

Arctic cooperation in a new situation: Analysis on the impacts of the Russian war of aggression

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TO THE READER

Russia invaded Ukraine – will the Arctic Region and its sustainable development be among the losers of the war?

Last year, the Arctic Council celebrated its 25th anniversary. At the beginning of 2023, the Barents Euro-Arctic Council will turn 30. The northern forms of cooperation significant to Finland have operated for a long time, but they are now facing existential questions.

Russia's invasion of Ukraine has also revolutionised Arctic cooperation in an unprecedented way. Arctic cooperation is in a completely new situation, and there is no clear way forward. Geopolitics tramped onto the Arctic scene, demanding attention. Many of the basic assumptions of Finland's Arctic policy strategy, drafted only one and a half years ago, have been undermined by the upheavals caused by the Russian war of aggression.

At the same time, the impacts of climate change, especially in the Arctic, are becoming increasingly visible and imposing requirements for accelerated climate action, particularly measures to strengthen the resilience of the region. In this context, the need to replace Russian energy may accelerate the green transition in the West, but the pressure to exploit Arctic resources will also increase further.

This report is a background study on Arctic policy commissioned by the Prime Minister's Office for analysis and situational picture of Finland's Arctic policy. The results of the survey will serve as a basis for monitoring the objectives of the Arctic Policy Strategy and for drawing up a situational picture in the government negotiations. The starting point of the mandate is to outline the potential impact of the Russian Attack War on international cooperation in the Arctic region and on the achievement of the Sustainable Development Goals as a whole. The report presents the positioning of international and national Arctic policies in this new context.

The report first examines (Chapter 2) the geopolitical and international political background and scenarios of the Russian aggression in the Arctic region, including impacts on both Arctic cooperation mechanisms and the green transition and climate work. Chapter 3 sets out the framework for Arctic cooperation in the new context and the related constraints and prospects for the future. Chapter 4 examines Finland's Arctic policy strategy for 2021 and the impact of changes on its objectives, especially from the point of

view of sustainable development. The conclusions (Chapter 5) draw together the findings of the report, particularly in terms of future orientation.

The study is based on the expertise of the researchers involved, a joint scenario workshop, a review of available material and some interviews with actors in different fields for background information. The persons interviewed for the report are not named, but in parts of the text, the source is mentioned as an interview. The survey was conducted on a tight schedule in a situation that was unclear and uncertain in many respects. The time of the situational picture is around mid-September 2022. Subsequent events and any changes they may bring to the situational picture have no longer been considered in the contents of the report.

Gaia Consulting Oy and the Finnish Institute of International Affairs have also been involved in the study led by the Arctic Centre at the University of Lapland. The research director of the study was Research Professor Timo Koivurova, and the work was coordinated by the Head of Science Communications Markku Heikkilä. Director Johanna Ikävalko, Research Professor Stefan Kirchner, University Research Fellow Sanna Kopra, Communications Specialist Anne Raja-Hanhela and Researcher Adam Stepien were also part of the working group. Programme Director Harri Mikkola of the Finnish Institute of International Affairs and Senior Consultant Riina Pursiainen, and Business Manager Susanna Sepponen of Gaia Consulting participated in the work.

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1 Key findings

The purpose of the report commissioned by the Prime Minister's Office in the spring of 2022 is to outline the possible effects of Russian aggression on international cooperation in the Arctic region and on the implementation of Finland's Strategy for Arctic Policy strategy, especially from the perspective of sustainable development goals.

The report is based on the developments triggered by the Russian aggression in February 2022 during the first six months until mid-September.

During the next six months, things may change again in numerous ways, but one thing is certain, there will be no return to the pre-war reality. The spectrum of different predictions and scenarios about how the war of aggression against Ukraine with all its consequences will affect Russia's future as a state or how it will affect Arctic and Northern cooperation is confusingly broad. However, it is possible to highlight trends that seem likely at the time of drafting the report and can thus help guide the future direction of Finland's Arctic policy. The scenarios outlined as background for the report are presented in section 2.4.

Despite the war, the Arctic region is not disappearing, nor is Finland's status as an Arctic country. In all circumstances, the Arctic remains a crucial topic for Finland, and transboundary developments such as climate change and geopolitics are always present in the region.

The state of Arctic cooperation can be summarised as the fact that, although Arctic political cooperation is in a temporary state of suspension, the Arctic states continue to cooperate through legal agreements. The Arctic Council, established by a political declaration, has re-launched activities in which Russia is not involved. In the cooperation of the Arctic Council, seven-member countries have until now explicitly emphasised that the Arctic Council should be maintained in its current form; at the Barents Euro-Arctic Council, Russia-related activities are suspended. The time for conclusions about the future of the forums has not yet arrived, but it is approaching. Russia participates in Arctic activities based on legal agreements, such as the Central Arctic Ocean Fisheries Agreement, as well as in global processes related to the Arctic, such as the Climate Agreement. The nature of these structures has also changed since the beginning of the war.

From a geopolitical point of view, the situation in the Arctic has changed dramatically, although the region is still in a state of peace. Even before the war of aggression, relations between Russia and the West had deteriorated for diverse reasons related to Russia's actions, including Crimea and Eastern Ukraine in 2014, the events in Syria and the internal developments in Belarus. The deterioration was also reflected in increased military activities, exercises, and tensions in the Arctic region, especially in the Barents Sea and the Norwegian Sea. Arctic geopolitics will change further with the war in Ukraine as Finland and Sweden enter NATO. After that, the entire Arctic region will be divided between NATO and Russia, and Finland will be the easternmost member of the western alliance in the northern region. If the current power regime in Russia maintains its position, it seems likely that hard security tensions in the Arctic will become more complicated.

As a member of NATO, Finland will have better opportunities to participate in and influence Euro-Atlantic cooperation to strengthen the security of Northern Europe. The increasing military capability will most likely create new regional tensions in the short term. In the longer term, however, achieving a stronger military balance in the Nordic region is likely to raise the threshold for aggression and stabilise the regional security environment. However, this stability is based on military force, and the space for cooperative security between the West and Russia and diplomacy will be reduced. Maintaining stability requires the development of a credible military deterrent and the ability of the West and Russia to exercise mutual escalation control. As a member of NATO, Finland would contribute to the guidelines of the alliance's policy towards Russia and the development of NATO's relations with Russia and the Arctic dimension.

Climate change in the Arctic is progressing vigorously, and the significance of climate change for the Arctic cannot be overestimated. Climate change itself is linked to the conditions for a green transition in the Arctic. Russia's invasion of Ukraine has triggered a complex cause-and-effect chain, which affects actions related to climate change and the green transition.

The paralysis of international cooperation and research in the Arctic region is particularly problematic. Many measures related to the sustainability of the Arctic require extensive international and regional cooperation, as nature and the environment do not change in line with national borders. Before the Russian war of aggression, efforts were made to extensively influence the climate and environmental work in the Arctic region in a wide range of structures, especially in the Arctic Council and elsewhere. In addition, the suspension of research cooperation with Russia creates gaps in the knowledge base regarding Arctic climate change.

The effects of Russian aggression on the green and just transition in the Arctic are extraordinarily complex. In the short term, the impacts are mainly negative, related to,

for example, the rapid pressures brought by the need for self-sufficiency and the supply of raw materials to reverse climate decisions, for instance, concerning peat harvesting. In the longer term, the energy crisis may also affect the development of more sustainable production and consumption and the acceleration of low-emission solutions both in the Arctic countries and globally.

The EU is an essential tool for Finland's Arctic objectives. The EU has programmes, networks and funding for cross-border cooperation and activities in many fields. Most of these activities and policy areas support or affect Finland's Arctic objectives. The economic and political consequences of the war in Ukraine affect the Union's Arctic policy objectives, notably the transition towards renewable energy and ensuring the safe supply of critical minerals. The increasing pressure to implement these objectives is felt in the Arctic regions of Europe, which in turn leads to growing tensions between different forms of land use.

Clearly, the Arctic Council is the most important of all Arctic cooperation forums for Finland because it is the only Arctic intergovernmental forum in which Finland is a member. In addition, Finland started Arctic cooperation with its environmental initiative at the turn of the 1980s and 1990s. Through the Council, Finland can promote many important objectives for sustainable development and environmental protection in the Arctic.

The importance of the Arctic Council for Finland is underlined by the fact that the EU is neither a member of the Council nor even a formal observer but acts as a de facto observer. There are only eight Arctic countries, and in this forum, Finland has the opportunity to play a significant role and have a strong profile in many important issues, such as environmental and climate protection, sustainable development, and emergency preparedness.

As a member of the Arctic Council, Finland has been able to influence the achievement of the objectives of extensive cooperation covering the entire Arctic region. In many respects, the goals of Finland's Arctic policy strategy have also focused on continuing cooperation in the Arctic Council. Maintaining the Arctic Council as a key international intergovernmental forum is essential for Finland and many other actors.

Currently, the seven western Arctic member states have suspended their activities in the Arctic Council, which Russia chairs. However, these countries have expressed their will to preserve the Arctic Council and sought ways to make this happen through rules of procedure. Norway is preparing to accept the chairmanship of the Arctic Council in spring 2023.

Finland constantly exerts its influence, usually as part of the European Union, but also in global and regional international organisations or agreements. These organisations and agreements continue to work, and Russia still operates in them. Much of the Arctic cooperation is based on legal agreements in which Russia continues to be a member based on the rules of international law.

In European regional Arctic cooperation, there are no longer any activities with Russia, even though the related structures have not been dismantled. Continuing cooperation in the Barents Euro-Arctic region would require a scenario in which trust will be restored and multidisciplinary collaboration is genuinely possible. Such a situation is not in sight. At the same time, the practical cooperation needs of the northern regions of Finland, Sweden and Norway are growing strongly, which puts pressure on strengthening regional Nordic cooperation mechanisms in the north. The continuation of the Northern Dimension would also require the normalisation of EU-Russia relations in a way that is currently not in sight.

Russia's invasion of Ukraine has profoundly impacted the cooperation between the EU and Russia. Russian partners have been removed from projects, all cross-border programmes such as Kolarctic have been suspended, and the resources allocated to them have been transferred to other programmes. All this makes it unlikely that Russia-related programmes will resume in the next few years.

In science and research, the impact is also significant. Russian institutes can no longer participate in EU research programmes; in other networks, virtually all academic cooperation with Russia has stopped. As the situation continues, there will be gaps in Arctic research that cannot be patched, as Russia is about half of the entire Arctic region.

From the point of view of Arctic indigenous peoples, the breakdown of circumpolar cooperation is overly complicated. Indigenous peoples' organisations are permanent participants of the Arctic Council, which has guaranteed them a strong position in Arctic decision-making. There is now a major chasm in the activities of indigenous peoples because the leadership of the Russian Arctic Indigenous Peoples organisation supports the war, and, in addition, there are Sami, Inuit and Aleut involved in the Arctic Council also living in Russian territory.

In terms of Finland's Arctic policy strategy and its sustainable development goals, the impacts of the war are significant. Although the description of the operating environment and security policy in the strategy introduced in 2021 also highlighted the intensification of military tensions, it did not foresee a situation like the one that has happened. The descriptions of Finland's Arctic policy strategy about the international operating environment and the structures of Arctic cooperation are largely no longer relevant.

The strategy includes objectives related to Finland's internal Arctic activities, for which the Russian aggression war has no impact, or the effects come from such complex causes and consequences that they cannot be clearly analysed in the framework of the report. Internationalism is a built-in feature of most areas of Arctic activities. Although internationalisation has often been linked to the Nordic countries or the EU level, this has often been accompanied by a broader cross-border Arctic cooperation dimension towards Russia.

The effects of the Russian aggression on Finland's Arctic activities and sustainable development goals are, therefore, wide-ranging, and almost exclusively negative. In the longer term, the green transition may accelerate, but many areas have directly or indirectly identifiable problems. However, the situation is likely to lead to redirecting activities and objectives. The most significant direct impacts on Finland's Arctic policy strategy are related to priority area 1, Climate change mitigation and adaptation, and priority 3, Arctic livelihoods. Priority area 2, which focuses on the inhabitants of the Arctic region, consists mainly of measures for which the war of aggression has no direct impact. Concerning the priority area of infrastructure and logistics, the war also directly impacts some actions, but the impact chains are mostly long.

The report's conclusions list the opportunities for Finland's future Arctic activities found in the study. In practice, Finland has to adapt its operations to the reality of the new Cold War, where the international Arctic structures are incomplete. However, regardless of the geopolitical situation, climate change and adaptation, sustainable development, and the status of indigenous peoples remain vital themes in the Arctic. They are still needed as priorities for Finland's Arctic activities.

2 Russian war of aggression: Effects in the Arctic Region

2.1 Immediate effects on Arctic activities

The immediate effects of the war on the Arctic cooperation forums are summarised below to make it easier to understand the content of the report.

Russia's armed invasion of Ukraine, which began in late February, rapidly suspended most of the Arctic's international cooperation. On March 3, seven of the eight Arctic Council members — all except Russia — condemned Russia's illegal invasion of Ukraine. They also suspended their participation in the work of the Arctic Council at a time when Russia chairs the Arctic Council. This also paralysed the working groups of the Arctic Council, where much of the practical work takes place. The Russian chairmanship ends in May 2023.

Russia disapproved of the solution, stressing that the cooperation of the Arctic Council should be separated from tensions elsewhere and announced that it would continue to promote its chairmanship programme within Russia. Other Member States also stressed the importance of continuing the cooperation of the Arctic Council for several reasons and clearly expressed the importance of maintaining the cooperation in the Arctic Council.

The Standing Committee of Parliamentarians of the Arctic Region condemned Russia's invasion of Ukraine on 8 March 2022 (Statement 2022 arcticparl.org). Parliamentary cooperation was suspended for the time being, on which Russia expressed its dissent.

The international umbrella organisations of indigenous peoples have played an important role, especially in the cooperation of the Arctic Council. Many of these organisations now have difficulties in taking a position on the war in Ukraine, as they either operate in Russia or some of the peoples belonging to them live in Russia.

On 9 March 2022, the non-Russian parties of the Barents Euro-Arctic Council condemned Russia's illegal invasion of Ukraine, stating that they had no choice but to suspend cooperation with Russia, although they also stressed the value of Barents cooperation. In accordance with the instructions of the Ministry for Foreign Affairs, Finnish regions suspended their cooperation with Russia both in the Barents Regional Council and in other forms of cooperation.

In the Northern Dimension, all activities involving Russia or Belarus were suspended. In practice, this meant all the key activities of the Northern Dimension, the most important of which were the environmental partnership projects conducted in Russia. The Northern Dimension has been a joint policy of the EU, Norway, Iceland, and Russia.

The Nordic Council of Ministers' activities towards Russia have been discontinued. The Nordic Environment Finance Company Nefco ceased all its operations in Belarus and Russia, which have included wastewater treatment projects and environmental "hot spots" and projects on increased energy efficiency and sustainable use of resources. Nefco is resolutely involved in the reconstruction of Ukraine.

The EU cross-border cooperation programmes 2021-2027 with Russia have been suspended, and the participation of Russia and Belarus in the Interreg NEXT 2021-2027 programme has been terminated. Efforts have been made to divert funding for cooperation with Russia for other purposes.

Arctic science and education organisations, such as the International Arctic Scientific Committee (IASC) and the International Arctic Social Sciences Association (IASSA), also condemned Russia's invasion of Ukraine. However, Russia remains a member of the IASC. UArctic, a central Arctic university for Finland, condemned the Russian invasion and suspended the membership of Russian universities. Scientific and educational organisations also raise concerns about the scientific values lost through wars.

In accordance with guidelines at both national and EU levels, Finnish higher education institutions have suspended all institutional cooperation with Russian parties, including numerous research projects.

At the regional level, the Nordic Forum is an organisation of northern provinces with a secretariat in Russia; Lapland is the current chair. Lapland suspended its chairmanship, and the Forum, with its secretariat located in Yakutia, has practically been transformed into a tool for Russia to reach its goals. At the Arctic Mayors' Forum (AMF), there were Russian cities only as observers, and the Forum was able to continue.

The Arctic Economic Council (AEC) has Russian companies as members. It also currently has a Russian chair during the Russian chairmanship of the Arctic Council. The board of the Economic Council condemned Russia's aggression by a majority. Memberships of Russian companies on the sanctions list have been suspended, and some Western companies have suspended their role in the Economic Council for the duration of the Russian chairmanship.

Russia's membership in international bodies has not ceased, and Russia has been involved to varying degrees in Arctic cooperation based on legal agreements since the beginning of the war.

2.2 Security environment in the Arctic

Finland is located at the intersection of two strategically important areas, the Baltic Sea, and the Arctic. The illegal annexation of the Crimean Peninsula to Russia and the war Russia launched in Eastern Ukraine in 2014 had a negative impact on the security of the Baltic Sea and, subsequently, in the northern regions of Europe. The Russian invasion of Ukraine, which began on 24 February 2022, and the almost complete decline in relations between the West and Russia have significantly increased the tensions in Northern Europe and, at the same time, the strategic pressure on Finland. The aggression is leading to a major strategic loss from Russia's point of view: With the likely accession of Finland and Sweden to NATO, the geostrategic situation in Northern Europe will change against Russia's interests.

The security situation in the Arctic region deteriorated years before the invasion began in February. Finland's Strategy for Arctic Policy, updated in 2021, also registers this change when it states that *"the security policy related developments in the Arctic region impact Finland's national security. From Finland's perspective, the security of the Arctic region is closely linked to the security situation in the Baltic Sea area and the rest of Europe, which has been marked by increasing tensions in the 2010s."* The strategy also notes that heightened tensions between great powers and especially China's increasing economic and strategic interest in the region may create conflicts of interest and heightened tensions in the region.

At the same time, the strategy states that *"it is in the common interest of all Arctic countries that the Arctic region remains stable and peaceful. [...]. From the perspective of all actors, reinforcing commitment to peace, stability and constructive cooperation in the Arctic region is vital. Due attention must be paid to the cooperation and dialogue structures which are proactive and preventive, and which promote dialogue between states in a manner which builds confidence and reduces risks [...]."*

It is clear that this goal has been worth pursuing. At the same time, the above quote reflects the basic premise of traditional political speech on the Arctic region, which emphasises that the region is in a state of peace, confined and airtightly separated from the problems of international politics. However, Russia's illegal invasion of Ukraine and a clearer understanding of the nature of Russia's aggressive and imperialist superpower policy and its policies have led to the need to reassess the fundamental principles of the

national Arctic policy. The 2021 Strategy for Arctic Policy is significantly more moderate than its predecessors in terms of economic expectations and, as noted, also considers the strained security policy situation. From a long-term perspective, however, it is evident that Finland has overestimated the economic benefits and underestimated the security policy risks associated with the region in its traditional Arctic policy.

In national security policy, Northern Europe is increasingly seen as a single entity. This is a significant change, as just a few years ago, the focus of the debate on security policy was almost exclusively in the Baltic Sea region. As stated in the Government Report on Finnish Foreign and Security Policy 2020, *“the security in Northern Europe is increasingly interlinked, and any shifts in the security situation in the Baltic Sea region, the Arctic neighbourhood of Finland and on the North Atlantic are closely connected”*. The Government’s Defence Report 2021 also reflects this change in understanding by stating that *“Russian security thinking aims to achieve strategic depth and a broad operational area, reaching from the Arctic regions to the Black Sea and on to the Mediterranean. Northern Europe and the Baltic Sea region are a central part of this larger space.”* This means that it will not be possible to assess the change in the security policy situation in the European Arctic without its integration into the changing geostrategic position of the Nordic region. Military dynamics in the Baltic Sea region play a particular role.

Military activities in the Baltic Sea have been vigorous since 2014, and overall security risks have increased. However, the risk of a military conflict in the Baltic Sea has so far been assessed as low. So far, the Russian aggression has not significantly increased the military tensions in the Baltic Sea. This is partly explained by the fact that Russia has sent an important number of its troops located in the vicinity of the Baltic Sea to battle in Ukraine, which is likely to have reduced its ability to operate in Northern Europe for years. As a result of the war, the United States and other NATO allies, the United Kingdom and Germany, in particular, have strengthened their presence in the Baltic Sea region. NATO decided to establish four multinational battle groups in the Baltic States and Poland in 2016, calling for stronger forces and a permanent presence of NATO allies in the region. Other countries in the Baltic Sea region have also reacted to the deterioration of the European security environment, including through increased preparedness and increased military training. The Baltic Sea is likely to remain an arena of military confrontation between Russia and the West in the coming years.

