

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large red speech bubble is centered on the page, containing the main text.

Crew Training for Polar waters and Inspection Campaign on Polar Code in 2022.

ASBPIF 2020, on-line

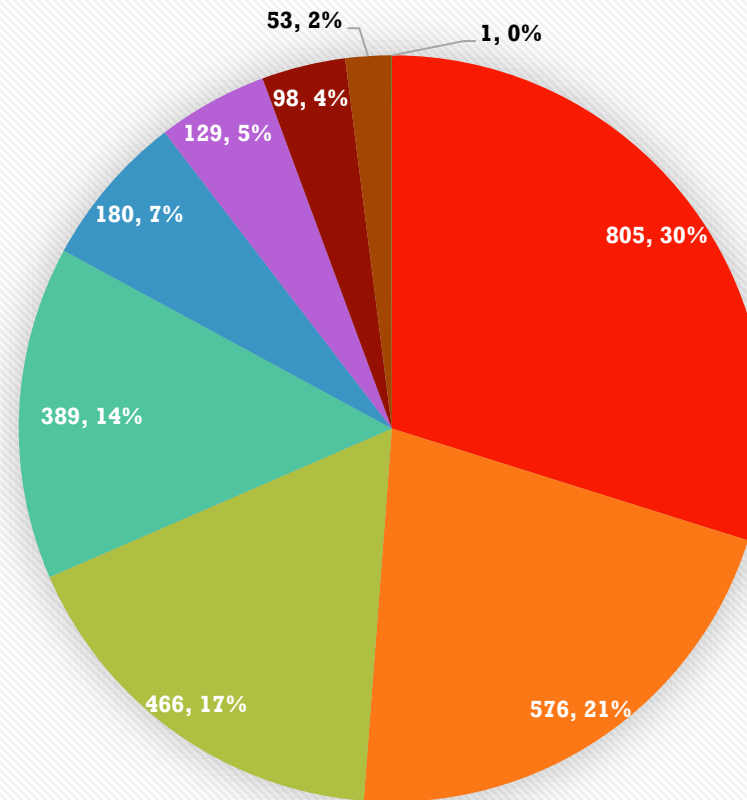
Since
2017

Number of
documents for
Polar waters per
training centers

**TOTAL 2697
DOCUMENTS**

Training centers of Russian Federation

Total 9
centers



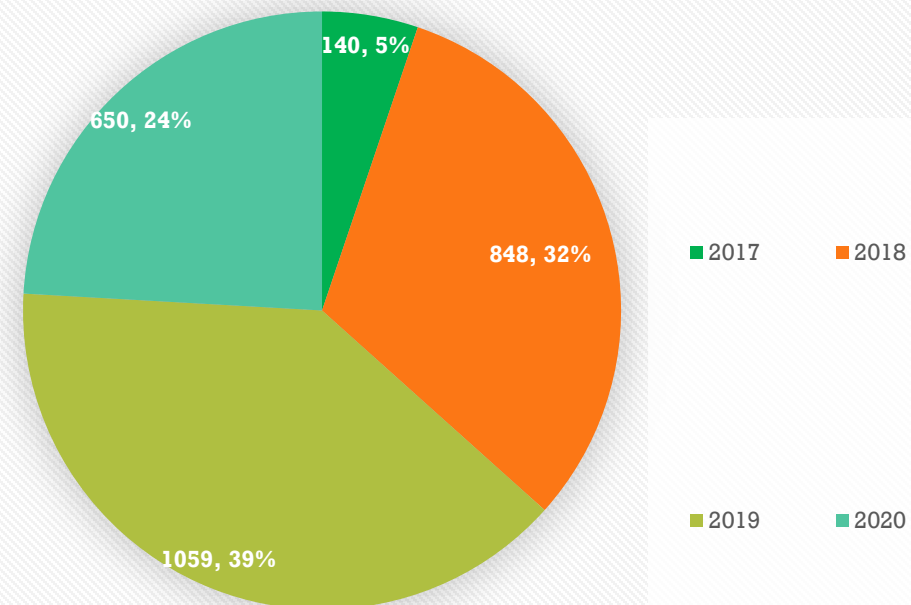
- Marine training center of GUMRF Makarova
- Institute for advanced training of GMU Ushakova
- Training center of MGU Nevelskogo
- Training center of Sovkomflot
- Advanced training center of Arctic Institute Voronin
- Training center Marstar
- Marine training center Senyavina
- Training center Morskie Sistemy
- GUMRF Makarova

