Russia's Northern Fleet and the Oil Industry – Rivals or Partners? Petroleum, Security and Civil-Military Relations in the Post-Cold War European Arctic

Kristian Åtland

Described as one of the world's most promising new energy provinces, the European Arctic is no longer seen primarily as a military playground. Russia's approach to the region is increasingly governed by national economic interests, rather than by national security interests. The development of offshore oil and gas fields, the construction of new pipelines and terminals, the increasing traffic of oil tankers to Western Europe and the United States, and the conversion of naval yards to civilian production, represent both new challenges and new opportunities for the Russian Navy. Issues that were previously considered crucial to the country's national security have slowly but steadily been "desecuritized", and new patterns of civilmilitary relations have emerged. This article discusses the relationship between the Russian petroleum industry and the Northern Fleet, and the interplay between Russian commercial and military interests in the post-Cold War European Arctic.

Twenty years ago, the European Arctic¹ was among the most heavily militarized regions of the world. The fiords on the northern coast of the Kola Peninsula were full of naval bases, and Soviet nuclear submarines were frequently operating in the frigid waters of the Barents Sea. The level of tension on NATO's northern flank was high, and this was reflected in the position of the Soviet Northern Fleet. Civilian activities in and by the Barents Sea were severely restricted, and Soviet politics on the Arctic were largely governed by military-strategic interests and national security concerns.

The end of the Cold War, the disappearance of the bipolar world order, and the emergence of a more complex global security environment led to a recasting of security interests on both sides of the fading Iron Curtain. It soon became clear that the military activity level in Russia's northwestern corner would decrease, due to changes in threat perceptions as well as to financial constraints, and that it would be hard for the Russian Northern Fleet to uphold its privileged position in the region. The economic independence and political influence that the military had enjoyed in the past, at the regional as well as at the federal level, began to fade away. The Defense

Ministry, the Navy, and the Northern Fleet were no longer setting the terms for the development of the region, at least not to the extent they had done in previous times.

This development coincided in time with the emergence of increasingly powerful *civilian* actors, state as well as private, who saw the end of the Cold War as an opportunity turn the Barents Sea region into something other than a military domain. The Russian oil and gas industry, which in the case of Gazprom was still closely associated with the Russian state, was among the most influential of the new lobby groups. In the early 1990s, it was still unclear how the Russian military would deal with its new potential "rivals" at the state and regional levels, and whether the Navy and the petroleum industry saw their respective interests as conflicting or compatible.

The objective of this article is to examine trends, and possible turning points, in the Russian Navy's relationship with domestic petroleum companies in the post-Cold War period. The article takes as its point of departure the working hypothesis that there has been a *change of attitude* among the military top brass when it comes to its willingness to accommodate the interests and needs of the petroleum industry. In the early 1990s, Russian Navy and Northern Fleet commanders voiced a number of reservations and concerns regarding petroleum activities in the Euro-Arctic region, particularly in the vicinity of submarine bases and operation areas, and they were reluctant to offer active support for the industry. This approach seems to have been replaced by more flexible and pragmatic attitude in the late 1990s and early 2000s.

If a change of attitude has in fact taken place, or is in the process of taking place, it would be interesting to find out *when*, *why* and *how*. Was it caused by external factors (changes in the security and economic environment), internal factors (improved policy coordination at the state and/or regional level), or a combination of the two? Attitude changes, policy changes, and changes in the interrelations between Russian military and civilian actors, such as the Navy and the petroleum industry, are well worth analyzing. They may, as noted above, be indicative of alterations in the security and economic environment, at the regional as well as at the global level. Changes in the nature of civil-military relations at the two levels may also have an impact on the political climate in the Euro-Arctic region in the years to come, and the prospects for

Russian-Western cooperation in the development of the region's oil and gas resources.

The article is structured as a multi-case study, drawing on theoretical propositions developed by the so-called Copenhagen school of security studies. The first section introduces the terms "securitization", "desecuritization", and "resecuritization", which may help us get a better understanding the processes of security policy decision-making as well as the dynamics of civil-military relations at the state and regional levels. This section also elaborates on the methodology and sources used in the study. Then follow the three cases, which analyze the attitude of the military in the context of (1) the development of offshore oil and gas fields on the Barents Sea shelf, (2) the construction of oil and gas terminals on Kola Peninsula, and (3) the conversion of activities at the Severodvinsk naval yards. The findings from the case analyses are summarized and systematized in the concluding section.

Theory, Method, and Sources

Within the field of international relations (IR), international security studies (ISS) and studies of civil-military relations (CMR) are often treated as separate research fields. It can, however, be argued that the two approaches can, and sometimes should, be combined. Security policy decisions may influence civil-military relations, just like civil-military relations may influence security policy decisions.² In the case of Russia, national economic and military-strategic interests are largely defined at the state level. Gazprom and the Russian Navy can both be seen as "prolonged arms" of the Russian state, but this does not necessarily mean that their interests and priorities are the same.

In order get a better understanding of the mechanisms that shape Russia's security policy, and the interaction between military and commercial actors at various levels, it may be useful to draw on the works of the Copenhagen school of security studies.³ The terms "securitization", "desecuritization", and "resecuritization" describe the processes that take place when an issue or development is placed on, removed from, or reintroduced to a state's security agenda. In the words of Danish political scientist Ole Wæver, securitization is "the intersubjective establishment of an existential threat with a saliency sufficient to have political effects".⁴

The essence of securitization theory is that security is a "speech act", i.e. an utterance whereby "[...] a state representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it." In order for a "securitizing move" to be successful (i.e. result in *de facto* securitization), the "securitizing actor(s)" need(s) to have a certain authority in relation to the "audience", and the alleged threat needs to be perceived by the audience as being of an "existential" nature in order to justify emergency measures. The receptiveness of the audience to the securitizing actor's claim about the existence of an existential threat is often related to factors such as internal security demand, position of the securitizing actor, and the historical pretext of the alleged threat — factors often referred to as "facilitating conditions of the security speech act". ¹⁰

Once a specific issue, or cluster of issues, has been securitized, it may take a long time to "desecuritize" it. ¹¹ There may be actors who have a strong interest in maintaining the *status quo*, either because their world views are more conservative than those of the ruling elite, or because they have vested interests that may be threatened by the consequences of desecuritization (typically, the military establishment or the military-industrial complex). In the case of Russia it would be wrong, however, to place the leadership of the Northern Fleet squarely in the *status quo* camp. As this study will show, the Fleet has in recent years shown a good deal of pragmatism in dealing with the new realities in the north, apparently in contrast to the General Staff in Moscow, which follows the developments from a greater distance. ¹²

The high level of tension in east-west relations in the arctic part of Europe during the Cold War led to the securitization of a wide array of issues and issue areas at the regional level. People-to-people contacts and cross-border industrial cooperation at the level of companies were seen by the Soviet political elite as a potential threat to national security. Contacts of this kind were discouraged through strict visa practices and extraordinary security measures such as the establishment of "closed cities" and "special border zones". The Northern Fleet and Ministry of Defense were often successful in their "securitizing moves", since the "audience" (i.e., the Politburo, the Communist Party, or the People's Congress) found the country's national security to

be at risk and generally welcomed extraordinary security measures. The Soviet Union tried to maximize its security through a widening of the security policy sphere.

Eighteen years after the end of the Cold War, the Northern Fleet still utilizes the Barents Sea as an operation area for missile-carrying submarines, controls the major port facilities on the Kola Peninsula, and provides work to the military-industrial complex. In order for the northern "oil and gas bonanza" to materialize, the petroleum industry needs to find ways to meet the needs of the Northern Fleet. Similarly, the Fleet is required by the central authorities to support the needs of the industry, for example by protecting the new energy infrastructure as well as tanker shipping.

To obtain knowledge about the nature of Russian civil-military relations in the post-Cold War European Arctic, one has to look into *situations where Russian civilian and military interests meet*. The task at hand is to find out, based on the sources available, how such situations have been dealt with by naval commanders in the region as well as by decision-makers elsewhere in the Russian military and security establishment. One has to search for *patterns* in the way the issues have been handled at different levels, and *trace* relevant processes over time, in order to identify attitude changes.