In addition to the Baltic Sea, the Russian war of aggression has further emphasised the strategic importance of the European Arctic region. The most important thing is to note that the economic and military resources deployed in the region play an essential role in achieving Russia’s two major strategic objectives. These are the preservation of administrative regulations and the strengthening of regional supremacy status. In principle, Arctic cooperation is in a subordinate position to these, and in practice, the

basis for cooperation with Russia has now eroded. It is no longer credible or reasonable to think that the Arctic is a confined area of peace and cooperation, as Mikhail Gorbachev suggested in his historic speech in Murmansk in 1987. Under this rhetorical smoke veil, Russia has actively developed its military power in the Arctic over the last decade, while the West, prior to the occupation of Crimea, has sought to limit its military activity in the region due to general escalation control.

The framework for increasing or maintaining regional stability is very difficult, and there is no prospect of a positive change. In the future, Arctic seas and land are expected to be subject to increased cross-pressure due to the interests of the major powers. The Nordic countries are increasingly striving to prepare themselves against the growing Russian threat.

With the likely accession of Finland and Sweden to NATO, seven out of eight members of the Arctic Council will be members of NATO. The Western Member States of the Arctic Council have imposed more comprehensive sanctions on Russia. Russia, on the other hand, restricts the flow of energy to the West in an effort to break the unity of the West. Russia has also placed Finland and Sweden on the list of "unfriendly countries." In September 2022, President Putin announced a partial mobilisation in Russia and, at the same time, further escalated his confrontational rhetoric by stating that Russia is at war against the 'collective West'.

Despite the deterioration of the regional security situation, there is still reason to assume that the key strategic objectives of Russia's Arctic policy will remain largely unchanged in the coming years. In practice, Russia's social development programmes, rearmament, international influence, and the preservation of President Vladimir Putin's regime continue to depend on export revenues from Arctic oil and gas. Russia's goal is still to exploit the region's hydrocarbon reserves, control and develop maritime traffic along the North-East Passage, maintain its relative military advantage in the region and limit NATO's activities in the Arctic. However, the escalation of the struggle between superpowers, the rupture in the relations between Russia and the west the uncertainties about the internal political development of Russia all bring their own additional elements. Russia sees its influence in international politics largely based on the use or threat of military force and political pressure, which has been demonstrated horribly by the events in Ukraine. At the same time, the Arctic region is becoming increasingly important for Russia from a military point of view, as its other critical European maritime corridors, the Baltic Sea, and the Black Sea, are closed by NATO. The role of the Russian Northern Fleet remains important for the use of the country's military force.

Economic sanctions against Russia may increasingly lead to closer cooperation between Russia and China in the northern regions, as was already seen after the invasion of

Crimea. Russia itself has restricted energy trade to the West, which lately has caused a hard awakening in many Western countries that have realised their energy dependence on an increasingly hostile actor. At the same time, Russia has fewer markets for the sale of hydrocarbons. This highlights China's potentially growing role both as a market, as a financier and as a technology developer. While there are many obstacles and uncertainties in the deepening of political and economic relations between China and Russia, China is now in a situation where it has more economic and political influence over Russia than ever before.

This is also significant from the point of view that the United States perceives China as a system-level competitor whose influence it seeks to stagnate around the world. Although China's footprint in the Arctic is still limited, the United States is concerned that China could seek to exploit the region not only to promote its own economic interests but also for military purposes. The Pentagon, for example, has warned of the dual-use potential of Chinese Arctic research. The U.S. sees China's potential submarine activity in the Arctic Ocean as particularly problematic.

While Washington's concern about China's Arctic influence has intensified, the increasing US presence in the Arctic remains clearly linked with Russia. Russia's disregard for common standards, the strengthening of the Northern Fleet and the aspirations of NATO's northern member states, even before Russia's full aggression, led the United States to be increasingly prepared for the rise of tensions and higher geopolitical stakes in the Arctic.

The Arctic has increased its political importance in Washington over the past few years. This is a significant change, as the United States has been a reluctant presence in Arctic activities for many years. At the beginning of the 21st century, the United States did not see the need to invest in the development of its military capabilities in the north, which was seen as a low-tension area. This situation has changed since Russia's brutal aggression, and the presence of the United States in the region will increase significantly with Finland and Sweden's membership of NATO. The close connection with the United States gives Finland both political and military backing in a difficult security policy situation. As the world's most powerful and capable military force, the United States plays a crucial role in Finland's military security of supply and the military action of Northern Europe in a possible conflict situation.

As stated, the military significance of the Arctic region for Russia is further emphasised, as nuclear weapons located in the region play a key role in Russia's efforts to maintain its superpower status. The importance of nuclear weapons is growing in the current context, where the confrontation between the West and Russia is expected to escalate or remain at the current level for a long time. In the broader perspective, the strategic military importance of the European Arctic region is also emphasised, as maritime routes in the

North Atlantic play a vital role in the European defence perspective. At the same time, there is a growing need to secure — or from Russia's point of view to be able to cut off — the critical maritime routes in the North Atlantic for NATO allies.

Russia aims to ensure the survival of strategic nuclear submarines in heavily defended Arctic Sea areas. In a severe crisis, this so-called Bastion strategy could have critical consequences for Finland and other Nordic countries. Controlling regions in Northern Scandinavia or parts of it would help Russia strengthen its air and sea defence, making it easier to protect critical objects in the Kola Peninsula. It is reasonable to assume that this would also have an impact on Finland's territorial integrity in the north.

Russia remains the strongest military force among the individual European Arctic players and attaches the utmost importance to maintaining its relative superiority. Despite Russia's major operational problems and failures in Ukraine, it is still reasonable to assume that Russia's capacity for submarine action, rapid transfer of troops and ability to conduct long-range strikes, among other things, has improved. However, Russia's ability to operate both in the Baltic Sea region and in the European Arctic depends in many respects on its military success in Ukraine. A significant part of the country's military equipment has been destroyed in combat operations, thousands of Russian soldiers have been killed in the attacks, and Russia's direct military defeat is also possible. However, Russia has shown its willingness and readiness to use military force to promote its interests, and despite the losses experienced in Ukraine, the country still has considerable military resources. In this context, the West is also forced to develop its military capabilities in the north. This work has already begun, as evidenced by the increased military training of Western actors and investments in defence development in all Nordic countries.

The likely accession of Finland and Sweden to NATO is a major strategic loss for Russia. However, Russia's attitude towards NATO efforts by Finland and Sweden has so far been more moderate than expected. This is surprising, as Russia's long-term major strategic goal has been to keep Finland outside NATO — in December 2021, Russia listed Finland as one of the countries to which NATO should not expand. The reasons for a more moderate-than-expected response are based on guesswork. On the other hand, this suggests that the NATO issue is less important for Russia than its imperialist aspirations, especially in Ukraine and Belarus. In part, it may also be because Russia is facing major military problems in Ukraine, and the country's capabilities are insufficient to exert pressure on Finland and Sweden. The situation would be significantly different if Russia had succeeded in its original goal and Kyiv had fallen in days. In this instance, the security situation in Europe would be much worse, with the risk of a wider geographical escalation of military operations and Russia's presumably greater pressure on Finland and Sweden. Under these circumstances, too, Finland and Sweden would have had a great need to improve their defence capabilities and secure a stronger Western military backrest. However, it is also

worth considering the possibility that Finland's and Sweden's security policy space and sovereignty might have diminished when faced with Russia, empowered by its military successes and a more disunited West.

All in all, major powers have long had significant differences of opinion on issues such as the structure of the international security architecture, the rule of law, international trade regulations and the role of human rights. These disagreements are difficult to reconcile and are, in many respects, incompatible. Russia's total war of aggression has made it even more difficult to manage the situation. The events in Ukraine provide a picture of the means Russia is willing to use in areas of strategic importance to it. The military threat to the north must be assessed against this background. All in all, when considering long-term policy orientations, it is necessary to observe recent events and their evidence of Russia's policies and aspirations.

The war of aggression in Ukraine has shown that Russia is prepared to use extensive military force to pursue its political purposes in an area of top strategic importance, is able to channel significant military force without general mobilisation, is prepared to take increased risks and commit war crimes, is ready to threaten the use of nuclear weapons, and sees itself in a long-term conflict with the West. It strives for a wide range of hybrid influences, relying on strengthening its own relative influence by weakening other states. Russia sees that its own values of conservative authoritarianism are not commensurate with the liberal values of the West (which they indeed are not) and that there is a transformation in the power transitions of world politics, the basic nature of which is ultimately a violent zero-sum game based on military force. Russia sees that the great powers have the right to spheres of interest and that the sovereignty of the so-called small border states is always limited; they must, if necessary, bend to Russia's "legitimate security concerns" and, if need be, these legitimate interests can also be defended in the territories of other states. This also means that it is not possible for the Russian border states to dispel Russia's security concerns without compromising their values, principles, and interests too much. At the same time, it is proven that Russia does not respect its own international commitments and often approaches international cooperation from a tactical point of view — how cooperation helps to increase relative dominance vis-à-vis others.

The above list already shows that the change in the security environment brought about by Russia's actions has been drastic and comprehensive in many respects, which has forced Finland to reflect on the grounds of many of its previous policy solutions, including the Arctic policy. The Russian invasion is a turning point in relations between Russia and Finland. In its traditional policy with Russia, Finland has emphasised the importance of ensuring regional stability, with an emphasis on dialogue and confidence-inspiring measures. This approach has also limited Western military integration and cooperation,

as it was hoped that this would contribute to the functioning of the bilateral relationship with Russia. The Russian aggression in Ukraine undermined this approach.

There is reason to assume that the strategic pressure around Finland will intensify in the coming years and that the accelerating confrontation between the West and Russia will further weaken the stability of Northern Europe. Finland's — and Sweden's — NATO membership changes and contributes to clarifying the security policy position of the region. NATO's position in the region will be strengthened, and the military alliance will be able to plan and practice defending Northern Europe as a more united whole than before. The membership will enable the defence of the north to be designed and operationalised even more efficiently, and the balance of power in the region will also change. With NATO membership, the threshold for the use of military force against Finland will rise. At the same time, Finland will become more clearly part of the front between NATO and Russia. Russia may respond to the changed situation by increasing its military power in the Baltic Sea region and in the north if it still is able to move some of its declining resources to develop the armed forces.

The importance of the Arctic in Russia's security policy thinking is emphasised even more, while the Baltic Sea will increasingly become NATO's internal sea through Finland and Sweden's membership. At the same time, the common defence of the Nordic region will increasingly focus on the northern parts of Fennoscandia: NATO's activities in the region are increasing, as are other defence mechanisms, such as the intensified defence cooperation in the Nordic countries and the UK-led Joint Expeditionary Force (JEF). It can be assumed that Arctic issues will become one of the priorities of Finland's NATO profile and policy. At the same time, it can be assumed that the nature of international cooperation in the Arctic will be more and more defence policy in the future (interview on 12.9.2022).

The next few years will determine not only the more precise content of Finland's NATO policy but also Finland's way of being Russia's neighbour. These definitions will to a substantial extent, also guide the direction and content of our future Arctic policy. At the time of drafting this report, the most recent guidelines of the Finnish foreign policy leadership were heard at the Ambassadors' Conference at the end of August 2022. At the event, the President of the Republic said: *"Under the prevailing circumstances, there is not much left of our earlier relationship with Russia. The trust is gone, and there is nothing in sight on which to base a new beginning. This is not the right time to build connections. On the contrary: we must very carefully reconsider any dependencies that could be used against us. Nothing must be left loose. However, this is not the right time to totally sever all connections either. There are still practical matters, the management of which is in our own interest. We should also hold channels of discussion open for the future, even if we do not actively use them for the time being."*

Time will tell what Finland's interests are and in which ways the international situation will make it possible for us to communicate with Russia, and how willing Russia will be to engage in dialogue.

2.3 Green transition in the Arctic

The Arctic region is, in a way, a magnifying glass for the planet's sustainability. Climate change affects the nature, inhabitants, and resources of the Arctic more severely than almost any other region in the world (excluding small island states) — the Arctic is warming four times faster than the rest of the planet (Nature 2022 [nature.com](https://www.nature.com)). Impacts on both natural ecosystems and the living conditions of the local population challenge security of supply and, in many ways, negatively affect the traditional livelihoods of the region and the development of new business opportunities.

The impacts of climate change reverberate from the Arctic to the world: general sea level rise is the most frequently used example of this. The effects are also reflected in the global economic environment, creating new threats and opportunities, such as new shipping routes and easier access to Arctic natural resources. In addition to opportunities, climate change also poses unpredictable challenges, such as ice changes, loose ice shelves at sea, and changes in permafrost on land, which in turn may make access to the sea more difficult. In addition to direct effects, indirect and harder-to-verify knock-on effects, for example, on weather conditions in different regions, are expected to increase.

The green transition objective of a climate-neutral Europe by 2050 is also the strongest reflection on the future and well-being of the Arctic. The Arctic region has a wealth of valuable non-renewable resources and exploiting them will also have a strong impact on the state of climate and biodiversity. The green transition advocated by the EU Green Deal will be achieved by boosting sustainable low-carbon industries and transport based on green technologies. At the same time, it is stressed that the transition must also be just, i.e., it must take into account the socio-economic development of different regions and ensure that the transition does not accelerate inequalities between the different regions of Europe.

The effects of Russian aggression on the sustainable development of the Arctic and the green transition are complex. Of these, the weakening of international dialogue and cooperation is clearly visible in the short term. Many measures related to the sustainability of the Arctic require extensive international and regional cooperation, as nature and the environment do not change in line with national borders. Positive and negative changes in the environment and climate of one Arctic country can affect the entire region.

Prior to the Russian invasion, efforts have been made to influence the climate and environmental work of the whole Arctic region in a wide range of structures. Significant scientific studies have been carried out in the Arctic Council on the impact of environmental problems and climate change in the region; the development of the region has been regularly monitored and evaluated, and projects have been implemented to find ways of adapting to the rapidly changing climate. As a result of the cooperation of the Arctic Council, Arctic states have, for example, committed to reducing their black carbon emissions by 25–33 % from the levels of the year 2013 by 2025 and, according to the monitoring reports, they have reached this target (Expert Group Report 2021 oarchive.arctic-council.org). In addition, important work has also been done by the Council to reduce methane emissions.

Practical climate and environmental work have also been conducted in other key Arctic cooperation forums. In the Barents partnership, climate change work, including black carbon, biodiversity protection and the circular economy, have played a key role. The Northern Dimension Partnerships have supported practical environmental work in areas such as water protection, transport emissions, waste management and district heating.

The Nordic Environment Finance Company NEFCO and the investment bank NIB have also consistently funded initiatives to improve the state of the environment and projects promoting more sustainable economic development in the Arctic region. The effects of the Russian aggression also affect many of these investments.

Another clearly increased environmental and climate risk visible in the short term is related to Russian energy and the energy deficit caused by the export barriers. The acute energy demand in Finland has already led to suggestions undercutting the national climate and energy policy. Although Finland and the EU have confirmed that they will hold to their green and just transition plans to reduce fossil fuel consumption and, in Finland, in particular, to reduce the use of peat for energy, the short-term energy needs may lead to unsustainable solutions in the longer term. In Finland, the need to grow wood-based bioenergy due to the insufficient volume of cleaner forms of energy is actively debated. Solutions that increase the use of fossil reserves in other countries' Arctic regions would have an impact not only on the Arctic environment but also on the global climate load if the total consumption of fossil fuels increases rather than decreases. In the short term, there may also be other environmental risks related to the disruption of energy supply chains. For example, Russia has recently been forced to burn natural gas surpluses at its plants near Finland.

The third challenge of the green transition is that Russia is a major exporter of minerals critical to the green transition and low-carbon technologies. The trade of these minerals has not been included in sanctions so far, but there is currently a lot of uncertainty

surrounding trading with Russia. The difficulties of importing minerals from Russia is likely to increase their demand from other areas where environmental legislation and its implementation may be at an even poorer level than in Russia.

Although the immediate climate and environmental impacts of the energy crisis caused by the Russian war of aggression are negative, it has been widely seen as contributing to a long-term energy transition towards more sustainable forms of energy production. In spring 2022, the EU published the RePowerEU Plan (REPowerEU Plan 2022 ec.europa.eu), which reduces dependence on Russian fossil fuels e.g., by accelerating the deployment of renewable energy sources. The Prime Minister of Finland has stated that Finland must move away from dependence on Russian energy “as quickly as possible” (Yle News 1.3.2022 yle.fi). Similarly, Sweden’s recent decision to stop the production of oil, coal and gas has been stimulated by the growing desire in Europe to focus on renewable energy because of the Russian invasion. The countries of the Baltic Sea region, of which Finland, Sweden and Norway are in the Arctic region, declared their common desire to decouple from Russian energy and invest in offshore wind power (Ministry of Employment and the Economy 2022 tem.fi).

The energy crisis has also boosted the debate on energy self-sufficiency, and the potential of Arctic regions, for example, in the production of wind power, has been debated. In Northern Finland, seven billion euros of wind power investments are already planned, and as the need for renewable energy increases, other investments in the green transition can also be expected to increase. The importance of zero-emission energy is seen to grow in the future due to consumer requirements; an example of this is the ongoing development in the production of zero-emission steel (Pohjoisen tulevaisuuskauppa 2022 lapland.chamber.fi). At the same time, the utilisation of electricity generation as close as possible to its source of production has been emphasised to minimise the loss caused by the transmission of electricity. If realised, this would have the potential to bring, for example, investments in production plants to the Arctic Region.

It is clear that the effects of the Russian aggression on the green and just transition in the Arctic are very complex. In the short term, the effects will be largely negative, but in the longer term, especially the energy crisis may also affect the development of more sustainable production and consumption and the acceleration of low-emission solutions both in the Arctic countries and globally. If Finland is able to accelerate the decoupling from fossil fuels in line with the principles of just transition, it can have a positive effect on the state of the Arctic in many areas of sustainable development.

Nonetheless, further developments of the geopolitical situation can significantly affect the attractiveness of the Arctic region as a sustainable investment destination.

2.4 International Arctic policy scenarios for 2030

In order to capture the spectrum of uncertainty with regard to different trajectories that the international political situation can take in the Arctic, the researchers developed a set of scenarios with 2030 chosen as the time horizon.

The scenarios support the researchers in reflecting on the implications of different trajectories for the Arctic cooperation and the achievement of the objectives of the 2021 Finnish Arctic Policy. The set of four scenarios presented here support the Government in considering policy options taking into account their respective strengths and weaknesses under different hypothetical future circumstances or conditions.

METHODOLOGY AND PROCESS

A scenario is not a single prediction, but a way of organizing many statements about the future. It is a plausible description of what might occur and how that could emerge from the present. The scenarios can be only read together as one set: no single scenario is likely to come to pass, while all of them together contain plausible elements of future developments. The idea is to capture the scope of possibilities, not to predict the future.

A deductive method of scenario development was employed: first establishing general parameters for each scenario by defining critical uncertainties and then writing the narratives.

The scenarios were developed based on the outputs of an expert workshop, which identified the critical uncertainties and key questions to be answered in each scenario. Then, the scenario narratives were written through an iterative process.

First, the scope of the scenarios was defined: International Relations in the Arctic until 2030, with special focus on Finnish-Russian relations.

Second, we considered the current situation (see the previous chapters). A SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) was conducted separately for the theme of Arctic cooperation and regarding the implementation of the Finnish Arctic Policy.

Third, utilizing existing expertise via guided brainstorming session, the researchers identified the possible drivers of change that affect the international relations in the Arctic. Driving forces are understood here as the key trends and dynamics that will determine the course of the future. We focused primarily on the external drivers.

Fourth, the identified drivers were collated into clusters (e.g., some drivers occur together, or they are in causal relationship with one another).

Further on, each workshop participant assessed these clustered drivers with regard to importance and uncertainty. Two drivers that scored the highest in both importance and uncertainty are selected as critical uncertainties.

The following **drivers of change** were identified and collated into clusters:

- The intensity of West-Russia tensions (lower tensions vs. higher/ongoing tensions)
- Chinese interest in the Russian Arctic (high interest vs. low interest)
- Degree of global interest in the Arctic (climate, environment, resources) (low vs. high)
- Place of the Arctic in the great power strategic competition (central vs. marginal)
- Effectiveness of global institutions (effective vs. ineffective)
- Impacts of coronavirus (high vs. low)
- Global economic situation (growth vs. recession/stagnation)
- United States engagement, especially in the European Arctic (strong vs. weak)
- Internal changes in Russia (regime hardening vs. liberalization) (also Russian economy stable vs. in crisis)
- Climate change impacts in the Arctic and their consequences/responses to them (high impacts vs. low impacts)

The two critical uncertainties (driving forces scoring at the same time as highly uncertain and highly important) that were selected:

- The intensity of tensions between Russia and the West
- Importance of the Arctic in international relations/Global interest in the Arctic

The critical uncertainties outline four possible futures where these uncertainties take different values. Four scenarios were written based on these parameters. Other driving forces were also considered, especially those that are highly important while relatively certain. The narratives presented below seamlessly flow from the present and the past and take account of the current trends and status as well as authors' understanding of the political, economic, social, and economic dynamics globally and in the Arctic.