Since
2017

Number of
documents for
Polar waters

**TOTAL 2697
DOCUMENTS**

Documents issued, 2017-2020



Since
2017

Number of
Certificates of
proficiency
for Polar waters

**TOTAL 257
CERTIFICATES**

Certificates of proficiency issued, 2017-2020

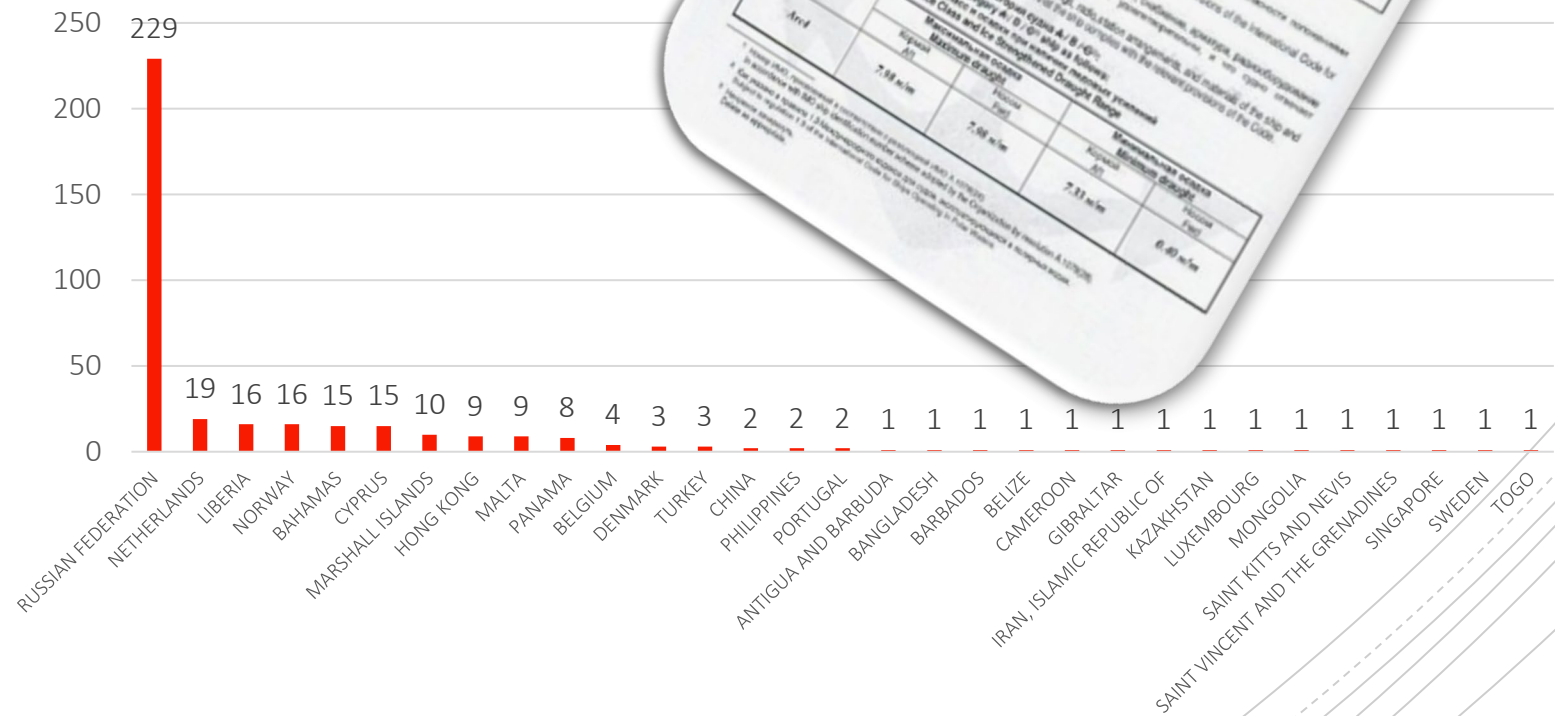


Number of ships
with polar
certificate visited
Russian ports

**TOTAL 377
SHIPS**

Since
2017

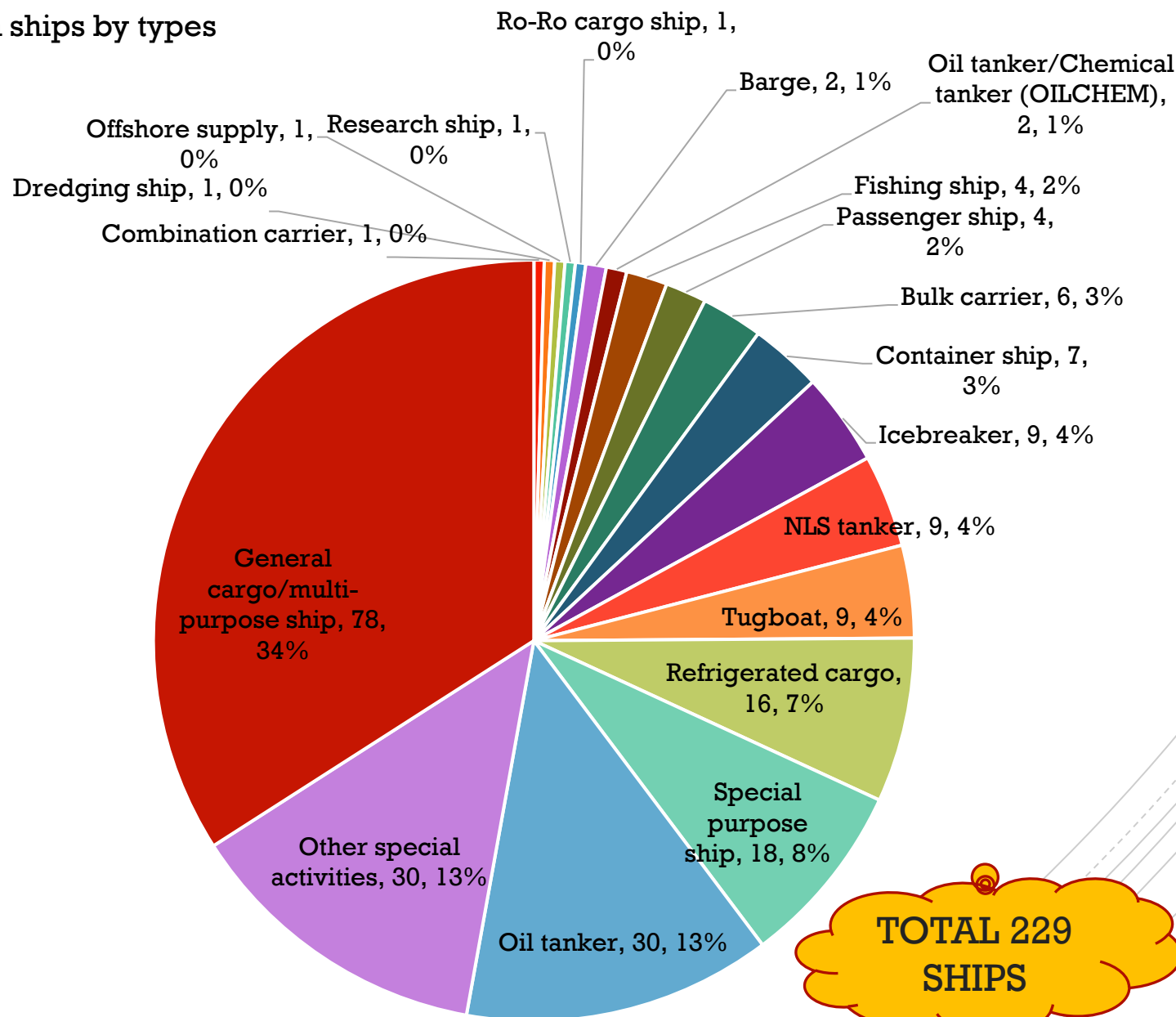