The challenge for an outside observer, in addition to the obvious lack of insight into closed decision-making processes, is that the available data is largely qualitative and therefore difficult to measure. But by designing a *multiple-case study*¹³, one can zoom in on a limited number of carefully selected cases, presumed to be illustrative of a particular phenomenon (here: the interaction between the Navy and the petroleum industry). Such an approach allows for contextualized analyses, cross-case comparison, exploration of causal relationships, and subsequent *generalizations*. ¹⁴

In case study research, the techniques of *pattern-matching*¹⁵ and *process-tracing*¹⁶ can be powerful analytical tools. The extent to which evidentiary patterns emerging from the cases coincide with expected or predicted patterns may be a good indication of a case study's internal validity. ¹⁷ In this study, the expected pattern is one of *increasing convergence of interests between the Russian Navy and the petroleum industry*. The study also aims at tracing the processes of civil-military interaction in each of the

three cases, from the early 1990s to the present day, as a means to substantiate the conclusions and identify causal inference beyond co-variation in patterns.

A critical factor in case studies is the *unit of analysis*. ¹⁸ The appropriate unit of analysis in this study, which focuses on Russian security policy decision-making in the context of civil-military relations in the European Arctic, appears to be *decisions* made by the Russian military and security establishment in the 1990s and 2000s ("why they were taken, how they where implemented, and with what result"). ¹⁹ Of particular interest in this regard are decisions related to the issue of *whether or not to allow petroleum-related activities in or around the Barents Sea*. Given the strategic importance of the region in question, it seems fair to assume that such decisions, and the general attitude of the Navy and the Russian military and security establishment to petroleum activities in the European Arctic, have been shaped by security concerns. Thus, the extent to which such activities have been "securitized", i.e. perceived as constituting a threat to Russia's national security, is an interesting variable to explore.

This leads us to the issue of *case selection*. The three cases of this study are selected based on their ability to shed light on the nature of the civil-military relations in the Euro-Arctic region, as well as the mechanisms of "securitization", "desecuritization" and "resecuritization". The Barents Sea shelf, the Kola ports, and the Severodvinsk yards are all important meeting places for Russian commercial and military interests. They are arenas where the Russian Navy has been, is, and is likely to be, facing a growing presence by the petroleum industry, and where the Northern Fleet's interests are presumed to be affected in a variety of ways, directly as well as indirectly.

The case analyses are to a large extent based on articles in Russian newspapers and analytic journals. Many of the articles contain statements made by centrally placed decision-makers within the Russian security and defense establishment. Of particular interest are statements made by the leadership of the Northern Fleet at different points in time, and by prominent representatives of oil and gas companies like Gazprom and Lukoil. The analysis also draws on observations made by Western journalists and scholars familiar with the region, as well as conversations with Russian scholars.

Case 1: The Development of Oil and Gas Fields in the Barents Sea

Already in the early 1970s, seismic surveys were done on the Russian Barents Sea shelf. The mapping of resources was intensified towards the end of the decade, and exploration drilling started in 1981, in the shallow southeastern part of the Barents Sea, also known as the Pechora Sea. Exploration drilling continued throughout the 1980s and expanded to also cover other and less accessible parts of the Russian Western Arctic shelf. In this period, several promising deposits were identified, including the Prirazlomnoye oil deposit in the Pechora Sea (1989), and the Shtokman gas condensate deposit in the deeper northeastern part of the Barents Sea (1988). The license for development and production covering both fields for the period 1997–2018 is held by the Gazprom- and Rosneft-controlled company Seymorneftegaz. ²⁰

The Prirazlomnoye deposit is located at a depth of 19–20 meters, 60 kilometers off the coast of Nenets Autonomous Region. The field is estimated to yield some 610 million barrels, or 83 million tons, of crude oil. Prirazlomnoye has been referred to as a potential economic lever for other and more capital-intensive offshore oil and gas projects in the Russian part of the Barents Sea. The ice conditions in the Pechora Sea do, however, constitute a serious challenge for the licensee. Significant investments have already been made in production infrastructure and icebreakers to transport the oil. An ice-capable production platform is currently being constructed at the naval yards in Severodvinsk, and the field is expected to enter into production in 2008.

The Shtokman field, which is further from the coast (approximately 550 kilometers) and in much deeper water (280–380 meters) is considered to be the world's biggest offshore gas field. The field's reserves of gas have been estimated at 3.2 trillion cubic meters, with another 31 million tons of condensate. A number of technical and financial obstacles need to be resolved before the field can be developed. The timing of the project was expected to coincide with an increase in demand for liquefied natural gas (LNG), principally from the US market, and Gazprom's search for partners focused on the need for foreign expertise in deep water gas production. In October 2006, however, Gazprom chief executive Alexei Miller announced that Gazprom would be the sole owner of the project, and that the gas would be sold to Europe via the planned "Nord Stream" pipeline through the Baltic Sea. For this

purpose, a pipeline from the Shtokman field to the mainland and further via the Kola Peninsula to Volkov in the Leningrad Oblast will be built. The LNG project is likely to be delayed, at least until after 2013.

Today, the main attention of the Russian oil and gas industry is directed towards the onshore fields in Western Siberia, and not towards the Barents Sea. Still, Russian companies do seem to be positioning themselves for future offshore activities in the Western Arctic. According to the Ministry of Natural Resources, thirteen licenses have already been issued in the "Western Arctic Sector" (The Barents, Pechora and Kara Seas). Of the thirteen licenses, eight are for geological study and oil and gas prospecting, whereas five are for hydrocarbon exploration and production. According to the Russian Ministry of Natural Resources, twenty additional blocks in the same sector will be offered in six (presumably closed) offshore tenders in the period up to 2010. Gazprom plans to invest \$500 billion in the development of oil and gas fields on the Russian Arctic shelf in the next 12-15 years.

How – and to what extent – will the prognosticated increase in offshore petroleum activities in the European Arctic influence the activities of the Northern Fleet? This will, of course, depend on factors such as the number of installations and where they are located. There is reason to believe that the shelf under the shallow waters of the Pechora Sea will be developed first. This southeastern corner of the Barents Sea does not have the same strategic importance as the deeper central and western parts of the Barents Sea. But it may only a question of time before petroleum activities begin also in the central and deeper parts of the Barents Sea, where the Fleet's strategic nuclear submarines have their transit routes and stationing areas.

The main challenge for the Northern Fleet seems to be that platforms, rigs and pipelines, foreign or domestic, and regardless of their location, are to be regarded as *permanent* installations. The installations can not be removed in the event of a crisis or conflict. In this sense, offshore petroleum infrastructure differs fundamentally from tankers, cargo ships, fishing vessels, research vessels, etc., which be can be cleared away by temporary "traffic restrictions" justified by military needs or security concerns. Noise generated by offshore petroleum installations is likely to complicate Russian anti-submarine warfare (ASW) operations. On the other hand, offshore

drilling may also complicate foreign submarines' "track and trail" operations in the Barents Sea, if the Russian submarines are able to hide in the background noise.

The ownership of platforms and drilling rigs does not necessarily have to remain in Russian hands. Internationally, the ownership of offshore installations is often a complex issue. Oil rigs are bought and sold on a commercial basis, and this may well happen also in the Barents Sea. Whether or not there is foreign participation on the ownership side could influence the Russian defense authorities' views on the given installations. It should, however, be acknowledged that oil rigs are of little potential military value. Because of the danger of explosion, they can not be used as missile launch pads, and because of the noise they generate they can not be used as underwater "listening posts". They can, however, be used as carriers of radars, a function that has already utilized on platforms in the Baltic and Caspian Seas.

