The influence of geopolitics on polar research – Options for HM Government

Professor Basil Germond & Professor Neeraj Suri

This blog is based on the oral evidence given by Professor Basil Germond to the Environmental Audit Sub-Committee on Polar Research (House of Commons, 24 May 2023) and on the written evidence submitted by professor Basil Germond and Professor Neeraj Suri to the same Committee (March 2023).

Why polar research matters?

The effects of climate change on the Arctic as well as increasing commercial activities in the region are adding pressure on an already fragile ecosystem. In this context, polar research (also known as Arctic science) is crucial for two interrelated reasons: 1) It enables the scientific community to better understand climate change and the multiple processes resulting from a warming Arctic, and 2) Arctic climate data is needed to understand, map, and eventually address the effects of climate change in the High North.

For decades, the Arctic region has benefited from a low level of tensions. This was reflected in the concept of “Arctic exceptionalism”. Environmental cooperation and interstate dialogue were not subordinated to security considerations. The Arctic Council epitomized this pragmatic dialogue and collaboration regarding environmental governance and scientific cooperation.

How geopolitical tensions have changed the status quo?

Russia’s invasion of Ukraine has increased geopolitical tensions in the High North and seriously damaged “Arctic exceptionalism”. Official channels of scientific cooperation and environmental governance with Russia have been mostly shut down.

There is a strategic acceleration in the High North that results from two systemic changes that act synergistically: climate change and Russia’s war of aggression: indeed, the impacts of climate change require cooperative governance to tackle economic and environmental challenges whereas Russia’s antagonistic behaviour prevents scientific cooperation and efficient Arctic governance and even creates risks of confrontation.

The end of ‘Arctic exceptionalism’ is also linked to the militarization of the Arctic: The High North is a key strategic area for Russia’s navy and its nuclear forces. It is thus in Russia’s interest to control and limit who access the Arctic waters and especially its Kola bastion. For NATO, the region is of crucial importance to the defence of the Alliance’s Northern Flank.

In other words, the military, security, defence, and geopolitical dimensions of the Arctic region have taken precedence. Polar research is still a priority of the UK, but it is now subordinated to defence and security considerations, interests, and objectives.

Why is science cooperation with Russia inappropriate?

Science cooperation can be an instrument for peace. The advancement of knowledge can foster international cooperation and vice versa. However, science can also be an instrument of state power. Science & technology has military applications and scientific collaboration can infringe on national security requiring appropriate strategic export control regulations.

Science is not apolitical. Even non-sensitive science collaboration (such as climate science) can be instrumentalized to serve the political purposes of state actors. In the case of polar research, there are three reasons explaining why cooperation with Russia is not appropriate in the current context:
1) **Security reason:** Most scientific collaboration regarding climate change in the Arctic is unlikely to directly endanger national security. This is because climate data are mainly benign, and the objectives of climate research and its policy and practical applications are not related to defence. However, sharing seemingly benign climate data with a hostile state potentially entails **risks of sharing sensitive, dual use data.** For example, data regarding the sea ice thickness can have **military applications.** Polar research can also inform resource exploitation and navigation. Thus, not all Arctic science can pragmatically be open source.

2) **Political reason:** In the current confrontational context, science cooperation with institutions supporting or supported by Putin’s regime **ceases being politically (or even morally) acceptable.**

3) **Diplomatic reason:** the West must project an image of unity in its opposition to Putin’s regime. Russia could use science cooperation to claim that it is legitimate to work with Moscow. There is a risk that **Putin’s regime instrumentalises such collaborations** to try and demonstrate to the BRICS that Russia is not a pariah state.

**What future for Arctic science cooperation?**

Climate change has increased the need for good governance in the Arctic. Fisheries and SLOCs need to be monitored and controlled. For example, cooperation is necessary to make the new sea routes safe and sustainable.

Yet, **governing maritime spaces can hardly be done in isolation** due to the liquid and fluid nature of the milieu as well as the multiplicity of stakeholders and interests. In other words, the effects of climate change on the oceans are global, ‘fish cross borders’ (as do fishing fleets), the maritime economy is transnational, and the sea cannot easily be controlled/occupied like the land.