Number of ships by flag



Number of Russian ships with polar certificate visited Russian ports

Since
2017

Russian ships by types

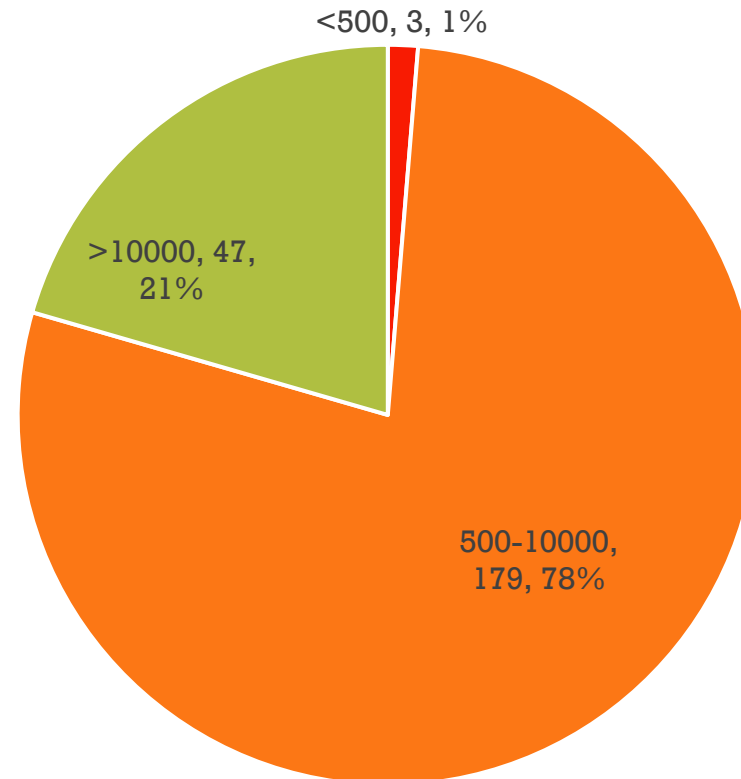


TOTAL 229 SHIPS

Number of
Russian ships with
polar certificate
visited Russian
ports

Since
2017

Russian ships by tonnage total



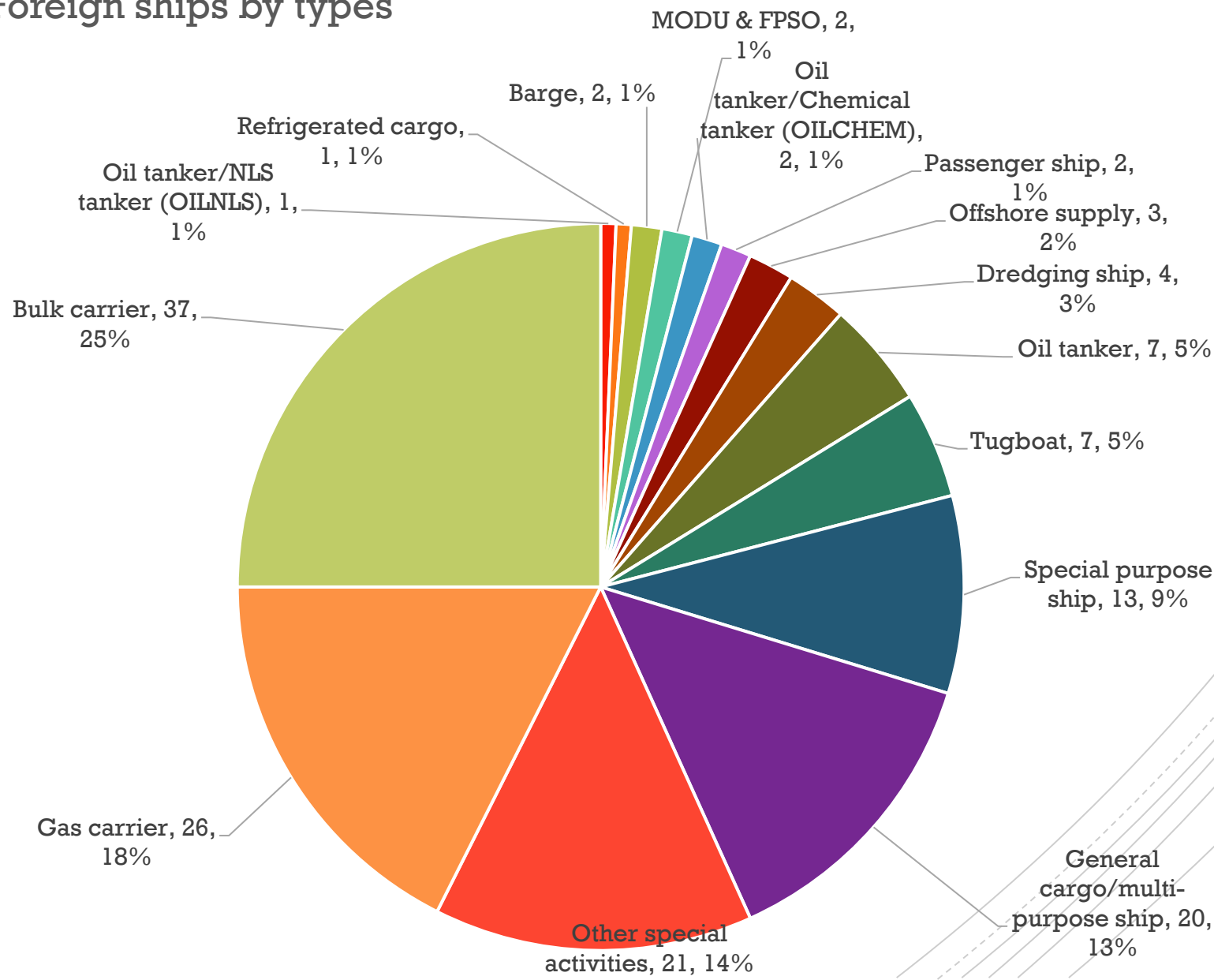
**TOTAL 229
SHIPS**

**TOTAL 148
SHIPS**