When the Russian military view oil and gas installations in the Barents Sea as potentially problematic, and occasionally try to "securitize" the issue, it has mainly to do with the fact that the presence of industrial infrastructure may limit the operational area of the submarine and/or surface fleet and "channel" subsurface vessels into more easily identifiable transit and operational areas. The "channeling" effect that petroleum installations might have on the Northern Fleet's vessels, particularly the strategic nuclear submarines (SSBNs), should be viewed in connection with already existing limitations in terms of ice conditions and underwater topography. The Barents Sea is relatively *shallow*. It has an average depth of 230 meters, and only 25 per cent of the sea has a depth of more than 300 meters. The northern and eastern parts of the Barents Sea is frozen or infested with drift ice up to six months of the year, which creates considerable limitations on the Fleet's operation area.²⁷

Unlike surface vessels, submarines have the obvious advantage of being able to operate under the ice, provided that they have enough maneuver room between the lower edge of the ice and the sea bottom. According to Norwegian and Canadian estimates, the largest of the Russian SSBNs need approximately 200 vertical meters to operate safely in a stationing area, and a horizontal space of between 17,000 and 34,000 square kilometers. ²⁸ This implies that as much as 33 per cent of the Barents

Sea may be naturally unsuited for Russian SSBN deployments, at least on a year-round basis.²⁹

For the ocean-going part of the Northern Fleet, the Barents Sea is probably more of a *transit* area than a *stationing* area. The need for maneuver room, i.e. distance between the sea bottom and the surface, or – if the transit is taking place under the polar ice – between the sea bottom and the lower edge of the ice, is much more modest when the submarines are in transit. The military importance of the European Arctic is linked to the possibility of "internal" transit of strategic submarines into the Barents Sea, and the possibility of "external" transit from the Barents Sea to potential stationing areas in the Atlantic or Arctic Oceans. ³⁰ Transits in shallow waters and operations under the Arctic ice canopy are considered both risky and difficult, and require special training and extraordinary shiphandling skills. ³¹

Russian defense authorities are intent on securing the Northern Fleet optimal maneuver room, not only in the deep parts of the Barents Sea and the Arctic Basin, but also in the shallow coastal regions. It is therefore only natural that the Ministry of Defense is involved in discussions and decisions with regard to future offshore oil and gas activities in the Barents Sea. So far, we know of only one occasion where the military have "vetoed" exploration drilling off the Kola Peninsula. That was on a location close to the mouth of the Kola fiord. Generally, it would hardly benefit Fleet to hinder or delay the development of oil and gas fields in the Barents Sea. Provided that the needs of the Russian Navy are taken into consideration, particularly the need for reasonably unrestrained transit into and trough the Barents Sea, the Navy is unlikely to "securitize" the issue on principal grounds. An interesting signal in this regard is the principal decision in April 2006 to provide the oil industry with previously classified topographic and geological maps of the northern waters.

An important point to make in this context is that the development of oil and gas fields on the Russian arctic shelf will impose new peacetime responsibilities on both the Russian Navy and the Russian Border/Cost Guard. The Northern Fleet is likely to be tasked with the anti-terrorism protection of the new installations, and if additional resources are not made available for this purpose it may lead to a reduction in the Fleet's more traditional activities. On the other hand, the new "brown water" task will

give the Fleet a new (regional) function, in addition to the (global) nuclear deterrence function, and this is increasingly seen as a valid argument for improving the Fleet's dire funding situation. Russian parliamentarians often mention the regional and global tasks of the Northern Fleet in the same sentence. However, experts agree that missile-carrying submarines are unsuited for the "brown water" task, which requires smaller surface vessels. In reality, the two tasks have little or nothing to do with each other.³⁴

In addition, technological improvements in the field of arctic petroleum operations have probably made the development scenario more acceptable to the Northern Fleet. Instead of traditional oil and gas platforms visible on the surface, the Fleet may be sharing the Barents Sea with remote-controlled sub-sea systems placed on the sea bottom. This is a technology that has already been developed for the Snøhvit gas field in the Norwegian part of the Barents Sea, and the technology is likely to be utilized also at the Shtokman field. Seabed petroleum installations apparently represent less of a challenge to the Northern Fleet than traditional platforms would have done, since they can easily be sailed over by both surface and subsurface vessels.

It should also be noted that the number of strategic submarines on patrol is much lower today than it was in the days of the Cold War. According to open Russian sources, the Northern Fleet today has forty two operational submarines, of which eleven ballistic missile submarines (SSBNs), four cruise missile submarines (SSGNs), and some twenty multi-purpose attack submarines (SSNs). The maximum number of strategic submarines that can be out on patrol at any given time is probably not more than five. The number of submarines and cruises may, of course, increase in the coming decades, but not to the Cold War level. Interestingly, some of Russia's nuclear-powered submarines are currently participating in a Navy Staff project to survey and map the country's continental shelf under the arctic ice, where experts estimate that about 100 billion tons of oil-equivalent hydrocarbons are concentrated. The submarines are concentrated.

Seen from the perspective of the Russian petroleum industry, the Northern Fleet does no longer appear to be a rival or an opponent. Continued presence of Russian naval vessels in the Barents Sea is seen to be in the interest of the industry too. In November 2002, the president of Russia's largest private oil company Lukoil, Vagit Alekperov, spoke at the Academy of the Russian General Staff in Moscow. In his speech,

Alekperov stated that the industry and the armed forces were in essence pursuing one and the same goal – "Russia's revival". He added that "we Russian businessmen feel strongly the need for effective armed forces, the kind that can defend Russia's commercial interests where and when it is needed". Whether statements like these signal the beginning of a genuine partnership between the industry and the armed forces, or if they are just expressions of a desire on the part of Russian business interests to score some "goodwill points" with the military, remains to be seen.

Case 2: The construction of oil and gas terminals on the Kola Peninsula

When Gazprom, Rosneft, Lukoil and other Russian companies are looking for places to construct oil, gas and LNG export terminals on the Kola Peninsula, they base their assessment of prospective locations on factors such as water depth, ice conditions, existing infrastructure (railways, roads, storage facilities, etc.), and proximity to the Western market. Interestingly, these are largely the same factors that were considered important in the Cold War period, when the Soviet Union built its naval bases on the Kola Peninsula. The Northern Fleet needed ice-free ports, located as close as possible to Western Europe and the USA. That would give the Fleet optimal access to the North Atlantic and/or the Arctic Ocean through the Barents Sea, and the continental USA would be within striking distance of the country's sea-based ballistic missiles, even if the SSBNs were located close to their well defended home bases.³⁹

Many of the best port facilities on the Kola Peninsula are still controlled by the military. The Russian petroleum industry's increasing need for new export terminals in the region, and the simultaneous reduction of the Northern Fleet's inventory in the post-Cold War period, have led to a situation where the present and future use of strategic port facilities on the Kola Peninsula has become a hot issue. It is worth noting that the attitude of the military towards the petroleum industry seems to have undergone significant changes in recent years, from non-cooperation and inflexibility in the 1990s to increasing cooperation and flexibility in the 2000s. This development indicates that the issue of commercial use of former naval ports and bases on the Kola Peninsula is currently in the process of becoming "desecuritized".

The idea of developing the Murmansk region as a hub for petroleum shipments from Western Siberia is not new. Already in the late 1980s, the leadership of the Soviet Oil and Gas Ministry suggested opening Murmansk for oil transit westwards. However, the plans did not materialize at the time, presumably because the defense authorities found the plans incompatible with the extraordinary secrecy regime that surrounded the naval ports and military installations in the region. ⁴⁰ The explanation for why the issue reappeared on the agenda in the 1990s is to be found in the post-Cold War political climate, Russia's new geopolitical situation, and the rising oil prices.

First, the defense-related counter arguments against oil, gas and LNG export terminals on the Kola Peninsula seem to have lost much of their relevance now that the superpower rivalry has been replaced by en emerging Russian-American energy partnership. Second, after the dissolution of the Soviet Union, Russia is left with less than half of its commercial ports. With a few exceptions, the Baltic and Black Sea ports are now controlled by other countries than Russia. Many of Russia's remaining ports have limited capacity, under-developed infrastructure, or are located in shallow waters. Third, the rise in oil prices at the world market, particularly after September 11, 2001, has made oil extraction and exportation an increasingly lucrative business.

