

The background of the slide is a photograph of the Aurora Borealis (Northern Lights) in a dark sky, with green and purple hues. Below the sky, a snowy mountain range is visible, with a body of water in the foreground reflecting the lights. The text is overlaid on a dark blue rectangular area in the upper right.

Polarworthiness: A new standard of seaworthiness in the polar context ?

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Polar Shipping and Arctic Development Symposium

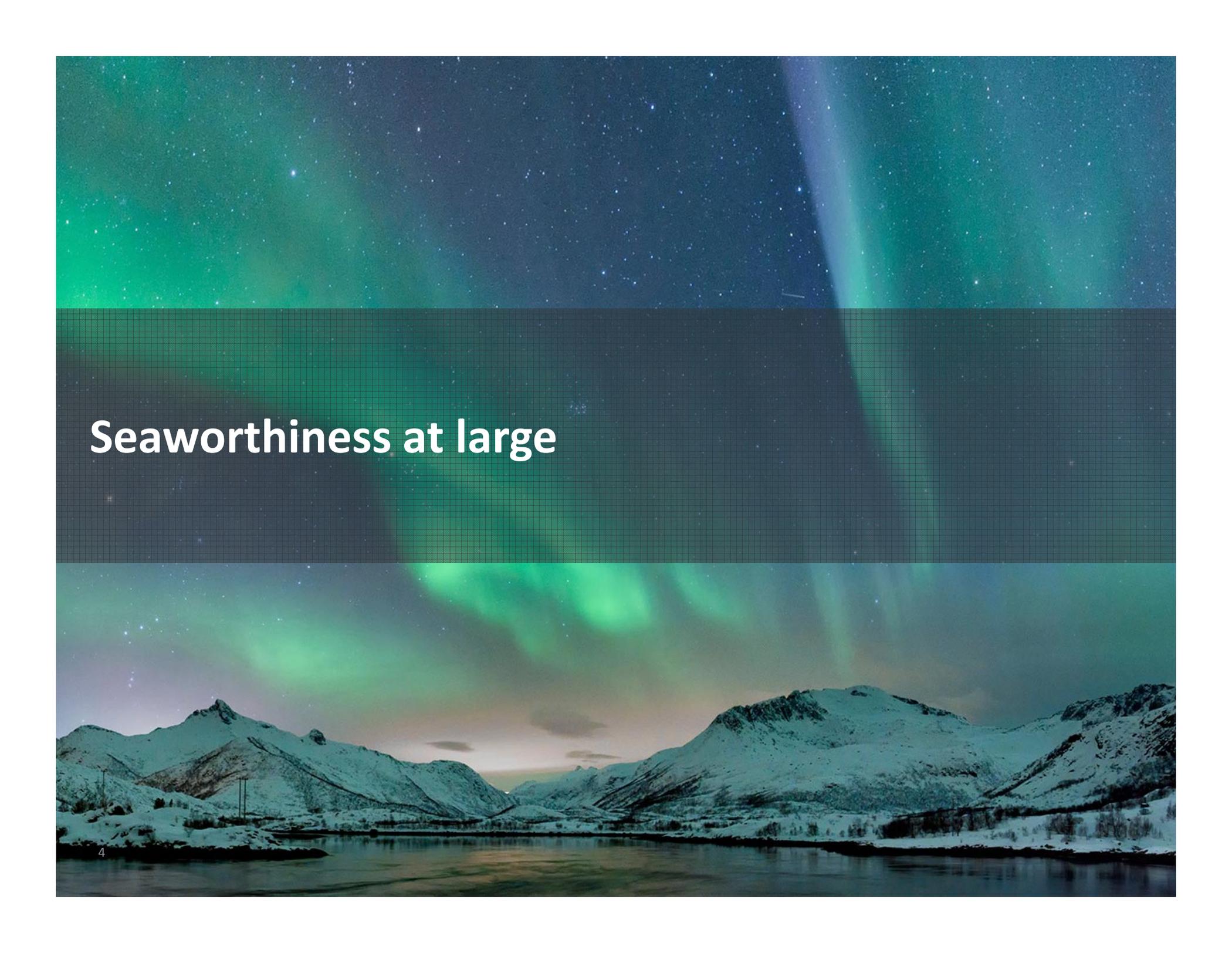
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Introduction

- CMI's International Working Group on Polar Shipping has been examining various aspects of domestic and international law and its impact on commercial shipping in polar waters.
- Formed in Hamburg in 2014 to identify concurrent risks in the polar context which remain to be addressed or harmonized.
- One of these issues is the standard, of “seaworthiness” in the polar context. Is this a new standard? If so, what does it entail, and what are its effects?