CRITICAL UNCERTAINTIES AND THEIR DIFFERENT PARAMETERS

1. The intensity of (overall) tensions between Russia and the West

Lower level of tensions: There is some kind of diplomatic settlement that brings an end to active combat operations within Ukraine and prevents a further escalation of the conflict. Return to pre-24/2 level of interactions between West and Russia (internationally) is observed. The cross-border interactions between Russia and Western countries return to the levels from before the COVID-19 pandemic, with return of some level of cross-border connectivity. There is some level of cooperation on technical or scientific matters between Russia and Western countries globally beyond the current limited interactions within the UN, forums based on legally binding international law, and international negotiations.

Higher/ongoing tensions: The war in Ukraine goes on as a semi-frozen conflict or Russia achieves its objectives in Ukraine, while the West does not accept any Russian gains and maintains all sanctions and diplomatic isolation. Energy trade between West and Russia may be completely severed, and economic relations are strictly limited. Diplomatic relations break down further, even in the context of still ongoing cooperation based on international treaties or within global forums such as G20, affecting their outputs and ambitions even though the presence of other actors would ensure the continuation of the activities.

2. Importance of the Arctic in international relations / Global interest in the Arctic

The Arctic at the centre of global attention: The Arctic is of interest globally as one of the planet's geopolitically important and militarized regions. There is further investment in Arctic military infrastructure in Russia and in the West. The Arctic is also perceived as a key region for global resource production, both in terms of energy resources and critical minerals. There is significant interest of non-Arctic actors in the developments within the Arctic region, especially China. Chinese interest is largely based on the increasing imports of Russian Arctic resources. There is continued acknowledgment of the Arctic as a hotspot for climate change, which by 2030 has clear impacts globally. Various actors see this see the Arctic change as a critical transformation for the global economy and politics. Due to Arctic amplification and feedback mechanisms, there is a stronger focus on the region in the global climate negotiations compared to 2022.

The Arctic as a marginal region globally: Global attention focuses on other parts of the world. The Arctic is seen as a source of important resources, but there is only limited extraction, and few new investments are proposed. This is caused by restricted access to resources and high costs of extraction, compared with other regions (e.g., Africa or Australia). There is also relatively low interest in Arctic shipping, apart from the exports

of Russian energy resources to Asia. There is limited military investment as the strategic goals are focused elsewhere. While there is clear understanding of the faster pace of climate change in the Arctic compared to the global average, the focus in climate discourse is on regions where impacts affect hundreds of millions of people. The circumpolar North receives scientific attention but remains not strongly visible in climate negotiations. The ideas of rapid economic and socio-political change fade away as the pace of actual developments is slow.

Figure 1. Four scenarios for 2030.



OTHER KEY DRIVERS OF CHANGE

The pace of climate change in the Arctic: The Arctic is warming more than three times faster than the rest of the Earth on average, and some areas, such as the northern parts of the Arctic Ocean, are warming up to seven times faster than the entire planet (Isaksen et al. 2022). The impact on livelihoods, biodiversity, infrastructures, and landscapes is enormous, leading to changes already visible in the region. The impacts of climate change in the Arctic and the global impacts of Arctic change on the climate, including weather events in the Northern Hemisphere, are considered to be highly certain until 2030. This affects the scientific, economic, and political interest in the Arctic, as well as the way in which the various stakeholders and rightsholders operate in the region. However, as the effects of climate change are increasingly felt south of the Arctic Circle, the continuing profound change in the Arctic may not hit the headlines as often as a decade ago.

Internal developments in Russia: One of the factors behind the war in Ukraine is the tensions between Russia and the West, as well as Russia's foreign policy orientation and economic development. The prospects for the Russian state are not very positive due to, among other things, weak demographics, poor innovation, and the undiversified economy. As a result, the country's international influence will continue to be based on military force, its use and threat, especially as the green transition reduces trade relations and the influence they bring. In recent years, Russia's internal development has become increasingly authoritarian, its foreign policy thinking is increasingly nationalistic and militaristic, and it needs an external enemy for domestic policy reasons — it can be convincingly argued that the country is not genuinely interested in improving relations with the West. Although a change in the Russian regime seems very unpredictable at the moment, it is still a probable option over the next seven years. Changes in world energy prices — currently highly uncertain — and growing dependence on China may lead the Russian elites and the middle class to question more openly the wisdom of the economic (strongly fossil fuel-based) and political (nationalist authoritarianism and strong corruption) model chosen by the Putin regime in exchange for relative social stability. However, there is no guarantee that any change of regime will bring to Russia a leadership that would be interested in mitigating tensions with the West, ending the war in Ukraine and liberating the conditions internally. The pension reform, which the Russian government was forced to abandon due to public dissatisfaction, shows that the Russian regime continues to respond to a certain degree of public concerns. At the moment, however, it is difficult to say what developments or issues could likely trigger such widespread public dissatisfaction.

Efficiency of international institutions: Many Arctic issues can or need to be addressed globally, and many international agreements, institutions and negotiations are important for the Arctic environment and for the peoples in the region. Tensions between Russia and the West and the course of the conflict in Ukraine have a strong impact on the efficiency of international institutions, but it is also influenced by other dynamics. The negotiations on the United Nations Framework Convention on Climate Protection, the International Convention on Biological Diversity, the International Maritime Organisation (IMO) agreement on the protection of the marine environment, the Convention on the Protection of International Marine Regions and the Global Treaty on Plastic Pollution affect all Arctic cooperation and the achievement of the objectives of Finland's Arctic policy.

Participation of the United States, in particular in the European Arctic: Although the United States interest in the Arctic is closely linked to the global attractiveness of the region, it has its own dynamics, especially in relation to the European Arctic region. It is unclear how the accession of Finland and Sweden to NATO would affect the interest and commitment of the United States in the region and the extent to which the special interests of the United States would affect the policies, views and choices made by the two Nordic countries. To date, the US's attitude towards China's presence has indirectly affected the concerns and investment decisions that have emerged in the European Arctic. The level and methods of participation of the United States are likely to affect the Nordic countries' relations with Russia.

2.4.1 Four scenarios for 2030

SCENARIO 1: Arctic, a geopolitical hotspot

The Arctic appears often in the headlines of international meetings and in global leaders' speeches. It has become a region that is one of hotspots of the ongoing Russia-Western tensions. Following the accession of Finland and Sweden, NATO member states have enhanced their investment in Arctic capabilities, in order to match, at least to a limited extent, the expansion of Russian military presence in Eurasian Arctic.

The militarization of the Kola Peninsula has returned to the levels known in the 1980s, and the military presence and investment in northern regions of Norway, Sweden and Finland reach levels unknown since the end of World War II. The Arctic itself continues to be a place where no endogenous sources of international tensions are expected, but it is now perceived primarily as a key global military theatre. There are concerns that there may be incidents in Arctic waters that could lead to conflict situations. For instance, Russian criticism of Norwegian governance of Svalbard is reaching all-time high.

Russian investment in fossil fuels has led to increased black carbon emissions, especially that the newest projects are based on Chinese technologies. As there is no Arctic dialogue on the need to limit BC emissions, there is no way for other Arctic states to influence Russian developments. Fossil fuels experience expansion also in other parts of the Arctic, especially in Norway, Canada, and Alaska, in order to meet the Western demand without access to Russian resources and the need to limit dependence on the Middle Eastern oil exporters.

The role of the Arctic as a militarily strategic region overshadows its importance as a space of climatic and environmental changes and any interest in Arctic cooperation, including on adaptation or environmental assessment.

The seven Western Arctic states (commonly referred to as the A7) maintain the suspension of Arctic circumpolar cooperation, but they restarted many projects without Russia. Major observer states such as China and India exclude themselves from the “interim project implementation” by the A7 and instead work more closely on Arctic issues with Russia. This “Eastern Arctic cooperation” does not produce many concrete outputs, but for Russia it is an important element of propaganda targeting domestic and global non-Western audiences, showing Russia as a committed Arctic actor. The limited scope of cooperation - with the exception of fossil fuels - is primarily a result of Chinese reluctance to choose between Russia and the West in the Arctic. However, China is still interested in Arctic issues, which shows in its research budgets and in a closer cooperation with the Nordic countries on Arctic questions.

Barents Euro-Arctic cooperation is not formally abandoned, but few believe in its revival. Without Russia, it does not have any added value compared to other forums. European Arctic regions develop their own cooperation formats, building on the existing Nordic Council cooperation committees in the North.

All EU-Russia programmes are cancelled and there is no funding for Northern Dimension projects or cross-border cooperation envisaged in the new multiannual financial perspective 2028-2034.

Indigenous organisations participate in cooperation between Western Arctic states, in particular because they focus on climate change mitigation and adaptation in the Arctic, and green colonialism has become a major concern for many activists. However, the focus of permanent participant organisations shifts to global Arctic processes and organisations.

SCENARIO 2: Limited global cooperation

The Arctic cooperation has partly returned to the level of engagement present before the 2022 Russian invasion on Ukraine, although lack of trust is prevalent. Nonetheless, the increased interest in the Arctic among actors such as China, EU or India and a genuine acknowledgment of the role of the region in Arctic capitals, including Washington and Moscow, leads the Arctic states leadership to propose some advancements in Arctic cooperation. Russia and the A7 states sign a new declaration, which acknowledges strong disagreement about the war in Ukraine (and any Russian territorial gains), while confirming that the Arctic states wish to keep the Arctic as a peaceful region, although accepting its geopolitical role. Arctic states agree to limit their cooperation to technical issues, comprising among others search and rescue, climate and weather data, fisheries management, as well as environmental actions in North-West Russia. The work on black carbon and methane and the pan-Arctic observation systems is especially important in this context.

However, there is limited interest in developing joint projects and many initiatives under the umbrella of the AC or BEAC are implemented without Russia or by Russia with the involvement of AC observer states. Chinese leadership is content that it does not have to choose between the West and Russia in what it sees as an important region for its own economic and diplomatic expansion as a global power. Chinese funding for Arctic research reaches all-time high.

The energy crisis in the West and rising prices during the war in Ukraine led to an increased interest in Arctic resources, visible primarily in Russia but also in Norway and Canada.

The progress of global climate change and especially rapid pace of warming in the Arctic (two-to-seven times the global average, depending on the region, with Northern Barents Sea warming at an exceptional rate), as well as clearly visible significant impacts and adaptation needs boosted the interest and investment in Arctic research.

While Russia wishes to maintain its investment in Arctic military capabilities, its resources are limited, and spending is focused on mitigating significant losses to its military personnel and equipment lost during the war in Ukraine.

Indigenous organizations attempt to find their place in the Arctic cooperation, with hopes of returning to the situation before 2022. However, the limited trust and formats of Arctic cooperation and a strong involvement of powerful actors such as China limits effective indigenous influence.

SCENARIO 3: The return to the 1990s

As the situation in Ukraine has become more stable and limited cooperation between Russia and the West returns, also in the Arctic the cooperation structures are revived. With the global attention elsewhere, the leadership in China and other global powers does not see the reason to invest much in the region, while maintaining their token presence in Arctic research and cooperation forums. There is no discussion on forums alternative to the Arctic Council and no genuine closer Chinese-Russian cooperation on Arctic issues.

The United States, Canada, Russia as well as Sweden do not wish to expand and provide significant resources for Arctic cooperation or invest significantly in regional development, in contrast to remaining Arctic states. The cooperation is limited to technical (non-strategic) aspects and characterized by a low level of ambition. Both within the Arctic Council and in the BEAC, the cooperation is conducted primarily on lower administrative levels.

Arctic resources are not seen as central to green transition or meeting global energy needs. Their extraction remains often prohibitively expensive compared to energy and resource prices.

The EU returned to some level of cross-border cooperation with Russia, but the funding is minimal, and Brussels does not see Arctic regions as key to its strategic objectives, despite declarations made in the latest iteration of its Arctic policy statement. The focus in European capitals is clearly on the Mediterranean, Eastern Europe and the Middle East, while the resources for external action and regional development are more and more limited, which is clearly visible in post-2027 multiannual financial framework.

Indigenous organizations and Arctic and global environmental NGOs are clear beneficiaries in this scenario, as they play a stronger role in Arctic technical cooperation and have become more influential, as the political interests of Arctic states and non-Arctic powers are limited. However, funding for Indigenous activities is restricted in line with the lower interest in Arctic cooperation and developments.

SCENARIO 4: Frozen tensions

The Arctic is not seen as playing any central role in global politics, while the tensions between Russia and the West remain high. The West's relations with Russia in the Arctic are sour, resulting in close to permanent suspension of all cross-border cooperation.

Russia responds to the NATO accession of Finland and Sweden with increased military presence and unfriendly declarations. However, by 2030 the expansion of military

infrastructure remains de-facto at the levels observed before the Russian invasion on Ukraine.

The cooperation in the Arctic is suspended and only few fragmented projects have been implemented among the seven Arctic western states. Russian attempts to establish alternative formats involving primarily China proved unsuccessful despite a number of high-level meetings discussing Arctic matters. China is primarily interested in Russian fossil fuels, but that does not extend to the overall interest in the Arctic, outside abstract declarations. Consequently, funding for, e.g., Chinese research in the Arctic has been limited.

Limited interest of western Arctic capitals, with the focus instead on Central-Eastern European, Baltic, North Atlantic and Pacific issues, leads to a lack of willingness to genuinely invest in northern regions and in the Western Arctic cooperation beyond token declarations.

Arctic Indigenous Peoples somewhat lose their special position in Arctic governance, as the Arctic cooperation is limited, and the national governments are less interested in the North. On the other hand, the pressures on indigenous lands are lower compared to other scenarios.

3 Framework for Arctic cooperation in a new context: limitations and options

3.1 Arctic Council and related structures

Arctic cooperation between states began at the initiative of Finland in the late 1980s during the Cold War. Finland proposed that eight Arctic states (Nordic countries, Russia, the United States and Canada) could work together to protect the Arctic environment, which led to the signature of the Arctic Environmental Protection Strategy in Rovaniemi in 1991. This form of cooperation was later merged into the Arctic Council, established by the Ottawa Declaration in 1996. The Arctic Council focuses particularly on climate change and on promoting environmental protection and sustainable development in the region, but its field of operations also covers several other issues, such as emergency rescue services and accident prevention. The practical work of the Council is carried out in working groups that implement projects, which numbered almost 130 in early 2022.

The Arctic Council is the main forum for circumpolar Arctic cooperation. Because of its field of operations, the number of observers, the membership base, the status of indigenous peoples and the global impacts of climate change in the Arctic, it is crucially different from all other forms of cooperation in the north. It plays an important role in the governance of the Arctic region.

What is unique about the Council is the status given to the umbrella organisations of the Arctic indigenous peoples as permanent participants. These organisations either represent one indigenous people in many countries or many indigenous peoples in one country. Indigenous peoples' organisations participate in the implementation of many projects and sit at the same table with the eight Arctic states at all levels of decision-making. The attractiveness of Arctic issues has also led to an increasing number of organisations, including non-regional states, seeking observer status in the Council. There are currently 38 observers.

The Arctic Council was also able to function during the annexation of Crimea and the war and unrest in Eastern Ukraine. The philosophy was that in the Arctic, Russia and the Western powers were able to cooperate, even though their tensions elsewhere were high. The Arctic Council has even been nominated for the Nobel Peace Prize, most recently shortly before the Russian invasion of Ukraine. However, after the aggression, unlike in many other Arctic structures, Russia was not expelled or suspended. Instead, seven

Member States decided to suspend their participation in the work of the Council while considering how the operations could continue.

The suspension of cooperation was near in 2014 due to the occupation of Crimea and the war in eastern Ukraine. Canada, as the Chair at the time, proposed banning Russia from the Council, but other member states considered that shutting Russia out would call into question the expediency of Arctic cooperation (e-mail 3.4.2022). During the spring of 2022, these Member States reflected on how they could continue to cooperate in the Arctic Council. They gave a partial response on 8 June (Joint statement 8.6.2022 state.gov) when seven states reiterated the importance of the Arctic Council to advance the objectives of Arctic cooperation and re-launch the work of the Council in projects where Russia was not involved. According to the states, advancing these projects that had been approved in the Reykjavik work plan for the Russian Chairmanship is a vital component of the responsibility of the seven Member States for the people of the Arctic, including Indigenous Peoples (Joint Statement 8.6.2022). According to some researchers, the aim is to gradually relaunch the work of the Council so that Norway could take on the Chairmanship in May 2023 (Koivurova 29.6.2022 gjia.georgetown.edu and Greenwood 4.5.2022 highnorthnews.com). This is also suggested by the fact that many projects defined in the Reykjavik work plan are now in operation. Although the working groups of the Arctic Council are not operational, researchers from seven Arctic countries have completed the scientific assessments launched under the Icelandic Chairmanship (interview on 13.9.2012). In the context of the Arctic Council, it has been considered important that the Council remains a key body of cooperation between representatives of the eight Arctic states and indigenous peoples.

The current situation is challenging. Permanent bodies of the Council, such as its six working groups, also need to know how the Council's work continues. So far, it has not been possible to organise meetings of the Council's decision-making or preparatory bodies. Indigenous peoples' organisations have a unique position in the Arctic Council as its permanent participants, and it is naturally important for them that the Council be able to continue its activities. The Council has also gained a large number of observers over the years. A total of 13 non-Arctic states have been admitted as observers to the Council, and many of them have also developed national Arctic strategies, in which one of the pivotal ways to advance their Arctic policy is to act through the Arctic Council. Now, the promotion of observers' Arctic policies is also more uncertain.

What happens to the cooperation of the Arctic Council? It should be remembered that from the outset, the western Member States have affirmed that they find it important to maintain the Arctic Council but that they do not currently consider it possible to participate in the formal decision-making process of the Arctic Council. What is important, therefore, is that the group has clearly stated that the cooperation of the Arctic Council

is very important and must continue. It is also necessary, according to these countries, because they have a responsibility towards the people of the region, including indigenous peoples, who support and benefit from the work of the Council. In their June declaration, the Council also underlined the importance of the Arctic Council and its work. The western Member States have sought to find ways in which the work of the Council could continue in a limited way, as mandated by the Reykjavik Ministerial meeting.

Seven Arctic states have jointly considered the possibilities and conditions for relaunching the full range of activities of the Arctic Council at some point (interview on 29.2022). Since Russia is also a Member State of the Arctic Council, we must try to find a way to continue working in the Arctic Council in the new context. For example, we need to consider how the Chairmanship will be transferred from Russia to Norway in April 2023 (interview 29.2022). According to the Council rules of procedure, the Chair must notify the date and place of the Ministerial Meeting six months in advance. In the rules of procedure, a quorum for the organisation of a Ministerial Meeting requires a proposal from six members, not all eight.

The second question concerns the functioning of the Council's structure and its maintenance in relation to decision-making. According to the Code of Conduct, all decisions taken by the various bodies of the Arctic Council are taken by consensus of all eight Member States. If a Ministerial Meeting or a meeting of Arctic ambassadors takes place without all Arctic states, decisions may be taken by consensus of the States present, although these decisions must also be adopted by the Member States that are absent within a certain period.

If tensions remain strong, as in scenarios 1 and 4, this will also make it difficult to start cooperation between the Arctic Council. There is already an example of how the current tensions have undermined existing cooperation with Russia. In the Council of the Baltic Sea States (CBSS), Russia announced that it would withdraw from the cooperation after CBSS had suspended its membership. (CBSS news 2022 [cbcc.org](https://www.cbss.org)). If cooperation in the Arctic Council cannot be initiated due to the lack of trust and military tensions, this would mean the establishment of a new organisation, as the Arctic Council is an organisation of eight Arctic states and indigenous peoples by its rules.