As a potential link between the oil fields in Western Siberia and North America, the Murmansk region has a special position. Unlike the ports further east, the Kola fiord is ice-free year round and deep enough to receive super tankers with a dead weight of up to 300,000 tons. The distance from Murmansk to the U.S. East Coast is only 9,300 kilometers, less than half the distance from the Persian Gulf to the East Coast (approximately 20,500 kilometers). The transportation costs for one ton of oil from Western Siberia to the U.S. were in 2003 estimated by Lukoil's economists at between \$23 and \$25, or \$3.2–3.4 per barrel. Provided that a better functioning transportation system is established between Siberia and Murmansk 44, and the oil price remain at its current level or higher, the Siberian oil could become a highly competitive alternative to the oil that the U.S. today imports from the Persian Gulf.

Shortly after the U.S.-Russian "energy summit" in Houston in October 2002, four of Russia's largest (semi)private oil companies – Lukoil, Yukos, TNK⁴⁵ and Sibneft⁴⁶ – signed a Memorandum of Understanding on a project for the construction of a

pipeline system to ship crude oil through a sea terminal near Murmansk. ⁴⁷ The terminal was estimated to cost roughly \$300 million, whereas the price estimates for the pipeline varied between \$3.4 and \$4.5 billion, depending on the decision whether to lay it around or under the White Sea. The dismantling of Yukos after the arrest of Mikhail Khodorkovsky in November 2003, the increasingly dominant position of state-controlled companies Gazprom and Rosneft, and the preference of the state pipeline monopolist Transneft to export the oil from the Pechora Sea port of Indiga instead of Murmansk, have temporarily put the project on hold. ⁴⁸

In the 1990s, several alternatives were suggested with regard to the location of the terminal. Lukoil had a preference for Mokhnatkina Pakhta, just north of Murmansk, where the Northern Fleet has a strategic fuel storage facility. Lukoil Arctic Tankers, a subsidiary of Lukoil, has since 1994 been allowed to use this facility for petroleum loading operations. In December 1999, Lukoil CEO Vagit Alekperov and Murmansk Governor Yuri Yevdokimov signed an agreement on the building of an oil refinery at this location. Construction was to have begun in May 2000, but the plans were stopped by the Defense Ministry and the Northern Fleet brass. Admiral Popov, who was commander of the Northern Fleet at the time, was highly skeptical of Lukoil's plans. "As long as I hold my current position, no private companies will be allowed next to Northern Fleet", he said in a newspaper interview in the fall of 2000. 49

The tendency in parts of the Russian military establishment to "securitize" the terminal/refinery issue in the early stages of the development process can be explained in a number ways. Throughout the 1990s, the Northern Fleet and other military units on the Kola Peninsula found themselves in a situation where their needs and interests were increasingly overlooked and/or disregarded by the political elite. The military were driven back from their former "footholds" by commercial actors, and often relegated to playing a subordinate role. The Mokhnatkina Pakhta issue may not necessarily have been seen as an existential *security* problem for the Fleet, but it could have been seen as an important *symbolic* issue.

Another possible reason could be that the construction of an international oil export terminal in the Murmansk region, particularly if linked to the West Siberian oilfields by a direct pipeline, would have led to a radical increase in the traffic of super tankers

in and out of the region. This could indeed have been perceived as a potential hindrance to naval operations. Increased tanker traffic would lay restrictions on other ship traffic in the region, including that of naval surface and subsurface vessels, and heighten the risk of collisions. ⁵⁰ A third possible explanation for the skepticism could be security risks associated with the presence of Russian civilian personnel, perhaps also foreign citizens, at – or in the immediate vicinity of – Russian naval ports.

The Northern Fleet's initial reluctance to accept petroleum activities in its backyard has, however, been toned down significantly in recent years. After the Kursk accident in August 2000, both the Commander of the Northern Fleet, Admiral Vyacheslav Popov, its Chief of Staff, Vice Admiral Mikhail Motsak, and the Chief of the Fleet's Submarine Flotilla, Vice Admiral Burtsev, were replaced. Shortly after his appointment, the new Commander of the Northern Fleet, Admiral Gennadiy Suchkov, signaled a far more pragmatic approach to the issue than his predecessor had displayed:

We [The Northern Fleet] are first and foremost interested in revitalizing the petroleum base at Mokhnatkina Pakhta. Experience from cooperation with private companies already exists in the other [Russian] fleets, so why shouldn't also we try to benefit from this experience?⁵¹

This statement can be interpreted as a clear indication that the new leadership of the Northern Fleet was ready to "desecuritize" the terminal issue and try to accommodate the needs of the petroleum industry. The pragmatic approach of Admiral Suchkov, occasionally referred to as Russia's "oil shelf commander"⁵², has largely been pursued also by his successors Mikhail Abramov and Vladimir Vysotskiy.⁵³ The decision in August 2007 to build a LNG processing plant for the Shtokman gas field in the village of Teriberka, located within the closed administrative-territorial unit (ZATO) of Severomorsk, is another example.⁵⁴ The further development of this project will be an interesting test case for the limits of civil-military interaction on the Kola Peninsula.

In the LNG terminal case, the leadership of the Northern Fleet was not reluctantly accepting, but actively *lobbying* for the Vidyayevo alternative, despite reluctance on the part of the General Staff and the Ministry of Defense in Moscow. ⁵⁵ In both the

Mokhnatkina Pakhta/oil terminal case and the Vidyayevo/LNG terminal case, the Northern Fleet commanders were apparently in close contact with the petroleum industry throughout the decision-making process. Former Fleet Commander Suchkov was careful not to place himself in a position where he could be accused of having "sold out" the Fleet's strategic port facilities. For this reason, he decided to send the oil terminal case to the Navy staff and the Defense Ministry for further processing.

Obviously, the Northern Fleet does not have the spatial needs today that it had in the mid 1980s, when the military activity level in the European Arctic was much higher. In 1986, the Northern Fleet comprised some 180 nuclear-powered submarines of different classes. In 2006, it had 42 – less than one forth of its Cold War inventory. In the same period the number of heavy surface vessels (aircraft carriers, cruisers and destroyers) fell from 79 to 18. The slimming down of the Fleet is also reflected in the number of cruises. In the period 1965–1993, the Soviet/Russian submarine fleet conducted 4600 cruises for which a significant part started and ended at the Northern Fleet's bases on the Kola Peninsula. In the year 1985 alone, the nuclear submarines of the Northern Fleet conducted 80 cruises. Ten years later, the number of cruises had fallen to 18. The number is even lower today, but it seems to be slowly increasing.

The challenges that the Northern Fleet are facing today are of a financial, rather than a strategic nature. An increased industrial presence on the northern coast of the Kola Peninsula and the building of new oil, gas and LNG terminals will not necessarily jeopardize the safety and security of the remaining military infrastructure, including the naval ports and storage facilities. It might even be beneficial for the military to cooperate with the petroleum industry, instead of continuing the Cold War tendency to "securitize" each and every aspect of civil-military interaction in the region. In return for its efforts to meet the needs of the petroleum industry, the Northern Fleet is likely to get generously paid by the industry – in the form of fuel. "The main thing for me", said Northern Fleet Commander Suchkov in 2002, "is for the Fleet to have fuel. This we can get if we lease the [Mokhnatkina Pakhta] base to the oil industry". ⁶⁰

Similarly, it appears to be in the interest of the petroleum industry to be on a good footing with the Northern Fleet admirals, since the industry will have to rely on the

military for anti-terrorist protection of the facilities as well as a number of other functions associated with the activity. Issues related to LNG production and transportation have in recent years been a hot topic at the meetings of the Joint Working Group of Gazprom and the Russian Navy, established in 2002 and led by Gazprom's Chairman and the Navy's Commander-in-Chief. In 2005, the two (A. Miller and V. Masorin) signed a cooperation agreement which focuses on seven tasks:

- How the Navy's vessels, port facilities, and shipyards can be used to support Gazprom's activities;
- 2. how the Navy's research institutions and hydrographic vessels can assist in the performance of navigational, hydrographic, and hydrometeorological surveying;
- how the Navy can contribute to the creation of a comprehensive safety & security system for hydrocarbon extraction and marine transportation, including a search and rescue system;
- 4. how the Navy can contribute in the development of schemes for joint transportation support (including marine, aerial, and other forms of transportation);
- 5. how the Navy can assist Gazprom in the construction of gas processing plants and supporting transmission infrastructure;
- how the Navy can assist Gazprom in the development of the Shtokman gas field and its onshore processing infrastructure; and
- 7. how the Navy can assist Gazprom in the implementation of the Nord Stream gas pipeline project in the Baltic Sea. ⁶²

The 2005 agreement between Gazprom and the Russian Navy is a good indication of the increasingly pragmatic nature of civil-military relations in Russia. It also testifies to the "desecuritization" that has taken place in the European Arctic after the Cold War. Whereas the building of international oil and gas terminals in the vicinity of the naval bases on the Kola Peninsula appeared impossible in the mid and late 1980s, mainly due to military concerns, it now appears both possible and uncontroversial.