Introduction

- Seaworthiness at large.
- Seaworthiness in the Polar Code context.
- Practical Issues
- Conclusions

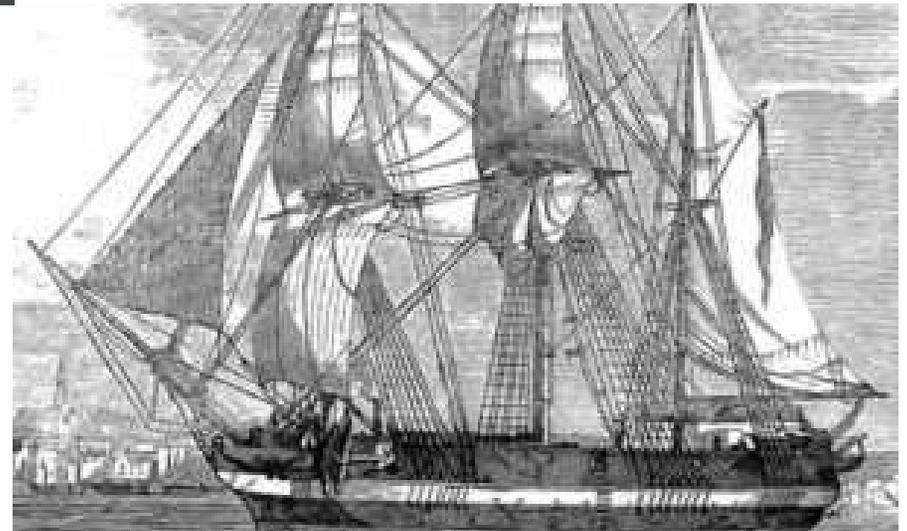


Seaworthiness at large

- “... the state of a vessel in such a condition, with such equipment, and manned by such a master and crew, that normally the cargo will be loaded, carried and cared for and discharged properly and safely on the contemplated voyage” ¹.
- Temporal aspect to the concept. The standard of what is “acceptable seaworthiness” rises with time and technological progress.
- “Seaworthiness must be judged by the standards and practices of the industry at the relevant time, at least so long as those standards and practices are reasonable” ².

Seaworthiness at large
Franklin's 1845 Arctic expedition is illustrative.

- “The HMS EREBUS and TERROR ...were hardened veterans of polar travel, and technological marvels of their age”.³
- Prior to the Arctic expeditions, completed four year charting mission to Antarctica.
- Originally built to withstand bombardment at sea.