Would such an Arctic body of seven states have a role that could not be carried out through existing organisations or as a national activity? Especially in light of scenario 1, it is very possible that cooperation between the western Arctic states would lead to the establishment of a new Arctic organisation. The challenges facing the Arctic are enormous — environmental problems starting with climate change, responding to accidents or many of the challenges of sustainable development — so there would be pressure on the new geographically limited western Arctic cooperation body. In line

with the Arctic Council's model, it would be important to produce extensive scientific assessments of the state of the Arctic environment and the impact of various global and regional environmental problems in the Arctic. Perhaps it could be envisaged that such cooperation could also lead to more ambitious environmental protection and climate change mitigation measures. On the other hand, the level of ambition in climate policy in the United States and Canada, for example, has fluctuated strongly over the years, depending on which party has been in power. Could some of the existing Arctic Council working groups be adapted to these needs? These are difficult questions for which there are no clear answers. In this situation, too, Russia would have to position its Arctic cooperation in a new way, probably especially with China. If the situation stabilises, as in scenarios 1 and 3, the Arctic Council will be able to continue its important role.

If tensions remain strong, NATO will most likely strengthen its Arctic policy. If and when Finland and Sweden are accepted into NATO, seven of the eight Arctic states will be NATO members. Already today, NATO's strategic document in 2022 raises the importance of the High North (the concept used in Norway as a term similar to the Arctic) for NATO (NATO 2022 [Strategic Concept](#)). In general, in this scenario of the Arctic as a geographical hotspot, transatlantic cooperation in different areas of Arctic policy is likely to become stronger.

3.2 Arctic legal agreements

There are also cooperation processes underway in the Arctic based on legal agreements, unlike the cooperation between the Barents Regional Council and the Arctic Council, for example, which is based on declarations. The starting point for all legal agreements is that a party cannot simply be banned from the cooperation. Under customary international law, enshrined in the Vienna Convention on the Law of Treaties (Finnish Treaty Series 33/1980), the parties to a multilateral agreement may not suspend or terminate the agreement with one party except in exceptional circumstances. Where a party to a contract has materially breached that agreement, the other parties may react to the conduct of a party to such an agreement. By attacking Ukraine, Russia has violated both international customary law and the prohibition of war of aggression under the UN Charter. Although Russia has fundamentally violated this rule, this does not mean that it has also violated all other agreements to which it is a party. The legal premise is that Russia will also continue in these Arctic judicial cooperation processes, as it continued at the Antarctic Treaty Consultative Meeting in Berlin in May-June 2022 (interview 31.8.2022).

Three agreements have been negotiated under the auspices of the Arctic Council, which are examined below. Although they have been negotiated under the Arctic Council, they are formally separate from it as independent conventions, although two agreements

relating to emergency response operations are functionally linked to the work of the respective Arctic Council Working Group.

The Arctic Search and Rescue Agreement on **maritime search and rescue cooperation** in the Arctic (Finnish Treaty Series 3/2013) was signed in 2011. It entered into force in 2013 and aims to strengthen cooperation and coordination of aeronautical and maritime search and rescue operation (SAR Agreement). Geographically, the agreement concerns the northernmost land area of Finland. However, the agreement is important for Finland both in terms of maritime rescue cooperation and aviation rescue cooperation. The agreement involves countries that develop Arctic maritime and air rescue, and this allows Finland to participate in useful projects and research and development work. The agreement is in force, and Finland has the capacity for operational rescue operations also towards Russia also based on this agreement. There is currently no information on whether the agreement will be terminated (interview 1.9.2022).

The Agreement on Cooperation on Marine **Oil Pollution Preparedness** and Response in the Arctic (Finnish Treaty Series 15/2016) was signed in 2013 and entered into force in 2016 (MOSPA). As far as Finland is concerned, only the northernmost areas of the Gulf of Bothnia (the Bothnian Sea) are covered by the agreement, and Finland already has two previous agreements on the basis of which oil spill response is carried out in the Baltic Sea region. This agreement is important for Finland because it involves countries that have developed oil spill responses to Arctic conditions. Winter conditions in the Gulf of Bothnia region are Arctic, and cooperation with Arctic countries enables Finland to monitor research and development. It is assumed that the contract will continue to operate (interview 31.8.2022), although there are currently no activities ongoing.

The two agreements are separate treaties, but they are closely linked to the Arctic Council's Emergency Prevention, Preparedness and Response Working Group (EPPR), the activities of which are still suspended. The EPPR's role is to maintain operational guidelines, in particular for MOSPA, but it will also facilitate, support, and evaluate the implementation of the SAR through information exchange, exercises and identifying of best practices. The EPPR is therefore important for the implementation of both agreements, and the relaunch of the working group is also important for their further work. An important body for the implementation of these two agreements is also the **Arctic Coast Guard Forum** (ACGF), which, through its members, actively engages in dialogue with the Arctic Council, although it is a separate form of cooperation. The forum's operational area also covers maritime rescue and environmental damage prevention, but its activities are more about cooperation between coastguards. ACGF's work is now interrupted, and the parties are exploring how the operation could continue (e-mail received on 21.9.2022).

The **Agreement on Enhancing International Arctic Scientific Cooperation** was negotiated under the auspices of the Arctic Council and was signed at the Fairbanks Ministerial Meeting in 2017. The agreement entered into force the following year (Finnish Treaty Series 43/2020). The aim of the agreement is to promote the practice of science, particularly between Arctic states, in various ways, such as access to research infrastructure or areas in other countries for the purpose of carrying out research and by facilitating access to scientific information related to scientific activities under the agreement. Although the agreement is separate from the Arctic Council, the convening party in the implementation of the agreement is the current Chair of the Council. At the beginning of its Chairmanship in May 2021, Russia started proposing activities in the framework of the agreement. The last meeting of the parties to the science agreement took place in November 2021. Since then, there have been no contacts relating to the agreement. At the moment, even though the agreement is in place, everything is quiet. If there were a formal request from another party or its researchers to the responsible Finnish authority, then Finland should consider how to deal with it, especially if the request were from Russia. On the other hand, even Russia, as a party to this agreement, remains guaranteed to enjoy the rights it defines.

A large part of the Arctic Region is sea, and it is governed by many international treaties, especially the **UN Convention on the Law of the Sea**, which is called the fundamental law of the sea. Russia is a party to this agreement and will continue to be a party to it; much of the rights and obligations of the convention are also valid as customary international law vis-à-vis all states in the world. The International Agreement to **Prevent Unregulated Fishing** in the High Seas of the Central Arctic Ocean was reached in 2018 and entered into force in June 2021. The aim of the agreement is to prevent unregulated commercial fishing in the central Arctic Ocean, in a sea area outside national jurisdiction, where the ice cover is melting due to climate change. The five Arctic coastal states, as well as China, Japan, South Korea, Iceland, and the European Union, are parties to the agreement. The agreement will also establish a scientific mechanism to study the development of fish stocks in the region and the rapid transformation of the region's ecosystems. Russia did not participate in the second sub-meeting of the scientific mechanism of the agreement in March 2022 but took part in the virtual meeting of the parties thereafter. It has also contributed to the drafting of the code of conduct of the conference of the parties and the science mechanism (e-mail received on 31.8.2022).

Russia is also a party to the **North-East Atlantic Fisheries Commission** (NEAFC) and a member of the commission under the agreement. The scope of the agreement extends to the Arctic Ocean. More extensive marine protection in the Arctic is also done by the **OSPAR Commission**, whose work is based on the Convention on the Protection of the Marine Environment of the North-East Atlantic (Finnish Treaty Series 51/1998). For a long time, OSPAR has suggested to the Arctic Council that it would be interested in

cooperating with the Arctic Council to protect the Central Arctic Ocean, which falls within the jurisdiction of OSPAR. Now, OSPAR, of which Russia is not a member, has established a fixed-term working group to improve the conservation status of the Arctic Ocean by 2025.

The international Svalbard Treaty entered into force in 1925, and Finland is one of its 46 contracting parties (Finnish Treaty Series 15/1925). The agreement guarantees Norway's sovereignty not only to the group of Svalbard islands but also to the other parties to the agreement, in accordance with the principle of non-discrimination, to carry out economic activities in the region. The legal status of the surrounding sea areas is disputed between Norway and other contracting parties, but Norway has established a fisheries protection zone based on which several parties' vessels fish in the area. So far, Norway has sought to exclude Svalbard from sanctions, so Russia has been able to continue fishing and mining in the region (High North News 5.5.2022 highnorthnews.com).

The 1973 **Polar Bear Agreement**, which entered into force in 1976, aims to protect the polar bear and its habitat. The parties to the agreement are the Arctic Ocean coastal states: Norway, Denmark (Greenland), Canada, United States (Alaska) and Russia. The contracting parties have held meetings at intervals of two years; the last meeting was in Svalbard in Norway in 2020 (meeting polarbearagreement.org). In 2015, the parties came up with a circumpolar action plan to effectively protect the polar bear until 2025. The next meeting of the parties to the agreement is scheduled to take place in Canada in spring 2023 (Meeting of the Parties canada.ca/polarbearconservation).

Finland, as well as Norway in its Arctic land and sea areas (Declaration of 5.3.2022 regjeringen.no), has continued bilateral cooperation with officials on **transboundary water agreements** with Russia. The agreement between Finland and the Soviet Union on transboundary waters (26/1965) establishes a special commission for the use of boundary waters. The commission meets annually, and this year it was also scheduled to celebrate the 60th anniversary of the agreement. Due to the Russian war of aggression, these celebrations were not held. The parties went through the minimum statutory matters at the annual meeting in October. It was held remotely (interview 6.9.2022). The necessary technical and hydrological exchange of information and preparation for the annual meeting continued (interview 31.8.2022).

On the regulation of **Lake Inari** with the Kaitakoski power plant and dam, an agreement was signed between Finland, Norway, and the Soviet Union (now Russia) (Finnish Treaty Series 39/1959). Finland draws up runoff plans for Lake Inari and gives weekly guidance on the implementation of water releases at the Russian Kaitakoski power plant. The releases are negotiated in cooperation with Russia and Norway. Each year, the parties organise a meeting of the regulatory mandates, and the next meeting is planned for spring 2023 as

a remote meeting. The meeting of delegates is intended to discuss only minimum statutory matters (interview 1.9.2022).

As can be seen, regional and multilateral judicial cooperation has continued in the Arctic. If tensions remain low, as in scenarios 2 and 3, it is possible to believe that these legal cooperation agreements will work. For example, the agreements related to emergencies are also linked to whether the Arctic Council's EPPR Working Group will be able to start its work. If tensions increase, these forms of cooperation based on legal agreements will continue to work, but what they can actually achieve will remain limited.

3.3 Barents cooperation

The Barents Euro-Arctic Council was established with the Kirkenes Declaration in 1993. Its geographical area covers the northernmost regions of Finland, Sweden and Norway and northwestern Russia. Finland includes the provinces of Lapland, Northern Ostrobothnia, Kainuu and North Karelia, and from Russia, the republics of Karelia and Komi, and the regions of Murmansk, Arkhangelsk, and Nenets. At the national level, all five Nordic countries, Russia and the European Commission are members. The presidency rotates between Finland, Norway, Sweden, and Russia. Finland chairs the 2021-2023 season, followed by Russia. The regional level is now chaired by the Nenets Autonomous Region, after which the regional chair will be transferred to North Karelia. The work of the Council takes place in national and regional working groups in a wide range of areas. There is a working group for indigenous peoples and young people. The international Barents Secretariat is in Kirkenes, Norway. The Secretariat has been set up by an intergovernmental agreement which, by written notification, allows for the parties to withdraw from the agreement within a transitional period of one year.

The Kirkenes Declaration supported Russia's reform process at the time, aiming, inter alia, at strengthening democracy and local institutions.

The 30th anniversary of the Barents cooperation, which had been planned at a high level for early 2023, will coincide with the Finnish chairmanship. The meeting of foreign ministers to be held at the end of the chairmanship was scheduled to take place in Joensuu in autumn 2023.

Following the Russian invasion in early March 2022, the Nordic countries and the EU announced the suspension of all Russia-related Barents activities. Russia's strongly worded response stated that without Russia, these forms of cooperation would lose their meaning.

The focus of the Barents cooperation and its main idea has been precisely to commit Russia to Northern European regional cooperation. In Finland, the Barents region has expanded to the provinces of Kainuu and North Karelia due to their connections with Russia.

Norway, which took the original initiative, has been the primus motor in Barents cooperation. Alongside multilateral cooperation, Norway has maintained a very large national secretariat in Kirkenes for bilateral Barents cooperation between Norway and Russia. Bilaterally, Norway has ceased to cooperate with official Russian bodies, but cooperation with independent Russian actors can continue. The Norwegian Consulate General in Murmansk was closed to the public in the summer of 2022. Finland still has offices of the Consulate General of Saint Petersburg in Murmansk and Petrozavodsk (Norway Barents Secretariat 2022 [barents.no](https://www.barents.no)).

Since the spring of 2022, multilateral Barents cooperation has continued under the leadership of Finland in a limited form among Nordic members in the Friends of the Presidency format. Some of the working groups have continued with a Nordic composition. The main objectives of the presidency — sustainable development, a healthy environment, people-to-people contacts, and good transport contacts — have been promoted without Russian parties. The Senior Officials Meeting held in Kuusamo on 30-31 May 2022 discussed the forms of Nordic follow-up work, and the focus was on green transition and climate change. At the regional level, there have been contacts between the Nordic regions under the leadership of North Karelia in the “Friends of the Future President” format, which has ignored the chairmanship of Nenets. At the national level, the presidency is supposed to rotate from Finland to Russia in the autumn of 2023, with obvious problems.

In a press release of the Regional Council of North Karelia on February 18, 2012, the Ambassador of Finland to Barents anticipated that Barents cooperation will be intensified in the future as an activity between the European Union, Finland, Sweden, Norway, Denmark, and Iceland (North Karelia Regional Council 2022 [pohjois-karjala.fi](https://www.pohjois-karjala.fi)). This would transform the Barents cooperation into the “northern dimension of Nordic cooperation”, with special features such as a sparse population, accessibility challenges and huge investment potential. This is also affected by Finland’s and Sweden’s NATO membership, although the Barents cooperation is not a matter of security policy.

At the beginning of October 2022, a regional meeting on Barents cooperation was scheduled for Rovaniemi, coinciding with the drafting and publication of this report. At the time of reading this report, new policies that were not known at the time of writing may already be adopted.

Background discussions at the regional level in September 2022 strongly emphasised the view that the entire format of the Barents cooperation may have come to the end of its life cycle. All structures are still in existence, but without connections with Russia, there is no glue holding them together. At the same time, there is a strong need for a new form of regional cooperation between Finland, Sweden, and Norway in the northern regions. This would be needed from several perspectives, such as climate, green transition, transport connections, security of supply, defence and electricity transmission. For example, long distances and sparse populations are common in the regions.

In addition, the Sámi region extends to all three countries. The message from regional-level actors to the state is that Finland, Sweden, and Norway should take a fresh look at northern cooperation relations.

It is unclear what form this could take. The traditional North Calotte cooperation includes only Lapland from Finland and Norrbotten from Sweden. Expanding it to the area of the Bothnian Arch, including North Ostrobothnia and Västerbotten, would bring synergies between cross-border cooperation and common economic interests, as there is a strong investment boom in the whole region. The North Calotte is a well-established concept, but it does not seem possible to expand it to Kainuu and Northern Karelia in the current Barents region.

The EU's NSPA (Northern sparsely populated areas) would incorporate the EU dimension, and this is an existing though loose network. However, from Finland, the whole of Eastern Finland would then be included, including the two Savo regions, which would significantly enlarge the Arctic region and reduce the Arctic perspective.

There is clearly room for a new initiative on this issue. The approaching NATO membership of Finland and Sweden also justifies the assumption that the northern regions of the Nordic countries will be seen more as a cross-border entity in the future, and not only from national perspectives.

Regional actors also have a strong interest in reconnecting across the border with Russian regional actors when this will be possible again. However, it is a mystery for everyone in what form, when and under what conditions this could happen. Will the Barents cooperation structures still be relevant at that stage, or should contacts be built on another basis? Different scenarios open different possibilities for this, and cooperation at the regional level is also essentially dependent on national development. It is not conceivable that official regional contacts with Murmansk or Arkhangelsk, for example, could be built if contacts at the national level are kept to a minimum. Another question would be how to react in case an internal crisis were to develop in Russia, and regional actors would try to make contacts independently, bypassing Moscow.

In any of the scenarios of this study, it is difficult to see a return to full-fledged Barents cooperation, where the actual objectives also included the creation of regional cohesion and identity. However, there are many forms of Barents cooperation — such as the environment and rescue — where technical contacts are possible and in the interest of all parties involved once a return to limited cooperation can take place (scenarios 2 and 3, partly also 1).

In other words, in the scenarios, multilateral Barents cooperation may remain more technical and limited, but it may be accompanied by a stronger form of cooperation between the Nordic countries.

The upcoming 30th anniversary of Barents cooperation in early 2023 is likely to make many actors and Member States publicly express views on whether Barents has a future and what it could be like.

3.4 Northern Dimension

The Northern Dimension Policy was initiated in 1999 as an EU cross-sectoral framework programme and was renewed in 2006 as a joint policy framework between four equal partners — the EU, Iceland, Norway, and Russia — all contributing financially. This rather flexible common operating policy and funding scheme aims to promote dialogue and cooperation, particularly in the fields of environment, public health and social welfare, transport and logistics and culture, both in the Baltic Sea and in the Barents regions.

While all environmental and nuclear safety projects have been implemented in Russia and Belarus, the projects dealing with transport and logistics, as well as health and culture have been broadly distributed across the Northern Dimension partners. Examples of projects in the Russian Arctic include Improvement of water services in Arkhangelsk (EUR 25 million) and nuclear safety projects, such as the development of a radiation monitoring and emergency response system in the Murmansk region (EUR 5 million) (NDEP website).

The Northern Dimension involves regular meetings of foreign ministers, deputy ministers and senior officials are held regularly and includes a parliamentary body.

Following the Russian invasion of Ukraine, the implementation of projects in Russia and Belarus has been suspended and the planning of further activities discontinued.

The Northern Dimension setup is unique compared to EU programmes and regional cooperation forums, offering a kind of “back door” for positive cooperation between the EU and Russia (Bailes and Ólafsson 2017, p. 55). The Northern Dimension Environmental

Partnership (NDEP) funding had been extended until 2027, with support for projects aiming at reducing black carbon emissions among eventual actions. Black carbon-related projects in Russia could be cost-effective, introduce best practices and technological solutions, and establish a strong practical platform for cooperation with Russia as regards this key short-lived climate pollutant. All this is suspended now.

Among frameworks, the Northern Dimension is likely to be among the first where re-engagement with Russia can occur, particularly under scenarios 2 and 3, where tensions are limited, and some level of Russia-West cooperation returns to the Arctic. Historically, in the early 1990s, it was exactly the nuclear and environmental projects and issues that were subject to practical and concrete joint work. The implemented projects are of interest to the EU and Nordic countries, as pollution and risks originating from Russia affect, often directly, their territories. The black carbon actions in Russia can be also seen as being cost-effective compared to using the same resources for black carbon mitigation in the northern parts of the EU. Such targeted and mutually beneficial cooperation can be the easiest to justify for both European and Russian stakeholders and decision-makers.

However, as the Northern Dimension is seen primarily as a vehicle for cooperation between the EU and its partners and Russia, a prolonged period of tensions (scenarios 1 and 4) will likely mean that this framework becomes effectively dormant and completely abandoned following the end of the EU's current multiannual financial perspective 2021–2027. Projects implemented in the Nordic states and the Baltic Sea coastal countries will be continued for the time being, and the Northern Dimension funding outside of Russia and Belarus was in the past useful, especially for planning major investments. Moving the Northern Dimension funding to other formats or rethinking the setup of the Northern Dimension without Russia - e.g., linking it even more strongly to the EU Strategy for the Baltic Sea Region (EUSBSR), in which it had already been positioned as an external arm. The interest in such cooperation topics does not directly depend on the overall global interest in the Arctic region.

At present, there are very different assessments of the future of the Northern Dimension, such as shifting funding to other forms or reconstructing the Northern Dimension framework without Russia — for example, linking it more closely with the EU Baltic Sea Strategy, where it has already been an external component.

In the interviews for background information, the respondents considered it possible that the Northern Dimension will become a form of Baltic Sea cooperation within the EU's internal market, involving the EEA countries Norway and Iceland. In this case, partnerships would also be adapted to this region — one scenario suggests that, for example, an environmental partnership could focus on the decontamination of marine areas from industrial waste and World War I and II military waste, and a transport partnership could

promote future modes of transport in the region, such as hydrogen, electric cars, and short-distance electric air transport.

