

Ref. mailing list

Consultation – Regulations on the construction, equipment and operation of passenger ships in the Norwegian territorial waters surrounding Svalbard

The Norwegian Maritime Authority (NMA) hereby circulates for review the proposed Regulations on the construction, equipment and operation of passenger ships in the Norwegian territorial waters surrounding Svalbard.

Comments to the proposal can be submitted to the Norwegian Maritime Authority on e-mail to post@sdir.no by **3 march 2019**.

The consultation will also be published on our website www.sjofartsdir.no. Please direct any questions regarding the consultation to Hanne H. Brekke, senior legal adviser at hhbr@dir.no. Media questions can be submitted to Dag Inge Århus, Head of Department of Communications and Public Relations, on e-mail to dia@sdir.no.

On 24 October 2018, a proposal for Regulations was presented in an open dialogue meeting between the NMA and the shipping industry. The NMA received a number of useful comments from the industry. These comments have led to the waiving of the proposed requirement for a winching area, a change of the requirements for tender activity and an adjustment of the requirements for voyage planning which were presented during the meeting.

1. What is the problem, and what are we trying to achieve?

Current scheme

Passenger ships that will be operating in Svalbard must currently hold an international certificate in accordance with the International Convention for the Safety of Life at Sea (SOLAS), 1974, a Passenger Ship Safety Certificate for Class A, B or C passenger ships engaged on domestic voyages in accordance with Directive 2009/45/EC¹, or another national certificate which allows operation in Svalbard.

The requirements for passenger ships operating in the Norwegian territorial waters surrounding Svalbard are mentioned in circular RSV 01-2017.

¹ The Directive has been implemented by the Regulations of 28 March 2000 No. 305 on surveys, construction and equipment of passenger ships engaged on domestic voyages (EU Regulations).



The alternative with national certificates could in principle cause a varied safety standard at Svalbard, and could lead to passenger ships in the future operating at Svalbard without having to satisfy MAC.385(94) regarding an international code for ships operating in polar waters (Polar Code). The Polar Code, which entered into force on 1 January 2017 and is incorporated as part of SOLAS, sets out binding global regulations for ships with international safety certificates that are to operate in polar waters. Our national rules do not include any provisions taking into account the special conditions related to the remote location and other specific challenges in polar waters.

The Polar Code

Many of the considerations behind the implementation of the Polar Code are applicable to each passenger ship operating in the territorial waters around Svalbard. The group of islands falls within the territorial scope of application of the Polar Code, and the Norwegian government makes the following statement concerning the Polar Code in the Storting White Paper No. 32 (2015-2016): “*The Polar Code represents some of the most important work that has been done to ensure sustainable shipping in polar waters. The Government intends to ensure effective implementation of the regulations.*”

Fire zones

Currently, existing ships classified as Class C according to the EU Regulations are allowed to operate in Svalbard. There is no requirement for such ships to have two main zones on board allowing the passengers to evacuate to a safe area in the event of a fire.

Safe main zones are extremely important in Svalbard due to the cold climate and great distances to search and rescue services. In case of a fire, the passengers should be able to stay on board the ship as long as possible. Evacuation to life-saving appliances is in itself a demanding and hazardous operation on a passenger ship. Due to low water temperatures and cold weather it is vitally important to stay warm and dry in the event of an evacuation. Pack ice and polar nights are other factors that could make it difficult to handle undesired events. By raising the standard of passenger ships in the territorial waters surrounding Svalbard to the level of SOLAS, the whole concept regarding fire, escape and evacuation will change, and the risk will be considerably reduced. New ships constructed in compliance with SOLAS have main zones allowing the passengers to evacuate to a safe zone on board instead of leaving the ship in case of a fire.

Damage stability

As for damage stability, there are varying requirements for new and existing ships with Passenger Ship Safety Certificate for Class C passenger ships engaged on domestic voyages. In short, ships constructed before 1992 have no requirements for damage survivability, ships constructed between 1992 and 2000 have a damage survivability requirement and are also required to be subdivided into watertight bulkheads, whereas only ships constructed after 2000 have a damage survivability standard based on the requirements of SOLAS. The requirement to comply with SOLAS will ensure that ships operating in Svalbard will be constructed in compliance with an internationally recognised and accepted standard.

Local conditions

At present, there are relatively few ships in the Svalbard area.² It could therefore take a long time before assistance from other ships is available for search, rescue and towing, as the distances may be great. Additionally, the distance between places of refuge could be considerable.

There are still large uncharted areas, especially on the north and east side of Svalbard. Moreover, the glacier ice is in constant change, and as it melts, new areas are uncovered. Pack ice is also present in the waters, in various sizes.