**Number of
Foreign ships with
polar certificate
visited Russian
ports**

**Since
2017**

Foreign ships by types

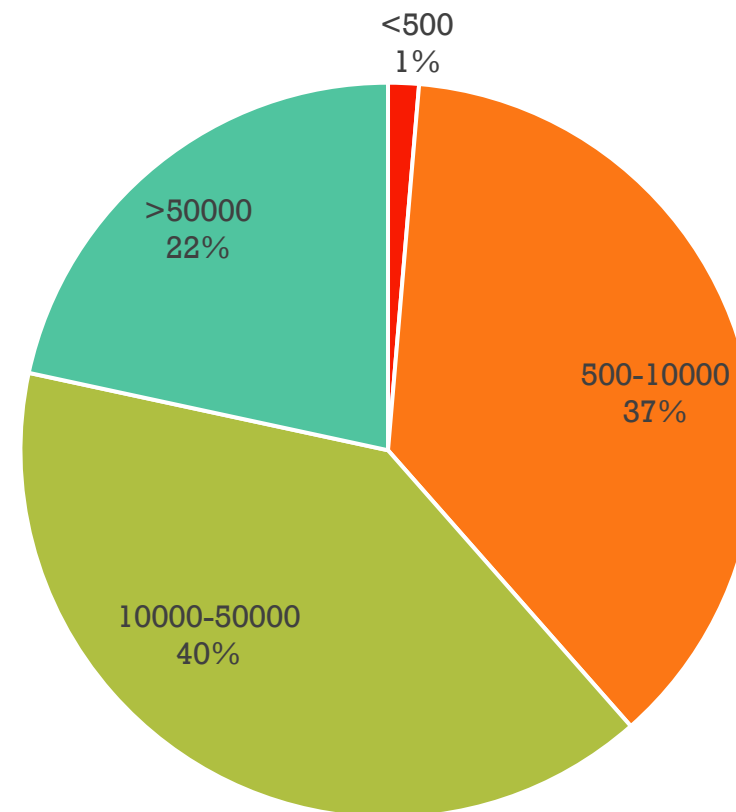


**TOTAL 148
SHIPS**

**Number of
Foreign ships with
polar certificate
visited Russian
ports**

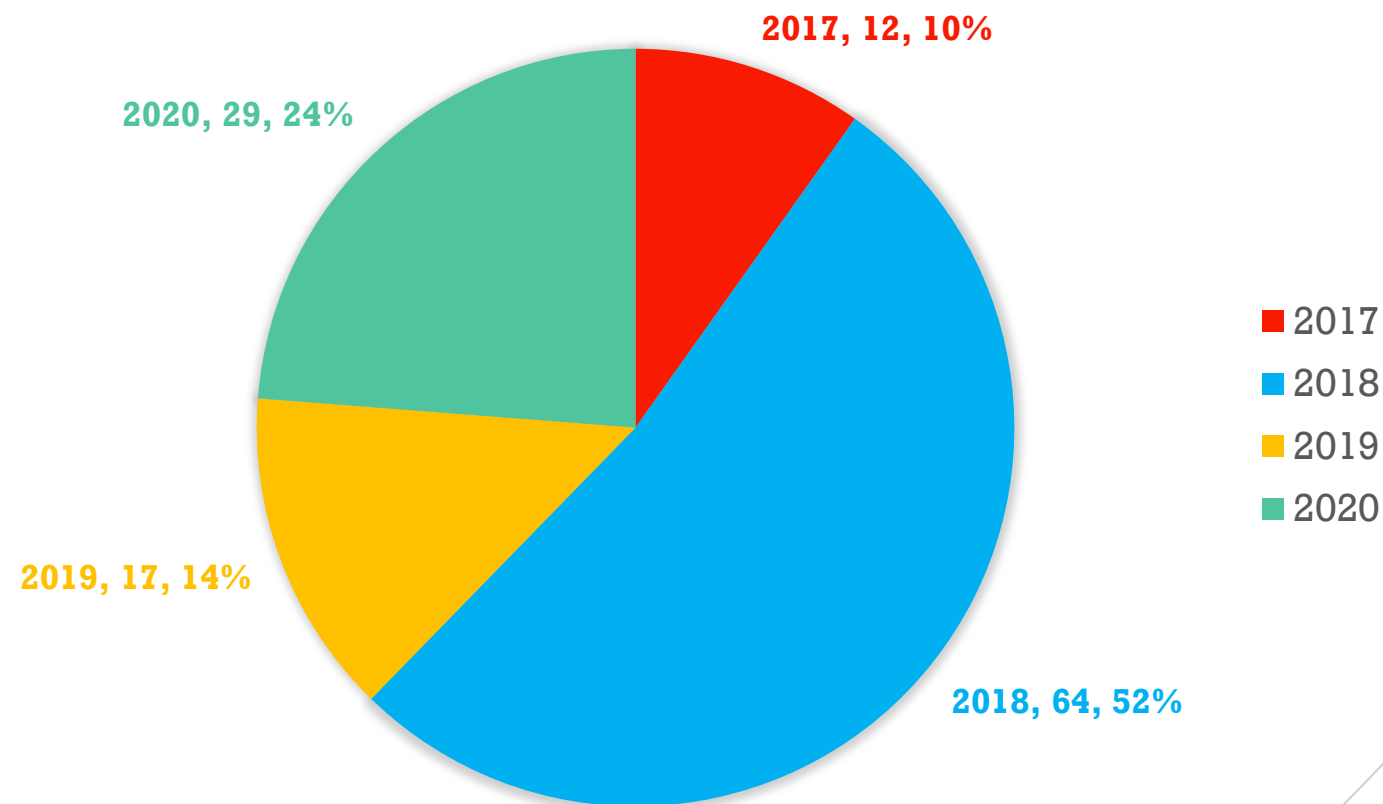
**Since
2017**

Foreign ships by tonnage total



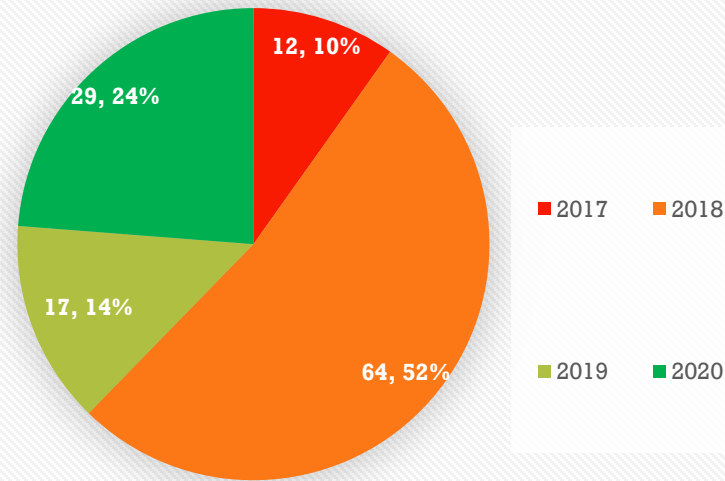
Deficiencies
related to polar
code: 2017-
2020