Case 3: The naval yards in Severodvinsk

When the Soviet government in the 1930s decided to build a substantial naval force on the Kola Peninsula, it was simultaneously decided to build a naval yard complex by the outlet of the river Northern Dvina, 30 kilometers from Arkhangelsk. The *Sevmash* yard in Severodvinsk has later been referred to as the crown jewel of Russia's shipyards. All of the Northern Fleet's nuclear submarines are built here, and

most of the submarine repair and maintenance work has been undertaken at the somewhat smaller *Zvyozdochka* yard, also located in Severodvinsk. The Cold War arms race contributed to giving the two enterprises a special position within the Russian military-industrial complex. In the 1980s, when the activity level was at its highest, Sevmash and Zvyozdochka employed a total work force of 48,000 people. ⁶³

Today, the Severodvinsk yards are facing some serious challenges. Already in 1990, the value of the defense orders of the Soviet Navy had fallen by 95 per cent. The Navy's share of the defense budget had in the same period been reduced from 23 to 9 per cent, and in reality almost half of the appropriated allocations were never paid out. ⁶⁴ Planned and already on-going construction projects were postponed, some indefinitely. Being unable to fill their order books with construction and maintenance tasks for the Northern Fleet, the naval yards in Severodvinsk began to orient themselves towards civilian customers, most notably the Russian petroleum industry.

The commercialization of construction and maintenance activities at Sevmash and Zvyozdochka in the 1990s was primarily motivated by economic necessity. At the same time there was significant concern, particularly within the Russian military establishment, that the petroleum-oriented conversion should lead to a weakening (or loss) of the yard's military expertise and production capacity. On the one hand, the Russian government wanted to adjust the Severodvinsk yards to the new economic realities, while on the other hand maintaining their military production capability. The issue was in other words successfully "securitized", in the sense that the Russian government accepted the military's claim that the defense production – in spite of the lack funding – should remain the core activity of the yards. The change in orientation could at most be described as a *diversification*, rather than a full-scale *conversion*. 65

In the late 1990s and early 2000s, there were many signals that civilian enterprises wanted to speed up the "demilitarization" of the Severodvinsk yards. The Russian economist Sergei Kolchin wrote in an article in the spring of 2001 that the Russian petroleum industry and the military-industrial complex had a common interest in deepening the interrelations. In his opinion, the defense enterprises should devote a far greater part of their production capacity to petroleum-related projects, whereas the oil and gas industry should shift a larger share of their investments to "local"

production facilities". ⁶⁶ This view was largely in line with the position of the Industry Ministry at the time. Deputy Minister of Energy Sergei Mitin announced in 2001 that the military-industrial complex would be injected more than \$20 million in the period from 2002 to 2005, as part of an energy-related conversion program. ⁶⁷

On orders from the Gazprom-controlled company Rosshelf, Sevmash in 1996 began the construction of an 85.000-ton ice-capable oil production platform intended for the Prirazlomnoye field in the Pechora Sea. Originally, the platform was estimated to cost \$800 million, and the estimated construction time was set at three years. However, the project got significantly delayed, due to poor project management and technical and financial difficulties. This was also the case with two other drilling rigs and additional infrastructure projects that were to be undertaken simultaneously with the production platform project. Ten years after the start of the project, the platforms are still not ready to be towed out in the Pechora Sea and put into production. ⁶⁸

Also the private company Lukoil has expressed an interest in closer cooperation with Sevmash. At a meeting between the two companies' CEOs in the summer of 2000, an agreement was signed on the building of part of the company's new oil tanker fleet. Three years later the project was still in the planning phase. At the same time Sevmash got involved in a conflict with a Swedish shipping company concerning a previously agreed-upon contract on the building of two smaller tankers. Both this and other contracts have later been annulled – a fact that has made the Russian press question the enterprise's ability to handle commercial assignments, especially in a time when the defense orders again seem to be on the increase. ⁶⁹

The Sevmash management maintains that it is in the company's interest to continue the conversion process by taking on more civilian assignments in the years to come. The building of trawlers, tug boats and various types of passenger vessels make up an increasingly important part of the company's portfolio. This can also be said about the production of equipment and machinery for the civilian nuclear industry. Production of consumer goods has also been undertaken. This production has largely been based on already available (dual-use) technology, and the quality of the civilian consumer products has not always been at the desired level. As of May 2005, Russian state

defense orders counted for 34 per cent of Sevmash's total orders. Another 30 per cent came from the petroleum industry, and 25 per cent from foreign companies.⁷¹

Some of the more exotic projects that have been proposed have been related to the commercial use of nuclear submarines. Together with the world's largest nickel producer, Norilsk Nickel, Sevmash has explored the possibility of reconstructing Typhoon submarines for the purpose of transporting nickel from the remote Siberian town of Dudinka, located at the lower reaches of the Yenisei River, to Murmansk. The possibility of using rebuilt nuclear submarines to transport oil and/or liquefied natural gas has also been explored. The plans have appalled both Russian and international environmentalists and are unlikely to materialize any time soon. The cooperation between Sevmash and the nickel industry is primarily to be perceived as an effort to suppress the prices that Murmansk Shipping Company charges for their ice-breaker-supported shuttle transportation of nickel from Dudinka to Murmansk.

In the case of Zvyozdochka, the post-Cold War reduction in Russian state defense orders is seen as an opportunity, rather than a threat. The company has, among other activities, specialized in producing modern ship propellers for the civilian market. Generally, the production at Zvyozdochka resembles the one at Sevmash, but the conversion at the former company seems to have been deeper and more successful than at the latter. The two companies have in some instances competed for the same jobs, whether it be the building of freezer trawlers or oil drilling rigs. Zvyozdochka has also, on a commercial basis, undertaken repair and maintenance work on non-Russian naval vessels, i.a. for the Indian Navy. To

Still, a real upswing in the civilian production at the Severodvinsk yards is yet to be seen. One possible explanation for this could be that the conversion at times has been be resisted by forces within, or associated with, the Russian military establishment. The military has traditionally been skeptical about defense industry conversion, and often tried to protect key parts of the military-industrial complex. It is fair to assume that the naval yards in Severodvinsk fall into this category. Since 1954, Sevmash has built more than 160 submarines of various classes and it is still Russia's – and the world's – largest submarine yard.⁷⁶

Russian Vice Admiral (R) Radiy Zubkov said at a conference in 1996 that the problems that the military shipbuilders were experiencing in the 1990s were directly related to "the disruptive and senseless process of conversion", and that many former defense enterprises had ceased to function as producers of military hardware. A common problem with the conversion, as seen from a military point of view, was that key enterprises within the military-industrial complex turned their back on the Russian defense authorities and oriented themselves towards more solvent customers within the private sector. As long as they produced military hardware for foreign customers, this was unproblematic. But when the enterprises turned to civilian production, their military competence could get lost.

Today, the naval yards in Severodvinsk are administratively under the Ministry of Trade and Economic Development. The influence that the Ministry of Defense and the Northern Fleet currently have on the yards' orientation and priorities is probably fairly limited. In the present situation, the yards are largely run by market principles and not military-strategic considerations. However, it cannot be excluded that a worsening of the international political climate, possibly combined with continued economic growth, could lead to a revitalization of the Russian defense orders and a slowing down of the petroleum-oriented conversion of the Severodvinsk yards.