² The Governor of Svalbard's "Reiselivsstatistikk for Svalbard 2014" (tourism statistics, in Norwegian only) <https://www.sysselmannen.no/globalassets/sysselmannen-dokument/trykksaker/reiselivsstatistikk-for-svalbard-2014.pdf>
The Governor of Svalbard's Annual Report 2016 (in Norwegian only) <https://www.sysselmannen.no/contentassets/3fc579c3d5044dbc95ffc36deefea216/arsrapport-2016---endeligversjon.pdf>

The special local and climatic conditions in Svalbard as well as the remote location, limited search and rescue resources and inadequate sea charts are particular risk factors associated with travelling in the Svalbard region compared to travelling near the mainland, and if not addressed, these risks will increase the likelihood of accidents. Additionally, there are large vulnerable nature areas in Svalbard, as the Ministry of Justice and Public Security states in their report to the Storting: *“Svalbard consists to a large degree of especially vulnerable and protected natural areas. The overall potential for damage in Svalbard is therefore large, while the acceptance of risk of environmental damage is proportionately low.”*³

In their High North Strategy 2017⁴, the Government stated the following: *“What is most important is to work to prevent accidents.”* *“Moreover, any safety measure taken to reduce the probability of an accident, will largely benefit the environment.”*⁵

Undesirable incidents

There are limited resources ashore to handle an accidental event, and there is not much infrastructure on the group of islands, combined with great distances. The Ministry of Justice and Public Security has stated the following: *“In addition, more extreme weather could affect maritime traffic in the waters surrounding Svalbard and exacerbate the consequences of engine breakdowns or other incidents at sea. Climatic conditions, long distances, and relatively few local resources make search and rescue operations, preparedness against acute pollution and clean-up operations in Svalbard particularly challenging tasks. To ensure sustainable development and prevent accidents and harmful spills, it is important that the industry set high safety and environmental standards.”* Furthermore, the Ministry of Justice and Public Security stated that: *“[o]ther developments in Svalbard and in the High North call for a thorough assessment of maritime safety in the archipelago, and for the implementation of measures wherever necessary.”*

*The objective is to reduce the risk of undesirable incidents related to maritime transport in Svalbard, so that damage to life, health and the environment can be avoided. Preventive measures are crucial to Svalbard. The Government will ensure that maritime activity sets high standards of safety and emergency preparedness in the north.”*⁶

Increased activity and future prospects

A new port infrastructure in Longyearbyen will probably contribute to increased cruise ship activity in Svalbard in general, and particularly in the Isfjord. The Governor of Svalbard informs that the small passenger ship industry is growing rapidly. Additionally, glacier retreat along the shore will reveal new areas. One of the action points of the Storting White Paper No. 32 (2015-2016) is to consider measures continuously to reduce the risk of undesirable incidents related to maritime transport in Svalbard.

SOLAS including the Polar Code – new safety standard in Svalbard

Due to Svalbard’s judicial position, it is important to have equal rules for all flag States, predictability and clear legislation for ships carrying passengers in the territorial waters around Svalbard.

The NMA believes that SOLAS⁷, including the Polar Code, and the Load Line Convention are most suitable to ensure that ships are constructed, equipped and operated in a way that provides satisfactory safety of life, health, property and the environment, cf. section 9 of the Ship Safety and Security Act.

³ Storting White Paper No. 32 (2015–2016) Svalbard

⁴<https://www.regjeringen.no/contentassets/76dc3d09a93a460c8fe649390a722689/nordomradestrategi2017.pdf>

⁵ Preamble to the Polar Code Part I

⁶ Storting White Paper No. 32 (2015–2016) paragraph 10.5.

⁷ The individual chapters of SOLAS refer to different codes. These codes are made applicable through the references to the codes in the various provisions of SOLAS.

The Polar Code is goal-based with both functional requirements and prescriptive rules and may be adapted to ship type, ship size and operational pattern.

2. Which measures are relevant?

The NMA see a need to raise the minimum safety standard requirement on passenger ships in the Norwegian territorial waters surrounding Svalbard. This cannot be done by amending the guidance circular, which expresses the current practice. If the safety requirements are to be strengthened, it has to be done through regulations.

3. Which fundamental questions do the measures bring up?

Requirements from Norway as coastal State

According to Article 94(1) of the UN's Convention on the Law of the Sea of 10 December 1982 (UNCLOS), every flag State is required to "effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag". This is the so-called "Flag State Jurisdiction". The legislation of the flag State is not restricted by the fact that the ship is within the territory of another state, but the coastal State has the right to decide the rules which are to apply to the ship as long as it is within the borders of the coastal State.

The sovereignty of the coastal State is based on Article 2 of UNCLOS. A coastal State has the same authority in their territorial waters as on their land territory. Therefore, national legislation will normally be applicable in the territorial waters.

As a coastal State, Norway finds it necessary to set some minimum requirements for ships operating in the Norwegian territorial waters⁸ surrounding Svalbard. These are minimum requirements for safety measures in certain fields which are of particular importance to take into account in Svalbard.

The proposed Regulations primarily apply to ships operating between ports in Svalbard, but we are proposing that the requirements of chapter 2 are also made applicable to passenger ships with international certificates that only visit Svalbard as part of a voyage.

The requirements of chapter 2 are for the most part operational requirements. For instance, we are proposing requirements for tender activity since this kind of activity is not regulated by conventions, and it should be regulated due to the level of risk to passengers. We refer to the comments to the section on tender activity. Chapter 2 also contains requirements for the ship's ability to handle illness and injuries, including requirements for hospital accommodation and procedures for evacuation by helicopter. Ships that cannot satisfy these requirements will not be able to call at Svalbard. This is connected to limited emergency preparedness resources in Svalbard, remote location, lack of infrastructure and the large number of people that could be on board the cruise ships.

