017 (TurkStream, n.d.).

TurkStream is to consist initially of two 900 km offshore lines, each with 15.75 bcm capacity. There is potential for a further two lines at some later date, depending on the success of the first half of the project. The first line is intended for deliveries to the Turkish market, thus replacing supplies currently delivered via Ukraine, Romania and Bulgaria. The second line is intended for onward delivery to the continental European market (Project – The TurkStream Pipeline, n.d.). In November 2018, Gazprom confirmed that the offshore sections of the pipeline had been completed, with the first gas scheduled to flow by the end of 2019 (Russia's Gazprom, 2018).



Source: TurkStream (2018) gas pipeline

Figure 5.2 Route map of TurkStream

Given that Gazprom's exports to Turkey remain strong, and that the older Blue Stream pipeline is being used at full capacity (16 bcm per year), the first line of TurkStream will undoubtedly reduce the transit of Russian gas via Ukraine by some 10–15 bcm per year. The key question concerns the second line, which has now been laid, and what will happen to that gas when it makes landfall in Turkey, as any supply destined for the EU will ultimately have to abide by Third Energy Package rules.

There are three options on the table. The first is the proposed Poseidon pipeline from Greece to Italy, a joint venture project between DEPA (Greece) and Edison (Italy) (Poseidon, n.d.). If this option is chosen, the second line of TurkStream will terminate at Ipsala on the Turkey–Greece border.

The second option is for Gazprom to request third-party access to the Trans-Adriatic Pipeline (TAP), which is also planned to run from Greece to Italy. However, TAP will have a capacity initially limited to 10 bcm, and may be expanded to 20 bcm only later, if requests are received from potential shippers (Trans-Adriatic Pipeline, n.d.).

The final option is the reversal of the Bulgaria–Turkey interconnector for the delivery of gas to Bulgaria and Macedonia using existing infrastructure. In November 2018 it was reported that Gazprom Export had booked capacity in the Bulgarian transport system, indicating that TurkStream gas could well flow into south-eastern Europe via this route. Plans have been drawn up for a Bulgaria–Serbia interconnector (Serbia to start, 2019), with further extensions into Hungary and on towards the major Austrian hub at Baumgarten. Indeed, this route, which is effectively ‘South Stream Lite’, now appears to be the preferred option for Gazprom and its customers in south-eastern Europe (Barsukov, 2018b).

Whichever route is chosen, onward gas deliveries to Europe via the second line of TurkStream may be constrained by regulatory uncertainty, as any of the three options discussed would require compliance with EU Third Energy Package rules. Thus, it is certainly conceivable that negotiations around the availability of Russian gas to Europe via TurkStream could also be included in a larger debate on total Russian export pipeline capacity to Europe, including transit through Ukraine.