A novel approach to the Northern Dimension would require political decisions at the EU level. The fundamental issue is whether tensions will, in practice, keep Russia out of cooperation for good, i.e., whether the structures should be considered without Russia. The question would then also be whether the whole mode of action is necessary in the new order of things.

The Baltic countries — Estonia, Latvia, and Lithuania — are the EU countries most affected by the Northern Dimension. It is difficult to see, in the light of their relations with Russia, that in any scenario, they would consider it in their interest to return to the broad forms of cooperation in which Russia would be implementing joint policies. If Northern Dimension relations with Russia have a future in the scenario of low tensions, the implementation would probably be very technical.

3.5 Nordic Arctic cooperation

The Nordic Council of Ministers has had multidisciplinary cooperation in Russia since 1995. In early March 2022, the Council of Ministers announced the suspension of cooperation, while Russia ordered the closure of all Nordic activities in the region. There is no longer any Nordic cooperation with Russia.

The current Arctic cooperation programme of the Council of Ministers was drawn up before the beginning of the war in Ukraine, and it is valid for 2022–2024. The programme is closely linked to the Agenda 2030 goals in the Nordic countries and is primarily implemented through joint projects funded by the programme. The Nordic Institute in Greenland manages the programme.

In 2019, the Nordic Council of Ministers, at the initiative of Iceland, developed its own development strategy for North Atlantic Cooperation (NAUST), involving Greenland, Iceland, the Faroe Islands, and the coastal parts of Norway. The areas of cooperation are broad, ranging from tourism to culture, energy, transport, maritime issues, and well-being, with a focus on sustainable development and regional development. The development strategy is based on previous regional cooperation in the North Atlantic region.

The Council of Ministers has also outlined closer cooperation with the western neighbours of the Nordic Countries: Canada, the United States, Great Britain, and Ireland.

In 2022, Finland holds the Presidency of the Nordic Council, and Norway chairs the Nordic Council of Ministers. Neither of the two Presidencies mentions Arctic issues in their presidency programmes.

After the aggression, the Nordic Environment Finance Company Nefco, a part of the Nordic structures, stopped all its operations in Russia. Nefco has had a significant role in the reconstruction of Ukraine. The operations of the Nordic Investment Bank NIB in Russia were already marginal even before the war because of sanctions.

The North Calotte Council operates under the Nordic Council of Ministers. Its members are the northernmost provinces of Finland, Sweden, and Norway. North Ostrobothnia, Kainuu and North Karelia, Finnish regions in the Barents Regional Council, are not involved in the North Calotte Council.

As previously described, the Barents cooperation has transformed at the regional level into cooperation between Nordic regions through the mechanisms and objectives of the Barents cooperation. Maintaining existing structures so far has been an obvious practical solution. However, as the situation continues, a political decision will soon have to be reached to decide which structures are necessary as the political reality has changed.

Finland's and Sweden's impending NATO membership has significantly increased Nordic defence policy cooperation. In the northern regions, this is reflected, among other things, in joint exercises supported by shared logistics in different countries.

In terms of livelihoods, climate, transport needs, contacts between the residents, tourism and security of supply, there is also an increased need to look at the northern regions of Finland, Sweden, and Norway as a whole. So far, there is no clear platform or mechanism for such cooperation. Nordic cooperation could provide a possible platform for addressing such regional Arctic or northern issues. This would require new policy initiatives or policies.

It is noteworthy that in the Finnish Ministry for Foreign Affairs, Barents cooperation and issues relating to the Northern Dimension are administratively in the Department for Russia, Eastern Europe, and Central Asia, while the coordination of Arctic and Nordic cooperation is the responsibility of the Department for Europe. The interruption of cooperation with Russia has created a new situation, as Barents cooperation, for example, has effectively become a part of Nordic cooperation, yet organisationally, it is separate from it.

3.6 EU Arctic policy and cross-border cooperation

Finland has strongly supported the European Union's northern and Arctic engagement and Arctic policy since its accession in 1995. At the EU level, decisions are broad in scope, and the various scientific, regional, and cross-border cooperation EU framework programmes are very important for Finland's national and regional interests in the Arctic. Several of Finland's Arctic objectives can be supported by EU Arctic actions, policies with an impact on the region, as well as funding (including the European Investment Bank). The EU research framework programmes have contributed to the production of Arctic knowledge, and the EU has been an important promoter and supporter of Arctic scientific networks — in which Finnish institutions and researchers have actively participated — in European research organisations and at the level of circumpolar cooperation on issues such as monitoring and evaluation of the Arctic. The EU climate, energy and environmental policies are one of the engines of the green transition in Finland's energy sector and its ambitious climate targets. EU policy plays a key role in the Arctic as a whole, as the EU's environmental and economic impacts are significant (Koivurova et al. 2021).

The war in Ukraine has had a significant impact on EU programmes and Arctic objectives (see sections 3.4 and 3.8 on the Northern Dimension and scientific cooperation). EU funding for Russian partners has been suspended in all programmes, effectively removing Russian institutional participants from ongoing projects. Circumpolar projects and projects in which Russian partners have played a vital role, even if cooperation between Nordic or European partners continues, have been particularly affected by this.

The European Union cross-border cooperation programmes — especially the Kolarctic programme, which is important in the Arctic Region — have contributed to the continuous interaction between Finnish, Nordic and Russian institutions, businesses, and citizens since the mid-1990s. The EU-Russia tensions and the consequences of the illegal annexation of Crimea to Russia had negligible impact on the programmes. Over the last decade, however, cooperation with non-state actors in Russia became increasingly difficult as the civil society lost any independence. After the Russian invasion of Ukraine, Russian partners were excluded from the projects that had already started, and almost all these projects continue among Nordic partners. Kolarctic offices in Murmansk and Arkhangelsk are closed.

Planning for the next Interreg NEXT Kolarctic 2021–2027 programme period is suspended. The Nordic and Northern regions and the European Commission are currently discussing where the European Regional Development Fund (ERDF) funds could be used. The 2022 budget has already been transferred to Interreg Aurora (Norway-Sweden-Finland), and there is now a debate on the use of other funding in border regions that are suffering financially because of the restrictions in border-crossings and for the termination of

cooperation activities. Stakeholders emphasise the high probability that contacts, cooperation dynamics and trust developed over the past three decades will disappear quite quickly (private communication, the Regional Council of Lapland, 30.8.2022).

The forthcoming Kolarctic 2021–2027 programme was intended to focus inter alia on cooperation between SMEs, research and innovation, climate change and disaster prevention, and trust-building cooperation between communities. The previous programme implemented projects with such themes as CO₂ reduction, aquaculture innovation or adaptation of forest management in the Northern Coniferous Zone to climate change (Kolarctic 2021-2027 kolarctic.info). It is worth noting that the Russian authorities and partners were strongly involved in cooperation through the Kolarctic and Karelia programmes in the previous MFF, although the political climate between the EU and Russia has been tense since 2014. Finland, other Nordic countries, and regions, as well as the EU, are losing a tried-and-tested instrument that can, although only to a limited degree, influence environmental issues on the Russian side of the border and have cross-border implications also in Finland and other Nordic countries. Furthermore, in the context of transatlantic Arctic cooperation, the EU can function as a mediator, in particular with Canada.

The attack on Ukraine is also likely to affect many of the EU's Arctic objectives, some of which are expressed in the latest policy orientations (European Commission and High Representative for Foreign Affairs and Security Policy / [eeas.europa.eu/joint-communication HR 2021](https://eeas.europa.eu/joint-communication/HR2021)) (see, e.g., Raspotnik, Stepien and Koivurova 2022).

The European Union has adapted its energy targets to the new situation. The REPowerEU (European Commission 2022) plan — presented by the European Commission in response to the need to end the EU's dependence on Russian fossil fuels — proposed a new target of 45 % of renewable energy sources in the EU's energy consumption by 2030, compared to 32 % in previous legislation and 40 % in proposals drawn up before the Russian invasion. The implementation of renewable energy projects needs to be intensified, which may support climate action but also raise concerns about the environmental and social impacts of the development of renewable energy sources. The EU will also step up the recovery of critical raw materials from more stable and reliable sources, including the non-Russian Arctic regions.

The idea of banning the import of Arctic fossil fuels from new extractive projects in the EU or multilaterally may become a reality in Russia's Arctic region due to sanctions and Russia's own actions that restrict supplies and reduce trust in the country as a dependable supplier. However, in other parts of the circumpolar area, extractive activities can be promoted, at least in the short term.

The current geopolitical and security situation may increase the EU's interest in the Arctic. To date, the EU has been the strongest player and has supported Finland's Arctic objectives in areas such as research, regional development, investment, and networking. However, it is also possible that the EU's interest in the Arctic will decrease due to the economic crisis and instead focus on Central and Eastern Europe, where the reconstruction of Ukraine is likely to require considerable resources.

EU-Russia relations and cooperation programmes can be expected to be one of the most affected Arctic forms of cooperation. Programmes such as Kolarctic do not have plans or budgets for the 2021-2027 multi-annual financial framework. In scenarios with relatively low tensions, cross-border cooperation can be expected to return in some form from 2028 onwards. However, the experience and capabilities of cooperation in Russia are likely to disappear. The nature of these programmes is also strongly influenced by the political powers governing Russia.

EU investment in Arctic research and Arctic issues in the context of international negotiations is likely to continue in all scenarios, including beyond 2027, depending more on the political and economic changes taking place in the EU. However, interest in the Arctic in the EU is relatively low and is likely to deteriorate further in scenarios where global interest in the Arctic is marginal, affecting the interest of the European public. This, in turn, affects Finland's ability to encourage the Union to invest in the development of the Arctic region and to maintain higher funding for sparsely populated areas in the north. The economic aspects of EU interest in the European Arctic — the development of renewable energy and the extraction of critical minerals — are problematic as some stakeholders and rightsholders oppose these actions and are increasingly criticising green colonisation. However, the EU remains the most important channel for Finland to influence key European and global processes that are relevant to the achievement of Finland's Arctic environmental objectives. Finland's objectives depend to a considerable extent on global climate change mitigation, adaptation to climate change and the means of implementing the European Green New Deal, such as nature-based solutions, the classification of bioenergy as a sustainable form of energy and the protection of biodiversity.

3.7 Arctic Indigenous Peoples

Of the four million inhabitants of the Arctic, about 10 per cent are indigenous peoples. The Indigenous peoples of the region are characterised by the fact that, as states spread into the Arctic, many indigenous peoples were scattered into several states. For example, the Sami and Inuit live in four countries. These nations have gradually developed their internal cooperation and established their own international organisations, such as the Nordic

Sámi Council in 1956, which included Russian Sámi in the early 1990s. The international Inuit organisation, the Inuit Circumpolar Council ICC, was founded in 1977.

Although these international organisations in the Arctic have participated in global and regional processes, the Arctic intergovernmental cooperation has been of particular importance to them. Already during the period of Arctic environmental cooperation, when the ICC, the Sámi Council, and the Organisation of Russian Indigenous Peoples (RAIPON) were observers, the Indigenous Secretariat was established in 1993 to support the activities. With the establishment of the Arctic Council, indigenous peoples' organisations were given permanent participation status, i.e., they sit at the same tables as representatives of states and have a strong role in decision-making. States must consult permanent participants before taking decisions, and in the practical work of the Council; if they object to a specific decision proposal, it usually does not even go forward to decision-making (Koivurova and Heinämäki 2006). It is important that the six indigenous organisations that are permanent participants in the Arctic Council have also been invited to attend, for example, the meetings of Arctic science ministers or Arctic environment ministers. In Barents cooperation, the indigenous peoples of the region (Sámi, Nenets and Vepsians) have also participated in cooperation at both state and regional levels through the Working Group of Indigenous Peoples.

For Arctic indigenous peoples, the interruption of cooperation in the Arctic Council has been difficult. The Russian indigenous peoples are represented in the Council by the Russian Association of Indigenous Peoples of the North (RAIPON), whose leadership the Russian state changed, and which has already approved Russia's invasion of Ukraine in a statement (for more details, see Zmyvalova 2022). Three of the other permanent participants of the Arctic Council — the ICC, the Sámi Council, and the Aleut International Organisation — also represent indigenous peoples living in Russia. Two of these organisations (the Sami Council and the Inuit Circumpolar Council) have stressed in their statements the importance of continuing cooperation within the Arctic Council and expressed concern that, once again, state action threatens their unity; however, they do not condemn Russia's military action in Ukraine in their statements. In its opinion, the Inuit Circumpolar Council stresses that the Arctic must be an area of peaceful cooperation and expects the Arctic Council to proceed after a temporary break (Statement from the Inuit Circumpolar Council concerning the Arctic Council 2022, [inuitcircumpolar.com](https://www.inuitcircumpolar.com)). The Sámi Council has so far stopped the participation of its Russian members (Sámi Council 10.4.2022, [samicouncil.net](https://www.samicouncil.net)). Russian member organisations responded by making their own declaration calling for strong international efforts to restore their status in the Sámi Council (Sámi Council 27.2.2022, [samicouncil.net](https://www.samicouncil.net)).

The Arctic indigenous peoples are now in a difficult situation. The cooperation of the Arctic Council especially is of utmost importance to their work. They are permanent

participants in the Arctic Council and can promote the interests of their people in their homeland. Three organisations have some members of their people in Russia, which is problematic for the seven Arctic states in a situation where the Arctic Council has suspended all activities with Russia. The Sámi Council must also be able to find a solution internally on how to reinclude the Sámi people of Russia in their work (Saami Council 10.4.2022, samicouncil.net). As stated above, diplomatic efforts aim to restore the functioning of the Arctic Council over a certain period, so permanent participants in this scenario would be able to continue their work. At present, the Arctic Council is not working, so according to the Reykjavik working work plan, scientific assessments are conducted by individual scientists, with seven Arctic countries instructing the work. In the future, if only individual researchers exchange research reports, there is concern that indigenous peoples' data will not be considered, and indigenous organisations will not be involved in the reporting to the same extent as in the Arctic Council working groups (interview 13.9.2022).

Some of the permanent participants have been disappointed that during the difficult crisis in the Council, indigenous peoples' organisations have not been actively involved in resolving the situation. They have been informed of what steps are taken, but they have not had the opportunity to participate. The permanent participants, after all, have played a very important role in the cooperation of the Arctic Council, and in general, countries are trying to find consensus not only with each other but also in such a way that any decision would be acceptable to all permanent participants. Indigenous peoples understand the reasons for the current dilemma, but they have also considered how to strengthen their position in the Arctic Council cooperation (interview 12.9.2022) once the Council can resume its operations. They also point out that in such situations, it would be very useful to hear the thoughts and ideas from people who are native inhabitants of the region and who continue to live in these unique areas. They also have long-term knowledge of what it is to act in the Arctic Council; these organisations also have long-term prospects for Arctic cooperation. This may be lacking in Arctic states, as the staff dealing with Arctic matters on behalf of states may often change. (Interview 12.9.2022).

The status of Arctic indigenous peoples will in some way be preserved in all scenarios. However, the more acute the tensions in the Arctic region will be, the more difficult it will be for the Arctic indigenous peoples to find their place in the cooperation. In these scenarios, Arctic indigenous peoples are more likely to focus on global cooperation processes or on activities promoting the status of indigenous peoples within the UN framework. Above all, the Inuit Circumpolar Council and the Sámi Council are already very much involved in global treaty processes (such as the Stockholm Convention on Persistent Organic Pollutants or the Minamata Convention on Mercury) or in the activities of global organisations. In addition, permanent participants will be invited to meetings of Arctic Science Ministers, which are expected to continue as they take place between more

than 20 countries (Science Ministers Statement 2022, eeas.europa.eu). If the international political situation stabilises and the tensions in Arctic cooperation decrease, it will be crucial for the indigenous organisations in the region, as they will be able to act, especially through the Arctic Council as permanent participants.

3.8 Research and Arctic science cooperation

International research and Arctic sciences and education cooperation were also interrupted due to Russia's invasion of Ukraine. The International Arctic Scientific Committee (**IASC**) is the leading international scientific organisation in the Arctic region. It is represented by academics from each member state. Under the leadership of the Executive Council, the IASC condemned the attack and supported the statement by the Arctic Council of seven countries. At the same time, the IASC noted that its decision-making body will discuss the matter at its next meeting as part of the Arctic Science Summit Week ASSW (IASC Statement 2022, iasc.info). The ASSW took place in Tromsø from 26 March to 1 April 2022, and the local organisation announced that individuals representing Russian institutions, organisations or companies will not be accepted to attend the event (ASSW 2022 Statement, assw.info). However, the decision-making body of the IASC was unable to make a more precise statement on the impact of Russian aggression on the IASC's operations. The decisions of the decision-making body are always taken by consensus, and this time, Russia opposed the decision. The March Executive Council statement was possible because it was made by the majority without the express approval of the Russian representative. China criticised this procedure at a later meeting of the decision-making body (interviews on 2 September 2022). The IASC is currently considering what will be the line for the next ASSW conference in Austria. For example, if the local organiser allows online participation from Russia, this may cause tricky situations between the parties (interviews 2.9.2022). IASC has some other projects and working groups that also involve Russians. The guidelines for these are based on the sanctions in force in several countries prohibiting, among other things, the transfer of money to Russia (and thus preventing practical action), but in principle, the Russians are participating remotely.

The International Arctic Social Sciences Association (**IASSA**) stated on 8 March 2022 that it supports the declarations of the seven Arctic Council countries and agrees with the opinion of the International Science Council. It emphasises that military clashes create an atmosphere that makes science more difficult (IASSA Statement 2022, iassa.org). The United States Arctic Research Consortium **ARCUS**, which also has members from Russia, Europe, and North America, finally decided not to make a statement. It suspended the membership of its Russian member and follows the guidelines of the National

Science Foundation (NSF). Therefore, it does not cooperate with Russian or Belarusian organisations.

The **University of the Arctic** (UArctic) differs from the two aforementioned Arctic scientific organisations in two fundamental ways: it is founded by the Arctic Council and implements not only scientific cooperation but also education. UArctic has not made an organisation-level statement, but the Chairman of the Board stated that UArctic respects the opinions of seven countries (UArctic Statement 2022, uarctic.org). The UArctic Board then adopted a broader policy (UArctic Actions on Ukraine 2022, congress.uarctic.org) that condemned Russia's actions and made practical decisions. The Russian member universities (55 in total) were temporarily shut out from the activities of the Arctic University. This approach in the Board was possible because Russian members of the board were not invited to the meeting. The Board also proposed to its Russian members that they should resign, and they did. However, UArctic has suspended three board seats so that it will be possible to appoint Russians to the Board once the situation allows Russia to return to UArctic. UArctic also abolished the task of promoting regional cooperation, which was coordinated by the Russians, and suspended operations in its two offices in Russia. However, the heads of the thematic networks were given the freedom to decide whether Russian researchers could be involved, and in many thematic networks, the Russians still participated (interview 2.9.2022).

Europe has also made significant scientific contributions to Arctic research. European Union research funding for Russia practically halted in March 2022, just a week after the start of the Russian war of aggression. This meant that EU member states would no longer be able to cooperate in research with Russian organisations. The guidance also applies to ongoing projects and other research and scientific cooperation (see, e.g., EU research news 4.3.2022, pubaffairsbruxelles.eu). Each Member State defines their rules on cooperation between individual researchers. According to the guidelines of the Finnish Government, research cooperation between individuals is not limited, but in practice, it poses significant challenges related to, among other things, the safety of individuals. Another obstacle is the fact that no work, whether already done, in progress or in plans, can be remunerated to Russia. However, this does not always apply to Russian citizens who live abroad and have a foreign bank account. They have been able to continue in EU-funded research projects, at least so far.

The current situation poses challenges to EU research and innovation policy. EU Arctic policy has also been challenged to face a reality for which it was unprepared. Arctic issues keep coming up, such as the question of the implementation of the EU Arctic policy in the current context. The Commission will order a report on this. Several Directorates-General, such as Research and Innovation (DG RTD) and Maritime Affairs and Fisheries (DG MARE),

are faced with the urgent need for scientific knowledge in the Arctic while preparing their research programme.

From Finland's perspective, the new challenges and needs of research must be highlighted by a strong influence on the EU, in particular the European External Action Service (EEAS), the European Commission's Directorate-General for Research and Innovation (DG RTD), the Directorate-General for Maritime Affairs and Fisheries (DG MARE), the Directorate-General for Defence Industry and Space (DG DEFIS) and the Commission's Research Executive Agency (REA). A strong influence in the EU requires strong national focus and coordination. Arctic issues need to be included in the preparation of the next Horizon Europe Strategic Plan 2025-2027.