DEFICIENCIES 2017-2020

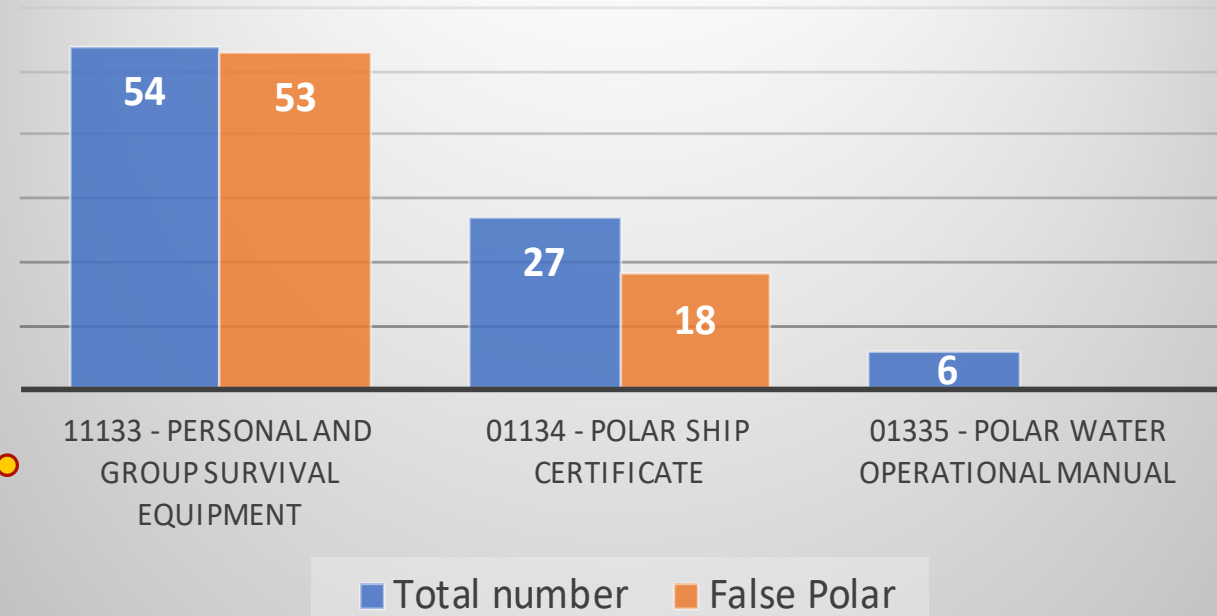


Deficiencies related to polar code: 2017-2020

Deficiencies 2017-2020

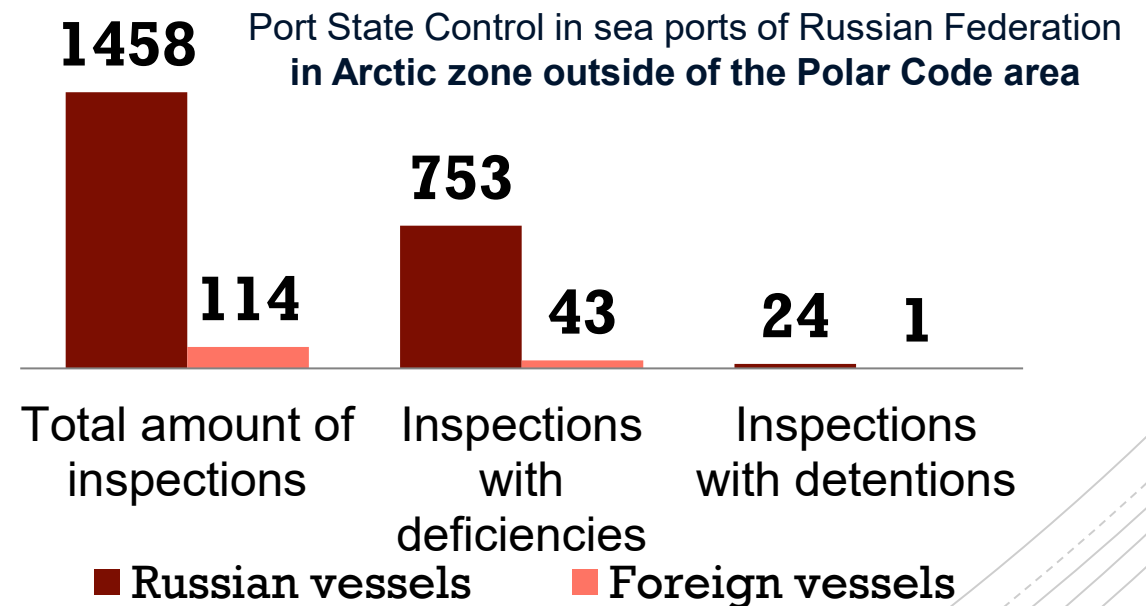
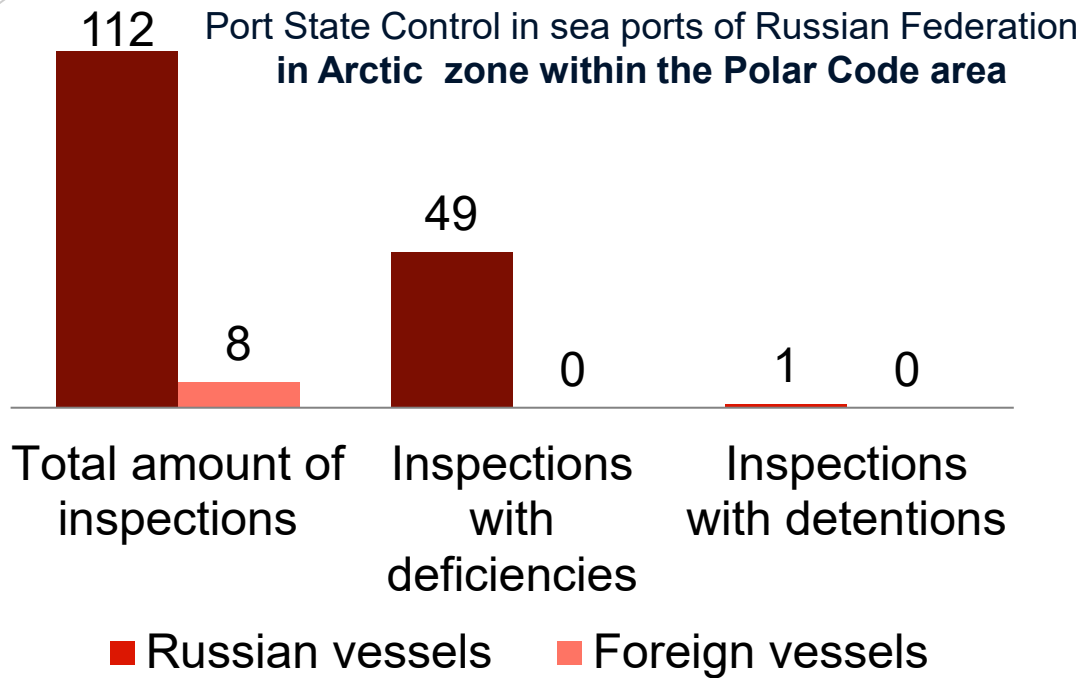