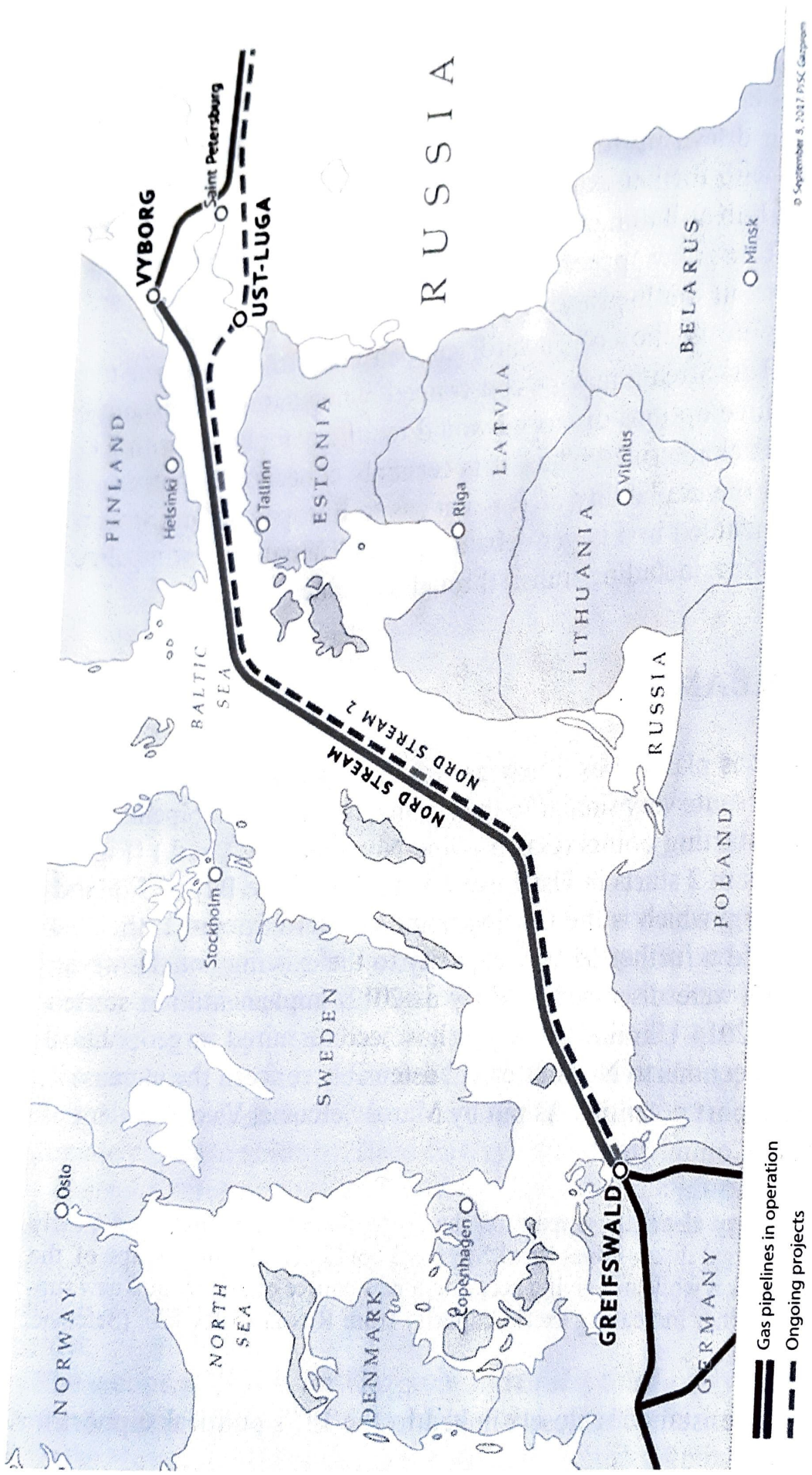
NORD STREAM 2


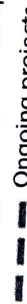
Nord Stream 2 is planned as a new gas export pipeline under the Baltic Sea following a route very similar to the original Nord Stream pipeline, but with different starting points (Gas pipeline Nord Stream 2, n.d.) (Figure 5.3). Nord Stream 2 starts in Ust-Luga on the side of the Bay of Finland opposite Vyborg, which is the starting point for Nord Stream 1; the new pipeline will add a further 55 bcm capacity to the existing line. However, although plans were discussed as early as 2012, implementation started only after the 2014 Ukraine crisis and has become mired in geopolitical debate. EU objections to Nord Stream 2 ostensibly concern the increase in Russia’s gas export potential. As put by Maroš Šefčovič, Vice President of the European Commission:

Let me be very clear: the impact of the Nord Stream 2 project goes clearly beyond the legal discussions. Nord Stream 2 could alter the landscape of the EU’s gas market while not giving access to a new source of supply or a new supplier, and further increasing excess capacity from Russia to the EU. (Šefčovič, 2016)

In reality the resistance is closely linked to the EU’s political support for Ukraine.

Initially, the intention was to have the pipeline built and operated by a project company – New European Pipeline AG – jointly owned by



 Gas pipelines in operation
 Ongoing projects

Source: Gazprom (2017) Nord Stream 2 gas pipeline

Figure 5.3 Route map of Nord Stream 1 and Nord Stream 2

Gazprom (51 per cent), E.ON, Shell, OMV and BASF/Wintershall (10 per cent each) and ENGIE (9 per cent) (Gazprom, BASF, E.ON, ENGIE, OMV and Shell, 2015). However, that setup was blocked, and the Western partners withdrew in 2016 after an intervention from Poland's cartel office. A solution was found when the company – now renamed Nord Stream 2 AG – became a fully owned Gazprom subsidiary in April 2017, with the original partners now serving as financial investors to the project, and providing half of the capital (Foy et al., 2017).

