The Northern Sea Route

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Commentary on: Northern Sea Route – Strategic Opportunity or Emerging Risk?

Topic of the report: Arctic Geopolitics in the warming world

The Northern Sea Route: A Shortcut to Trouble?

As the Arctic ice melts, the world watches a new shipping highway emerge: The Northern Sea Route (NSR). Stretching along Russia's Arctic coastline, the NSR is set to shorten the journey between Europe and Asia by up to 40%, bypassing conventional transit points like the Suez Canal (Liu & Kronbak, 2009). Figure 1 provides a clear illustration of this fact (Satish, 2024).

Figure 1

Satish, S. (2024, 21. November). Northern Sea Route – ClearIAS. ClearIAS. https://www.clearias.com/northern-sea-route/

For Moscow and Beijing, this is a geopolitical blessing. For the Planet and multilateralism, however, it could be a costly endeavor. Given the possibility of nearly ice-free summers by mid-century, as shown by estimates, Russian authorities have placed increased attention on advancing the NSR, calling for year-round navigation by 2030 (Didenko & Cherenkov, 2018). As demonstrated in Figure 2, there has been a significant increase in the volume of cargo transportation on the Northern Sea Route in recent decades (Arkhipov, 2020).

Meanwhile, China included the NSR in its 2018 Arctic Policy as part of its vision for a "Polar Silk Road". However, this appears to be a gross oversimplification of the situation, as there are complex environmental dangers, structural limitations, and geopolitical tensions that are in fact at play.

Figure 2: Volumes of cargo transportation on the Northern sea route from 1933 to 2018, thousand tons.

(Arkhipov et al., 2020)

Climate Paradox

The tragic irony of the NSR opening lies in its cause: climate crisis. A route made viable only by catastrophe is now being aggressively pursued. Instead of taking this fact into consideration, Russia and its partners are rushing to take advantage of it, ensuring a continued reliance on fossil fuels. Most of the traffic on the Northern Sea Route is not just commercial shipping, but primarily the export of fossil fuels, especially liquefied natural gas (LNG) from the Yamal Peninsula (Makarova et al., 2021). Rather than transitioning away from emissions, the route is being used to reinforce them. Meanwhile, black carbon emissions from ships accelerate the melting of Arctic ice, providing a textbook example of a feedback loop. Although the international Maritime Organization has taken steps, such as the 2021 ban on heavy fuel oil in Arctic waters, enforcement and ambition remain weak. This is not a sustainable policy; it's merely hoping for the best.

The China-Russia Arctic Nexus

From a geopolitical standpoint, the NSR is more of a Russian-controlled trade route than an open seaway. According to Article 234 of the United Nations Convention on the Law of the Sea (UNCLOS), Russia asserts extensive regulatory authority over ice-covered waters and has leveraged this authority to mandate that foreign ships use Russian icebreakers, pay substantial fees, and acquire permission far in advance. The NSR is not a neutral shipping lane, it is a tightly managed economic and strategic tool. China's increased presence only intensifies the situation. While Western Arctic states like Canada, Norway, and the United States advocate for cooperation and environmental protection, Russia and China are establishing a transactional partnership focused on infrastructure, extraction, and access

(Makarov et al., 2022). Since 2022, the Arctic Council has been essentially inactive, leaving no operational multilateral platform to oversee these clashing perspectives. In a changing world, it's tempting to see the NSR as a necessary alternative: shorter, cheaper, and safer. However, this overlooks its environmental impact and geopolitical risks. By legitimizing and normalizing this route, we risk enabling a strategy that rewards environmental degradation and erodes international cooperation.

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