## Mapping of the maritime jurisdiction for Arctic Navigation

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## **Abstract:**

In recent years, Arctic glaciers have gradually melted due to the global warming, which makes the exploitation of Arctic and its seabed resources possible. Though numerous disagreements and potentials over Arctic maritime jurisdiction still exist, the surround-Arctic nations have agreed the United Nations' Convention on the Law of the Sea to divide the Arctic Ocean into zones that can be regulated and exploited. The IBRU of Durham University has mapped the known claims, agreed boundaries and potential claims of the surround-Arctic nations in the Arctic to clear the maritime jurisdiction in the region. However, different countries may have different requirements within their jurisdictional areas. Clarifying these requirements is essential for Arctic Navigation of investigation ships and merchant ships for their route planning.

In this paper, based on the map of maritime jurisdiction and boundaries in Arctic region (IBRU), we analysed the international conventions and relevant laws of the surround-Arctic nations to find out the rights and obligations of ships in different zones. The limitations on activities and recommendations on navigation planning are marked for different zones according to different purposes, i.e. science or commerce. The map could not only provide navigational guidance for the activities in the Arctic Ocean, but offer references for the countries not surrounding the Arctic in the formulation of the Arctic strategies.

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