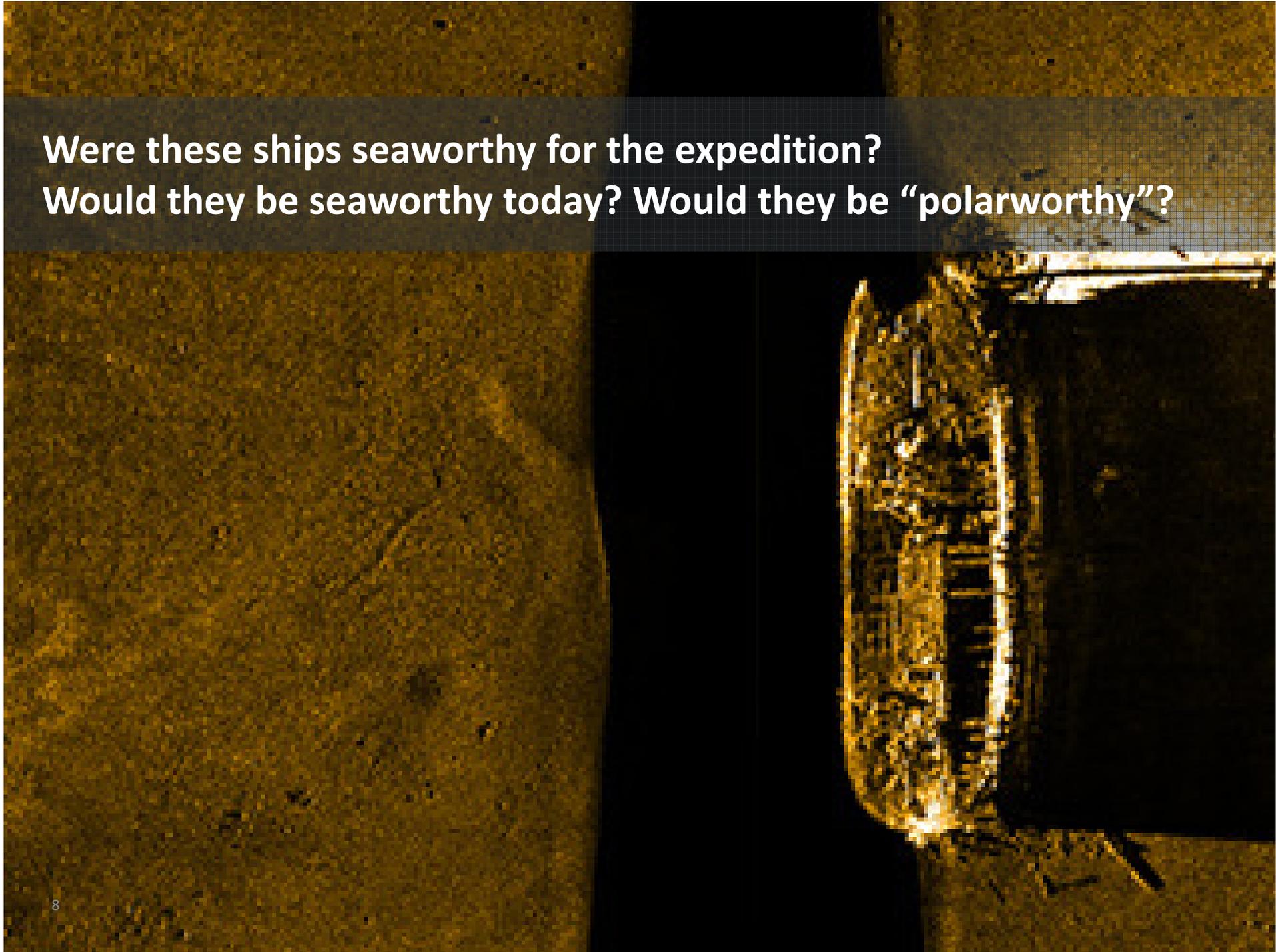


Seaworthiness at large
Franklin's 1845 Arctic expedition is illustrative.



- Refitted with protective bows (reinforced cross beams, iron plates). Propellers and iron rudders were retractable into iron wells.
- Full size steam engines added horsepower to the square sails.
- 24 officers/100 crewmen, three years worth of preserved foods.

**Were these ships seaworthy for the expedition?
Would they be seaworthy today? Would they be “polarworthy”?**



The exercise of “due diligence”

- “... all reasonable skill and care to ensure that the vessel was **seaworthy** at the commencement of its voyage, namely, reasonably fit to encounter the ordinary incidents of the voyage”.⁴
- Vessel/equipment breakdown / incompetent crew / cargo worthiness issues.

Contracts of Carriage

- Hague Visby Rules / bills of lading⁵
 - “The carrier shall be bound, before and at the **beginning of the voyage**, to exercise due diligence to make the ship **seaworthy**, properly man, equip and supply the ship, make the cargo spaces fit and safe for the reception, carriage and preservation of cargo” (Art III and IV).
 - Carve out for Charterparties (when the Hague Visby Rules do not apply – Art. V and VI).