To achieve its goal of delaying and possibly preventing construction of the pipeline, the Commission has attempted to use regulatory issues and the Third Energy Package rules, but the application of these differed from the case of OPAL, as they concerned an *offshore* pipeline. The two key issues to be addressed – construction permits and overall regulatory approval – both appear to have been politicized (Yafimava, 2017). Initially, Gazprom faced challenges to its construction of the offshore sections of Nord Stream 2, as permits from Russia, Finland, Sweden, Denmark and Germany were needed for laying the pipeline in their territorial waters. By January 2019, the relevant permits had been received from all except Denmark, and pipeline construction had commenced at the Russian and German ends.

Danish regulatory approval remained complex, because in November 2017 the Danish Parliament had approved an amendment to its Continental Shelf Act, granting the government the right to block the construction of pipelines in the country's territorial waters on grounds of foreign policy, national security, and defence interests (Danish Parliament, 2017). This affected Nord Stream 2, which was planned to pass through Danish territorial waters around the island of Bornholm. An alternative route, launched in 2018, would only pass through the Exclusive Economic Zone (EEZ): there, the Danish authorities cannot block the pipeline, but could delay it by demanding impact assessments. With two applications already pending, a further was added in March 2019, when the Danish authorities requested an environmental impact assessment of a third potential route south of Bornholm, outside Denmark's territorial waters but still within its EEZ (Denmark asks, 2019). This process would involve new surveys and route planning that could delay the project by several months or even longer.

In June 2017, the European Commission decided to step up its own efforts and requested a mandate from the Council of the EU to negotiate an agreement with Russia concerning the operation of Nord Stream 2 (European Commission, 2017b). However, in September that year, the EU Legal Service concluded that there was no legal rationale for such an agreement; further, that the Gas Directive (Directive 2009/73/EC concerning

common rules for the internal market in natural gas) 'does not apply to the Nord Stream 2 pipeline' (Council of the European Union, 2017; Yafimava, 2017). In response, the European Commission announced its proposal to amend the Gas Directive (European Commission, 2017c), clearly showing it was prepared to stretch the limits of its jurisdiction to achieve its political goals by raising two key points. Firstly, it proposed changing the wording of the Directive from 'EU territory' to 'EU jurisdiction': EU *jurisdiction* extends to the territorial waters and EEZs of EU member states, and, therefore, to offshore pipelines. Secondly, according to the proposal, where pipelines from third countries result in 'legally complex situations', an international agreement could provide a 'coherent regulatory framework'. In the absence of such an agreement, or exemption, 'the pipeline may only be operated in line with the requirements of Directive 2009/73/EC within the borders of EU jurisdiction'. In effect, this could apply from the point at which the pipeline crosses from Russian to Finnish territorial waters and would potentially limit Gazprom's ability to use Nord Stream 2 to full capacity, as a certain amount of capacity would have to be available for third parties.

The proposal was controversial; indeed, the European Council's own Legal Service concluded that it was not compatible with the United Nations Law of the Sea Convention and that the EU did not have the jurisdiction outlined in the proposal (Legal Service, 2018). However, in February 2019 the EU decided to approve a decision to apply the Gas Directive to pipelines from countries outside the EU. Nord Stream 2 must now comply with three key requirements of the Directive: unbundling, third-party access and the provision of regulated and transparent tariffs, as they will apply to the German end of the pipeline as it crosses German territorial waters up to the landfall facilities at Lubmin, on the Bay of Greifswald. The German regulatory authorities (essentially BNetzA) must ensure that the three requirements are met as the pipeline enters German waters and connects with the onshore EUGAL system (a pipeline planned to receive gas from Nord Stream 2 and run in parallel with OPAL) (Toplensky, 2019). It seems likely that the project will be able to meet these new conditions, subject to German and EU regulatory approval – but the ruling does give the European Commission a new level of control over the operation of the pipeline (Yafimava, 2019).

Common to the OPAL (onshore) and Nord Stream 2 (offshore) situations is the uncertainty generated by regulatory issues. As Gazprom's ability to use extra OPAL capacity will also be confirmed only around the same time as it intends to launch both lines of Nord Stream 2, the timing is clearly linked to discussions on a new Ukraine transit agreement. Further, as any OPAL and Nord Stream 2 decisions will also have significant

implications for the treatment of the EUGAL pipeline, the legal outcomes expected in 2019 are complex and interlinked.