International rules

The starting point for the NMA has been SOLAS and appurtenant Codes⁹, as well as the Load Line Convention, and the NMA has proposed that the requirements of the conventions, with a few exceptions and additions, shall apply as regulation for passenger ships operating in the Norwegian territorial waters surrounding Svalbard. Some provisions have been excluded from each chapter of SOLAS because they allow certain undesirable exemptions or make the application of particular provisions of SOLAS contingent on the ship carrying an international certificate.

⁸ Section 2 of the Act relating to Norway's territorial waters and contiguous zone (Territorial Waters Act)

⁹ The individual chapters of SOLAS refer to different codes. These codes are made applicable through the references to the codes in the various provisions of SOLAS.

The conventions are internationally recognised and adopted by the International Maritime Organization (IMO), which stipulates minimum requirements for the construction, equipment and operation of ships. Provisions laid down by the IMO are considered balanced. The various considerations behind the rules of SOLAS are safeguarded through the IMO's open processes, where different interests have the opportunity to put forward their views before the IMO member states lay down new provisions or change existing ones. This also ensures that the future development of the proposed Regulations for Svalbard can take place in line with new legislation being negotiated internationally in the IMO, which could be an advantage as we in Svalbard are also regulating ships flying other flags.

Time of construction

SOLAS is based on the premise that the ships comply with the requirements applicable at the time of construction, unless upgrades have been required. The NMA finds that the proposed Regulations for Svalbard must also be based on this arrangement.

4. What are the positive and negative effects of the measures, how long will they apply, and who will be affected?

Consequences for the companies

In 2016, 43 passenger ships were registered in Svalbard. 37 of these ships held a Passenger Ship Safety Certificate (SOLAS).

The proposed new rules will have limited or few financial consequences for ships that currently hold a Passenger Ship Safety Certificate (SOLAS). Ships with Passenger Ship Safety Certificate (SOLAS) are already required to comply with SOLAS Chapter XIV¹⁰. That implies that the ship shall comply with the Polar Code and hold a Polar Ship Certificate. New passenger ships were required to hold a Polar Ship Certificate from 1 January 2017, and existing ships by the first renewal survey after 1 January 2018.

The requirements that could entail changes for ships with Passenger Ship Safety Certificate (SOLAS) are largely operational, apart from the requirement for hospital accommodation. Some changes may entail costs associated with administrative work or training following the implementation of new requirements, while others may require the replacement of old equipment with new.

For a small number of ships that currently have the lowest standard of safety, the conversion costs in order to satisfy the proposed Regulations could exceed the current value of the ship. The conversion costs of achieving a SOLAS standard for ships operating in polar waters are estimated to around 9,500,000 NOK. Approximately 1,500,000 NOK of these are costs of complying with the Polar Code. These estimations are based on a hypothetical conversion of a ship of an "existing EU Class C" standard, measuring less than 40 metres in length and capable of carrying 90 passengers.

What will happen to ships operating in Svalbard today will be decided based on, among other things, second hand value, current activity, conversion costs, price of alternative ships, and expected development of the market. Prognoses for port calls in Longyearbyen made for the various ship categories indicate an expected market growth¹¹. In addition, the NMA also receives an increased number of inquiries from clients who want to establish operation outside Svalbard.

Moreover, the five-year transitional provision will allow the companies to plan the phase-in of new rules and spread the costs over several years.

¹⁰ For Norwegian ships, this follows from the Regulations of 23 November 2016 on safety measures for ships operating in polar waters.

¹¹ Report on new port infrastructure in Longyearbyen prepared by Menon on assignment from the Norwegian Coastal Administration, in cooperation with DNV GL and Dr. Techn. Olav Olsen (in Norwegian only): <http://www.kystverket.no/globalassets/rapporter-og-brosjyrer/kvu-longyearbyen-hovedrapport-v2.pdf>

The proposed Regulations will make the requirements for the construction, equipment and operation of passenger ships in the Norwegian territorial waters surrounding Svalbard more available to companies from all flag States. With Regulations to adhere to it is easy to determine which rules apply. In addition, the Regulations refer to an internationally known set of rules.

Consequences for the NMA

The introduction of minimum safety requirements implies that the legislation will comply with the current assessment of which requirements must be fulfilled in order to ensure satisfactory safety of life, health, property and the environment in Svalbard, cf. sections 1 and 9 of the Ship Safety and Security Act.

The legislation will comply with internationally recognised requirements for passenger ships operating in polar waters, a set of rules of which Norway has been an initiator.

When the new Regulations are laid down, the NMA will be able to spend less time providing guidance on which requirements apply to passenger ships in the Norwegian territorial waters surrounding Svalbard. Up until now, the NMA has been required to update and provide guidance in a circular containing information on certificates required to operate passenger ships in Svalbard.

The NMA will still be in charge of certification (of Norwegian ships), inspection and guidance. The difference lies in the fact that the requirements for the ships will be laid down in Regulations and provide a level of safety which, according to the NMA, is justifiable in terms of safety.