– Carve out example:

The [charterer/shipper] acknowledges and agrees that ***given the nature of the services*** to be provided by the Owner, and the ***scope of trade of the vessel*** as set forth herein, this Contract [of affreightment/charter party] is a ***special agreement*** in accordance with ***Article VI*** of the Hague Visby Rules [as contained in Schedule 3 of the ***Marine Liability Act***] and no ***bill of lading*** will be provided in connection therewith.

...

– Carve out example (continued):

...

The Owner shall provide the [charterer/shipper] with a ***non-negotiable receipt*** of cargo [or Waybill (non negotiable) (“Receipt”)] and the ***Hague Visby Rules*** shall not apply to such Receipt, or to the carriage of cargo hereunder. The [charterer/shipper] further acknowledges that given the nature of the services and agreed scope of trade, ***no agreement or undertaking as to seaworthiness*** can reasonably be required of the Owner (and no conditions, term or warranty as to seaworthiness is agreed, expressly or by implication, herein) *provided the Owner shall exercise* [reasonable care] with regard to the maintenance and operations of the Vessel.

Warranty of seaworthiness in a voyage policy ⁶

- *Implied warranty of seaworthiness* in every voyage policy that, at the **commencement** of the voyage, the ship will be seaworthy for the purpose of the particular marine adventure insured.
- Where a voyage policy attaches where the ship is in port, there is an implied warranty in the policy that the ship will, at the time of **commencement** of the risk, *be reasonably fit* to encounter the ordinary perils of the port.

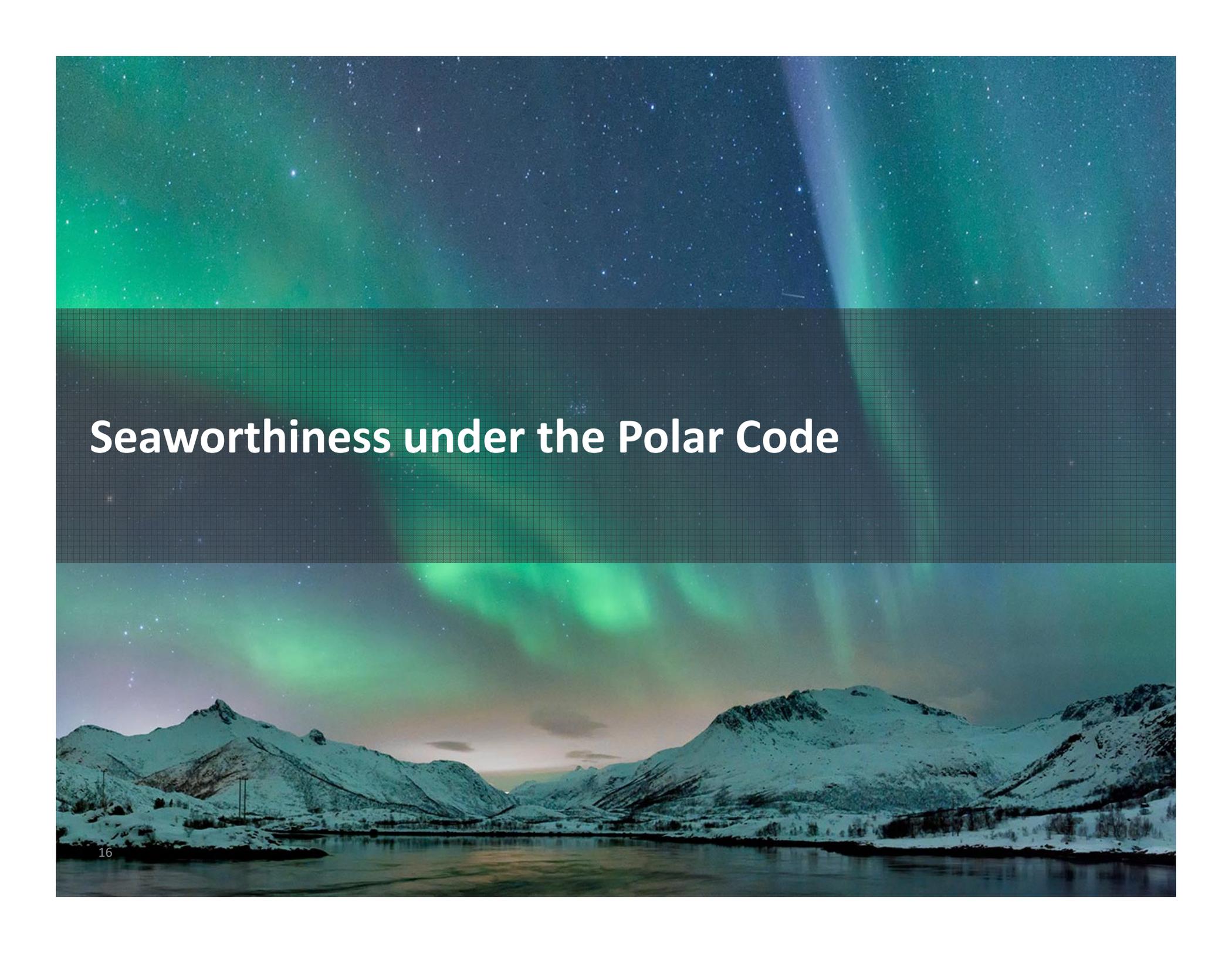
Warranty of seaworthiness in a voyage policy