To add further intricacy to the debate, the Nord Stream 2 project has also become the focus of US attention, rekindling memories of the 'gas war' of the early 1980s when the Reagan administration attempted to block expansion of Soviet gas exports. The focus on Nord Stream 2 intensified in 2018, with the US administration arguing that 'if completed [Nord Stream 2] would generate additional funds the Kremlin could use to finance its malign activity, while simultaneously deny [*sic*] Ukraine substantial transit revenues it needs to defend itself against Russian aggression' (US Treasury, 2018). The USA has also argued that the pipeline would make Germany 'a captive of Russia' (Hodgson, 2018), and that it threatens the security of Europe (Joint Statement, 2018). These concerns were all reflected in a non-binding resolution adopted by the House of Representatives on 11 December 2018, with bi-partisan support (US Congress, 2018). The resolution urged the US president to use all available means to support European energy security through a policy of diversification, and supported the imposition of sanctions with respect to Nord Stream 2. US Energy Secretary Rick Perry warned that imposing sanctions on the project and its participants remains a real option for the White House (US envoy, 2018).

Gazprom's response to this threat, and the pressure applied by the European Commission, has been to move ahead with the project. Thus, although the European Parliament has called for project termination, by the end of 2018, 300 km of the pipeline had already been laid (of a total of 1200 km). Nord Stream 2 might be operational by the end of 2019.

LNG from the USA

Unlike the 1980s, the political arguments from the USA were mixed with direct US economic interests – the expansion of LNG exports to Europe (see Chapter 4). This element has also been central in official Russian responses, as in a Kremlin statement that argued 'Thus (Washington) is trying to hinder the implementation of the project, using all acceptable and unacceptable methods that are nothing more than veiled unfair competition' (Peskov, 2018).

This response, from December 2018, showed that Russia had finally realized that gas exports from the USA represented a threat to its position in Europe. For many years Russia had refused to acknowledge the shale gas revolution as a reality; even in 2010, Gazprom CEO Alexey Miller had declared: 'the predominant assessment is that shale gas is a well-organized and well-financed information campaign, same as global warming or

biofuels' (Miller, 2010). US gas exports to Europe were dismissed as unrealistic or propaganda (Loe, 2019).

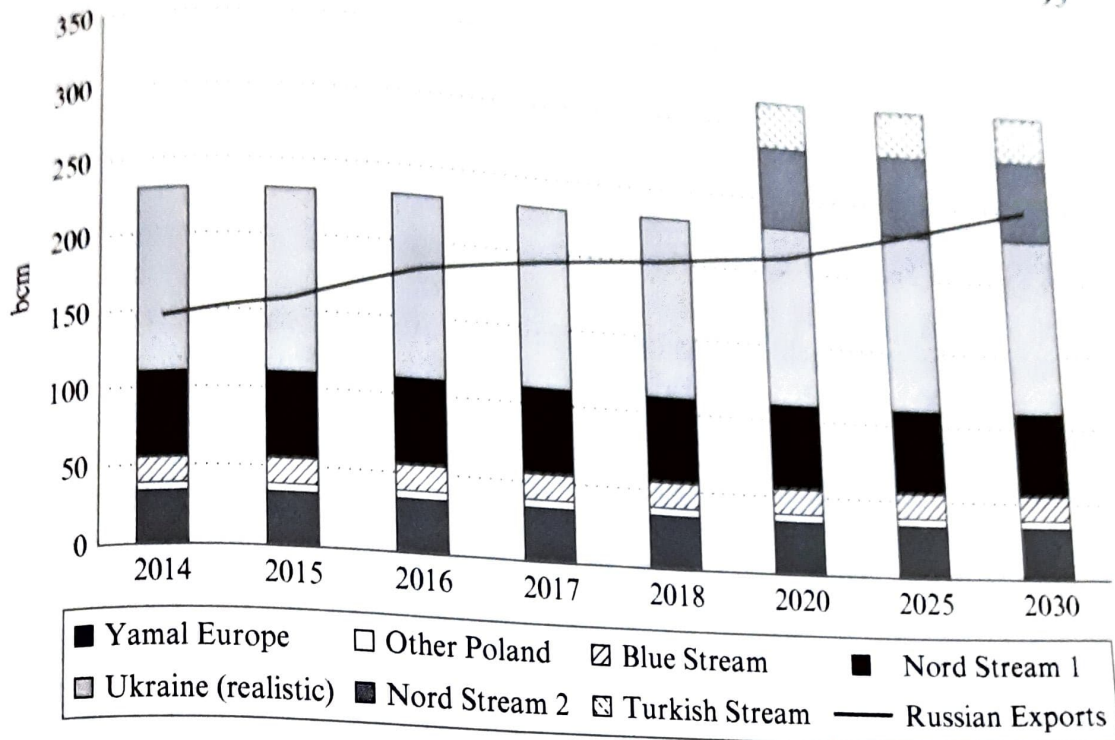
Nevertheless, the first cargo of US LNG arrived in Sines (Portugal) in April 2016; by August 2018 accumulated imports of US LNG to Europe had reached 2.8 bcm. In coming years the EU intends to support the development of terminals and other infrastructure permitting higher imports from the USA (European Commission, 2018). As a result, although US political intervention in European gas policy is often deemed 'unwanted interference', gas imports from the USA are becoming a crucial part of the EU's diversification strategy, with obvious political and commercial implications for Russia (see Chapter 4).