5. Which measures would be most appropriate, and why?

The Svalbard Treaty of 9 February 1920, which has been ratified by 44 states, recognises Norwegian sovereignty over the islands, and the Act of 17 July 1925 No. 11 relating to Svalbard (Svalbard Act) stipulates that Svalbard is part of the Kingdom of Norway. Furthermore, the Act of 16 February 2007 No. 9 relating to Ship Safety and Security (Ship Safety and Security Act) is made applicable to Norwegian and foreign ships, also in the territorial waters of Svalbard.

The Svalbard Treaty states that all treaty parties shall be treated equally, and a set of Regulations cannot in any way be discriminatory against the contracting parties' right to carry out maritime operations. The NMA is proposing to put the new rules for passenger ships in a separate set of regulations in order for the rules to be readily available to all flag States.

6. What are the preconditions for a successful implementation?

A successful implementation of the new rules presupposes that everyone operating in Svalbard is made aware of the new Regulations. In December 2017, the NMA developed a separate website¹² containing information about the operation of passenger ships in Svalbard. The website is intended to provide the industry with guidance, and will among other things be used to present information about these new rules that apply to passenger ships in Svalbard. This is particularly important in order to ensure equal treatment of ships regardless of their flag.

The NMA must continue their port State controls in Svalbard to ensure compliance with the new provisions.

7. Comments to the individual sections

To section 1 Scope of application

First paragraph:

¹² The NMA's website on operation in Svalbard <https://www.sdir.no/en/shipping/vessels/vessel-types/passenger-vessels/rules-for-passenger-ships-on-svalbard/>

The Regulations apply to both Norwegian and foreign passenger ships in the Norwegian territorial waters surrounding Svalbard¹³. A passenger ship is a ship carrying more than 12 passengers as defined in SOLAS chapter I regulation 2(f).

Norway's territorial waters around Svalbard include the internal waters and the territorial sea. The territorial sea is the sea territory extending 12 nautical miles from the base line, cf. sections 1 and 2 of the Act of 27 June 2003 No. 57 relating to Norway's territorial waters and contiguous zone (Territorial Waters Act) and the Regulations of 1 June 2001 No. 556 relating to the limit of the Norwegian territorial sea around Svalbard.

Section 1 of the Svalbard Act stipulates which areas are included in Svalbard. Both passenger ships operating in the territorial waters around Svalbard and passenger ships engaged on international voyages calling at Svalbard fall under the scope of the Regulations. For foreign ships, the Regulations are applicable with the limitations following from international law. The internal waters are fully subject to Norwegian jurisdictional competence¹⁴. In principle, Norway has the same jurisdictional competence over territorial waters as it has over its internal waters, but here, the competence is limited by the ships' right of innocent passage. Innocent passage is defined as expeditious, continuous passage through waters in ways not prejudicial to the peace, good order or security of a coastal State.¹⁵ Ships making an innocent passage in the territorial waters around Svalbard fall outside the scope of the Regulations. Passenger ships with stays in the territorial waters fall under the scope of the Regulations.

All sections of the Regulations are based on the Svalbard Treaty. The same requirements apply to all passenger ships regardless of their flag.

The Regulations are not exhaustive with regard to the regulation of passenger ships in the territorial waters around Svalbard. Norway has already implemented i.a. the International Convention for the Prevention of Pollution from Ships (MARPOL)¹⁶ and the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREG)¹⁷ that lay down requirements for Norwegian and foreign ships in the Norwegian territorial waters, including Svalbard. There are also requirements regarding the obligation to notify and report marine accidents¹⁸.

For fields which are not covered by these Regulations nor regulated for foreign ships through other regulations of the NMA, for instance the field of working and living conditions for persons working on board ships, the NMA presupposes that the ships comply with relevant regulations of their flag States.

These Regulations shall apply within the Norwegian territorial waters for all islands that are subject to the Svalbard Treaty. Spitsbergen, Nordaustlandet, Barentsøya, Edgeøya, Prins Karls Forland and associated islets and rocks share territorial waters. Kvitøya, Kong Karls Land, Hopen and Bjørnøya are situated relatively far away from the other islands and have their own baselines and associated territorial waters. The Regulations shall not apply when the vessel is leaving the territorial waters to move between the islands. Furthermore, the Regulations shall not apply to voyages between the mainland Norway and Svalbard or Jan Mayen and Svalbard. The Regulations are based on a safety level that corresponds to the ships operating near shore, and long voyages over open sea are not taken into account.

¹³Official statistics for the surface area of Norway's sea territory as of 1 January 2012 (in Norwegian only).

<https://www.kartverket.no/kunnskap/fakta-om-norge/Sjoarealer/Sjoomrader/>

¹⁴ Act of 27 June 2003 No. 57 relating to Norway's territorial waters and contiguous zone (Territorial Waters Act)

¹⁵ See UNCLOS Section 3 Articles 17–19.

