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The Fourth General Assembly: Special Political and Decolonization
(GA4)

Research Report

Topic 2: The use of potential future sailable routes as consequence of melting sea ice



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Introduction

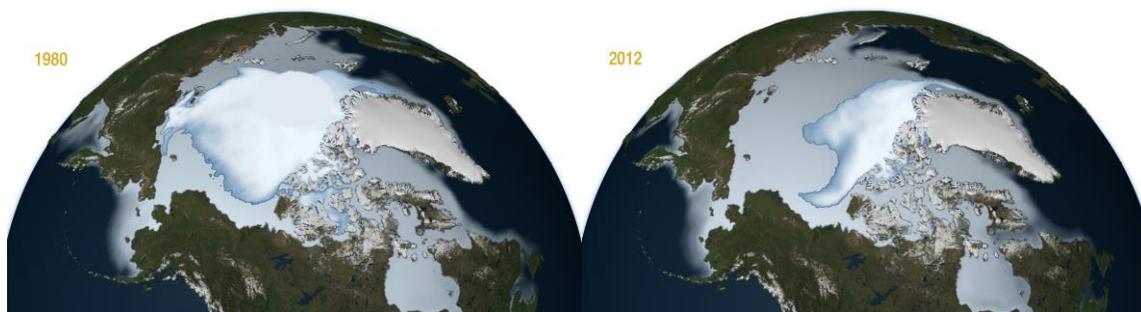


Image 1 and 2: Satellite view on melting sea ice in the Arctic: 1980 (l) compared to 2012 (r).

In today's world, ignoring or even repudiating the existence of climate change is nothing but a refusal to face the truth. Consequently, the stake of global warming in melting sea ice causing rise of the sea level is neither to be disregarded. To portray the impact the effects of accelerating global warming, please take a close look to *Image 1 and 2*. These satellite pictures acquired by NASA show us the shocking decline of ice masses in the Arctic region. Research shows that by 2060, 49,8% of the Arctic sea ice will have turned into water.

Climate change is affecting the world in various way. One such example is ice melting, as described above. Next to that, ramped up droughts, floods and other extreme weather are increasingly devoted to climate change as well. Most of the time, just negative effects of the changing climate are mentioned. Of course, the hazardous, threatening aspects is where the focus is on in the first instance. What could be done to prevent sea ice of melting? How should prepare ourselves for the increase of sea level? Notwithstanding disadvantages, the Fourth General Assembly will debate on a possible advantage: the use of potential future sailable sea routes as consequence of melting sea ice.

Definition of Key Terms

Sea ice – ‘Ice formed by the freezing of seawater.’¹

The Arctic - Also referred to as Arctic circle or North Pole. ‘A polar region located at the northernmost part of Earth. The Arctic consists of the Arctic Ocean, adjacent seas, and parts of Alaska (United States), Northern Canada (Canada), Finland, Greenland (Denmark), Iceland, Norway, Russia and Sweden.’²

¹ “Sea Ice.” Merriam-Webster, Merriam-Webster, www.merriam-webster.com/dictionary/sea%20ice. <https://www.merriam-webster.com/dictionary/sea%20ice>

² “The Arctic, Country by Country.” Diplomat Magazine, diplomatonline.com/mag/2012/10/the-arctic-country-by-country/. <http://diplomatonline.com/mag/2012/10/the-arctic-country-by-country/>

Climate change , acceleration of climate change - Climate is considered ‘the average course or condition of the weather at a place usually over a period of years as exhibited by temperature, wind velocity, and precipitation.’³ Climate is most often measured over a span of thirty years or even a longer period of time. Therefore, to demonstrate actual change of climate it is necessary to have a lot more years of data. Due to several natural circumstances, climate has always been and will always be changing. Thus, the fastened changes of climate provoked by the greenhouse effect has been referred to as the acceleration of climate change.

Background Information

To get a proper overview on why the use of future Arctic shipping routes are beneficial for international trade, the current existing flows of intercontinental shipping needs to be taken into regard. Since the invention of celestial navigation in the second century AD, maritime technologies have been developing: from primitive local trade, till intercontinental cargo shipping utilizing modern day logistic methods and satellite navigation.