HOW MUCH PIPELINE CAPACITY IS NEEDED?

Given this potential diversification, a key question becomes: How much Russian gas export capacity is needed? Since 2011 Russian gas has been supplied to Western Europe via three main corridors: via Ukraine, through Belarus, and under the Baltic Sea. There are also 'dead-end' connections to Finland, Estonia, Latvia and Lithuania, while Turkey is served by a separate corridor – Blue Stream – under the Black Sea.

The main transit pipeline through Ukraine enters Slovakia at Uzhgorod with a technical capacity of 72.2 bcm, with most of the capacity having been put in place in the 1980s (capacity figures from Pirani and Yafimava, 2016). A spur into Hungary can carry some 19 bcm, and there is a connection north into Poland which can take 4.2 bcm. A separate southerly line into Romania has a capacity of 23.8 bcm. Thus, total capacity through Ukraine is estimated at 119.2 bcm. Construction of the Yamal–Europe pipeline through Belarus and Poland started in 2004 and was brought up to full capacity in 2006 at some 32.3 bcm. Two smaller connections from Belarus into Poland have a capacity of 5.4 bcm. As mentioned above, the North Stream pipeline from Vyborg in Russia to Greifswald in Germany has a nameplate capacity of 55 bcm and was completed in 2012. The Blue Stream pipeline to Turkey adds a final 16 bcm of capacity; it has been in operation since 2003.

Altogether, technical pipeline capacity into Western Europe has amounted to some 211.9 bcm since 2012, with Blue Stream bringing the total to around 228 bcm. In 2012, the actual volume of gas exported to Europe through these pipelines was 150 bcm. That meant a considerable overcapacity, even taking account of seasonal variations in volume, with supplies increasing sharply in winter months. In the following years there continued to be substantial spare capacity in the system, even though



Source: Gazprom, authors' analysis (NB: realistic Ukraine capacity assumed to be 120 bcm. Nameplate capacity is theoretically 151 bcm, according to Naftogaz Ukrainy)

Figure 5.4 Russian gas exports to Europe compared to pipeline capacity

exports were growing slowly, but this changed with the rapid rise in Russian gas exports from 2015. As shown in Figure 5.4, at the current level of sales to Europe, average annual utilization of Russia's export capacity has increased from 63 per cent in 2014 to 87 per cent in 2018. In peak demand winter months, the system is practically full. Indeed, even on an average basis, the Yamal–Europe, Blue Stream, and Nord Stream pipelines are running at over 90 per cent capacity utilization, leaving the politically sensitive Ukrainian route as the only option available for expansion (Investor Day, 2018, slide 30). Furthermore, the capacity of the Ukrainian system must be in some doubt. Although the nameplate figure is 151 bcm according to Naftogaz Ukrainy (Pirani and Yafimava, 2015), in reality not more than 120 bcm have been transported in the post-Soviet era, and lack of maintenance may mean that realistic current capacity is closer to 100 bcm. In that case, the average annual utilization of Russian export pipelines could currently be as high as 95 per cent overall – close to full. By the mid-2020s, if current trends continue, pipeline capacity may well be insufficient to transport all the Russian gas needed by Europe.