Number of real VS false deficiencies



TOTAL 87 DEFICIENCIES;
TOTAL 71 (82%)
OF FALSE DEFICIENCIES

Number of
Foreign ships with
polar certificate
visited Russian
ports



Crew Training required by the Polar Code



Training of Russian crews is already effected by our Maritime Universities

Instructors' staff

During the course we invite:

Experienced Ice Master who
worked at the NSR for many years

Experienced Ice Breaker Master

Experience Ice Pilot

- Naval architects



- Basic knowledge of ice characteristics and areas where different type of ice can be expected in the area of operation

Basic knowledge of vessel performance in ice and cold climate

Basic knowledge and ability to operate and manoeuvre a ship in ice

- Basic knowledge of regulatory considerations

- ▶ Basic knowledge of crew preparation, working conditions and safety of operations in ice to be able to apply safe working practices and respond to emergencies
- ▶ Basic knowledge of environmental factors and regulations to ensure compliance with pollution- prevention requirements and to prevent environmental hazards



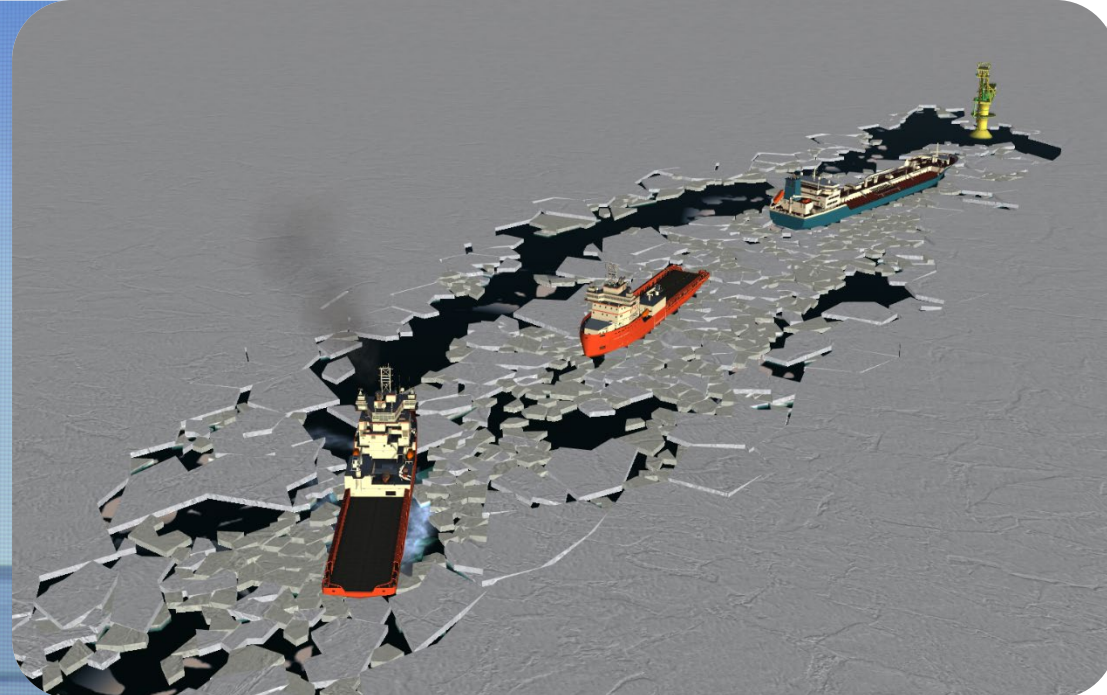
- ▶ Knowledge of voyage planning and reporting to be able to plan and conduct a voyage in polar waters

- ▶ Knowledge of equipment limitations
- ▶ Knowledge and ability to operate and manoeuvre a ship in ice to be able to manage the safe operation of vessels operating in ice-covered waters

- Knowledge of safety to be able to maintain safety of the ship's crew and passengers and the operational condition of life-saving, firefighting and other safety systems in polar waters



Makarov + Krylov



This add-on course includes trip on board in ice conditions and adds practical skills and more information on ice navigation such as:

- **Safe working mooring practice in cold weather**
- **Navigation and use of propulsion in variable ice field and packed ice**







**Admiral Makarov
State University of Maritime
and Inland Shipping**



Igor Zlodeev

- ❖ Instructor of the Makarov Training Centre.
 - ❖ Master Mariner, Ice-pilot.
 - ❖ 25 years of Arctic navigation experience and the ice-navigation experience in Canada and the USA navigating regions.
- At the moment he works as an instructor for Makarov Training Centre of the Makarov State University of Maritime and Inland Shipping.

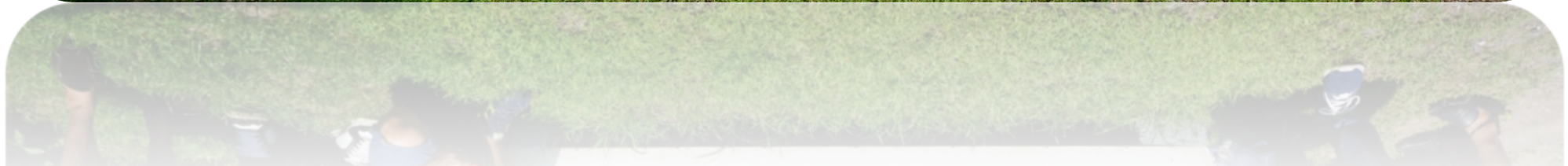
**PROFESSIONAL
DEVELOPMENT PROGRAMMES
INSTITUTE**

[Redacted text]





**Environmental limitations,
Lack of practical experience,
Limited area for exercises**



- Frankly speaking, if ISM procedures are well implemented on board you already should have everything you need. But unfortunately this is not always a case. Even the Polar Code insists on the Polar Water Operation Manual.
- Hopefully, nowadays a number of good publications on this topic are available including NI ice Navigation by David Snider as well as many others. Though these all are very good books, seafarers are often in need of something more simple, more straightforward. All known books are intended for deck officers, nothing for engineers and ratings.