¹⁶ Regulations of 30 May 2012 No. 488 on environmental safety for ships and mobile offshore units

¹⁷ Regulations of 1 December 1975 No. 5 for preventing collisions at sea (Rules of the Road at Sea)

¹⁸ Regulations of 27 June 2008 No. 744 on the obligation to notify and report marine accidents and other incidents at sea

Norwegian ships carrying twelve passengers or less, and which are engaged in regular service, are used for organised medical service and ambulance service or are used for transportation to and from schools, shall at present have a Passenger Certificate¹⁹. Currently, we have no such ships in Svalbard. This proposal sets out that any future ship of this category will be required to satisfy the same requirements as passenger ships. We are proposing to regulate this in the Certificate Regulations.

To section 2 Documentation

The NMA is proposing that all ships be surveyed in accordance with IMO Resolution A.1104(29) and have on board a confirmation that the requirements of the Regulations are met. The confirmation should be readily accessible for inspection by the NMA's surveyors during a port State control.

It is a precondition that every ship has a certificate issued by its flag State ensuring a follow-up and control regime.

The confirmation may be in an electronic format, on the same terms that apply to other certificates for ships operating in Norwegian waters.

We are proposing that the confirmation should be in Norwegian or English and be renewed every five years.

The NMA will regulate certificates for Norwegian ships without Passenger Ship Safety Certificate (SOLAS) in the Certificate Regulations, following the systematics of the other regulations of the NMA.

To section 3 Definitions

In order to clarify what is meant by passenger and passenger ship, the terms are defined at the start of the Regulations. The definitions are in accordance with the definitions of SOLAS.

The NMA is proposing that the International Convention for the Safety of Life at Sea, 1974 (SOLAS), consolidated edition 2014, as amended by IMO Resolutions MSC.392(95), MSC.394(95), MSC.395(95), MSC.435(98) and MSC.436(99) be defined at the beginning of the Regulations. This will make it easier to keep the Regulations updated when future amendments to SOLAS are made.

In the opinion of the NMA, it is not legally necessary to refer to the individual codes referred to in SOLAS. SOLAS Chapter II-2, for instance, requires compliance with the IMO's International Code for Fire Safety Systems (FSS Code) and the IMO's International Code for Application of Fire Test Procedures (FTP Code). As SOLAS Chapter II-2 is made applicable as regulation, these codes will also apply as regulation, and it is not legally necessary to mention them specifically. In SOLAS, the incorporated codes are referred to by abbreviations defined in the introduction of each chapter of SOLAS, see e.g. SOLAS Chapter III regulation 3.10 or SOLAS Chapter XIV regulation 1.1. The codes are typically defined as code XX "as (it) may be amended". The companies must thus keep track of whether the codes have been updated and which requirements currently apply.

To section 4 Planning and monitoring of the voyage

In the introduction, we referred to the Government's High North Strategy and the quote "What is most important is to work to prevent accidents". The purpose of this section is to avoid grounding, which again could cause loss of ship/evacuation and environmental damage.

¹⁹ Section 20 second paragraph of the Certificate Regulations.

According to volume 7 of the Norwegian Pilot Guide (“Den norske los”) (2017), «[t]he west side of Svalbard is covered by both electronic navigational charts (ENC) and paper charts produced in more recent years and ENCs at smaller scales. There is a great variation in content and accuracy regarding new and older surveys.²⁰” Furthermore, the Norwegian Pilot Guide informs that the coastlines can be encumbered with considerable errors in the chart datum. Additionally, due to the low density of surveys in some areas, the existence of shoals cannot be ruled out. Extra special care must be exercised when sailing in the waters around Svalbard.

Ships shall have on board adequate and updated charts and nautical publications, etc.²¹. Every voyage must be planned in compliance with SOLAS Chapter V regulation 34, and IMO Resolution A.893(21) “Guidelines on voyage planning” and Part I-A chapter 11 of the Polar Code shall also be taken into account. The voyage plan should among other things make sure that the planned route is in areas with adequate water depth.

First paragraph:

The non-mandatory safety part of the Polar Code, Part I-B, gives guidance to the master. The NMA is proposing making the content of the Polar Code Part I-B chapter 10 paragraphs 10.2 and 10.3 mandatory for passenger ships operating within the territorial waters around Svalbard.

According to the Polar Code Part I-B chapter 10 paragraph 10.2, the navigational officers shall aim to plan their route through charted areas. It must be taken into account that the chart basis may be limited in certain areas. Navigational officers must take into account all available information and guidance in planning and executing the voyage, and familiarise themselves with the status of surveys and the chart information.

Any deviations from the planned route must be undertaken with particular caution, particularly when navigating poorly charted waters. The echo-sounder must be used and the position checked frequently using both visual and radar fixing and GNSS.

The NMA has registered several incidents involving both passenger ships and ships carrying 12 passengers or less in Svalbard. One such incident involving a ship carrying 12 passengers or less is documented in the report of the Accident Investigation Board Norway (AIBN) on a marine accident on board the *Polaris I* in the Isfjord on 21 August 2012, which will be covered in more detail in the second paragraph.

Groundings represent 24 of the reported passenger ship accidents in Svalbard since 1993. Around half of these are due to lack of knowledge of shoals in the waters in which the ships have operated. Three of the passenger ships which ran aground were severely damaged. Severe damage means ingress of water or rudder and propeller damage to such a degree that the ships needed assistance.