Obviously, possible physical constraints could limit Russian exports to Europe. Discussions on the future of pipeline options in the Black Sea (TurkStream), the Baltic Sea (Nord Stream 2) and through Ukraine will

be vital to the future of European gas supply – with the debate reaching its first crisis point in 2019, when Russia and Ukraine renegotiate the transit contract for Russian gas to Europe.

OUTLOOK FOR UKRAINE

The 'gas component' in Russian–Ukraine relations has changed considerably since 2014. In 2013 Ukraine imported 28 bcm of natural gas; and, as this all came from Gazprom, it made Ukraine one of the biggest importers of Russian gas, on a level with Italy, which is Russia's second biggest customer in Western Europe. The large volumes, representing 50 per cent of Ukrainian gas consumption (Naftogaz, 2019), seemed to indicate a country highly vulnerable to Russian pressure. The argument put forward earlier by Poland regarding Nord Stream therefore gained new relevance: if transit through Ukraine should become redundant, Russia could apply pressure via gas sales, without involving its Western customers. However, it should also be noted that Ukraine had been attempting to address this issue for some time, as its imports of gas from Russia had been on a downward trend since 2006 – indeed, volumes had almost halved since then, although their share of consumption remained relatively stable, reflecting a corresponding reduction in total consumption (Naftogaz, 2019). Nevertheless, it still came as a surprise that in the years after the 2014 crisis Ukraine managed to wean itself almost completely away from gas imports from Russia. According to Gazprom, its exports to Ukraine had fallen to 2.4 bcm by 2016 (Gazprom in figures, 2013–2017); even more significantly, most of the decline in imports from Russia had been compensated by imports from the West – mainly Slovakia by way of reverse flow in the gas transit system. Gazprom and President Putin protested, arguing that 'reverse flows' were impossible and that the new supply was really Russian gas in the transit system that was now being diverted to Ukraine through swap arrangements with the Western buyers (Ukraine's reverse, 2014). Naftogaz, however, maintained that the pipeline system had backhaul capacity to take gas from the West, even though a virtual reverse flow of gas would be more rational (Kobolev, 2015). According to Naftogaz statistics, Ukraine imported 10.6 bcm from the West in 2018 (Naftogaz, 2019). Although these imports gave rise to new controversy in Russian–Ukrainian relations, developments since 2015 have effectively removed the issue of Ukraine's gas dependence on Russia from the agenda.

Ukraine's interest in maintaining transit of Russian gas over its territory is obvious, as this business provides substantial revenues – in 2017 estimated at US\$3 billion (Ukraine expects, 2017). Implementation of Nord

Stream 2 and TurkStream would make Russia less dependent on Ukraine for transit, placing these revenues at risk. However, it remains unclear just how much less dependent Russia could hope to become. For example, German Chancellor Angela Merkel, who has consistently supported Nord Stream 2, has repeatedly stated that a go-ahead for Nord Stream 2 would require transit through Ukraine (Merkel says, 2018).

Several factors are involved here. It is clear that Russia's actions with regard to Ukraine and the Crimea since 2014 provide a challenging political context for future gas relations. Further, the outcome of an arbitration case between Russia and Ukraine over historical gas sales and transit agreements also seems likely to influence negotiations over the future of Russian gas transit via Ukraine. Rulings in 2018 dismissed Gazprom's claim that its take-or-pay rights had been breached and that Naftogaz owed it US\$56 billion, while also dismissing Ukraine's claim that it has been overcharged throughout the lifetime of the sales contract. Instead, the court ruled that Ukraine should have the right to pay market prices from 2014, and on this basis has stated that it owes Gazprom approximately US\$2 billion for gas arrears since then. In addition, a future sales volume for the remainder of the contract was set at 5 bcm (or a minimum bcm take-or-pay level) (Ukraine and Russia, 2018). A second ruling on the gas transit contract, in which Naftogaz claimed US\$16 billion in take-or-pay fees from Gazprom, was delivered on 28 February 2018: it held that Gazprom owed Naftogaz damages of US\$4.63 billion for failure to deliver agreed transit volumes, leaving Gazprom with a net debt of US\$ 2.56 billion to the Ukrainian company (Olearchyk, 2018). Gazprom disputed the outcome, and vowed to use all legal means to oppose it, with its CEO Alexey Miller taking a very bold first step by threatening to cancel both the transit contract and the sales contract altogether with immediate effect – a step supported by the Russian Energy Minister (Novak, 2018). Although it is difficult to see how this could work in practice, given the level of transit volumes at present and uncertainty over whether one party has the legal right to terminate a ten-year contract unilaterally before the end of its term, there can be no doubt that this move created a more urgent need for negotiations and brought to the fore the high stakes involved. As the net amount owed by Gazprom is almost equivalent to the US\$3 billion bond debt between Ukraine and Russia (Olearchyk, 2018), there may be some possibility that an overall balance of payments may be found, but Gazprom's continuing chagrin at the outcome of the Stockholm arbitration process indicates that negotiations will be long and fraught.