However, **the political context does not currently facilitate international cooperation;** the current absence of a constructive dialogue with Russia means that, in practice, governance of the Arctic will not be smooth. This is further **exacerbated by Russia’s war in Ukraine** and the resulting weakening of the Arctic Council that jeopardizes the prospects for a sustainable governance of the Arctic.

Thus, we need to proceed with a **cost-benefit analysis:** Arctic governance without Russia is compromised, but what political and diplomatic costs are we ready to pay for Russia to participate?

Another argument is that it is always possible to **find ad hoc arrangements with Russia** for specific collaboration (after all the Black Sea grain deal is a diplomatic concession to Russia for the greater good of humankind because of food security considerations). So, it might be possible to say the same about climate change impacts and the need for accurate data.

**What are the options for the UK?**

The UK is not an Arctic riparian state, but it is in its interest to uphold freedom of navigation and international law of the seas in the Arctic as well as to advance Arctic science. Arctic cooperation remains an important objective of the UK in the long-term as stated in the **2023 Integrated Review.**

However, **working on the hypothesis of an enduring “Arctic exceptionalism” would be misleading.** In the current geopolitical context and with the militarization of the Arctic, security considerations are prominent and need to be prioritized.

HM Government is committed to Arctic security, upholding freedom of navigation, defending Arctic Allies and responding to aggression. This is corroborated by the recent increased operational presence in the High North.
Now what else can be done? Germond’s research has shown that the global leadership of Western maritime nations derives from their ability to control the global supply chain. This control does not only depend on naval power but also on Western leadership over the private, corporate maritime sector as well as international maritime institutions.

The UK has a comparative advantage due to its combined scientific and maritime power that grants HM Government the ability to influence both security and scientific stakeholders. This is a key aspect since sustainability and security in the Arctic require science and innovation but also the commitment of shipping companies, maritime insurance, regulators, and enforcement agencies.

The Council for Science and Technology advocated the need to harness the synergies between science/innovation and national security. So, the UK should capitalize on its dual scientific and maritime power to explore ways to foster science-security dialogues with like-minded states and to strengthen Western leadership of the corporate maritime sector.

In the absence of cooperation with Russia, the UK can drive the climate-security/public-private dialogue in the Arctic, for instance in alternative hybrid forums such as the Arctic Circle Assembly and the IMO where security issues can be discussed openly. Also lots of bilateral opportunities.

What are the Defence implications for the UK?

Unlike Antarctica, the Arctic is not a continent. As a maritime space, it is governed by international law of the seas that regulates freedom of navigation, navigation safety, resources exploitation, delimitation of exclusive economic zones, and environmental protection. It is in the UK’s interest to uphold freedom of navigation and international law of the seas in the Arctic.

In the current confrontational context, the High North will increasingly be the theatre of assertive naval diplomacy, contestation of freedom of navigation or innocent passage. There will be an increase in shadowing patrols, intelligence gathering, threats to communication and undersea infrastructures.

Defence cooperation with NATO partners is a priority: The militarization of the Arctic requires long-term military planning to anticipate all eventualities and defend NATO’s Northern flank. The High North is a key strategic area for Russia (especially for its strategic submarine forces) and a potential theatre of confrontation. The miserable performance of the Russian Navy in the Black Sea shall not give the false impression that NATO’s northern flank is not vulnerable.

HM Government has stressed the need to increase the UK’s projection capabilities into the High North along with allies, and the Royal Navy has stepped up its operational presence. Working with partners in the Arctic (whether it is NATO, JEF partners, 5 Eyes) creates economy of scale, reassures allies, demonstrates NATO’s resolve, and sends a strong message of unity to Russia.

The next step is for the UK to become a net provider of security in the High North: With AUKUS, the UK has managed to cleverly outsource its long-term security in the IP to a trusted partner. But closer to home, in the Arctic, the UK shall take the lead and make the necessary investments to become a net provider of security in the high North.