President Putin and former Defense Minister Ivanov have on several occasions underlined the need for a modernization of the Russian Navy. The building of new vessels, such as the fourth generation strategic missile submarines (the Borey class), the maintenance of older submarines, and the dismantling of decommissioned submarines will probably make up a significant part of the yards' future portfolio. Even if the defense-related contracts should continue to increase, there is little to suggest that the sums will approach Cold War levels within the coming decades. A moderate increase in the defense orders will therefore hardly come at the expense of the petroleum-related production, and a gradual increase in the number of commercial assignments should not jeopardize the military production capacity of the yards. Inasmuch as both Sevmash and Zvyozdochka still have unused production capacity, it all boils down to a question of how to combine civilian and military production.

The Navy and the Ministry of Defense seem to have realized that the Severodvinsk yards are unable to survive solely on the defense orders. This situation calls for a strategic partnership between the Fleet and the petroleum industry, rather than rivalry. All in all, there is little to suggest that we are facing a civil-military conflict of interest related to the future use of the yards. The only thing that could lead to a "resecuritization" of the issue would be an initiative by Russian commercial actors to phase out the military production at the yards, which in today's context seems highly unlikely.

Conclusion

The findings from the three cases discussed in this article indicate that Russia's approach to the Euro-Arctic region after the Cold War has been marked by two parallel and mutually enforcing domestic processes; *desecuritization* and *civil-military rapprochement*. Initial rivalry and conflicts of interest between the Navy and the Russian petroleum industry seem to have been replaced by an increasingly cooperative and pragmatic relationship. The Russian Government, the Defense Ministry, and the commanders of the Northern Fleet seem to have come to the conclusion that oil and gas extraction in, and transportation through, the Barents Sea region under current conditions will not jeopardize Russia's military security.

As long as the Northern Fleet's primary operational needs (such as the need for unrestricted transit into and through the Barents Sea, and the maintenance of a military shipbuilding capacity in the region) are met, the Fleet is unlikely to create difficulties for the industry by playing the security card. The number of vessels and the activity level at the Russian naval bases on the Kola Peninsula is currently so low that it appears to be in the Fleet's interest to share some of their facilities with Gazprom, Lukoil and other companies. The Arctic is still considered militarily important to Russia, particularly in terms of nuclear deterrence, but not nearly as important as it was during Cold War. Issues that were previously discussed in terms of "national security" have therefore been – or are in the process of being – moved out of the security sphere. They are, in other words, being *desecuritized* (see figure 1). This pattern, which is replicated in all of the three cases, has in turn contributed to the

emergence of new civil-military relations in the region, and a more favorable climate for offshore and onshore petroleum activities.

Case	Attitude of the Navy	
	Cold War Period	(Late) Post-Cold War Period
1. Development of offshore oil	Skeptical attitude (industrial	Pragmatic attitude (petroleum
and gas fields in the Barents	infrastructure would jeopardize	activities on the Russian Arctic
Sea	state security by "channeling"	shelf seen as compatible with
	strategic nuclear submarines to	new and leaner Fleet's needs
	more easily identifiable transit	and interests, additional "brown
	and stationing areas)	water" defense tasks welcome)
	↓	\downarrow
	SECURITIZED	DESECURITIZED
2. Construction of onshore oil	Skeptical attitude (incompatible	Pragmatic attitude (leasing or
and gas terminals on the Kola	with the extraordinary secrecy	selling spare port and storage
peninsula	regime that surrounded Kola	capacity to the oil industry can
	Peninsula naval ports, bases and	give the Fleet a new source of
	fuel storage facilities)	income, and fuel to the vessels)
	\downarrow	\downarrow
	SECURITIZED	DESECURITIZED
3. Petroleum-oriented	Skeptical attitude (would	Pragmatic attitude (yards
diversification of activities at	undermine the yards' strategic	cannot survive on state defense
the Severodvinsk naval yards	submarine-building capacity,	orders alone, and additional
	and possibly lead to the loss of	petroleum-related production
	sensitive military technologies)	will keep them in operation)
	\downarrow	\downarrow
	SECURITIZED	DESECURITIZED

Figure 1: Patterns in Navy attitudes to petroleum activities in the European Arctic

With regard to the *civil-military rapprochement*, it is worth noting that the current relationship between the Russian Navy and the oil industry is more than just "non-confrontational". It is in fact fairly opportunistic, in the sense that each of the two camps systematically uses its relationship with the other to promote its own interests. The Northern Fleet needs the oil industry, just like the oil industry needs the Northern Fleet. The petroleum resources in the Barents Sea are seen as the key to an economic revival of the Russian Northwest, and they may help the country to regain some of the

economic, military and political might that the Soviet Union once had. This is something that also the Russian military expect to benefit from. At the regional level, the Northern Fleet can improve its fuel supply situation by leasing or selling facilities to the industry. At the federal level, tax revenues from the petroleum activities can give the Russian defense budget a welcome boost. Thus, there are many factors that point towards a *strategic partnership* between the Navy and the oil industry.

Similarly, the Russian petroleum industry has in recent years shown a significant degree of flexibility in dealing with the Northern Fleet, i.a. in issues related to Arctic shelf activities, onshore terminal construction, and the use of local naval yards. It is probably fair to say that Gazprom has taken over the Northern Fleet's former role as the most dominant player in the region. Economic growth is priority number one, and the state-controlled Russian oil and gas industry has attained considerable leeway in the energy-rich European Arctic, partly as a result of the de-emphasizing of the regional security dimension. Also, technological progress and global climate changes have made arctic oil and gas exploration more feasible than it was in the mid 1980s.

Still, there is little to suggest that the Russian petroleum industry has any intension of forcing the military out of the northern arena. The scope of the Northern Fleet's regional defense tasks is expected to increase in the years to come. The management of Russian natural resources and economic interests in the Arctic, and the protection of important and vulnerable energy infrastructure, are likely to become an important part of the Northern Fleet's future task portfolio, in addition to the more traditional task of providing nuclear deterrence from the sea. In the longer run, there is the potensial danger that the "marriage of convenience" between the Navy and the oil industry could lead to a "resecuritization" of resource-related issues in the region, particularly if the Nothern Fleet succeeds in regaining some of its former strength.

The cases studied in this article show that Russia has fundamentally redefined its strategic interests in the European Arctic after the end of the Cold War. The change in approach appear to have been brought about by changes in the international political climate, rising oil and gas prices, but also by domestic changes, for instance in the interrelations between military and civilian actors at the regional and federal level. The growing consensus within the Russian political elite on the need to "desecuritize"

the European Arctic does not necessarily imply that the interests of the Russian military are being ignored. It might as well be an indication that the Russian military, and particularly the Northern Fleet, have begun adjusting to the new political realities.

References

1 -

¹ The part of European Russia that is located north of the Arctic Circle. Russians often distinguish between the "Western" and the "Eastern Arctic". The former term refers to the European part of Arctic Russia (including the maritime areas), whereas there latter refers to the Asian part. Smolovskiy, A. "Voyenno-strategicheskaya obstanovka v Arktike" ("The Military-Strategic Situation in the Artic"). *Morskoi sbornik* 2 (2006): 62.

² The two-way influence between security policy decisions and civil-military relations has been observed in a number of "transitional societies", not least in Latin America, see Kai Michael Kenkel: "Human Security, Securitisation and Civil-Military Relations in Transitional Societies: the Case of Brazil", Paper presented at the 48th Annual Convention of the International Studies Association, Chicago, Illinois, 28 February – 3 March 2007.

³ The term "Copenhagen school" was first used by Bill McSweeney in his 1996 article "Buzan and the Copenhagen school." *Review of International Studies*, Vol. 22 (1996), in reference to the theoretical works done at the time by a group of researchers associated the Center for Peace and Conflict Research, established in 1985 and later renamed Copenhagen Peace Research Institute (COPRI). Ole Wæver, Barry Buzan and Jaap de Wilde are seen as the "school's" main contributors.