The master’s knowledge of the chart quality and safe route planning is of particular importance in these areas. The master ship shall be navigated in such a way that it does not pose a risk to life, health, property and the environment, cf. sections 14 and 19 of the Ship Safety and Security Act.

Second paragraph:

When active, glaciers generally pose a constant risk of calving. *“Glaciers running into the sea will definitely calve. Signs of an active glacier may include, among other things, sharp and broken surfaces in the glacier front, presence of blue ice and ice in the water at the foot of the glacier ... Calving*

²⁰ The Norwegian Pilot Guide volume 7 Sailing Directions Svalbard and Jan Mayen, third edition (2017), Norwegian Mapping Authority and Norwegian Polar Institute

²¹ SOLAS Chapter V regulation 27

*generates waves of different sizes, dependent on the size of the ice mass, and for a ship, the effect will be more powerful and harmful in narrow waters, such as fjords or straits.*²²

The above quote has been taken from a decision by Hålogaland Court of Appeal, where the court also gave the following statement: *“As a general rule for masters in polar waters, and particularly when steering ships carrying passengers, strict requirements should be laid down for exercising caution in connection with navigation in general and manoeuvring of ships in the vicinity of hazardous objects, such as icebergs and glaciers in particular. It must be assumed that in such waters, a normally attentive master will be aware that glaciers may and will calve, and that the risk of calving is unpredictable.*

The NMA is proposing to establish a minimum safe distance to glacier fronts in accordance with the Governor’s recommendation²³:

The Norwegian Polar Institute has, on request from the Governor, made a report on the distance to glacier fronts. The main conclusions are that it is impossible to predict when an ice block will fall, how big it will be and where it will land in the water. According to the report, to avoid direct hits by ice and the biggest waves, 200 metres will be a reasonable minimum distance.

The Governor still points out that 200 metres might be too close in certain cases, and that it is the captain’s and the tour operator’s duty to assess the risk at any visit to a calving glacier front. The minimum safe distance should be increased when visiting glacier fronts in narrow fjords, in shallow fjords and glacier fronts higher than 40–50 meters. The Governor recommends the use of a range finder to assess the distance to the glacier front.

The report²⁴ has the following main conclusion:

In summary: to avoid direct contact with calving ice pieces, the minimum safe distance MSD from the calving front would be the total ice thickness ($D_w + H_c$) for subaerial calving, or twice the fjord depth D_w for submarine calving. The average cliff height in Svalbard is 20 m, with maximum cliffs of about 50 m. The average fjord depth is 40 m. The MSD considering direct impact alone is thus somewhere between 60–80 m from the cliff face. This should then be increased by a factor of two to account for the most hazardous waves that are formed in the splash zone around the calved block, to give a MSD of 120–160 m from typical calving glaciers.

That is for a minimum safe distance. A reasonable safe distance, with a better margin for safety, would then be 200 m.

Furthermore, this distance should be increased in narrow fjords, where wave amplitudes do not diminish radially, in shallow fjords, where waves can increase in amplitude or even break, and in front of glaciers with unusually high ice cliffs.

Volume 7 of the Norwegian Pilot Guide (page 75) gives more or less the same recommendation, and also points out that an assessment of the height of the glacier front cannot be used alone to determine the minimum safe distance, because the “pivotal point” of the block of ice could be far below the water level.

Furthermore, the suggested minimum safe distance of 200 metres follows the recommendation of the Association of Arctic Expedition Cruise Operators (AECO) to their members²⁵.

²² From a decision by Hålogaland Court of Appeal (LH-2010-5805), where the court of appeal came to the conclusion that the ship’s captain had acted carelessly and violated the provisions of the Ship Safety and Security Act concerning the safe navigation of ships as he steered the ship too close to a glacier.

²³ Minimum safe distance to a glacier front recommended by the Governor of Svalbard
<https://www.sysselmannen.no/Snarveier/Minimumsavstand-til-brefronter/>

²⁴ How close should boats come to the fronts of Svalbard’s calving glaciers? Kohler/Norwegian Polar Institute

²⁵ AECO’S GUIDELINES FOR EXPEDITION CRUISE OPERATIONS IN THE ARCTIC
<https://www.aeco.no/guidelines/operational-guidelines/>

The Accident Investigation Board Norway (AIBN) has investigated a fatal accident²⁶ near the Esmarkbreen glacier in 2012. The person died almost instantly after being hit by a lump of ice from the calving ice. The lump was about the size of a fist and hit her at high speed on the back of her neck/head. The AIBN assumes that the tender that carried the victim was approximately 100–130 metres from the glacier front when the accident occurred. The glacier front is said to have been 33 metres of height and the ice hit land/shallow water when it broke free from the glacier.

The operator did not have an accurate range finder, but used his own discretion.

The proposal to establish minimum distance requirements by regulation could make it easier for the master to set limits when people want to go closer to the glacier front than what is justifiable in terms of safety.

The proposed minimum safe distance does not exempt the master from using his or her own discretion. An even larger distance from the glacier front could be necessary, for instance in narrow fjords or shallow water.