- When the voyage policy relates to a voyage performed in different stages during which the ship requires different or further preparation or equipment, there is an implied warranty ***that, at the commencement of each stage, the ship is seaworthy.***

Warranty of seaworthiness in a time policy.

- No implied warranty in a time policy that the ship will be **seaworthy** at any stage of the marine adventure, but where, with the privity of the insured, ***the ship is sent to sea in an unseaworthy state***, the insurer is not liable for any loss attributable to unseaworthiness.





Seaworthiness under the Polar Code

Polar Code:

- Provides for safe ship operation and protection of the marine environment, in extremely harsh conditions.
- Addresses risks found in polar waters not adequately mitigated by other IMO instruments
- Reflects a risk based / holistic approach to
 - Safeguard the adventure (ship, crew and cargo)
 - Reduce identifiable risks to the environment⁷

Unique sources of hazard⁸

- **Ice** (as it may affect hull structure, stability, machinery and navigation systems, outdoor working environment, maintenance and emergency preparedness, malfunction of safety equipment and systems).
- **Low temperatures** – working environment and human performance, performance of safety equipment and systems.
- **High latitudes** – as it affects navigation and communication systems.



Unique sources of hazard

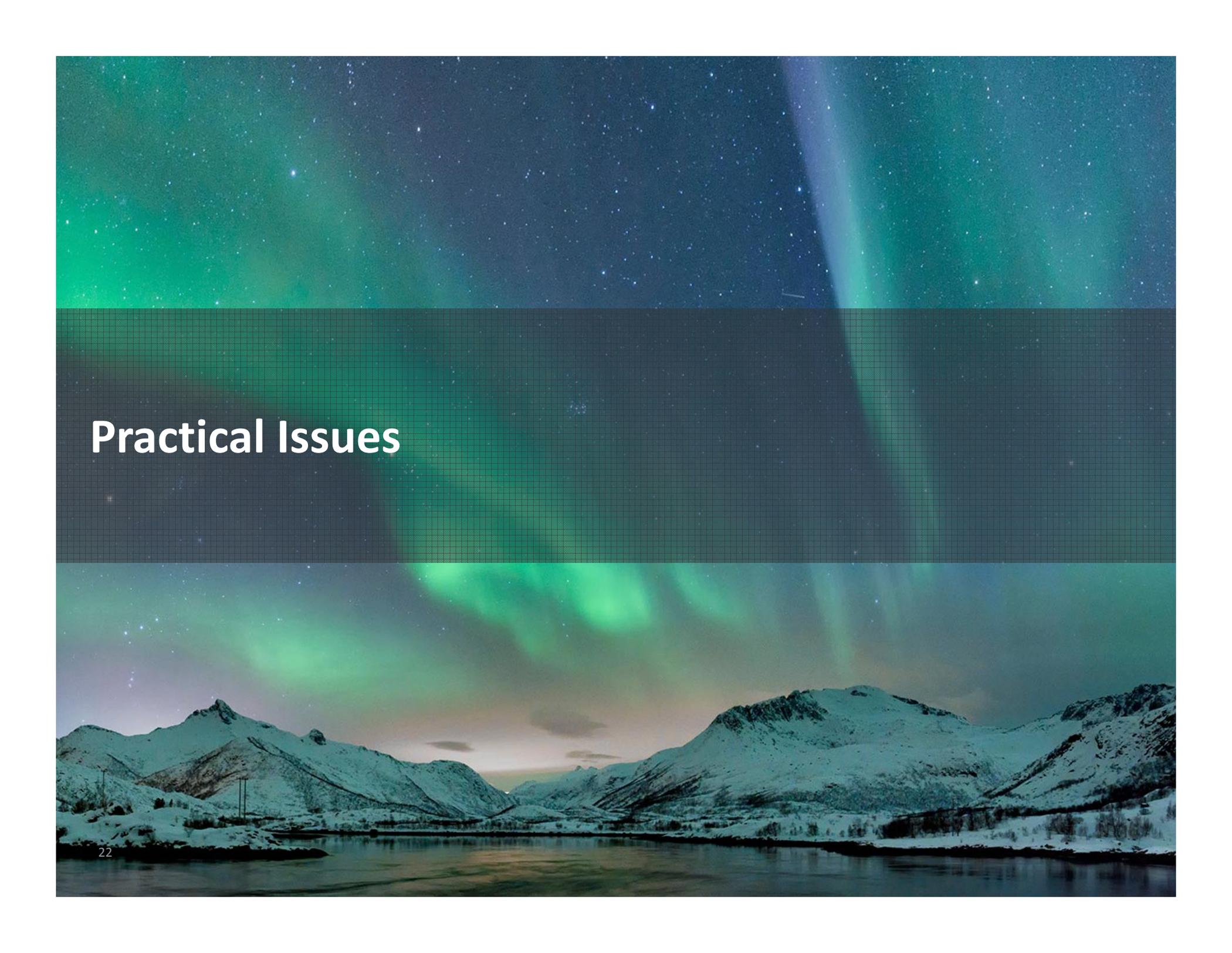