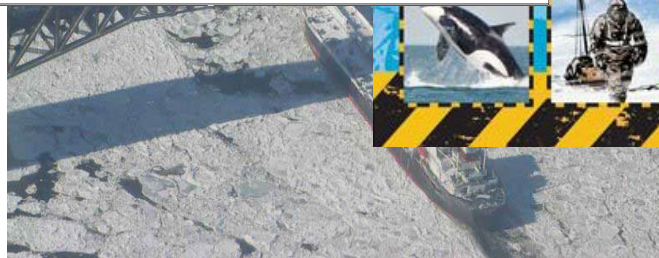
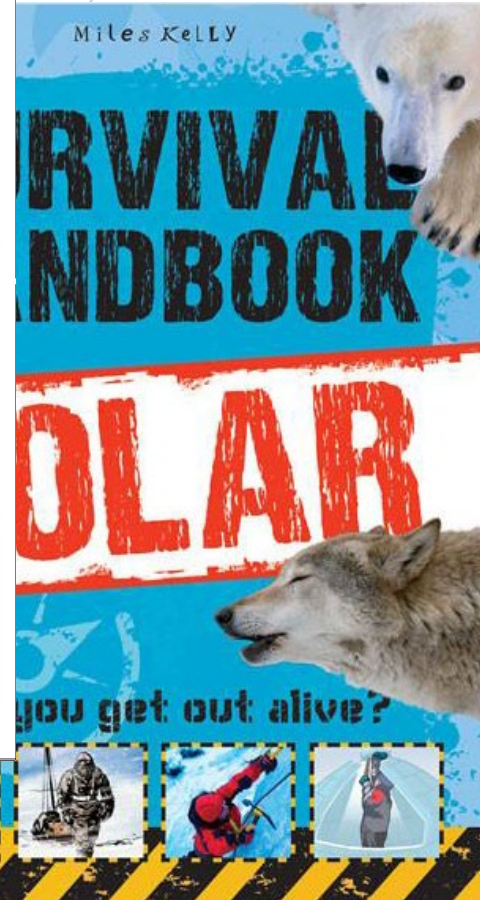
(1) Safety awareness

I hope that here at Forum we are in a good position to rectify this. The idea is not to rewrite everything from scratch but just to collect all that we already have, filling the gaps we identified.

These guidelines could be discussed via correspondence group or meeting if needed. Not only navigation but survival and first aid as well as safe working practices onboard should be included

We should decide if English version is enough or should it be English/French/Russian?

Prepared guidelines could be disseminated via Arctic Shipping Best Practices Information Forum website, via National Maritime Administrations or via Port State Control offers visiting the ship in ice area



Winter Navigation on the
River and Gulf of St. Lawrence

Practical Notebook for Marine Engineers and Deck Officers
January 2005

■ There are a number of good courses available though for now there is no accreditation system, and we are in position to make at least a list of such courses available and promote those who complies with high standards of training

Again we are here to discuss how much shall we go into accreditation process.

The NI is going to develop one of its own like DP Training Scheme which we all familiar with...

BALTICE.org
Baltic Icebreaking Management

Ships, icebreakers, ports...

[Home](#)[Icebreaking & Traffic](#)[Ice & Weather](#)[Reporting & Instructions](#)[Training & Courses](#)

Ice Training Movies

[f](#)[t](#)[in](#)[G+](#)[e](#)[+](#)


Ice training movie can be downloaded from the link below, or it can be used as a short course of safe winter navigation. More information from <http://shipgaz.com/courses/baltice-ice-navigation>.

[Download full video](#)

Compressed ZIP format, 720x576, 119MB

Part I - Ice conditions and Types

Part I Ice Conditions and ice types ...



New ice channel. A passage through

Ice Navigation Courses

On the following links you can find the ice navigation course providers, schedules and course program.

[Aboa Mare](#)

[Marstal Navigationskole Denmark](#)

[Kalmar Navigation Institute](#)

[Makarov Training Centre Russia](#)

Before linking the contact information to the baltice.org web pages, a course organizer should contact by e-mail winternavigation@fta.fi. The course will then be evaluated by BIM according to certificate and references.

[Description of the icebreaking process](#)

Date: 24 / 01 / 2018

Local time: 1200

No	Action	Yes/No	Taken by
1.	Have the following been informed of the ice conditions? The Master The Engine room The crew	YES	Officer in charge of navigational watch
2.	Have watertight doors been shut, as appropriate?	YES	Master
3.	Have speed and course been adjusted as necessary? (N.B. momentum varies as the square of the ship's speed)	YES	Master
4.	Have instructions been issued on the following matters? Monitoring ice advisory service broadcasts Transmitting danger messages in accordance with SOLAS 1974 Chapter V, Regulation 2 (a)	YES	Master

It is not an easy task as it seems. It should be neither too long (we have manual for this) nor too short as it becomes too general and useless

Ideally it should be a supplement for guidelines we develop

The checklists should be open, so the companies would be able to modify them and make them ship specific

- We should decide If English version is enough or should it be English/French/Russian?

1. He

2. Have watertight doors been shut, as appropriate?

3. Has speed been adjusted (N.B. momentum varies at the square of the ship's speed)?

4. Have instructions been issued on the following matters?

- monitoring ice advisory service broadcasts
- transmitting danger messages in accordance with SOLAS 1974 Chapter V, Regulation 2(a)

DATE: 04 Jan. 2017

TEG-33 Cornwall, Canada



First of all, I would like to express gratitude to Denmark, Finland and Norway for their support and expertise in arrangement of Polar Code Inspection Campaign.



Duration

- The schedule, length and time frame for the campaign have been proposed to be split into two parts, the first of which would run in June (3 weeks) and the second in August (3 weeks). This proposal for June and August was based on the number of ships bound for Greenland inspected by the DMA in the period May to October 2018.
- Some members (Russia and Finland) have expressed that two periods of each three weeks seem to be short.



Discussion

TOTAL 88 SHIPS

- Finally, it was agreed that this would be additional campaign. The CIC for 2022 will be Fire Safety led by the Germany.
- It was also noted that if there was no Polar Ship Certificate there is nothing to check, taking this into account and the fact that number of ships with Polar Ship Certificate is quite small, both Russia and Finland suggested to extend duration of Inspection Campaign for whole year, which was not supported.