⁴ Wæver, O.: "Securitisation: Taking stock of a research programme in security studies". Draft paper, February 2003: 11.

⁵ Wæver, O.: "Securitization and Desecuritization", in Ronnie D. Lipschutz (ed.): *On Security* (New York: Columbia University Press, 1995): 55.

⁶ The act of presenting something as an existential threat to a referent object.

⁷ The one(s) that makes the argument about a threat to a referent object.

⁸ Those who approve or reject the securitizing move.

⁹ Wæver (2003), op. cit.: 11–12; Wæver (1995), op. cit.: 21–22.

¹⁰ Wæver (2003), op. cit.: 14–15; Buzan, B., Wæver O. & de Wilde, J. *Security: A New Framework For Analysis* (Boulder, Lynne Rienner Publishers, 1998): 32.

¹¹ It should be emphasized that "desecuritization" is not synonymous with "giving a lower priority to". Issues may arise that demand the immediate attention of political elites without necessarily being *security* issues. Similarly, saying that something is no longer a security issue does not mean that it is no longer *important*. Desecuritization does, however, indicate that the issue in question is no longer perceived to represent an existential threat to the state's sovereignty, independence or political order.

¹² This was made clear by researchers at the Kola Science Center during a visit by the author to Apatity

¹² This was made clear by researchers at the Kola Science Center during a visit by the author to Apatity in September 2006.

¹³ Yin, R.K. *Case Study Research: Design and Methods* (Thousand Oaks: Sage Publications, 2003): 46–47. Yin distinguishes between "holistic" (single unit of analysis) and "embedded" (multiple units analysis) multi-case studies. This study belongs to the first category.

¹⁴ In this study, the mode of generalization is that of "analytic generalization" in which "a previously developed theory is used as a template with which to compare the empirical results of the case study". Yin (2003), op. cit.: 32–33.

¹⁵ Yin (2003), op. cit.: 116.

¹⁶ Tilly, C.: "Means and Ends of Comparison in Macrosociology", *Comparative Social Research*, 16 (1997): 48. The increasing appreciation of the relevance and utility of process-tracing techniques in case studies has led to a certain "historization" of social sciences, as pointed out in George, A.L. & Bennett, A. *Case Studies and Theory Development in the Social Sciences* (Cambridge, Mass. MIT Press 2005): 205.

¹⁷ Yin (2003), op. cit.: 116.

¹⁸ Yin (2003), op. cit..: 22–26.

¹⁹ Schramm, W. (1971) *Notes on case studies of instructional media projects* (Washington, D.C: Working paper for the Academy of Educational Development), cited in Yin (2003), op. cit., p. 12. Schramm's approach, which was related to the media sector, may be relevant also in the field of security studies, which tend to focus on security policy decision-making.

²⁰ Originally, licenses for the two fields were issued to Rosneft, but they were transferred to Sevmorneftegaz in November 2002. The company was established in 2001 by Rosshelf and Rosneft-Purneftegaz, which were subsidiaries of respectively Gazprom and Rosneft. Pirani, S. "Shtokman talks start from a blank sheet". *Gas Briefing International*, January 2003, available at http://www.quintessential.org.uk/SimonPirani/shtokmanjan03.htm.

²¹ http://www.offshore-technology.com/projects/Prirazlomnoye/

²² http://www.offshore-technology.com/projects/shtokman/

²³ Medetsksy, A. "Foreign Partners Shut Out of Shtokman". *Moscow Times*, 10 October 2006.

²⁴ Arctic Operational Platform (ARCOP) Workshop Report 2, *Industry Needs* (Helsinki: Ministry of Trade and Industry, 2003): 10.

²⁵ Trutnev, Yu. "O povyshenii effektivnosti osvoeniya uglevodorodnykh resursov kontinental'nogo shelfa Rossiyskoy Federatsii" ("On the enhancement of efficiency of hydrocarbon resources development on the continental shelf of the Russian Federation"). *Mineral'nye resursy Rossii*, 2006, No. 4. The article is posted at http://www.geoinform.ru/?an=trutnev_ru.

²⁶ Krupenik, N.: "Gazprom to invest \$500 bln in Arctic oil and gas field". *Itar-Tass Weekly News*, 11 April 2006.

²⁷ Bergesen, H.O., Moe, A. & Østreng, W. *Soviet Oil and Security Interests in the Barents Sea* (London: Frances Pinter Publishers, 1987): 67.

²⁸ On missions, SSBNs are often accompanied by one or more defending attack submarines (SSNs), which also need room to maneuver.

²⁹ Ibid.: 60–61 and 72; Critchley, W.H. "Polar Deployment of Soviet Submarines". *International Journal* 39 (4) (1984): 856.

³⁰ The "external" transit routes go southwestwards through the Norwegian Sea and the so-called GIUK (Greenland, Iceland, UK) gap or (less commonly) northwards, either east of Novaya Zemlya, between Novaya Zemlya and Svalbard, or between Svalbard and Greenland.

³¹ In September 2006 a Russian nuclear submarine (the "Yekaterinburg", a Delta IV-class SSBN) test-fired a ballistic missile from a launch area close to the North Pole. Similar tests had reportedly not been conducted since the summer of 1995, when a Typhoon-class SSBN launched a ballistic missile with ten dummy warheads from the same location to a test range west of Murmansk. "Russia Test Fires SLBMs from North Pole, Pacific". *Itar-Tass*, 11 September 2006; Boyle, R. & Lyon, W. "Arctic ASW: Have We Lost?" *U.S. Naval Institute Proceedings* 124 (6) (June 1998): 33.

³² This point was made by a Russian officer at a Norwegian-Russian seminar on the relationship between petroleum and naval activities, held at Haakonsvern Naval Base, Norway, in March, 2003.

³³ Timakova, N. "Have Secrets, Will Sell: The Russian Government Intends to Market Geological and Geophysical Data". *Russian Energy Weekly* (43), 7 November 2006: 2.

³⁴ This was made clear by one of Russia's leading security researchers, Dr. Alexei Arbatov, in an interview with the author at the Carnegie Moscow Center in September 2006.

³⁵ Barabanov, M. Sovremennoye sostoyanie i perspektivy razvitiya rossiyskogo flota (Present situation and prospects for development of the Russian Navy) (Moscow: Center for Defense Information 2006): 57–58.

³⁶ See Podvig, P. "How many submarines are on patrol?" Posted 16 September 2006 at http://russianforces.org/blog/2006/09/how many submarines are on pat.shtml.

³⁷ "Russian nuclear subs to survey Arctic continental shelf borders". *RIA Novosti*, 21 March 2006.

³⁸ Fedorov, D. "U biznesa i armii odni tseli – vozrozhdenie Rossii" (The industry and the armed forces share the same goal – Russia's revival"). *Kraznaya zvezda*, 6 December 2003: 1 and 3.

³⁹ See Kreitler, W. M. *The Close Aboard Bastion: A Soviet Ballistic Missile Submarine Deployment Strategy*. Master's Thesis (Monterey: U.S. Naval Postgraduate School 1988).

⁴⁰ Sapozhnikov, P. & Chereshnev, S. "Lukoil dokachayet neft' do Murmanska" ("Lukoil sends oil to Murmansk"). *Kommersant*, 13 March 2002: 16.

⁴¹ The Soviet Union had 82 major river and sea terminals. Russia has approximately 40. Illarionov, V. "Severnye vorota Rossii" ("Russia's northern gateway"). *Stroitel'naya gazeta*, 28 June 2000: 7.

⁴² Andreassen, N. "Russian Arctic Naval base seeks U.S. oil mission". Reuter, 4 December 2002.

⁴³ Ivanova, E. "Neftyanaya ekspansiya na Kol'skiy Poluostrov" ("Oil Expansion on the Kola Peninsula"). Rossbalt, 28 May 2002, available at http://www.rosbalt.ru/2002/05/28/52102.html.