- **Remoteness** (lack of suitable hydrographic data and information, reduced availability of navigational aids, limited SAR facilities, delays in emergency response / mitigation measures and limited communications capability).
- Potential **lack of ship crew experience** in polar operations / potential for human error.
- Rapidly changing and **severe weather conditions** – potential for escalation of incidents.
- **Environment** – sensitivity to **harmful substances** and other environmental/cultural impacts. Need for longer restoration periods.

The Polar Code's efforts to mitigate the potentially devastating effects of such unique hazards and to reduce risks to the environment elevate "seaworthiness" to a higher standard..

- **Polar Ship Certificate⁹**
 - Design and construction of ships. Categories of ships (depending on ice thickness).
 - Design and construction of equipment, crew and passenger clothing, ice removal fire safety), intact stability, materials. Ship safety measures (bridge equipment, crew and passenger clothing, ice removal, fire safety).

- **Polar Water Operational Manual¹⁰**
 - Appropriate training for open-water operations
 - Advanced training for other waters, including ice.
 - Provides standards for polar ready vessels and crews
- **Protecting the Polar Environment**
 - Regulates discharges (oily mixtures, sewage / treatment plants, garbage, food, waste, cargo residues, chemicals)
 - Banning of heavy fuel, use of non-toxic lubricants