In 2017, only seaborne cargo ships transported millions of containers with a total value of 12 trillion US dollar. A small share of all worldwide trade is shipped between Northern Europe and Asia. The largest port of Europe is located in Rotterdam, the Netherlands. Annually, circa 7.5 million containers pass Rotterdam seaport. *Image 3* portrays the connection between Europe’s most important port and Dalkan port in China. These ports are connected by the use of two shipping lines. The most common sailed one is the Suez Canal route. However, route crossing the polar circle is significantly shorter and thus cheaper to use in comparison to shipping routes southwards of the Eurasian continent. Expressed in a number, shipping by use of the Northern Sea route will save 3300 nautical miles, 6100 km. Consequently, transportation duration is shortened, products are delivered faster and can be offered cheaper. Because less distance is to be covered by transport, costs for shipping are lowered.



Image 3: Northern Sea route and Suez Canal route

Taking notion of above mentioned profits of sailing the Arctic sea, one question arises: why is the Suez route substantially more in use than the polar one? The answer to that question is rather obvious. Throughout the year, most parts of the Arctic sea are blocked by extensive sea ice flanks. Next to the regular huge masses of ice, the sea is filled with randomly drifting, not mapped smaller ice floes. Regular cargo ships sailing this area could encounter

³ “Climate.” Merriam-Webster, Merriam-Webster, www.merriam-webster.com/dictionary/climate. <https://www.merriam-webster.com/dictionary/climate>

damage or even worse, especially when sailing by night. Only in September, when the Arctic ‘summer’ is at its summit, is it nowadays possible for ships that are not ice boats to sail the polar route. Owing to the fact that this route is thus not instantly sailable, it is practically only in use to supply small Arctic ports.

Climate, however, is changing. And so does the potential use of Arctic trade routes. Several expert researches depict that by the second half of the twenty first century the decline of polar sea ice and warming of the Arctic circle will have unlocked an all season sailable trade Northern Sea route. If climate change will damage sea ice masses as much as is predicted, this specific shipping route is very likely to become more used. Not mentioned one of the benefits of this route is less greenhouse gas emission by ships due to a shorter transportation distance and less piracy in regard to the Suez route. According to research of the Copenhagen Business School, it is by 2040 that the Northern Sea route will economically more available.

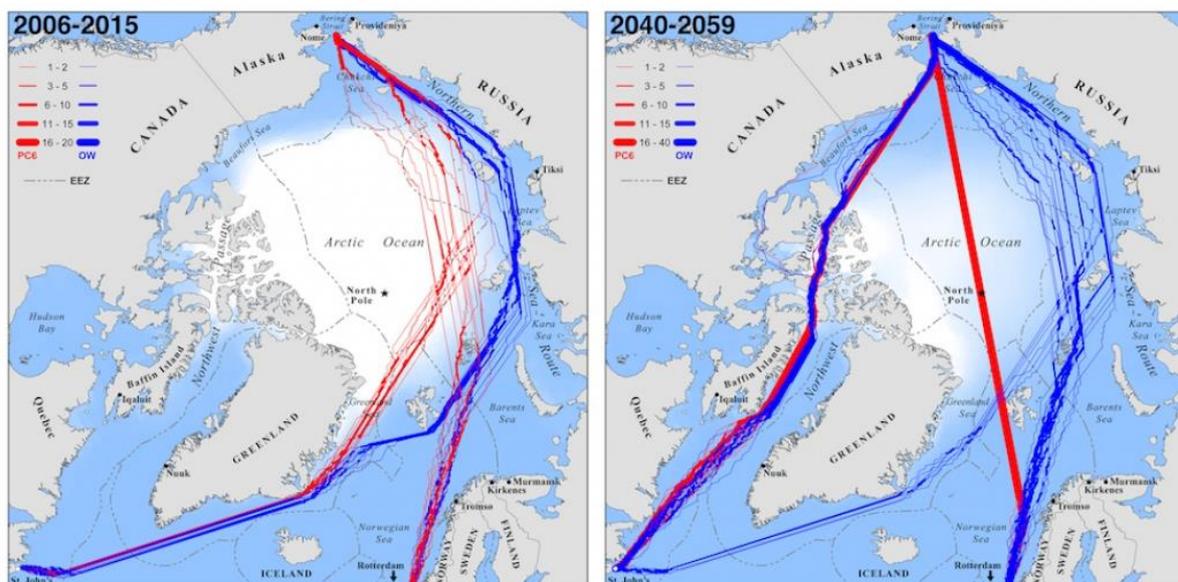


Image 4 and 5: The change of Arctic sailable routes within thirty years. Red lines illustrate sailable routes for ice ships and blue lines those for common cargo ships.

