

## **Competency enhancement for seafarers operating in polar waters**

# Current Requirements for Polar Competence in STCW

- The current **STCW requirements** for polar competence primarily address navigational officers, focusing on specific skills outlined in the Polar Code, Chapter 12. These include:

**1. Basic Training:** Targeted at officers with operational responsibility for navigation in polar waters.

- Focus on navigational officers with operational responsibility.
- Includes foundational knowledge on navigating in polar waters.

**2. Advanced Training:** For senior officers with decision-making roles in polar operations.

- Aimed at senior officers responsible for operational decision-making.

# Gap in Polar Competence Requirements

However, these requirements **do not comprehensively include all crew members.**

## Gaps Identified

- No requirements for
  - crew members who is a part of the ship's complement with designated safety or pollution-prevention duties
  - search and rescue team
  - non-navigational personnel
- This presents a gap in ensuring preparedness for the unique risks of polar waters.
- This challenge has also been highlighted by several countries previously, including Canada and Argentina.

# Understanding Risk Factors in Polar Waters

## Key Hazards in Polar Operations (Polar Code 3.1)

- **Ice:** Risks of topside icing affecting ship stability and safety.
- **Low Temperature:** Potential equipment failures and human performance challenges.
- **Extended Darkness/Daylight:** Impact on navigation and human performance.
- **High Latitude:**
  - Inadequate hydrographic data and navigational aids.
  - Remoteness leading to limited SAR facilities and delays in emergency response.
  - Communication limitations affecting incident response.
- **Limited Crew Experience:** Increased potential for human error.
- **Sensitive Environment:** Heightened impact of pollution and longer restoration times.

# Why Competence Enhancement is Necessary

- 1. Safety Challenges:** Complex risks from ice, extreme temperatures, and isolation.
- 2. Emergency Preparedness:** Limited crew training on survival, evacuation, and SAR.
- 3. Environmental Protection:** High risks of severe incidents, like oil spills, in sensitive ecosystems.
- 4. Compliance:** The Polar Code (Chapter 12) requires trained personnel, but current implementation is insufficient for all roles.

# Norway's Proposal for Polar Competence

Norway has recognized a gap in the current polar competence requirements in STCW and submitted a detailed proposal to the ISWG in October 2024 to address this issue:

## 1. Expand STCW Requirements and polar code (chapter 12):

1. Include all crew members who is a part of the ship's complement with designated safety or pollution-prevention duties , not just navigators.
2. Familiarization training for entire crew.

## 2. Three-Level Training System:

1. **Familiarization** training for entire crew
2. **Basic Training:** For all crew with designated safety or pollution-prevention duties, focusing on general knowledge of polar risks and emergency response.
3. **Advanced Training:** For officers with specific responsibilities under Polar Code operations.

## 3. Revised Knowledge, Understanding, and Proficiency (KUP):

1. Move role-specific content (e.g., voyage planning) to advanced training.

# Conclusion

- Competence enhancement is essential for safety, sustainability, and compliance in polar operations, ensuring protection of lives, vessels, and the environment.

# Thank You

**For further questions or discussions:**

Irene Mortveit Ellingsen

Senior Engineer

[IMEL@sdir.no](mailto:IMEL@sdir.no)