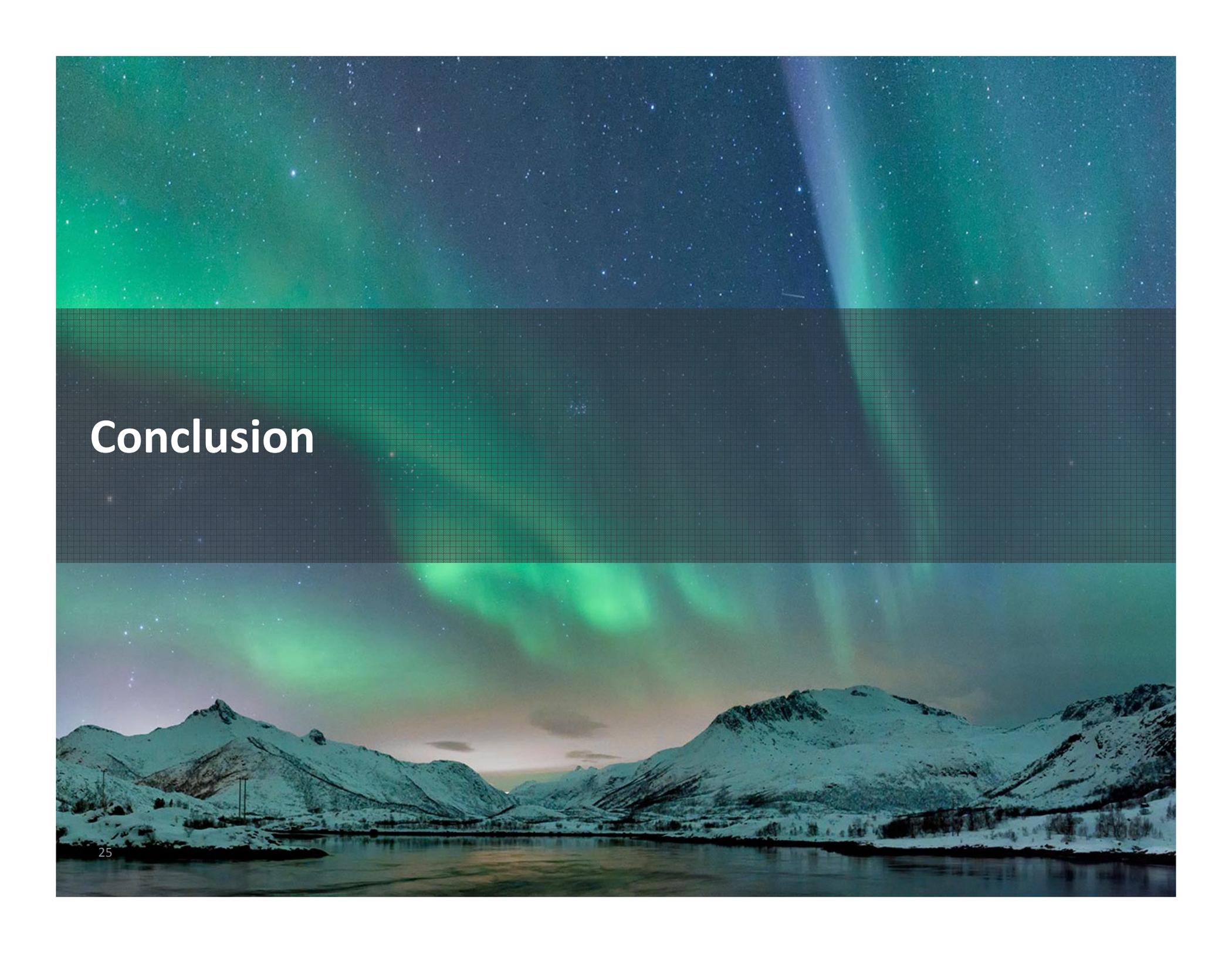
The image is a vertical composition. The top half shows a close-up of the Aurora Borealis, with vibrant green and blue light streaks against a dark, star-filled sky. The bottom half shows a wide landscape of snow-covered mountains and a calm lake at night, with the aurora visible in the sky above. The text 'Practical Issues' is overlaid on the middle section.