Given Gazprom's strong export volumes and almost full utilization of its major export routes to Europe, the fates of Nord Stream 2 and TurkStream will substantially influence Gazprom's negotiations with

the Naftogaz subsidiary, UkrTransGaz, concerning renewal of their gas transit contract, due to expire at the end of 2019. Ukraine will have some negotiating leverage in those negotiations, in which it has demanded a commitment from Gazprom to continue transiting gas, because pressure from Western buyers and governments is likely to play a major role. However, the Russian side is likely to take a hard line, insisting that it wants to reduce transit volumes through Ukraine to a minimal level, and only on commercial terms.

However, irrespective of the associated disputes, it has become clear to all parties in Russia, Ukraine and the EU that Russia will need to use the Ukraine transit system beyond 2020. The European Commission has stressed its desire to support the use of the Ukrainian system, from both a political and a commercial perspective, wishing to maintain optionality around gas supply routes and also to ensure that Ukraine continues to receive the annual transit fees so vital to its economy (Toplensky, 2017). Further, Southern European customers of Gazprom have expressed a desire to see volumes continue to flow through the current Ukrainian system (Bypassing Ukraine, 2015), and the USA has also announced its political support (US supports, 2017). In addition, although Russia and Gazprom initially asserted their desire to reduce transit volumes through Ukraine to zero, they have conceded on more than one occasion that gas will continue to flow, even if at reduced volumes (Russia wants, 2019). The consensus view would seem to be that, in the short term, some 50–90 bcm of capacity will be needed. Although this requirement may fall in the mid-2020s, depending on the level of European demand and how many new export pipelines are completed, it is likely to rise again towards the end of the decade as Europe's import requirements continue to grow (Pirani, 2018).

The key question, therefore, is whether it will be possible to achieve an overall agreement that provides a balance between the various transport routes, the findings of the Stockholm arbitration court, the requirements of the Third Energy Package regulations and the commercial requirements of Gazprom and its customers. The history of Ukraine–Russia negotiations indicates that discussions are likely to be taken to the wire – Ukraine's bargaining position has been enhanced by its newfound ability to survive without Russian gas supplies, thanks to its lower demand and the availability of reverse flow gas from Europe. The potentially fraught nature of the negotiations was indicated by Ukraine's suggestion that it may increase transit fees sharply, to allow for lower utilization of its system, potentially undermining the economics of Russian gas exports but also reducing the incentive for Gazprom to conclude a significant new deal (Bros, 2016). Russia may bring up the old proposal of creating a consortium to manage

the transit system in Ukraine (Aslund, 2019). The need for a continuous negotiations process involving Russia, Ukraine and the EU may become a reality, given the real possibility that one or more of the parties may want to agree only on a short-term deal at the end of 2019. The EU has offered to play a mediating role, indicating that it sees itself as a natural coordinator of the negotiating process: that might entail an attempt to coordinate a grand bargain to cover all the related issues over Russian gas exports to Europe (EU offers, 2017). The Third Energy Package has added general leverage to the EU, while uncertainties over implementation of EU regulations on Nord Stream 2 offer temporary clout in negotiations with Russia. Russia understands this logic well: President Putin has hinted that negotiations on a new transit contract with Ukraine might be postponed until Nord Stream 2 is completed and operative (Toporkov and Chervonnaya, 2019).

POLITICIZATION OR COMMERCIALIZATION

Gas relations between Russia and Europe have become more politicized, with 2006, 2009 and 2014 as specific milestones. The EU has attempted to halt expansion of Russian pipelines, partly with reference to the impact of new pipelines on the traditional transit countries (especially Ukraine but also Poland), and partly due to growing concerns that Russia's share of the European gas market is becoming too great.

