



New mandatory regulations for vessels operating in polar waters

An international framework - the Polar Code – is expected to enter into force in 2017 to protect the Arctic and Antarctic from maritime risks.

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Introduction

After intense work and negotiations within the International Maritime Organization (IMO) the International Code for Ships Operating in Polar Waters (the Polar Code) is expected to enter into force on 1 January 2017. The Polar Code will be implemented as amendments to MARPOL, SOLAS and the STCW Conventions and will apply to new ships constructed after that date. Ships, as defined by the Polar Code, constructed before 1 January 2017 will be required to meet the relevant requirements of the Polar Code by the first intermediate or renewal survey, whichever occurs first, after 1 January 2018. However, the Polar Code does not apply to fishing vessels, vessels under 500 tonnes or fixed structures

The code contains comprehensive detailed requirements in separate chapters about ship structure; stability and subdivision; watertight and weather tight integrity; machinery installations; operational safety; fire safety/protection; life-saving appliances and arrangements; safety of navigation; communications; voyage planning; manning and training; prevention of pollution (both oil and noxious liquid substances); prevention of pollution from sewage from ships; and prevention of pollution by discharge of garbage from ships.

Polar Ship Certificate

The Polar Code will require vessels intending to operate in polar waters, to apply for a Polar Ship Certificate. The Polar Ship Certificate will classify the vessel as either a Category A, B or C vessel. Many provisions of the Polar Code are related to the category of the vessel. The issuance of the certificate requires an assessment by the vessel's flag state/class about identified operational limitations and plans or procedures or additional safety equipment necessary to mitigate incidents with potential safety and/or environmental consequences. The assessment may contain information about low ambient air temperature, ice, high latitude, possibilities of abandoning the ship, remoteness etc. For vessels operating in low ambient air temperatures, systems and equipment required by the Polar Code must function at the polar service temperature, which is a temperature specified for a vessel that must be set at least 10 degrees Celsius below the lowest mean daily low temperature for the relevant area and season.

Polar Waters Operational Manual

The Polar Code can be seen as a proactive regulation, aiming at mitigating the risks of operating in polar waters requiring any vessel sailing in Polar waters to carry a Polar Waters Operational Manual. The manual will provide the Master and crew with information regarding the ship's operational capabilities and limitations, based on the assessment done to issue the Polar Ship Certificate.

Risk evaluation of polar operations

These mandatory regulations and standardised approaches are expected to make polar operations safer for operators, seafarers and more predictable for insurers. Operational predictability is closely linked to the ability to price the risk of polar operations at a correct level. As a leading marine insurer Gard has a responsibility to fully evaluate all and any risks of Arctic and Antarctic activities.

As outlined in previous type: [asset-hyperlink id: cdc80c8b311c433ab78aea9da8aa8aa7](#) it is no secret that the polar environment imposes new and unknown challenges on all operators within the industry. It seems likely that a major incident in polar waters would cost more than, for example, a wreck removal or pollution response in non-polar waters, due to the unique challenges posed by the location and the environment.

The cost of carrying out wreck removals continues to escalate and the further complicating factors in polar waters may create challenges for the international insurance and re-insurance markets. Depending on whether the claim is *poolable* within the International Group or not the

loss would fall either on the International Group's reinsurance programme or if outside the *pool* on the commercial market.

Polar Operational Limit Assessment Risk Indexing System (Polaris)

To date there are some concerns that the Polar Code does not take into account that conditions in the Arctic are never uniform and does not clearly link the ice-classes of vessels with the actual ice conditions prevailing in the polar regions. However, guidelines to the Polar Code have now been introduced to help solve these issues. The operator is now obliged to explain the methodology used to determine how the ship will be able to operate in the conditions of the planned voyage. This system is known as the Polar Operational Limit Assessment Risk Indexing System (Polaris) and Gard has been involved in its development. Operators intending to operate vessels in the polar waters will need to be familiar with Polaris in addition to existing systems such as the Canadian Arctic Ice Regime Shipping System known as the AIRSS system.

Comment

Despite some of the potential shortcomings of the Polar Code during its development - from environmental and training/safety perspectives - which have been highlighted by both industry and environmental organisations, the Polar Code must be seen as a major achievement and a step in the right direction. However, the work of ensuring safe and sustainable operations in the polar regions has just begun. The insurance industry as a whole and Gard have a responsibility to ensure that instead of racing to provide the cheapest insurance, there is a race to protect one of the last relatively unspoilt environments in the world. This can be achieved partly through cooperation and correct evaluation of the risks involved.

Questions or comments concerning this Gard Insight article can be e-mailed to the [Gard Editorial Team](#).

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