Practical Issues

- How will *due diligence* be exercised in the Polar context?
 - Properly man, equip and supply/cargo spaces fit and safe?
Reasonably fit to encounter the ordinary incidents of the voyage?
 - Lack of infrastructure (repair facilities, bunker facilities)
 - Lack of support (supply of equipment, technical assistance, salvage, ice-breaking, low population density, remoteness).
- Where/when is the *commencement* of the voyage?
 - From foreign ports?
 - From Polar ports?
 - Entry into the North West Passage “corridors”? ¹¹
- Will national laws vary the analysis?
 - Rules of Navigation in the Water of the Northern Sea Route ¹²



- Will there be more reliance on GA as a risk sharing measure?
“All loss which arises in consequence of extraordinary sacrifices made or expenses incurred for the preservation of the ship and cargo come within general average, and must be borne, proportionally by all who are interested. Natural justice requires this.” ¹³
- What is the flip side of the coin? An elevated standard – but what is left “high and dry”?
 - Load line?
 - Collregs?
 - Civil Liability?
 - Commitment of shippers and industry/government resources (infrastructure, access to equipment/relief).

The image is a vertical composition. The top half shows a dark night sky filled with stars and a vibrant green aurora borealis. The bottom half shows a snowy mountain range with a calm lake in the foreground, reflecting the aurora and the sky. The word "Conclusion" is written in white text on the left side of the image.

Conclusion

Conclusion

- The Polar Code provides a higher standard of seaworthiness given the inherent risks in the Polar environment. It reflects a risk based approach to mitigate identifiable hazards during the polar adventure.
- The Polar Code should be seen as “a high tide that raises all ships”.
- Need to ensure that concurrent standards / requirements (the “flotsam and jetsam”) are elevated as well.
- Broaden the concept of risk sharing in the Polar context? Risk management issues for shippers, insurers and shipowners/operators. All sectors need to be “polarworthy”.
- Bring the “known-unknowns” under the microscope and keep looking for the “unknown-unknowns” (beyond the “tip of the iceberg”).

Notes:

1. Tetley, *Marine Cargo Claims*, Thomson Carswell, 4^{ed} Chapter 15, p. 877.
2. *The Lendoudis Evangelos* [2001] 2 Lloyd's Rep., 304 at 306. See also *The Eurasian Dream* [2002] 1 Lloyd's Rep. 719 at 736.
3. 2014 Victoria Strait Expedition, *The Search For the Lost Ships of the Franklin Expedition*, www.canadiangeographic.ca/franklin-expedition
4. *The Kapitan Sakharov* [2000] 2 Lloyd's Rep. 255 at p. 266 (C.A.)
5. *Marine Liability Act* (S.C. 2001, c.6), Schedule 3
6. *Marine Insurance Act* (S.C. 1993, c. 22 s. 37)

Notes:

7. *International Code for Ships Operating in Polar Waters (Polar Code)*, Preamble, s.7

<http://imo.org/en/MediaCentre/HotTopics/polar/documents/POLAR%20code%20TEXT%20ADOPTED.pdf>

8. *Polar Code*, Introduction, s.3

9. *Polar Code*, Chapter 1 – General – s.1.3.1.

10. *Polar Code*, Chapter 2 – Polar Water Operational Man

11. Canadian Marine Advisory Council (CMAC), National CMAC Meeting – Spring 2016 (April 19-21, 2016), “*Looking North – Northern Marine Transportation Corridors*”, Transport Canada, Fisheries and Oceans Canada.

12. *Rules of Navigation in the Water Area of the Northern Sea Route* (Order of the Ministry of Russia, January 17, 2013 No. 7,

http://www.nsra.ru/en/celi_funktsii/

Notes:

13. *Birkley et al. v. Presgrave* (1801) 1 East 220. See also the *Marine Insurance Act* S.C. 1993 , C.22, s.65, and *Ultramar Canada Inc. v. Mutual Marine Office Inc. et al.* (The “*Pointe Levy*”) (1994) 82. F.T.R. 1

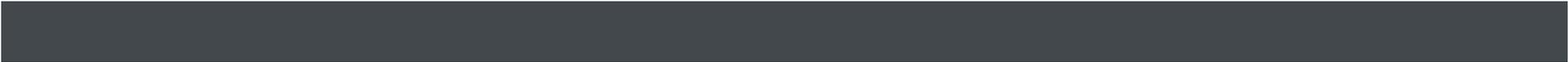
B.Z. Toons

by Brian Zaikowski

www.bztoons.com



I got you a bunch of stuff. This is just the tip of the iceberg



Thank you!

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