These attempts have been only partly successful. South Stream was cancelled, but it has re-emerged in a smaller version as TurkStream. Nord Stream was completed, but finalization of Nord Stream 2 remains an issue, although the EU has gained some leverage over Russian gas exports through regulations developed under the Third Energy Package. On a more fundamental level, the explanation of these mixed results must be sought in the dichotomy of Europe's position towards Russia, where it both needs Russian gas and does not want more Russian gas – with important European players holding conflicting views.

Restricting the growing European dependence on Russian gas has been an important driver in development of the internal market in energy, as discussed in Chapter 4. In addition to liberalization of the gas market in terms of regulations, this has included infrastructure development, with the goal of reducing vulnerability to dependence on Russian gas. In fact, these policies may have worked to Russian advantage. With new regulations and infrastructure in place, importing Russian gas has become less risky, and this lower vulnerability may have inclined some importers to take more Russian gas than they would have done without the new

infrastructure development, including interconnectors and reverse flow capacities (Aune et al., 2017).

For Russia, the downside is that it has been denied direct access to downstream customers. And in the new market conditions, Russian gas may be replaced more easily in many situations, reducing the previous leverage of Gazprom and Russia (which they deny they ever wanted to use). At the same time, shorter-term contracts and lower than expected prices make it harder to finance long-term upstream investments.

Over the past decade, Gazprom has had a surplus of gas due to its decision to develop fields on the Yamal Peninsula – precisely at a time when European demand went into decline after the 2008 economic crisis. However, that surplus will soon be coming to an end (Yermakov, 2018), and the company must decide how much new gas to develop and whether it wishes to prioritize supply for Western markets in Europe, or Eastern markets in Asia. The answer will have both commercial and political consequences for all parties involved: it could either enhance Russia's long-standing ties with Europe or mark the point at which Gazprom accelerates the diversification of its marketing strategy in favour of China and the East. But for the mid-term at least, the European market is set to remain crucial to the financing of Gazprom – and thus most of the domestic gas sector – and an important source of revenue for the Russian state budget.

If Russia had wanted to improve its standing in the European market, a strikingly different, albeit highly theoretical, solution could have been radical liberalization of the Russian gas sector, allowing not only the break-up of Gazprom and competition among domestic companies, but also upstream access and even participation in the domestic market by foreigners – thus depoliticizing the gas sector and perhaps assuaging political misgivings against increased Russian exports to Europe. However, even limited liberalization attempts within Russia have encountered strong resistance. A full opening of the sector appears unthinkable in a situation where so much basic scepticism towards the West remains.

Thus, Gazprom and the Russian authorities have decided to follow a middle path and adapt to the new rules, perhaps realizing that these can allow them to exploit their competitive commercial advantages while avoiding some of the political difficulties. By following this strategy, Gazprom has actually encouraged greater dependence on Russian gas in Europe, at a time when most Western political leaders are keen to see the opposite occur. The irony of this outcome is surely not lost on the Kremlin.

However, while 'the West' has been preoccupied with mitigating the risks associated with its dependence on Russian gas, there has been less focus on Russia's export dependence, beyond general statements of mutual reliance. The key difference between the reciprocal dependencies is one of timing,

which can perhaps explain why European politicians are so concerned. The security-of-supply question in Europe is relatively short-term. A large scale disruption in gas supply could create a problem overnight, sparking an immediate political crisis, given that energy supply is a core foundation of any government's function. Over time, the problem could be dealt with by diversification of supply sources or a change in energy strategy – but that would not alleviate the short-term crisis. In contrast, Russia's dependence is long term, driven by the need for revenues to sustain its gas industry and provide export incomes to the state coffers. In 2017, 34 per cent of Gazprom's total revenues and 66.5 per cent of its net gas revenues derive from exports to the European market (Management Report, 2017: 34). Approximately 4.2 per cent of total federal budget revenues came from taxes on gas exports, with the 30 per cent export tax being the largest contributor. Although this revenue contribution is not as significant as that from the oil sector, there is no denying that an important source of funds for the Russian state budget comes from sales of gas to Europe. Thus, it is more realistic to see expansion into markets in Asia, as explored in the next chapter, as an addition, rather than an alternative to, the European market.