The situation caused by the war in Ukraine has also sparked heated debate in the **European Polar Board (EPB)**, the leading independent organisation coordinating European polar research. The EPB has 29 member organisations, the Thule Institute of the University of Oulu and the Arctic Centre at the University of Lapland from Finland. EPB member organisations have divergent approaches regarding the level of research cooperation with Russia and Belarus. This is partly due to different interpretations of the EU policies, one extreme being represented by, for example, the German full boycott and another from Finland's perspective, which still allows for cooperation between individuals. In practice, these differences have an insignificant impact on the EPB's day-to-day work because cooperation cannot even be planned in the direction of Russia and Belarus due to the freezing of payments.

If tensions between Russia and the West remain at the current elevated level, as described in scenarios 1 and 4, the practice of research is likely to become more difficult. For decades, Russia and Russian research organisations have played an ever-strengthening, significant role, which, at least for the time being, they no longer have. Russia covers about half of the Arctic region, and the interruption of research cooperation with Russia is causing significant gaps in research data on the Arctic. Many Finnish Arctic research projects have conducted fieldwork in Russia. These had to be interrupted or redirected. The situation cannot change in the foreseeable future.

Scenario 1 could result in leading Russia and other Arctic states in different directions, which could result in a likely strengthening of transatlantic Arctic science. For example, the continuation of the Arctic-wide operation of UArctic is strongly linked to the development of the situation in Russia. UArctic has received funding from the Ministry of Foreign Affairs to refocus its operations. UArctic is a member of the International Science Council and has a strong influence on UNESCO. The aim is also to raise Arctic issues in these global organisations (interview 2.9.2022). Promising Arctic research cooperation takes place through the activities of the Arctic Five university network, which includes thousands

of researchers and is not directly affected by the Russian war of aggression. Arctic Five network partners are the universities of Lapland and Oulu in Finland, the Luleå University of Technology and Umeå University in Sweden and the Arctic University of Tromsø in Norway. The core of the network activities is education and research in the fields of energy, health and well-being, mining, regional development, and teacher training. Special emphasis is placed on cooperation relating to the indigenous peoples in the region.

If geopolitical tensions remain low, as assumed in scenarios 2 and 3, scientific cooperation with Russia will be possible. As we have seen, the IASC plays a key role as a key Arctic science organisation. Russia continues as a full member of the IASC, although much of Russia's foreign Arctic research is in a state of stagnation. In the longer term, there has been discussion on whether science can be a tool for putting pressure on Russia (interview 29.2022). The interruption of scientific cooperation with Russia hampers important research aimed at understanding environmental and climate-related changes.

These kinds of ideas open opportunities for continuing research cooperation with Russia after a while.

Whether the Academy of Finland will be able to respond to the critical challenges that have arisen quickly and to the needs of research data is a crucial factor in how changes in the Arctic can be monitored, understood, and communicated to decision-makers. Climate change has not taken a time out because of the war in Ukraine.

3.9 Arctic Economic Council AEC and business cooperation

The Arctic Economic Council (AEC) was established in 2014 on the initiative of the Canadian chairmanship in the Arctic Council. AEC's objectives include bringing the views of the corporate community to the work of the Arctic Council. However, it acts as a fully independent cooperation forum for the business community. AEC promotes business-to-business cooperation and responsible economic development in the Arctic region and in global value chains that utilise the expertise developed for demanding Arctic conditions. The Economic Council is an open community that runs on membership fees, with the participation of companies, business organisations and indigenous communities with economic interests in the Arctic. In addition to the actual members, large support groups have been involved in activities in different countries. Like the chairmanship of the Arctic Council, the chairmanship of the AEC also rotates between the business communities of the Arctic countries. The Secretariat is in Tromsø, Norway. The concrete work of the Council is led by working groups that study and develop the conditions for sustainable business in the fields of shipping, infrastructure and investment, mining and resource use, telecommunications, and the blue economy. According to the AEC, its three key

tasks today are to make the voice of stakeholders heard in policy development, to build networks through partnerships and working groups, and to promote the Arctic as an attractive area for business.

The Russian aggression has significantly weakened the operating conditions of the Arctic Economic Council but the operations have not been suspended. Since the activities of the AEC are not based on an intergovernmental agreement or consensus decisions, it can, in principle, continue to operate in different configurations. However, the operating conditions are affected by the fact that the representative of the Russian corporate community is chairing the Arctic Economic Council in 2021–23.

The AEC Executive Committee published a statement on 1 March 2022 where it, with a majority decision, condemned the Russian invasion of Ukraine. The statement stresses that the Economic Council, inspired by the Arctic Council, was set up as a place for dialogue between nations and people in the north. *"For centuries people have traded and travelled across the borders in the region. The Arctic identity brings us together both in private and work contexts and therefore it has often been known as the region of high north – low tension."*

The work of the Economic Council has continued with some changes. Russian companies on the Sanctions List have been removed from the list of members, but there are still Russian non-EU companies in the Council as members. Some Western companies have suspended their participation in the Economic Council, at least for the duration of the Russian Chairmanship. So far, there is no clear indication of the possible impact of the change of chairmanship on the conditions and direction of operations and on the willingness to participate.

However, the future of the Arctic Economic Council is strongly influenced by how geopolitical tensions in the Arctic will develop. In the scenarios of the report, at least the frozen tensions scenario is likely to have a negative impact on the attractiveness of the Arctic from a business point of view, and the corporate voice in policy development is unlikely to be at its strongest. On the other hand, the Arctic at the centre of the geopolitics scenario may also involve aspects of trade and trade policy, but also, to an increasing extent, conflicts of interest, which make it difficult to cooperate on regulatory development and infrastructure investment. In other scenarios, the operating conditions of the Economic Council may even improve, but its role as a global player will be reduced. The scenario of return to the 1990s is a situation where especially the northern countries, possibly with Canada, could play an increasingly important role in cooperation, while the limited international cooperation scenario also implicates a recession in international economic cooperation. It seems quite clear that none of the scenarios discussed will have a positive impact on the networking and effectiveness of corporate communities across

the Arctic, and the Arctic sustainable economic development faces increasing challenges and risks.

3.10 Global structures relating to the Arctic

Many key issues for the future of the Arctic will be decided by international and regional intergovernmental organisations and agreements between them. The future of the Arctic region will most clearly be determined by the success of the global fight against climate change or species loss. International agreements aimed at preventing long-range transport of air pollutants to the Arctic are also important. The specialised UN agency, the International Maritime Organisation (IMO), has adopted a code known as the **Polar Code**, which guides safer and more environmentally sustainable shipping in polar areas, including in the Arctic.

Crucial climate change response in the Arctic and adaptation to its impacts will take place through the Paris **Climate Change Agreement**. Climate science is progressing with the work of the Intergovernmental Panel on Climate Change (**IPCC**). This is one of the key levels for the long-term future of the Arctic. Other examples include the development of the polar code for shipping, the reduction of long-range pollution into the Arctic or the negotiation of the so-called **BBNJ treaty** to enable the exploitation of marine genetic resources and the protection of biodiversity in the high seas.

Background interviews for the study do not provide a clear picture of Russia's current role in international organisations. There are indications that it is not very active in them. However, since the pandemic, many of these mechanisms have operated in exceptional circumstances for a long time, making postulating more difficult. However, it is obvious that the current difficult geopolitical situation exposes even the multi-lateral system to polarisation, which affects the level of ambition and efficiency of multilateral organisations and processes.

The **UN Security Council** discussed the Russian invasion on 25 February. As the Security Council needs the approval of all its permanent members for its activities, all it could do was convene a meeting of the UN General Assembly for an emergency session. The majority of countries in the world condemned the Russian invasion as illegal and strongly urged it to put an end to its illegal invasion of another independent state (UN News Report 2.3.2022, news.un.org). The resolution was adopted by 141 countries, with five voting against it and 35 abstentions (12 countries were not present). In their statements, the International Maritime Organisation and its bodies largely followed the guidelines of the General Assembly and forcefully condemned Russia's invasion. In general, it can be said that the countries of the world are divided in whether they condemn Russia's aggression

in international organisations and treaty meetings. Despite Russia's illegal invasion, these international bodies and conferences of the contracting parties will continue their work. For example, efforts are being made to promote the content of the IMO Polar Code and to improve its implementation, although it may be thought that the overall climate for promoting work has deteriorated (interview 30.8.2022).

Just after the Russian invasion, the Intergovernmental **Panel on Climate Change (IPCC)** held its virtual meeting on 27 February 2022. The representative of Russia made a rare speech at the meeting. He said he was sorry for all Russians who had not been able to prevent the invasion of Ukraine (Washington Post 27.2.2022, [washingtonpost.com](https://www.washingtonpost.com)). Generally, however, in climate regulation and in meetings under the Convention on Biological Diversity, Russia has defended its actions, and it seeks to participate in various international meetings and organisations. For example, at the meeting preparing for the Conference of the Parties to UNFCCC in Bonn, Russia was well represented (List of participants at the Bonn Conference), although Russia's invasion of Ukraine was condemned by many. Work has continued in the technical climate change subgroups. Russia has also announced that it will continue as a member of the treaty, although it has resigned from its own group of countries (interview 6.9.2022). Russia also participated in the General Assembly of the Intergovernmental Panel on Climate Change (IPCC) from 21 March to 1 April (IPCC General Assembly 2022).

Russia also participated in the meeting of the subsidiary bodies of the **UN Biodiversity Conference** CBD in March and the post-Aichi negotiations for the Global Biodiversity Targets (Earth Negotiations Bulletin 22.6.2022, enb.iisd.org). Russia has also continued to participate in the agreements on the reduction of long-range transboundary pollution. It has continued to participate in the Stockholm Agreement, which regulates the transboundary movement of persistent organic pollutants into the Arctic. Russia's actions were condemned at a joint meeting of the Conference of the Parties in Stockholm and other agreements, but the Russian spokesperson stated that Russia was only defending itself (6–17.6 Report). Russia is not a party to the Minamata Mercury Agreement.

Under the UN Economic Commission for Europe (Finnish Treaty Series 15/1983), Russia is a party, has also ratified some of the protocols and continues to operate under the Convention (List of participants UNECE 2022, unece.org). The meeting of the Executive Body is held annually in December, so the previous meeting took place before the invasion of Ukraine. The Working Group on Strategies and Review (WGSR) had a difficult meeting on 11-14 April 2022. Russia's actions were widely condemned, but the meeting was able to deal with the items on the agenda. Russia is the permanent chair of Eastern Europe, Caucasus and Central Asia (EECCA) by the decision of the Executive Body. This decision is likely to have to be amended at the meeting of the Executive Body in December (interview 6.9.2002).

To sum up, Russia continues in all the global negotiation processes essential to the Arctic, although it is unclear how much it has contributed to these meetings. The most recent was the fifth round of negotiations under the UN Convention on the Law of the Sea on the protection and sustainable use of biodiversity in marine areas beyond national jurisdiction (the so-called BBNJ Convention). In these global negotiations, Russia's invasion of Ukraine was condemned in both the fourth and fifth rounds of negotiations (reports of 4th and 5th rounds of BBNJ) mainly by Western countries. In general, although Russia participates in the negotiations, it has received little support for its ideas, and it does not seem to seek to contribute to the conclusion of the BBNJ convention (email received 20.9.2022).

If the tensions caused by the war in Ukraine remain strong, as in scenarios 1 and 4, this will also affect the atmosphere that prevails in global treaty negotiations and international organisations. The atmosphere usually influences the ambition of the multilateral international system to tackle key challenges for the future of the Arctic, such as climate change or biodiversity loss.

If tensions can be stabilised, it is likely that the traditional strong interaction between the Arctic Council and the levels of global governance will only be strengthened, especially in scenario 2. Already, much of the Arctic Council's activities are linked to various levels of global governance.

3.11 Other cooperation: Parliaments, NGOs, cities, and regions

The **cooperation between parliamentarians** in the Arctic began in 1993 (i.e., even before the Arctic Council was established) with the aim of promoting cooperation between the parliaments and parliamentarians of the Arctic countries and the flow of information on Arctic issues. The cooperation included the parliaments of eight Arctic countries (Nordic countries, Russia, the United States and Canada) and the European Parliament. It is based on the rule of procedure, according to which all decisions on Arctic parliamentary cooperation are taken by unanimity. In addition, the rules of procedure state that a conference of Arctic parliamentarians will be held every two years, where Arctic delegations from member states meet in the context of Arctic themes. Between the conferences, cooperation between representatives of the Arctic parliamentarians is led by a standing committee. The current representative of Finland in the Standing Committee is Mikko Kärnä, who chairs the six-member Arctic delegation of the Finnish Parliament. The Standing Committee is chaired by Aaja Chemnitz Larsen, MP, Parliament of Denmark, and coordinated by the Danish delegation.

On 8 March 2022, the Standing Committee of Arctic Parliamentarians published a declaration adopted by seven member countries (Nordic countries, U.S., Canada) which states that the Arctic parliamentary cooperation is suspended for the time being because of Russia's invasion of Ukraine. It also notes that the Standing Committee will continue to closely follow the geopolitical situation. Russia opposed the opinion of the Standing Committee on the suspension of the cooperation and considered that this kind of decision should be taken by consensus in accordance with the rules of procedure in force.

In spring 2022, representatives of the Standing Committee from seven countries unanimously decided at the virtual meeting that cooperation on Arctic themes could be resumed, but without Russia. The main sectors of parliamentary cooperation are climate change, people in the northern regions and a sustainable economy.

Since the beginning of the war of aggression against Ukraine, Russia has no longer been invited to the meetings of the Standing Committee nor to the recent meeting of Arctic parliamentarians in Nuuk (11-13 September 2022). The Nuuk meeting was named the Arctic Parliamentarians Summit — Nordic and North American Collaboration, not the traditional Conference of Parliamentarians of the Arctic Region (interview 19.9.2022).

The Northern Forum (Northern Forum) has long roots as a representative of Arctic cooperation. The forum, created in the early 1990s, had, at its best, more than 20 members from ten countries and became an observer in the Arctic Council. Over time, the forum slowed down, and almost all western members quit the forum, but in recent years it has regained members. In 2021, Lapland became the chair of the Forum, but after the beginning of the war, Lapland suspended its chairmanship and is likely to leave the forum by the end of the year.

Since the war in Ukraine, the Forum activities have been in the hands of the Russians — the secretariat is located in Yakutia — and the Northern Forum has become one of Russia's Arctic policy instruments. Among other things, the Forum has started to attract Chinese members and has led to an initiative for a Russian-Asian Arctic Research Consortium with members from China as well as from South Korea, India, Vietnam, and Singapore.

The original idea of the Northern Forum has thus changed completely since the beginning of the war, but so far, no other forum for regional cooperation outside the Nordic countries has been developed in the Western Arctic regions, and even at the level of objectives, there is no platform for cooperation of the circumpolar regions.

Arctic Mayor's Forum is a network of members from all seven Western Arctic countries. From Finland, the members are Kemi, Oulu, Rovaniemi and Tornio. There were only two observers from Russia, so urban cooperation could continue even after the war without

any major disturbances. The aim of the collaborative forum of mayors is to give a voice to local government in decision-making in the Arctic. This year, the Forum appointed its first full-time Secretary-General based in Tromsø.

The **World Winter Cities Association for Mayors**, with Rovaniemi as a member from Finland, has suspended its activities this year. The association has members from cities in Russia, China, Canada, Korea, and Japan.

One of the strongest Arctic NGOs is **the WWF Arctic** Programme, which is also an observer in the Arctic Council. The WWF international level did not clearly condemn the Russian aggression, although it condemned the war in Ukraine as contrary to the UN Charter and expressed its concern for Ukrainian civilian casualties (WWF Statement 2022, [updates.panda.org](#)). This may be because the WWF has a strong Russian member organisation. WWF-USA made its own statement in which it added a declaration that it would suspend the financing of Russian programs (WWF-USA Statement 2022, [worldwildlife.org](#)). WWF Central and Eastern Europe also strongly condemned Russia (WWF-CEE Statement 2022, [wwfcee.org](#)). The WWF Arctic Steering Group has started a discussion on how this will affect the organisation's activities in the Arctic region. The WWF Arctic Programme has its hands full as it works at all levels of government (international, EU, national, and state levels) to protect the Arctic environment. In addition, in spring 2022, the Norwegian Ministry for Foreign Affairs consulted WWF Norway and WWF Arctic Programme on Norway's priorities during the Arctic Council chairmanship (interview 14.9.2022).

Arctic cooperation networks also include the major international Arctic conferences, such as the **Arctic Circle Assembly** in Reykjavik, **Arctic Frontiers** in Tromsø and the biannual **Rovaniemi Arctic Spirit** in Rovaniemi. Each of these is once again in full operation after the Covid-19 pandemic, but it is clear that official Russia will be out for the time being. On the other hand, it is likely that in the conferences, Russian researchers and other actors who have moved outside the country will be able to gain visibility that official forums such as the Arctic Council could not provide. Conferences that are broad in scope may therefore provide an important platform for discussion on the whole Arctic, where the Russian voice will mainly be critical to the country's regime.

Most participants in grassroots Arctic NGOs, such as youth networks, are individuals rather than representatives of institutions. Individual contact with Russians may have been possible, but the focus of communication may have been on securing a person living in Russia. In practice, open international civil society activities are no longer possible in Russia.

Over time, Arctic cooperation networks have expanded to include northern administrative units. If geopolitical tensions remain high, especially in scenario 1, cooperation in the

Arctic could potentially be divided into Western and Eastern Arctic cooperation. For example, the cooperation of the Northern Forum seems to be turning east. On the other hand, if tensions are mitigated, as in scenarios 2 and 3, and the cooperation of the Arctic Council can be relaunched, this will also contribute to comprehensive cooperation at the level of NGOs and at the administrative level. For example, in the cooperation of Arctic mayors, the aim is to extend it to the entire Arctic region, and, at some point, the forum aims to become an observer of the Arctic Council.

4 Impacts of the changes on the objectives of Finland's Strategy for Arctic Policy

4.1 Overview and approach

The aim of Finland's Strategy for Arctic Policy, adopted in the summer of 2021, is to promote sustainable activities in four priority areas: climate change, inhabitants, expertise, infrastructure and logistics. The strategy stresses that all activities in the Arctic must be based on nature's carrying capacity, climate protection and the principles of sustainable development and respect for the rights of indigenous peoples. For each priority area, the strategy also defines the UN Agenda 2030 Sustainable development goals, whose global progress is linked to the measures in the priority area. From this perspective, we can also examine the objectives related to Finland's economic interests.

The introduction to the strategy describes the international operating environment and the security situation. Although the description of the operating environment and security policy in 2021 highlighted the intensification of military tensions, it did not foresee today's situation, where Arctic cooperation has become significantly more difficult. The descriptions of the international operating environment and the Arctic cooperation structures in Finland's Strategy for Arctic policy are largely no longer relevant.

The strategy describes Finland's goal as "a peaceful Arctic region marked by constructive cooperation. Increasing tensions and conflict potential must be avoided." The Arctic is still in a state of peace, but in other respects, the situation has developed in the opposite direction to the goals expressed in the strategy. This will have both direct and indirect effects on many of the fundamentals of the Strategy for Arctic Policy, including those that are not directly related to security policy or relations with Russia.

This chapter of the report examines the impact of the Russian war of aggression on the prospects for the implementation of the Strategy for Arctic Policy, especially from the perspective of sustainable development. Each priority area is assessed for the direct impacts and risks caused by the war of aggression, as well as a more detailed overview of the measures the war is expected to affect directly. Although the energy crisis and inflation resulting from the aggression will negatively impact all the measures of Finland's Strategy for Arctic Policy to some extent, this is discussed only with the measures where energy and inflation are especially relevant. It should also be noted that the implementation of the strategy measures is influenced by a number of other changes

in the operating environment (e.g., changes in domestic policies, new technologies and/or advances in the scientific community) which may both weaken or strengthen the implementation of the measures. Such “other changes in the operating environment” are excluded from this report.

At the end of the appraisal of each priority area, the longer-term effects of the geopolitical situation on the implementation of the sustainable development goals are briefly discussed from the perspective of the scenarios described earlier in the report.

4.2 Impacts of changes on the objectives of the strategic priorities

PRIORITY 1: Climate change, mitigation, and adaptation

The priority area implements the following goals and subgoals of the Agenda 2030 for Sustainable Development:



The impact of the war of aggression on ecological development, the protection of the natural environment, and climate change adaptation and mitigation comprises many uncertainties. Estimates of its impacts also vary depending on whether we consider the impacts during a brief period, less than five years, or longer-term impacts of more than five years.