⁴⁴ Today, the oil from Western Siberia is mainly shipped by railway to ports in the (shallow and in winter ice-covered) southeastern part of the Barents Sea, loaded on to small and ice-capable shuttle tankers, shipped to Murmansk, and reloaded to super tankers for long-distance export.

⁴⁵ TNK was taken over by British Petroleum in February 2003 and is today part of TNK-BP.

⁴⁶ It was announced in August 2003 that Sibneft was to merger with Yukos, and that a new company (YukosSibneft) was to be created. When Yukos President Mikhail Khodorkovsky was arrested in November the same year, the plans were put aside. Sibneft was later taken over by Gazprom.

⁴⁷ Gazprom: "LUKOIL, Sibneft, TNK, and Yukos to sign Memorandum of Understanding on Murmansk Pipeline". Press Release, 27 November 2002.

⁴⁸ Yegorov-Tismenko, I. & Salnikova, Yu. "Starved Ports: Russia's Northern Tanker Terminals Experience Shortage of Supply". *Russian Energy Weekly* (39), 9 October 2006: 2–5.

⁴⁹ Denisenko, J. & Drankina, E. "Chetvero o Mokhnatkinoi Pakhte" ("Four about Mokhnatkina Pakhta"). *Profil*', 9 December 2002: 34.

⁵⁰ There are a number of stories about collisions between tankers and submarines in global hot spots. As late as in January 2007, a Japanese super tanker and a U.S. nuclear submarine collided in the Hormuz Strait at the entrance of the Persian Gulf. Krane, J. "U.S. Submarine, Japanese ship collide". Associated Press, 9 January 2007.

⁵¹ Denisenko, J. & Drankina, E., op. cit.: 34.

⁵² Golotyuk, Yu. "Komanduyushiy neftenosnym shel'fom. Oba okeanskikh flota Rossii cmenili rukovodstvo" ("Commander of the oil shelf. Both of the Russian ocean fleets have changed their leadership"). *Vremya novostei*, 6 December 2001: 3.

⁵³ Suchkov was suspended from his position as Commander of the Northern Fleet after the sinking of the decommissioned nuclear submarine K-159 off the Kola coast in August 2003. He was replaced by Admiral Mikhail Abramov in June 2004. Vladimir Vysotskiy was appointed in September 2005, after Abramov was promoted to Chief of Staff of the Russian Navy.

54 "Gazprom changed site for proposed Shtokman LNG plant", Barents Observer, 14 August 2007, http://www.barentsobserver.com/gazprom-changed-site-for-planned-shtokman-lng-plant.527709.html. For a map of the territorial-administrative system of the Kola Peninsula, see http://2004.murman.ru/nature/adm delenie/index-eng.shtml.

http://2004.murman.ru/nature/adm_delenie/index-eng.shtml.
 This point was made by researchers at the Kola Science Center in Apatity during a visit by the author in September 2006.

⁵⁶ Barabanov, op. cit.: 57–58.

⁵⁷ Gundarov, V. "Pogruzivshis', nedeemsya vsplyt'"("Having taken a dive, we hope to resurface"). *Rossiyskoe voennoye obozrenie*, No. 3 (2005): 21.

⁵⁸ The Northern Fleet has seven major base complexes along the ice-free western and central Kola coast. These are located (from west to east) in Zapadnaya Litsa, Vidyayevo (Ara Bay and Ura Bay), Oleyna Bay, Skalisty, Severomorsk, and Gremikha. The Fleet headquarters are located in Severomorsk on the east bank of the Kola fiord, 25 kilometers north of Murmansk. See "Northern Fleet bases and shipyards", http://www.bellona.org; "[The]Russian Northern Fleet", http://en.wikipedia.org; and Handler J. "The Northern Fleet's Nuclear Submarine Bases". *Jane's Intelligence Review* 5 (12), 1 December 1993: 551–556.

⁵⁹ Litovkin, D.: "Nash flot snova zavoyevaet mir" ("Our Navy again conquers the world"). *Izvestiya*, 9 June 2003: 4.

60 "Komanduyushiy Severnym Flotom ne protiv stroitel' stva neftyanogo terminala v bukhte Mokhnatkina Pakhta" ("The Commander of the Northern Fleet is not against the building of an oil terminal in the Mokhnatkina Pakhta bay"). Regnum, 28 February 2002, http://www.regnum.ru/news/24554.html.

⁶¹ "Meeting of Gazprom and RF Navy Working Group". Press Release, 18 March 2005, http://www.capitallinkrussia.com/press/companies/50010088/33178.html.

⁶² "Gazprom and RF Navy Ink Cooperation Agreement". Press Release, 24 November 2005, http://www.capitallinkrussia.com/press/companies/50010088/37236.html. The list in the Gazprom press release has, for purposes of clarity, been slightly reformulated by the author.

⁶³ Jorgensen, A.-K. "The Military Sector: Federal Responsibility, Regional Concern", in Honneland, G. & Blakkisrud, H.: *Centre-Periphery Relations in Russia. The Case of the Northwestern Regions* (Aldershot: Ashgate 2001): 200.

⁶⁴ Litovkin, op. cit.: 4.

65 Jorgensen, op. cit.: 201.

⁶⁶ Kolchin, S. "Neftegazovvyi kompleks Rossii (NGK): Sostoyanie i perspektivy" (The Russian Oil and Gas Complex: Present State and Future Prospects"). *Vlast'* (5), 31 May 2001: 24.

⁶⁷ Ignatova, M. & Tikhonov, A. "Rossiyskim neftyanikam nuzhno srochno menyat' orientiry s zapada na vostok" ("The Russian Oil Industry Should Immediately Change Its Orientation from West to East"). *Izvestiya*, 29 April 2003: 5.

⁶⁸ Korostel', E. "Zharkaya rabota na Arkticheskoi" ("Hard work on Arctic rig"). *Korabel'naya storona*. 18 August 2006: 1.

⁶⁹ "Sevmashpredpriyatie ne spravlyaetsya s shvedskim zakazom na stroitel'svo dvukh tankerov" ("The Northern Machine Building Enterprise does not cope with the Swedish order of two tankers"). *Ekspert Severo-Zapad* 9, 10 March 2003.

⁷⁰ Bratkov, V. "Flagman atomnogo voyennogo korablestroeniya sprosonok naekhal na pressu" (The flagman of military nuclear shipbuilding dazedly meets the press). *Pravda*, 25 March 2003, http://www.pravda.ru/economics/industry/shipbuilding/33730-1/.

⁷⁴ Vestnikov, A. "Raboty budet menshe?" ("Less work?"). *Korabel'naya storona*. 23 January 2007: 1.

Mikhaylov, A. "Sevmnash, admiral koraabelov rossiyskikh" ("Sevmash: The Admiral of Russian Shipyards"). *Pravda*, 18 December 2002.
 Zubkov, R. A. "What Will the Russian naval Forces Look Like in the Beginning of the 21st

⁷¹ "Sevmash gibnet po vine federal'nogo tsentra?" ("Is Sevmash dying because of the federal center?") *Bizness-klass* (Arkhangelsk), 30 May 2005, http://www.bclass.ru/index.php?n=256.

⁷² Solovichenko, M. "Nornikel' nameren vozit' rudu na atomnykh podlodkakh" ("Norilsk Nickel plans to transport nickel on nuclear submarines"). *Finanzovaya Rossiya* 48, 26 December 2001: 1.
⁷³ Kolchin, op. cit.: 22.

⁷⁵ Kalistratov, N. "Zvyozdochka: Russia's Ship Repair Industry Leader". *Military Parade*, May-June 1998, http://milparade.udm.ru/27/078.htm.

⁷⁷ Zubkov, R. A. "What Will the Russian naval Forces Look Like in the Beginning of the 21st Century?" in Oldberg, I. (ed.) *The Russian Navy Facing the 21st Century* (Stockholm: Swedish Defense Research Establishment 1997): 31.

⁷⁸ Gorozhanin, L. A. "Voyenno-Morskoi Flot: Problemy Koreblestroeniya" ("The Navy: Problems of Shipbuiling"). *Voyennaya mysl*' (2), 3 January 2002: 21–24.