The minimum distance applies to both ship and tenders launched from the ship (see comments to section 18).

To section 5 Hospital accommodation and procedures for evacuation by helicopter

First paragraph:

In the other regulations of the NMA, the term “hospital accommodation” is used to describe what is often referred to as “medical facilities” in ACEP²⁷’s guidelines. In our regulations, the term “hospital accommodation” shall have the same meaning as “medical facilities” and thus include a doctor’s office, examination room, surgery room, ward, etc.

Due to limited emergency response resources in Svalbard and limited transport means from the ship to medical assistance ashore, we are proposing requirements for hospital accommodation. The Norwegian hospital in Svalbard, which is situated in Longyearbyen, offers both primary and specialist health care services and ensures emergency medical response. However, the hospital capacity is very limited.

Even if these Regulations shall apply to ships operating within the territorial border, we feel that the remote location and the local emergency response capability suggest a need for companies to ensure an emergency preparedness and a manning on board corresponding to the requirements for overseas ships in order for them to be able to provide medical assistance.

The NMA is proposing to use the IMO’s preliminary guidance in MSC.1/Circ. 1129²⁸ as starting point for a requirement for hospital accommodation. This guidance does not include guidelines, but refers to other internationally accepted guidelines, such as ACEP’s guidelines. These will take into account the ship’s size and operational pattern. The NMA has chosen not to make the section more prescriptive due to the fact that ships may be fitted in accordance with different standards. The purpose of the provision is to make it clear that there shall be a minimum of medical facilities on board.

²⁶ Report on marine accident Polaris I, IMO no 4500163, personal injury, Ymerbukten bay in the Isfjord on Svalbard, 21 August 2012, prepared by Accident Investigation Board Norway.

<https://www.aibn.no/Sjofart/Avgitte-rapporter/2014-07-eng>

²⁷ The American College of Emergency Physicians

²⁸ Where reference is made to PREP - Health Care Guidelines for Cruise Ship Medical Facilities

<https://www.acep.org/administration/resources/cruise-ships/prep---health-care-guidelines-for-cruise-ship-medical-facilities/#sm.000011y9irdwf5fddw6p2lscvuy28>

This provision does not lead to any upgrade requirements for Norwegian ships with SOLAS certificates, and we assume that to some extent, most flag States regulate the requirements for hospital accommodation on board ships engaged on international voyages. As a minimum, there is an applicable requirement for hospital accommodation for crew members set out in the Maritime Labour Convention (MLC, 2006). We therefore presume that all ships engaged on international voyages have the basic facilities on board, and therefore, that all ships should be able to satisfy this proposed requirement.

Norwegian ships holding a certificate for trade area 4 or for EU Class C are already required to have a “suitable room arranged for transport of sick persons, taking into account the size of the ship, the duration of the voyage and the possibility of using one of the passenger berths for transport of this kind”²⁹. Additionally, the Ministry of Health and Care Services’ Regulations on medical supplies on ships³⁰ require that these ships carry a range of medical supplies and equipment. However, the Regulations have their own definitions of vessel groups, which implies that ships operating within 20 nautical miles from the base line will have the lowest requirements for medical supplies and equipment on board.

This proposal implies that the “suitable room” be dedicated to hospital accommodation and may not be used for other purposes. The international guidelines specify some technical requirements for the room(s). Moreover, the company has to evaluate the need for more medical supplies and equipment on board. More may be needed than what is required by the Regulations on medical supplies on ships of category C.

The section should contribute to the existence of a minimum of medical facilities, medicaments and equipment on board every ship, and at the same time allow a certain degree of flexibility to evaluate the need on the individual ship, based on the area of operation and the number of persons on board. This is emphasised in the introduction to ACEP’s guidelines:

“The specific medical needs of a cruise ship are dependent on variables such as: ship size, itinerary, anticipated patient mix, anticipated number of patients' visits, etc. These factors will modify the applicability of these guidelines especially with regards to staffing, medications, equipment and supplies.”

Second paragraph:

The NMA is proposing that the ship will have procedures for evacuation by helicopter taking into account the recommendations of the “International Aeronautical and Maritime Search and Rescue Manual” (IAMSAR Manual).

During the meeting with the industry, a proposed requirement for all ships to have a winching area was presented. The NMA has made a reassessment of the need based on input from the industry.

Currently, SOLAS Chapter V regulation 7.3 requires the ship to have a plan for cooperation with search and rescue services. However, this provision does not specify that the cooperation shall include evacuation by helicopter. It is the opinion of the industry that having procedures for handling helicopter situations is more important than establishing a winching area. In the last resort, it is always up to the helicopter pilots to decide where to undertake the evacuation of persons.

Being able to receive helicopter assistance would be particularly convenient in Svalbard.

²⁹ Section 27 of the Regulations of 2 October 1972 No. 4 on calculation of number of passengers and concerning passenger accommodation, etc.

³⁰ Regulations of 9 March 2001 No. 439 on medical supplies on ships.