Draft version

Questionnaire

No.	Questions	Yes	No	N/A	Det.
1*	Is the ships Polar Ship Certificate valid? Part I-A, Regulation 1.3				
2*	Is the Polar Water Operational Manual (PWOM) readily available on board? Part I-A, Regulation 2.1				

79 Documents and
468 pages later

Not necessarily
in English

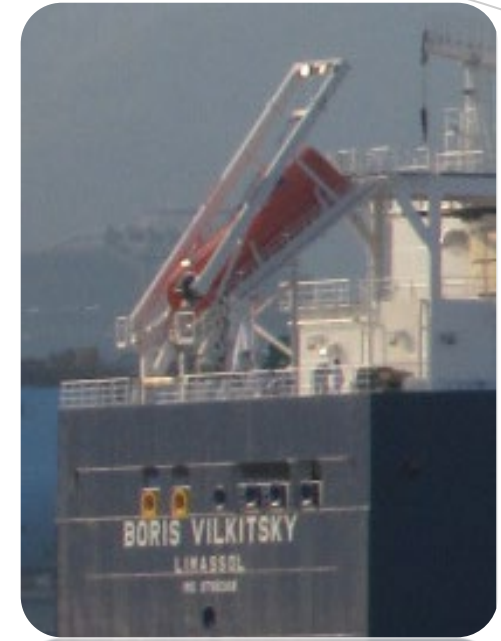


NOTE

1. If “NO” is selected, for question marked an “*”, the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box “Yes” or “No” should be selected as appropriate.

Draft version

Questionnaire



No.	Questions	Yes	No	N/A	Det.
3	Are there measures on board to prevent ice accretion? Part I-A, Regulation 4.3				
4*	Do the vessel carry proper lifesaving equipment onboard? Part 1-A regulation 8.2.3.1]				

NOTE

1. If “NO” is selected, for question marked an “*”, the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box “Yes” or “No” should be selected as appropriate.

Discussion

- It was also noted by the Russian Federation that regulations associated with the functional requirements of each chapter in Part I (Safety Measures) do not always provide for a definitive prescriptive means which can be checked against: Where the Code refers to “means” and is non-prescriptive with regards to the means, the Owner is to provide appropriate means which may be suitable equipment and/or met through provision of operational procedures which are defined by the Owner.
- Where appropriate means are identified as being partly or entirely addressed through provision of operational procedures the procedures are to be contained in, or referenced by, the Polar Waters Operational Manual (PWOM). Only where appropriate means are identified as being partly or entirely addressed through equipment or systems (e.g. heat tracing system to prevent ice build-up on exposed escape routes) the provision and testing of such equipment could be done.
- There was also a discussion regarding question number 4 – which one should be selected for the inspection campaign. Russia suggested to keep both and this was supported by Norway.

Draft version

Questionnaire

No.	Questions	Yes	No	N/A	Det.
4	Can exposed sections of the fire main be isolated and is the sections provided with means for draining of the sections? Part I-A, Regulation 7.3				



NOTE

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2. Where there is no box in the N/A column, then either box “Yes” or “No” should be selected as appropriate.

Draft version

Questionnaire



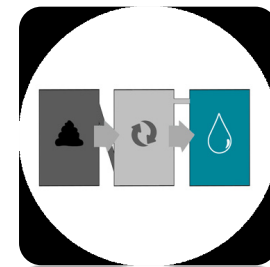
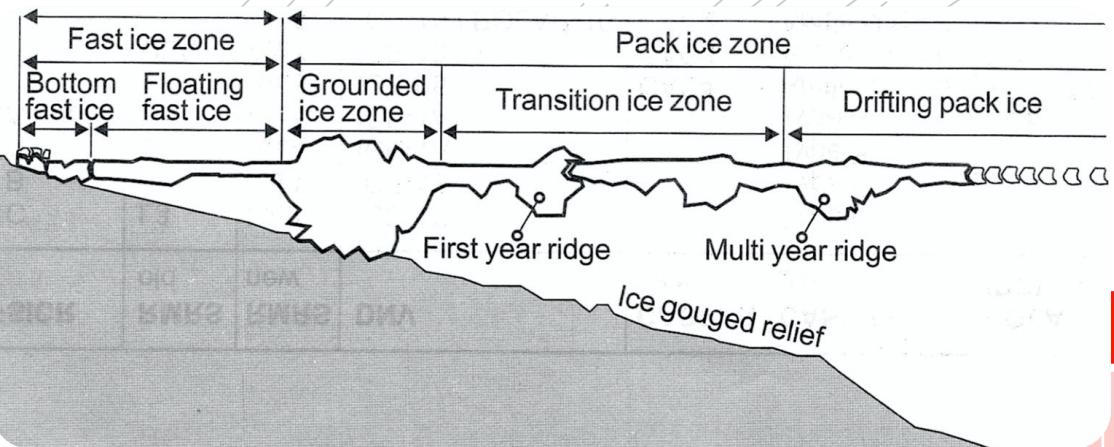
No	Questions	Yes	No	N/A	Det
5*	Have the master, Chief mate and other officers in charge of a navigational watch, the required certificates in accordance with STCW, chapter V and the Polar Code for the polar waters the ship is certified to operate in? Part I-A, Regulation 12.3				
6*	Are there means of receiving and displaying current information on ice conditions on board? Part A-1, regulation 9.3				

NOTE

1. If “NO” is selected, for question marked an “*”, the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box “Yes” or “No” should be selected as appropriate.

Discussion

- It was also noted by the Norway regarding question 6 on Collection of weather information which is covered by the SOLAS, however the Polar Code sets additional requirements on the ability to collect ice information.
- This requirement is applicable to all ships to which the Polar Code apply, including ships operating in ice free waters. For these ships, it is even more important as ice and weather conditions may change rapidly and they may need to change their voyage plan if ice occurs as they are not designed for operation in ice.
- The Polar Code different from other IMO instruments sets various requirements based on the operational environment. There are different “kick in” points for various requirements such as ice conditions, operation in low air temperatures and whether the ship is operating in areas and during periods where ice accretion. This will be the case for question 3 and 5. This could either be included at the end of the third bullet point, or as a footnote to the text “not applicable to the vessel” in the third bullet point.



Draft version

Questionnaire

Questions		Yes	No	N/A	Det.
7	Is the ship's crew responsible for garbage management well aware of the additional requirements in the Polar Code that shall be met to prevent pollution by garbage from ships as additional requirements to MARPOL annex V, regulation 4? Part II-A, Chapter 5, Regulation 5.2				
8	Is the ship's crew responsible for sewage discharge, well aware of the requirements if discharge of sewage in Polar waters should be considered? Part II-A, Chapter 4, regulation 4.2				

NOTE

1. If "NO" is selected, for question marked an "*", the ship may be considered for detention.
2. Where there is no box in the N/A column, then either box "Yes" or "No" should be selected as appropriate.

Thank you for attention

Vladimir. E. Kuzmin@gmail.com