As a country within the Arctic circle, Canada has asserted that Arctic Archipelago waters (the area just north of Canada itself) are their own internal waters. To support this, Canada has made an Arctic research centre and is developing autonomous submarines to improve underwater charts of the area, among other things. Together Russia and Canada make up nearly 75% of the Arctic coastline. Russia has claimed the Northern sea route, or the Northeast passage, a claim that the USA contested on grounds of considering it as international waters. In 2001 Russia filed a claim for 1.2 million square kilometres along the Lomonosov and Mendeleev ridges to the North Pole to UNCLOS, only to be refused. In 2007, after the refusal from the UN, Russia dropped a canister containing the Russian flag on the bottom of the ocean claiming the Arctic and north pole as theirs. However, such methods are not sufficient proof of sovereignty despite the creativity that went into such an action. In 1857 Russia sold Alaska to the USA as such the USA’s claim in the Arctic circle

is much smaller than Russia and Canada's claim. They are not discouraged, however, and are interested in the potential shipping routes, as such they have contested Russia's claim and state that the Northern sea route is in international waters. While UNCLOS has 160 members America is not one of them. Despite Denmark not being within the Arctic circle themselves, their colonial territory, Greenland, does give them a part in the Arctic sovereignty dispute. Denmark, like the other Arctic nations, shows interests in the resources that may be available in the Arctic and the potential alternate, shorter trade routes. It is only recently that Denmark entered into the debate to lay claims to the same ridge that Russia claims, stating that the Lomonosov ridge was an extension of Greenland. Denmark and Canada have had a dispute over Hans Island, a tiny speck in the entire dispute with the island only being 1.3 km squared and unpopulated. The two countries currently take turns planting their flags and leaving bottles of their alcohol on the island. While Sweden does not have an Arctic coastline, they would still benefit from access to trade in the Arctic circle. Sweden is a leader in ice-breaking operations and can support the commercial use of the Arctic sea. Norwegian sailor Roald Amundsen was the first man to sail through the Northwest passage. Norway's second-most sought resource is petroleum from the continental shelf makes its position in the Arctic, as well as its sovereignty very important. Finally, Finland has been internationally recognised for its Arctic knowledge and has been part of many decisions regarding the North.

Major Countries and Organisations Involved

Canada - One of the countries that are a part of the Arctic circle. Canada has long been interested in gaining Arctic sovereignty.

United States of America (Alaska) - Alaska is within the Arctic circle therefore the US is as well. The US is interested in potential shipping routes.

Russia - One of the countries that belong to the Arctic circle. Russia takes its position in the Arctic very seriously.

Finland - Finland does not have an Arctic coastline, but they do belong to the Arctic circle and possess a broad knowledge of the Arctic.

Denmark (Greenland) - While Denmark is not in the Arctic circle Greenland is. They are interested in potential Arctic trading routes and resources.

Sweden - Though Sweden does not have an Arctic coastline, they are leading in ice-breaking abilities and would greatly benefit from access to Arctic trade.

Norway - Norway is one of the countries with a history in the Arctic. Extended continental shelf claims, claims beyond their sea borders, have been set up by Norway.

Relevant UN Resolutions

Owing to the fact that this issue is a quite new one, the United Nations has not been debating on solutions for this issue so far. That is why resolutions about this issue could not be provided in this section.

- UNCLOS (United Nations Convention on the Law of the Sea)

http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

An international treaty that provides a regulatory framework for the use of the world's seas and oceans, *inter alia*, to ensure the conservation and equitable usage of resources and the marine environment and to ensure the protection and preservation of the living resources of the sea. It was adopted in 1982 and entered into force in 1994.⁴

Possible Solutions

The first possible solution is to implement restrict the use of the Northern Sea route as trade route between Asia and northern Europe. Once this route is extensively used by cargo ships in the future, the Arctic region will not only face hazards of global warming, but also the dangers of water and air pollution. Once the polar trade route is more frequently in use, the biodiversity living in the ice sea and on Greenland and the remaining ice caps will deal with the negative sides.

Secondly, bearing in mind that Arctic sea ice and sea territories have been claimed by several nation as mentioned above, sustainable agreements have to be made and complied to avoid tensions once the Northern Sea route is open for cargo ships. By using this sail route, ships cross territorial waters of various nations bordering the Arctic circle. Therefore, economic agreements have to be made, next to environmental.

The Arctic and the division of its territories and resources has been a precarious issue decades now. So it is important not to increase tensions in this conflict during the set-up of guidelines on the issue of potential future sailable sea routes.

Should the Northern Route be sailed in the future?

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