

## **II. Increased Maritime Transportation and Marine Environmental Protection**

### **Use of the Northeast and Northwest Passages as Transit Routes in the Arctic**

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As evidence of change in the Arctic marine environment from global warming continues to mount, there is concomitant growing interest in potential new commercial international navigation routes through that region. The two principal navigation routes through the Arctic are the Northeast Passage through Russian Federation maritime zones, better known as the Northern Sea Route, and the Northwest Passage through Canadian Arctic waters. The reason for the likely commercial interest in the Northern Sea Route is that a voyage from Asia (e.g., Yokohama) to Northern Europe (e.g., Hamburg) would be 4,800 miles shorter than the Suez Canal route. The Northwest Passage offers similarly attractive statistics: it would provide shorter voyages between Asia and North America and Asia and Northern Europe; it would be 9,000 km shorter than the Panama Canal route and 17,000 km shorter than the Cape Horn route. The Northern Sea Route is already open for commercial navigation with the assistance of icebreakers. Predictions for the Northwest Passage are that there could be a sufficiently long navigable and probably ice-free Arctic summer to enable commercial navigation by 2050.

For international commercial navigation to develop and thrive through the unique Arctic marine environment, there are many issues that will need to be addressed. Commercial navigation will likely occur during the Arctic summer, a matter of a few weeks to a few months. Although there are predictions for decreasing ice cover, and possibly for ice-free navigation in large areas of both passages, the environmental conditions for safe navigation, such as ice movement and fog, will likely be difficult to predict. Navigation will remain hazardous. Not all classes of commercial vessels will be able to navigate safely without icebreaker assistance at some point and will require ice-classing. Navigation will not necessarily be linear, following the shortest route. Crew members will need to have special safety and survival training, for which new international standards will be required, and which will need to be offered by maritime academies. The insurance industry will need to provide cover on a standing, as distinct from a case-by-case basis to make Arctic shipping attractive. The coastal states of the Arctic Ocean (in particular Canada and the Russian Federation along the passages) will need to develop the infrastructure necessary to support international navigation, such as regular meteorological and ice forecasts, strategically located ports (with repair facilities), navigation aids, traffic management services, prompt search and rescue, salvage, places of refuge, and so on. Issues of costs for the services and who should bear these will arise. These services, which are taken for granted in other coastal maritime regions, will need to be created or enhanced in the Arctic.

Given the international nature of shipping and the global maritime regulatory regimes developed in support thereof, there will be a need to re-examine the extent to which current international maritime law is sufficient to support Arctic navigation and protect its fragile coastal and marine

environment. In addition to carriage of goods by sea, other likely uses of the Arctic marine environment include offshore development and related support services, cruise shipping and recreational boating. The increase of these uses will require better definition and implementation of safety and environmental standards for a broad range of vessels. At this time, the 2002 IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, which are currently being amended, are non-mandatory and do not apply to the full range of vessels that are navigating in the Arctic. The protection of the Arctic marine environment will also likely need a higher level of protection as a "special area" under the Convention on Prevention of Pollution from Ships, 1973/78 and possibly also special mandatory measures under Article 211(6) of the United Nations Convention on the Law of the Sea, 1982 (UNCLOS).

Canada and the Russian Federation are already regulating Arctic shipping, using the special power conferred in Article 234 of UNCLOS. The Russian Federation has built substantial experience in regulating ice-classes and navigational safety requirements, and has a substantial fleet of icebreakers. Canada has similarly longstanding legislation to protect the Arctic marine environment from shipping activities, but has a less developed infrastructure. There are a number of issues that arise from the initiatives of these states to regulate shipping. The first relates to the extent to which nationally legislated standards are consistent with international standards, as coastal States bordering ice-covered areas are not required to act through the IMO in legislating a higher level of protection of the environment within their EEZs. The second relates to the status of parts of the Arctic passages, which are claimed as sovereign internal waters by Canada and the Russian Federation respectively, but are not so recognized by certain maritime states, including the United States. For instance, the United States is of the view that the Northwest Passage is subject to the regime of straits used for international navigation. This is important for access by international shipping as a matter of right (rather than privilege) and the degree of authority that may be exercised by Canada over international shipping in the area.

There is an important role for international regional cooperation on shipping matters in the Arctic. The Arctic Council has already started to consider the issues of governance of international shipping, and its forthcoming report on Arctic Marine Shipping Assessment (AMSA) will be an important contribution to these efforts. It remains to be seen how the Council's initiatives in this regard will relate to the role of the IMO as the competent international organization in this field and the national initiatives of individual Arctic Ocean coastal states. Earlier this year, ministers from the five Arctic Ocean coastal states (Canada, Denmark/Greenland, Norway, Russian Federation, United States) adopted the Ilulissat (Greenland) Declaration stating that no comprehensive regional ocean management regime is needed for the Arctic Ocean. Although Arctic States clearly have to play a leading role in the development of appropriate regime(s) for the Arctic, other States and organizations can be expected to have an interest to project. For example, on 9 September 2008 the European Commissioner responsible for Maritime Affairs & Fisheries (DG MARE), Joe Borg, made a statement, also in Ilulissat, outlining the interests of the EU in the Arctic as a matter of common concern. Other maritime states whose ships are likely to navigate the Arctic passages once this becomes feasible will also have an interest in safe navigation in the region and the provision of related services at reasonable cost.