

MASTER'S CHECKLIST Before entering ice-covered waters

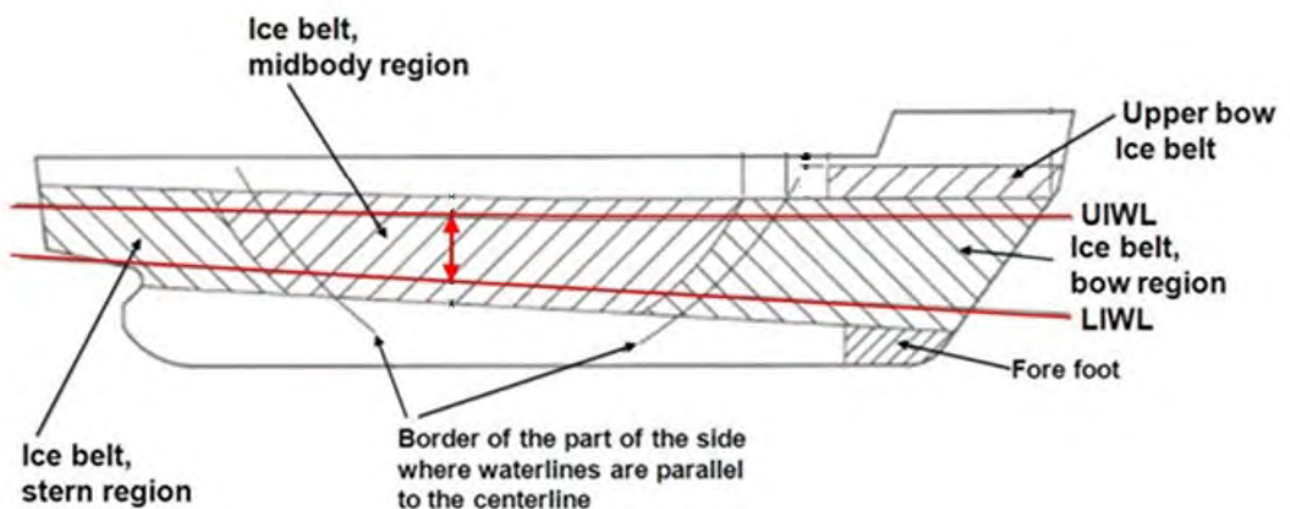
- Irrespectively of these guidelines, vessel is always fully in charge of her own safe navigation and manoeuvring.
- Make sure that the vessel's ISM manual includes instructions for safe navigation in ice.
- Ensure that the vessel's ice classification certificate or annex containing ice class information (ice class draughts and minimum engine power) is onboard and available.
- In order to comply with the ice class rules and have right to be assisted, the vessel must use at least the engine power specified for its ice class if the ice conditions, the icebreaker or the pilot so require.
- When assisted by an icebreaker and/or following another vessel in ice, always keep the propulsion machinery in immediate readiness for even aggressive engine manoeuvres.
- Ensure that the vessel is at all times loaded/ballasted between LIWL and UIWL (Fore and Aft, LIWL = Lower Ice Waterline, UIWL = Upper Ice Waterline) and that the propeller is completely submerged. Any neglect in this respect will cause assistance to be delayed or denied.
- Make sure that there is sufficient supply of fresh water and bunker in case of possible delays caused by ice.
- Start listening to the daily ice reports well in advance. Or check <https://Baltice.org>.
- For observing the ice features, adjust the X-band (9GHz / 3cm) radar image to show ice tracks; increase GAIN and remove all clutters until the ice tracks and other ice features are clearly displayed in the radar image. S-band (3GHz / 10cm) radar should be tuned normally and reserved to traffic monitoring and collision avoidance.
- Check that your VHF radio is operative and find out in advance which channel is used by the icebreaker operating in the area.
- Check that the pipes on deck are drained of water.
- Check that the sounding and air pipes of the ballast tanks are emptied of water.
- Check that anchor, mooring and other equipment which may be used in ice conditions are covered by adequate tarpaulins to prevent icing.
- Keep the pilot ladder in a sheltered place and, before use, make sure that it is in good condition and ice-free.
- For preventing icing, lower the ladders only as close as possible to Pilot boarding area.
- Make sure that the searchlights are working.
- Move the anchors astern or lift them onto deck, if there is even a slight possibility that they may come into contact with the icebreaker's towing notch (see guidelines). Any neglect in this respect will cause assistance to be delayed.
- Check that cooling water is available when navigating in ice.
- Avoid colliding with loose ice floes at high speed and check your open-water speed.
- Check the ice waypoints* provided by the icebreaker/VTS/GOFREP/ICE INFO when navigating in ice.

*ICE Waypoints

In ice-covered areas ice waypoints are provided to all vessels, these ice waypoints indicate the assistance route. The ice waypoints are set in order to help vessels navigate more easily and safely in ice conditions and in order to enable vessels to navigate unassisted for as long as possible. Vessels obtain the waypoints for ice navigation via ICE INFO, VTS/GOFREP or from the icebreakers.

Since the icefield is usually in constant move, the vessels must see the ice waypoints as an guide and the actual easy track can be located within 1 to 2 miles range of the given points.

Failure to follow the ice waypoints may lead to delayed icebreaker assistance. Vessels are, however, at all times responsible for their own safe navigation.



Image, Traficom

The vessel must also meet the following requirements when navigating in an area where icebreaker assistance is provided:

- when navigating in ice, the vessel is always to be loaded to the draught required for its ice class (between the upper and lower ice waterlines [UIWL/LIWL]);
- the propeller is to be completely submerged and if possible entirely below the ice;
- the cooling-water system is to be designed and used so that the supply of cooling-water is ensured when navigating in ice, even when using the maximum engine power stated in the Ice Class Certificate.