In the short term, the effects on climate change mitigation and conservation of biodiversity are generally negative. According to the strategy, Finland must strengthen its pioneering role in climate change mitigation and phase out fossil fuels by developing decentralised renewable energy production. As Russia’s energy imports decline, at the time of drafting the report in September 2022, Finland is in a situation where the perspective of security of supply may override the carbon neutrality targets as we are looking for solutions to meet acute energy needs. There is debate, in particular, about using peat for energy, which Finland has been significantly reducing, as well as

wood-based bioenergy, which is supposed to replace peat at least partly, but significant increase in its use does not support Finland's climate objectives.

Direct impacts can be identified on the implementation or follow-up of some measures in the priority area (as far as they have already been implemented).

The strategy aims to support international and Arctic cooperation and EU climate action, including reducing black carbon emissions, strengthening adaptation, and protecting the environment. As noted in chapter 3.8., international research and development related to the climate and the environment in the Arctic are currently operating in a high degree of uncertainty as to the future operating conditions. The current uncertainty about the state of cooperation in the Arctic Council, for example, as well as in the EU Arctic policy, makes it difficult to assess the ecological status of the entire Arctic region. The slowdown and/or cessation of EU and Nordic development banks' project activities in the neighbouring regions in Russia creates new risks that Finland should in one way or another take into account in its Arctic policy. In the longer term, lack of data about the ecological state of the area, such as the condition of the permafrost in Siberia, weakens our ability to understand the effects of climate change and to prepare for them in a science-based and efficient manner.

The strategy aims to improve Finland's operational readiness for adaptation and strengthen climate risk management by adding information related to changes, risks, costs, and benefits in the Arctic region, as well as the utilisation of data in the maintenance and development of infrastructure in the northern regions, among other things. This is largely nationally maintained data that is not significantly affected by the state of international Arctic cooperation. However, climate risks are not national, and the situation in Russia and the weakening of cooperation can lead to a lack of information exchange, some risks to Finland's immediate regions and thus insufficient preparation and prioritisation in promoting sustainable adaptation measures.

The strategic measure to promote cooperation related to transboundary water courses with Sweden, Norway and Russia will continue under the current circumstances. However, it is unclear what the current state of cooperation is with Russia. The sustainable use of water bodies and the preservation of their quality are, however, absolutely essential for the preservation of natural ecosystems and their diversity.

Efforts to prevent and raise awareness of the spread of alien species into the Arctic have also been conducted both at national level and by contributing to the CAFF and PAME Working Groups of the Arctic Council to develop skills and capabilities and international surveys of invasive alien species in the Arctic. This work will be negatively affected, at least in the short term, by the precarious situation of the Council working groups.

Finland for its part has contributed to the work supported by the Arctic Council to establish a comprehensive network of marine protected areas in the Arctic Sea. According to the work plans, the results of the preparatory project on the prerequisites for the work of the network were expected this year. The operation of such a regional network is based on cooperation between public authorities and the exchange of information between states, and it calls for these relations to be maintained.

Measures to help the disaster preparedness of nature-based livelihoods (forestry, agriculture, fisheries, game hunting, and reindeer husbandry) and development of disaster monitoring are likely to continue at national level, as in the past. However, many of these risks are not local and the areas affected by potential damage are often large. If cross-border cooperation between authorities deteriorates or is not prioritised, reduced exchange of information can have dire consequences on the level of preparedness in different countries.

Actions to strengthen climate-wise infrastructure and construction, circular and bio-economy, resource efficiency and the network of carbon-neutral municipalities may be undermined in the short term if resource use is prioritised only according to the acute needs caused by the war. On the other hand, the development of the northern circular and bioeconomy and related infrastructure has been identified as critical for a just green transition and, for example, as a target of EU cohesion policy funding, and in this perspective, the Russian aggression is not likely to change the focus of the Just Transition Fund and the Sustainable Growth Programme for Finland.

In the case of other measures, no significant impact of the Russian aggression was identified. Among these measures are Arctic food security and adaptation of local livelihoods to climate change, the adaptation programme for the Sámi areas and environmental impact assessment in cooperation with the local population. Our assessment is that the changed geopolitical situation has no direct impact on the possibilities for these measures to be implemented. However, to anticipate potential indirect risks, it would be useful to further strengthen the climate resilience of the Arctic by increasing climate and environmental cooperation with the local and indigenous communities.

In the longer term, the impacts on climate change mitigation and adaptation may not be purely negative or very significant. The decoupling of fossil fuels in Finland and the rest of the world may even become stronger and faster as we try to overcome our dependency of Russian energy. If we can achieve this decoupling in accordance with the principles of a just transition, the effects may turn into a strong positive development also in the northern regions of Finland. However, there is a risk that as the crisis escalates, we may make short-sighted decisions that can irreversibly compromise ecological sustainability. In this case, the subsequent decoupling from fossil fuels will not be enough to correct the situation.

Reflecting the scenarios of the report, the risks of long-term adverse effects clearly increase in scenarios 1 and 4, where hard geopolitics and military action draw attention from climate and environmental work and the operation of international cooperation forums is further compromised. In the other scenarios, for example, Nordic cooperation and local Arctic co-operation between Finland, Sweden and Norway can grow stronger and partially fill the gap. From the point of view of climate work, in which global commitments together with local action create impact, none of these scenarios is very bright or desirable.

PRIORITY AREA 2.1: Inhabitants, promotion of well-being

The priority area implements the following goals and targets of the Agenda for Sustainable Development (Agenda2030):



The Russian war of aggression was not identified as having any significant direct impact on the achievement of the priority area related to the promotion of the well-being of the inhabitants of the Arctic region in Finland. The implementation of the measures is affected by domestic policy decisions in Finland that have no direct link with the changed geopolitical situation, such as social and health policy issues and education policy issues.

In general, the social impacts of the geopolitical situation in the Finnish Arctic region are indirect. The general decline in the sense of security may be negatively reflected in the well-being of the inhabitants of the region, and the general deterioration of the economic situation brings with it many socio-economic challenges and may therefore jeopardise the socio-economic development of the various regions of Finland. It is also possible that the ongoing crisis and the economic uncertainty and possible recession that it brings may affect Finland's ability to promote measures for the well-being of the inhabitants as planned in the Strategy for Arctic policy. However, there was not enough fact-based evidence to identify such long chain of effects at the time this report was drafted.

One exception could be a measure to promote Finland’s ability to effectively prevent, monitor and prepare for health threats — this measure includes a direct link with how Finland cooperates with the Russian authorities. For example, a potential natural disaster or environmental accident occurring in the vicinity of Finland may also pose a health and environmental threat to the Finnish population. For the time being, efforts have been made to continue the cooperation between authorities, so if the relations between countries remain at the current level or improve, the possibilities of implementing such a measure will remain unchanged.

The scenarios identified in section 2.4 do not have a significant impact on the conditions for implementing concrete measures in the priority area, as the scenarios do not comment on the development of Finland’s domestic policy. However, it must be assumed that the welfare of the inhabitants of the North of Finland is under greater pressure in the high political tension scenario, and especially in the Arctic region as the geopolitical hotspot scenario, and that all activities requiring cross-border cooperation are more likely to be compromised than in the low-tension scenarios. As Finland’s general and equal conscription applies only to men, in the high-tension scenarios, men are also mainly affected, for example, in the form of increased refresher trainings.

PRIORITY AREA 2.2: Inhabitants, the rights of the Sámi as an indigenous people

The priority area implements the following goals and targets of the Agenda for Sustainable Development (Agenda2030):



The implementation of the measures in the Sámi rights priority area is primarily influenced by Finland’s domestic policies. However, the implementation of the rights of the Sámi people involves issues that are not explicitly mentioned in the measures of the strategy, but that may be affected by the Russian aggression.

On the whole, the most significant factor is the extent to which the Sámi people are able to operate within the Arctic cooperation structures. If indigenous peoples’ representatives are able to continue or even strengthen their influence in the structures of the Arctic policy,

it will boost their ability to impact the implementation of the rights of the Sami and other Arctic indigenous peoples at a more general level. The growing potential of indigenous peoples in international Arctic cooperation is, in principle, facing the same uncertainties as international Arctic cooperation overall. However, it should be borne in mind that indigenous peoples are in a subordinate position in international cooperation and their opportunities for participation must be actively supported, even in precarious situations, so that the opportunities for participation do not diminish because of general confusion. In its future Arctic policy, Finland must respond to this challenge in one way or another.

The other effects of the aggravated geopolitical situation on the Sámi living in Finland depend greatly on how much cooperation they have had with the indigenous peoples living in Russia before the war of aggression. For example, the measures strengthening indigenous peoples' international partnerships with the aim of protecting traditional cultural expressions and traditional knowledge will continue between the Sámi living in the Nordic countries regardless of the war.

The strategic measure aims to remove border obstacles and strengthen cross-border cooperation to promote Sámi-language services, including cooperation with schools in the Sámi Homeland. Implementation of this measure will continue between the Nordic countries, and to date, there has not been significant cooperation with Russia. However, the Sámi Education Institute is a member of UArctic that has suspended 55 Russian institutions and organisations because of the invasion, and this may have wider implications for the Sámi scientific, cultural, and educational cooperation.

Other measures in the priority area relate to the truth and reconciliation process of the Sámi in Finland, the strengthening of Sámi participation in Arctic politics and the revival of the Sámi languages. No direct effects of the Russian aggression were identified on the implementation of these measures. At the time of drafting this report, progress in the work of the Truth and Reconciliation Commission has been suspended, as the appointed Commissioners and the Secretary-General of the Commission resigned, invoking, inter alia, insufficient resources to carry out the work. During autumn 2022, new commissioners were appointed in their stead and the work will continue (Sámi Truth and Reconciliation Commission 2022, samediggi.fi).

The North is an area of strategic importance for both Russia and NATO. Although the measures in the priority area are purely related to the promotion of the rights of the Sámi people, the war of aggression has a broader impact on the implementation of the sustainable development goals, particularly as regards SDG 16 (peace, justice, and strong institutions). In general, scenarios 1 and 2 in Chapter 2.4, where hard geopolitics and military action divert attention from other cooperation, this can increase border obstacles in Sámi Homeland and further jeopardise the operation of international cooperation

forums. In addition, geopolitical pressure on the region is increasing in the form of military exercises, surveillance, and military infrastructure to counterbalance Russian military industries and bases on the Kola Peninsula. Russia's long-standing information war may also worsen, and it is feared that Finland's accession to NATO can increase information and hybrid warfare attacks. So far, there is no extensive evidence of this, but the information and hybrid war may pose a threat to Arctic inhabitants — both the Sámi and the rest of the local population — due to reduced access to reliable information and possible denial of service attacks or other means of hybrid warfare.

In Scenarios 3 and 4, local involvement and regional cooperation between the Nordic countries will be strengthened and indigenous peoples may have a wider latitude in these structures, although in all scenarios the position of indigenous peoples in international decision-making is likely to have to give way to national interests. Also in these scenarios, increasing pressure on the exploitation of Arctic natural resources can negatively affect the implementation of Sámi rights in both the short and long term. New mines or new felling areas or infrastructure construction may be planned for the areas, which may further undermine the traditional livelihoods of the Sámi.

PRIORITY AREA 3.1: Expertise, livelihoods

The priority area implements the following goals and targets of the Agenda for Sustainable Development (Agenda2030):



Priority area 3.1. focuses on promoting Arctic livelihoods, such as increasing tourism, Arctic demand, and special expertise. In accordance with the Sustainable Development Goals (SDGs), all economic activities in the Arctic are required to consider biodiversity and the carrying capacity of nature, as well as the well-being of the inhabitants and the rights of indigenous peoples.

Regarding the implementation of measures in the priority area of business, the Russian aggression has a particular effect because it deteriorates the economic situation. Accelerating inflation and rising energy prices are particularly slowing down the efforts

in the priority area to support the sustainable growth of the Arctic economy and the conditions for high added value jobs. In the short term, the projected economic downturn and other shocks in the economy will weaken demand-driven economic growth in general. In addition, the work of the Arctic Council, which is to be particularly supported, has become significantly more difficult in the current situation.

The availability of skilled labour as mentioned in the strategy, including the availability of foreign labour, was a challenge even before the beginning of the aggression, both in the whole country and in the Arctic, where there is a great need for seasonal workers in particular. In the short term, the war of aggression may dampen the prospects of attracting foreign labour due to fear of military threat. In 2022, it was difficult to find Ukrainian seasonal workers in agriculture, but their usual proportion of seasonal workers in Lapland is not known. It is therefore difficult to assess whether any changes in their number have had an impact on the availability of seasonal workers in Lapland.

Russian invasion may have an indirect impact on the measures related to sustainable tourism if tourists are hesitant to travel to a country bordering Russia as the indications from the spring and summer show. However, measures on sustainable tourism cooperation between neighbouring countries have mainly concerned joint projects between Finland, Sweden and Norway, and this cooperation is likely to continue without major changes. Geopolitical polarisation may affect the volume and conditions of sustainable tourism, and this may require special attention from Finland.

Other measures in the priority area are related to the Arctic situational picture of industrial and innovation policy and the communication of Finnish Arctic expertise. No direct short-term effects were identified. However, the demand for Finland's Arctic expertise is related to the general focus on diminishing resources and attention in the Arctic region, or the focus on military cooperation rather than other forms of cooperation.

The Arctic industries and businesses are affected by the wider effects of the war outside of the strategic measures. In the short term, the development of business ecosystems in the Arctic will suffer, especially as the operating conditions of SMEs are weakened. Russia's sanctions, inflation and rising energy prices may significantly impair the functioning of SMEs and opportunities for cooperation. The impact of sanctions on many SMEs can mean the failure of entire businesses. As formal economic cooperation deteriorates (the situation in the Arctic Economic Council) improving the overall conditions for sustainable economic development in the Arctic must be conducted with national actors and as Nordic cooperation. For example, Business Oulu and the Lapland Chamber of Commerce will continue to promote regional cooperation both within Finland's borders and with Northern Norway and Northern Sweden.

However, not all investments in sustainable business in the Arctic are frozen and plans already made before the war of aggression on many major investments will continue to be carried out as planned. In recent years, additional funding has also been provided for investments through new EU financial instruments. Projects financed through Just Transition financing and the Recovery Instrument are already projected or being planned. In the coming years, RePowerEU's energy investments will be added to the investment package. The new EU taxonomy on sustainable finance will have a bearing on all of these investments as any project supported by these financial instruments may not cause significant harm to the environment.

Through the Sustainable Growth Programme for Finland, projects in the Arctic, such as the Kajaani data centre ecosystem and hydrogen and bioeconomy initiatives, are to be implemented despite the war. Investment in energy and investments financed through the EU's Just Transition Fund is also expected to continue within the agreed timeframe. From the EU Recovery Instrument to the Province of Lapland, more than EUR 2.5 million has been allocated to both tourism and recycling and reuse investments during 2021 and 2022 (Business Finland 2022, [Tietopankki.businessfinland.fi](https://tietopankki.businessfinland.fi)). In addition, the plant investments of Metsä Group (Metsä Group 2022, [Metsagroup.com](https://metsagroup.com)) and Infinite Fibers (Infinited Fiber 2022, infinitedfiber.com) will bring new fossil-free production to the region to promote business and jobs that support the green transition in the region. Metsä Group's bioproduct mill has an investment value of up to EUR 1.85 billion and Infinite Fibers 400 million. However, the overall sustainability of projects requires a broader examination as the investment will increase pressure to fell more trees in the northern forest areas.

From the drivers of the scenarios identified in the study the for the long-term development of sustainable Arctic business life, the primary factor is whether there is global interest towards the Arctic or not. Tensions between Russia and the West primarily affect economic activity through sanctions and business barriers in the short term. However, changes in long-term investments and possible strategic orientations will have an impact on the long-term development of the whole region. If Europe and the United States do not see the Arctic as a strategically important region, as in scenarios 3 and 4, it may mean a decrease in higher investment in the Arctic compared to scenarios with a strong interest in the Arctic. On the other hand, global interest in scenarios 1 and 2 may negatively affect sustainable development if investments are based on purely military or economic interests or, for example, on unsustainable exploitation of northern natural resources. Regardless of the scenarios, it is in Finland's interest to ensure that all investment activities comply with the perspectives of economic, social, and ecological sustainability adapted to sensitive Arctic conditions.

PRIORITY AREA 3.2: Expertise, leading edge research

The focus on knowledge-based decision-making is essential for several goals and targets of the Agenda 2030 for Sustainable Development.

The priority area implements, inter alia, the following:



The effects of the war of aggression on top-level research include uncertainties as to how strong the cooperation with the Russian research community has been so far and how well research can continue after eventual disruption. In the short term, the most direct impact will be on the work of the Arctic Council and its working groups, which have actively cooperated in the assessment of research projects and the Arctic climate change and environmental status.

Leading edge research is based on the dialogue of the international research community. The weakening of cooperation and information exchange can have long-term effects, which, however, vary greatly from sector to sector, depending on how strong the cooperation with the Russian research community research has been until now and how well it can continue after the contacts are cut off. The change in the framework for cooperation in research and science with Russia is discussed in more detail in chapter 3.8. In general, according to guidelines at both national and EU levels. Finnish higher education institutions have suspended all institutional cooperation with Russian parties, including the number of research projects. Individual research projects involving Russian researchers may have continued if the Russian participants live outside Russia and have a foreign bank account, allowing them to be paid a salary.

In addition, research for sustainable development is threatened by a potential reduction in resources due to the economic downturn or uncertainty caused by the war. For the time being, no budget cuts were identified in the September 2022 budget session that would significantly complicate research in the current situation. On the other hand, there was no separate additional budget for Arctic science cooperation, unlike for research activities in Eastern Finland.

The measures on better national cooperation between higher education institutions and basic research, participating proactively in research on and evaluation of the change in the Arctic can continue almost as before. These decisions at national level may be affected by the previously mentioned potential redeployment of resources (of which there is currently no evidence) and by a general change in the research climate and priorities. For example, science and education organisations have pointed out what scientific values are lost through wars.

While measures under the Strategy for Arctic Policy may continue to be relatively comprehensive, the Russian war of aggression may have more extensive, longer-term negative impacts on sustainable development research. Russia's importance, especially for Arctic environmental and climate research, is irreplaceable. As stated in chapter 3.8, there have been a lot of field studies in Russia, and observations on the melting of the permafrost of Siberia, in particular, are vital to global climate research and natural sciences. The invasion and Russian hybrid warfare also pose other forms of threats to science. Russia may seek to prevent scientific research and the work of its own researchers in national and international research groups in a wide range of disciplines, if the results are seen as potentially contrary to Russia's political interests.

Section 3.8 also provides a comprehensive scenario analysis of the impact of the implementation of different scenarios on science. In scenarios 1 and 4, the practice of Arctic research becomes even more difficult, and the lack of dialogue between academic societies, for its part, may accelerate polarisation. In scenarios 2 and 3, cooperation in research with Russia would be possible again.

PRIORITY 4: Infrastructure and logistics

The priority area implements the following goals and targets of the Agenda for Sustainable Development (Agenda2030):



The implementation of measures in the priority area of infrastructure and logistics is associated with many uncertainties caused by the Russian aggression war, but their

impact on sustainable development is not unequivocally negative. Cooperation with Russia on the development of infrastructure and logistics is impossible in the current situation. On the other hand, Finland had to promote the availability of greener fuels more effectively because of the war. The most significant impacts of the priority area will arise in the long term and are still subject to significant uncertainties.

Measures in the priority area will contribute, inter alia, to the development of a pan-European core network and its northward dimension. The aim has been to connect the EU's northern regions and also enable rail transport from the Arctic to the rest of Europe and further to international markets. There have not been plans to extend the core networks from the Finnish Arctic region directly to Russia, but because of the invasion, the Commission has proposed to discontinue the development of the planned connections to Russia from the southern parts of Finland (Ministry of Transport and Communications 2022, lvm.fi). Extending the TEN-T network to Northern Finland was not planned even before the war. In the west, the northern infrastructure connections are developing, though, as the repairs and electrification of railway line between Kemi (Laurila) and Haparanda have begun, and they will open better connections to the Bothnian Arch and better access to the Narvik railway track and the Arctic Ocean. According to the information available, the war has no impact on this development.

The strategy also aims to enable effective travel and transport chains to support sustainable mobility and transport by developing new services. Although this extension mainly concerns national development in Finland, contacts with Russia have been an important route for Finland to Asia, for example. As these routes are no longer available, there is a risk of attempting to reach Asia through longer routes or by transferring traffic from rails to air. International passenger flights departing from Finland have also suffered from the fact that they no longer can use Russian airspace. If the situation persists and leads to longer flights, then the effects will be negative for both the environment and the economy. These changes can increase emissions and create new unsustainable transport practices.

Instead, the strategic measure to “develop a distribution infrastructure with adequate coverage for alternative fuels” and “promote the availability of alternative fuels” can be strengthened because of the energy crisis triggered by the war of aggression, as the need to develop distribution infrastructure and to promote access acutely increases. Presumably, in the northern regions of the Nordic countries, the willingness to cooperate across borders to develop a reliable distribution network may also increase, and this has been recorded in the measures.

Actions to develop domestic flights are not facing imminent changes due to the war of aggression, but of course inflation and potential recession caused by the global economic effects of the war may erode Finland's ability to support the operations. From the point of view of sustainable development, these measures are contradictory: while supporting the accessibility and sustainable socio-economic development of the northern regions, air transport is an option that places a burden on the climate.

As far as advancing shipping industry and Finland's maritime cluster are concerned, the effects of the war are in many ways negative, as the business links between the Finnish and Russian maritime industries have been significant. There has been demand for Finnish Arctic maritime expertise also in Russia, but at the time drafting this report, the export of icebreakers to Russia has, as a rule, been blocked due to sanctions. The fate of the permit for the 2000-staff-year icebreaker project in the Helsinki Shipyard is uncertain (Yle News 6.9.2022, yle.fi). There were also plans to import icebreakers from Russia to replace obsolete icebreakers in the coming years. Now we need to strengthen cooperation with Sweden, inter alia.

The strategy also aims at utilising the expertise of the Finnish maritime cluster on the Northeast Passage and supporting export opportunities through international cooperation. The Northeast Passage is located north of Russia, so it can be assumed that at least exports to Russia and work with Russian partners have become more difficult. This also has implications for the Finnish maritime cluster, although the effects are limited to a small part of the activities of the cluster. This impact is also mitigated by the fact that for a long time already Russia has been making the use of the Northeast Passage more difficult with destination measures, which had reduced the cooperation of the maritime cluster with Russia.

The most significant risks for the climate and the environment may arise as winter shipping cooperation with neighbouring countries becomes more difficult. Even if cooperation between authorities continues, the exchange of information and cooperation between ships and ports may become more difficult, which may in the long run make it more difficult to achieve the emission reduction targets. In the longer term, sanctions may also have some indirect impacts on the Arctic climate and the environment if Finland's green technology is not adopted in the neighbouring areas. The negative trend can be reversed by strengthening cooperation elsewhere and by investing in the development of sustainable maritime solutions independently.

Similarly, the international aspect of the action on maritime infrastructure and the development of map data, and in particular the work of the Arctic Council to improve communication links, are likely to have become more difficult.

Other measures in the strategy are related to the cooperation of the public and private sectors in Finland, attracting telecommunications and software investments in Finland and accounting for the greenhouse gas emissions in the IT sector. The war of aggression has no direct impact on these. The measure preparing for the impacts of climate change on transport infrastructure and its maintenance by relying on the latest research data requires international research cooperation. As mentioned earlier, the aggression has implications for research cooperation with Russia. On the other hand, it can be assumed that, from the point of view of Finnish transport infrastructure, Russian research data has not played a significant role.

There has been no significant cooperation with Russia regarding the development of telecommunications networks and digital services. However, the escalating geopolitical situation can affect them indirectly in the form of growing cyber threats, such as denial of service attacks.

The main long-term impacts are the eventual progress of the green transition as we start using cleaner fuels, but also potential negative economic and employment impacts as exports to Russia (from the perspective of Finland as a whole) decrease. Possible rising tensions may hinder the development of the region for a long time.

The scenarios presented in the report are likely to have very different impacts on the measures in this priority area. If scenario 1 materialises, there may be growing cyber threats related to telecommunications and, in general, the development of traffic and infrastructure in the Arctic region, including the development of rail traffic in the region, but also increased military activity.

Scenario 2 assumes that infrastructure and transport cooperation between the Nordic countries will intensify further. With Russia, cooperation would focus on issues related to the smooth operation of shipping and border crossings. This could also be the case in Scenario 3, where investments in rail connections and information technology are unlikely, and cooperation focuses primarily on the maintenance of existing traffic.

Scenario 4 would completely paralyse the development of the Arctic region as a whole, and consequently, the need to invest in logistics and infrastructure.

5 Conclusions and opportunities for Finland's Arctic activities in the future

5.1 Premises for conclusions

This report was drafted on request by the Prime Minister's Office in the spring of 2022. According to the request, "it is important to understand the potential impact of the Russian aggression on international cooperation in the Arctic region and on the other hand, for example, on the achievement of the sustainable development goals. The report should present the positions of international and national Arctic policies in this new context."

The report's conclusions are related to the positioning of Arctic policy in the new context. Based on the report, the team of researchers highlights viewpoints that Finland should consider when outlining the following international and national Arctic activities. The conclusions do not represent a consensus decided jointly by the research team; instead, they are precisely ideas that have come up or followed the study's findings. Future paths have different possible consequences, and it is also necessary to consider this in the report's conclusions. The conclusions suggesting measures are compiled in a list.

5.2 Conclusions as a basis for Finland's Arctic activities in the future

Finland's Arctic policy

- For the time being, Finland must adapt its activities to the reality of the new Cold War, where the international Arctic structures are incomplete. The time for a new comprehensive Arctic policy strategy will come when the situation seems to stabilise in some position. Finland can still be an active Arctic player. Finland's Arctic profile can be maintained by, among other things, keeping Arctic matters alive on a political level and strengthening Arctic-related activities.
- Regardless of the geopolitical situation, environmental and climate issues, sustainable development, and the status of indigenous peoples will remain key themes in the Arctic region. They are still needed as priorities for Finland's Arctic activities. Due to the Arctic region's particularities, there are other distinctive and persistent themes, such as science and research and emergency preparedness.

- With the geopolitical situation, the green transition will become increasingly important at the national level, not only for climate and energy policy but also in terms of security policy and the security of supply. The objectives of the green transition should also be clearly reflected in Finland's Arctic policy.
- In view of the policies for the Government term, Finland can outline matters in its own hands. This relates, in particular, to sustainable development in the Arctic region within Finland and those Arctic issues and structures not directly linked to the situation in Russia. Among the cooperation forums, Finland can invest in Nordic, pan-European and trans-Atlantic cooperation and strengthen the collaboration of indigenous peoples. Regarding Arctic strategy measures, Finland still holds the keys to most of the strategy's implementation. The strategy includes many measures influenced mainly by domestic policy decisions or decisions on dealing with the change in the operating environment caused by Russia's war of aggression.
- The need for research-based Arctic information will be further emphasised as Russia's Arctic role has changed, which requires investment in research and monitoring of Arctic nature and other issues related to the Arctic. The scientific community must also take the initiative to influence national and scientific policies and research funding.
- Finland's accession to NATO will cause a substantial increase in the need for research also concerning the security of the Arctic region.

International level

- As before, Finland must continue to uphold the multilateral international system and participate in processes central to the Arctic and its future. Most of these processes have restarted after the pause caused by the Covid-19 pandemic, and Russia participates in them. In general, Finland participates in international negotiations as part of the EU, so Finland's influence mainly takes place in the EU through the establishment of joint positions.
- In particular, it is crucial to secure international climate work and agreements and cooperation related to the green transition, regardless of future developments.
- Supporting indigenous peoples in Arctic affairs will continue to be important nationally and internationally. Finland can support the capacity of indigenous organisations to participate in international processes relevant to the Arctic, especially in a situation where Arctic cooperation would not be restored.
- In the EU, Finland must ensure that the weight of Arctic issues increases on the EU agenda. EU programmes can channel support to border regions affected by the collapse of cooperation between Russia and the EU.

Arctic regional level

- Finland must, for its part, strive for the Arctic Council to continue its activities. In the Arctic context, the Arctic Council is the only international forum where Finland can broadly pursue its own Arctic agenda in many different areas of activity and where Arctic indigenous organisations such as the Sámi Council play a central role. If the Arctic Council were to cease to function, it would be necessary for Finland to promote Arctic cooperation between seven Arctic countries and to maintain as many activities as possible from the current Arctic Council, such as the permanent participation of indigenous peoples.
- Even if the Arctic Council were to end in its current form, it is in Finland's interest to promote solutions that bind Russia to Arctic cooperation when the international situation and the internal development of Russia allow.
- The relevance of maintaining the structures of Barents cooperation without Russia must be decided at the political level, preferably between the Nordic countries (Finland, Sweden, Norway) and listening to the voice of the regions.
- For the growing cooperation needs of the northernmost regions of Finland, Sweden and Norway, an operating model must be developed at the Nordic level.
- The relevance of the Northern Dimension policy without Russia and Belarus requires an EU-level orientation in which Finland can be active.
- The activities of the Nordic Council of Ministers in the Arctic region should be strengthened, particularly if the work of the Arctic Council deteriorates.
- As a likely member of NATO, it is to Finland's advantage to develop an Arctic strategy for NATO.

Sustainable development in the Arctic

- The continuity of Arctic environmental and climate work must be ensured regardless of the functioning of international fora. If necessary, Finland must consider alternative ways to promote the climate resilience of the Arctic region.
- The need for the green transition has become a more acute issue for Finland and the whole of Europe, as the withdrawal from Russian fossil in favour of renewable energy came about with an accelerated schedule. As a result of the war, energy and climate policy have also converged with foreign and security policies.
- To secure sustainable development in the Arctic, we must find best practices to use existing fora and bring Finland's voice to the fore. We must make efforts to find alternative ways to tackle climate action and other sustainable

development issues if the existing means become either unusable or ineffective. Sustainable development processes cannot be frozen because of just one party; both national and international measures must continue systematically.

Anticipating Russia's Arctic role

- Russia's development is challenging to predict in the perspective of the next few years, even the next few months. Even chaos is possible. Finland's Arctic policy must maintain the readiness for action and change, even for a rapid response.
- About half of the Arctic region belongs to Russia, and the need for information about Russia's Arctic remains. In addition to information related to military activities, we will need to learn about the state of indigenous peoples, the state of the environment, the state of the economy, the state of the Russian administrative regions and their relationship with Moscow, the state of the media, the social conditions and so on. Finland must be able to maintain an understanding of Russia's Arctic regions in new circumstances. Up-to-date information is particularly important to ensure climate resilience and sustainable development in the Arctic.
- Finland needs to be actively involved in defining the conditions and terms under which it will be possible to reconstruct contacts with Russia linked to Arctic questions.
- In the longer term, it is in Finland's interest to continue to build a functioning relationship with Russia. However, this must not happen at any cost. In the coming years, ensuring national security must be at the heart of Finland's policy towards Russia. Therefore, a relationship with Russia, which focuses on practical issues, should not undermine Finland's security, and the cooperation must not create harmful dependencies.

REFERENCES

Expert group report 2021. <https://www.google.com/url?q=https://oaarchive.arctic-council.org/handle/11374/2610&sa=D&source=docs&ust=1664351513646551&usg=AOv-Vaw26HS1zK74Txb5g2MahQN3v> (accessed on 28.9.2022)

ASSW 2022 Statement 2022. <https://www.assw.info/news/assw-2022-statement-on-ukraine> (accessed on 28.9.2022)

Business Finland 2022. <https://tietopankki.businessfinland.fi/anonymous/extensions/MyonnettyRahoitusRRF/MyonnettyRahoitusRRF.html> (accessed on 29.9.2022)

CBSS news 2022. <https://cbss.org/2022/05/25/foreign-ministers-of-the-baltic-sea-region-met-in-norway-in-first-cbss-ministerial-session-since-nine-years/> (accessed on 28.9.2022)

Earth Negotiations Bulletin 22.6.2022 <https://enb.iisd.org/fourth-meeting-working-group-post-2020-global-biodiversity-framework-22jun2022> (accessed on 28.9.2022)

EU research news 4.3.2022. <https://www.pubaffairsbruxelles.eu/eu-institution-news/commission-suspends-cooperation-with-russia-on-research-and-innovation/> (accessed on 28.9.2022)

EU Commission and High Representative 2021 https://www.eeas.europa.eu/eeas/joint-communication-stronger-eu-engagement-peaceful-sustainable-and-prosperous-arctic-0_en (accessed on 28.9.2022)

Greenwood 4.5.2022. Move Forward Without Russia: How the Arctic Council Can Keep Up Its Work. <https://www.highnorthnews.com/en/move-forward-without-russia-how-arctic-council-can-keep-its-work> (accessed on 29.9.2022)

High North News 5.5.2022. <https://www.highnorthnews.com/en/svalbard-gets-exemptions-new-sanctions-against-russia> (accessed on 28.9.2022)

IASC Statement on Ukraine 2022. <https://iasc.info/news/iasc-news/957-iasc-statement-on-ukraine> (accessed on 28.9.2022)

IASSA Statement on Ukraine 2022. <https://iassa.org/news-archive/98-iassa-statement-on-ukraine> (accessed on 28.9.2022)

Infinited Fiber 2022. <https://infinitedfiber.com/blog/2022/06/20/infinited-fiber-picks-site-of-shut-paper-plant-in-finnish-lapland-for-its-planned-eur-400-million-textile-fiber-factory-investment/> (accessed on 29.9.2022)

IPCC General Assembly 2022, DRAFT REPORT OF THE FIFTY- FIFTH SESSION OF THE IPCC Electronic Session, 14 to 25 February 2022. <https://apps.ipcc.ch/eventmanager/documents/74/230320220433-Doc.%20,%20Rev.1%20-%20Draft%20Report%20IPCC-55.pdf> (accessed on 28.9.2022)

Isaksen, K., Nordli, Ø., Ivanov, B. et al. Exceptional warming over the Barents area. *Sci Rep* 12, 9371 (2022). <https://doi.org/10.1038/s41598-022-13568-5> (accessed on 29.9.2022)

Joint Statement 8.6.2022. <https://www.state.gov/joint-statement-on-limited-resumption-of-arctic-council-cooperation/> (accessed on 28.9.2022)

Canada parties meeting, Polar Bear agreement. <https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/polar-bear-conservation-multilateral.html> (accessed on 28.9.2022)

Koivurova 29.6.2022. Is It Possible to Continue Cooperating with Russia in the Arctic Council? <https://gjia.georgetown.edu/2022/06/29/is-it-possible-to-continue-cooperating-with-russia-in-the-arctic-council/> (accessed on 29.9.2022)

Koivurova, Timo & Heinämäki, Leena (2006). "The participation of indigenous peoples in international norm-making in the Arctic", 42:2 *Polar Record* 101-109, <https://doi.org/10.1017/S0032247406005080> (accessed on 28.9.2022)

Kolarctic 2021-2027. <https://kolarctic.info/kolarctic-what-next-2021-2027/> (accessed on 28.9.2022)

The Ministry of Transport and Communications 2022. <https://www.lvm.fi/-/ministeri-harakka-komission-uusi-ten-t-asetusehdotus-kohtuuton-suomen-kannalta-1811623> (accessed on 29.9.2022)

Metsä Group 2022. <https://www.metsagroup.com/fi/metsafibre/metsafibre/selluntuotanto/kemin-biotuotetehdas/> (accessed on 29.9.2022)

Nature 2022. https://www.google.com/url?q=https://www.nature.com/articles/s43247-022-00498-3&sa=D&source=docs&ust=1664351513647327&usg=AOvVaw1TS68_eUzJ6XW-_r58CqGG (accessed on 28.9.2022)

Norwegian Barents Secretariat 2022. <https://barents.no/nb/qa-hvordan-pavirker-krigen-barentssamarbeidet> (accessed on 28.9.2022)

Norway Statement 5.3.2022. https://www.regjeringen.no/en/aktuelt/relations_with_russia/id2903146/ (accessed on 28.9.2022)

Parliamentarian Statement 2022. <https://www.google.com/url?q=https://arcticparl.org/statement-by-the-standing-committee-of-parliamentarians-of-the-arctic-region-march-2022/&sa=D&source=docs&ust=1664351513831096&usg=AOvVaw3F8UQMYO-efDqx76ydxOuTp> (accessed on 28.9.2022)

Pohjoisen tulevaisuuskatsaus 2022. <https://www.lapland.chamber.fi/wp/wp-content/uploads/2022/05/pohjoisen-tulevaisuuskatsaus-2022-4.pdf> (accessed on 28.9.2022)

Regional Council of North Karelia, press release 18.2.2022. <https://pohjois-karjala.fi/2022/08/barents-yhteisty-uuteen-aikaan-pohjois-karjalan-puheenjohtajuuskaudella/> (accessed on 28.9.2022)

Raspotnik, A. Stepień, A., & Koivurova, T., 2022. Euroopan unionin arktinen politiikka Venäjän Ukrainaa vastaan käymän sodan valossa. Arktinen instituutti. <https://www.thearcticinstitute.org/european-union-arctic-policy-light-russia-war-against-ukraine/> (accessed on 28.9.2022).

REPowerEU plan 2022. https://ec.europa.eu/commission/presscorner/detail/fi/IP_22_3131 (accessed on 28.9.2022)

Sámi Council 10.4.2022. <https://www.saamicouncil.net/news-archive/cooperation-with-russian-side-on-hold> (accessed on 28.9.2022)

Sámi Council 27.2.2022. <https://www.saamicouncil.net/news-archive/statement-by-the-russian-side-of-the-saami-council-regarding-the-current-situation-in-russia> (accessed on 28.9.2022)

Sámi Truth and Reconciliation Commission 2022. <https://www.samediggi.fi/saamelaisten-totuus-ja-sovintokomissio/> (accessed on 29.9.2022)

Science Ministers Statement 2022. https://www.eeas.europa.eu/delegations/japan/european-union-and-25-countries-sign-joint-statement-strengthen-arctic-science_en (accessed on 28.9.2022)

Polar Bear Agreement meeting. <https://polarbearagreement.org/about-us/meetings> (accessed on 28.9.2022)

Statement from the Inuit Circumpolar Council concerning the Arctic Council 2022. <https://www.inuitcircumpolar.com/news/statement-from-the-inuit-circumpolar-council-concerning-the-arctic-council/> (accessed on 28.9.2022)

Ministry of Economic Affairs and Employment of Finland 2022. <https://tem.fi/-/itameren-alueen-valtiot-vastaavat-venajan-aiheuttamaan-energiakriisiin-neljalla-linjauksella> (accessed on 28.9.2022)

UArctic Actions on Ukraine 2022. <https://congress.uarctic.org/news/2022/4/uarctic-actions-on-ukraine/> (accessed on 28.9.2022)

UArctic Statement on Ukraine 2022. <https://www.uarctic.org/news/2022/3/uarctic-statement-on-ukraine/> (accessed on 28.9.2022)

UNECE 2022, participant protocol. https://unece.org/sites/default/files/2022-05/Final_List%20of%20Participants%20.pdf (accessed on 29.9.2022)

Washington Post 27.2.2022. <https://www.washingtonpost.com/climate-environment/2022/02/27/ipcc-russian-apologizes-ukraine-climate/> (accessed on 28.9.2022)

WWF Statement 2022. <https://updates.panda.org/statement-on-ukraine> (accessed on 28.9.2022)

WWF-CEE Statement 2022. <https://wwfcee.org/news/wwf-cee-is-gravely-concerned-about-the-mounting-situation-in-ukraine> (accessed on 28.9.2022)

WWF-USA Statement 2022. <https://www.worldwildlife.org/pages/wwf-us-statement-on-the-war-in-ukraine> (accessed on 28.9.2022)

UN News report 2.3.2022. <https://news.un.org/en/story/2022/03/1113152> (accessed on 28.9.2022)

Yle News 1.3.2022. Marin: Energiariippuvuudesta Venäjään irtauduttava ”niin nopeasti kuin mahdollista”, Fennovoiman ydinvoimalahanke ”ei etenemässä”. <https://yle.fi/uutiset/3-12339279> (accessed on 28.9.2022)

Yle News 6.9.2022. Lehtitiedot: Helsingin telakkaa haetaan konkurssiin – telakan johtaja Ylelle: ”Erimielisyyttä alihankkijan kanssa, kyse ei suuresta summasta”. <https://yle.fi/uutiset/3-12612042> (accessed on 29.9.2022)

Zmyvalova 2022, The Impact of the War in Ukraine on the Indigenous Small-numbered Peoples’ Rights in Russia <https://arcticreview.no/index.php/arctic/article/view/4058/6669> (accessed on 28.9.2022)