In most places in Svalbard, there is a limited possibility of arriving in port quickly in order to evacuate patients, and the best option might be to evacuate the patient directly from the ship by helicopter. The helicopter would primarily be used for medical evacuation during normal operation of the ship, but could also be useful in other situations.

Helicopter operations are principally hazardous, and the ship having procedures and crew members trained for such operations will be a significant risk-reduction factor. The NMA therefore wishes to emphasise that there are requirements for procedures for handling helicopter operations.

To section 6 Requirements for vessels used as tenders

This provision is new and has not been included in our other regulations for passenger ships. The NMA feels that due to local conditions, tender operations in Svalbard present a particular risk for the persons involved, which suggests a need for a set of minimum requirements.



Tender operations constitutes an important part of the travelling experience in Svalbard, and in his tourism statistics of 2014³¹, the Governor states that each passenger may land two or three times per day. Only a few ports allow the passengers to disembark directly from the ship. People must often be landed by tenders in nature, for instance on a rock, beach or ice. In some places, there are simple piers, but most of these have not been arranged for tender activity.

The map shows the approximate number of persons who were disembarked from tenders to different places in Svalbard in 2014. The numbers are retrieved from the Governor of Svalbard's "Reiselivsstatistikk for Svalbard 2014", which also indicates an increasing trend in the number of disembarking passengers. The figure and numbers show that a large percentage of the tender operations

take place in remote areas.

In addition to the tender activity, i.e. the transport of passengers between ship and shore and back, small and open vessels are being launched from passenger ships to get closer to nature or reach places where the ship cannot navigate. The scope of this sightseeing activity has not been mapped, but we see that this kind of activity is part of the marketing of several tour operators. This activity has up until now been regulated by the ordinary rules for passenger ships, or by the Regulations of 24 November 2009 No. 1400 on the operation of vessels carrying 12 passengers or less, etc. (the 12 Pax Regulations). The green areas on the map indicate where transport of passengers in open vessels is permitted pursuant to the 12 Pax Regulations.

The Norwegian Maritime Authority's regulations contain no requirements for tenders specifically, but these vessels are considered to be part of the ship's equipment and are therefore covered by the scope of application of the Ship Safety and Security Act and appurtenant regulations, The only Regulations mentioning tenders specifically, are the 12 Pax Regulations, which state that those Regulations do not apply to tender vessels. This is also the only place in the Norwegian Maritime Authority's regulations where tenders are defined: "*Tender vessel: A vessel carrying passengers to and from a larger vessel and which is regarded as part of the vessel's equipment.*"

³¹ The Governor's "Reiselivsstatistikk for Svalbard 2014" (tourism statistics).

<https://www.sysselmannen.no/globalassets/sysselmannen-dokument/trykksaker/reiselivsstatistikk-for-svalbard-2014.pdf>

The proposed regulation of tender activity is based on the IMO's guidelines for passenger ship tenders (MSC.1/Circ.1417). Ships with tenders on board satisfying the IMO guidelines will generally be able to use their tenders for tendering in Svalbard with the number of passengers for which the craft is constructed, with certain operational adjustments, as set out in this section.

This provision includes requirements for the ship, tender and the persons working on board. "The ship" means a certified passenger ship which complies with these Regulations.

First paragraph:

The first paragraph defines the term tender and states that tenders are regarded as part of the ship's equipment. This means, among other things, that the use of tenders is part of the ship's operation, and that relevant rules of the Ship Safety and Security Act with appurtenant regulations shall apply to tenders as it does to the other parts of the ship.

The connection between the ship and the tender is the foundation for the safety philosophy forming the basis for this provision. This implies, among other things, that the company is responsible for ensuring that the tenders, which form part of the ship's equipment, are in proper condition at all times, before and during use, and that those who handle the tenders have satisfactory qualifications. Furthermore, this means that the ship's general emergency response resources shall also be capable of dealing with any incident involving tenders.

The last paragraph of the proposal opens a possibility for expanded use of tenders for short voyages with 12 passengers or less. We have not proposed to limit the number of passengers during ordinary tender activity, but assume that the company acts in accordance with the number of persons the tender is permitted to accommodate. For any other trip that the tenders are used for not involving transfer directly between ship and shore, we are proposing to limit the number of passengers to a maximum of 12. This corresponds to the international definition of passenger ships (SOLAS).

The industry has commented that they want differentiated rules for tenders, based on the vessel's standard of safety. The NMA has taken this into account, as the safety level on a vessel constructed under chapter IV of the LSA Code or equivalent provisions and the safety level on a vessel which is CE-labelled or similar are two separate things. This makes it possible to stipulate rules which allow for operations at different distances from the mother ship. Consequently, the companies may choose tenders based on desired flexibility with regard to operational distance from the mother ship.

Second paragraph:

The NMA is proposing that tenders satisfying the requirements of MSC.1/Circ. 1417 may operate not more than 5 nautical miles from the ship.

The tender operator shall have approved training, cf. MSC.1/Circ. 1417 paragraph 15. Seafarers serving on Norwegian ships satisfy this requirement when they have completed the basic safety training, hold a certificate of proficiency in survival craft and rescue boats, hold a valid medical certificate with no limitations³², and have completed internal training in accordance with the appendix to MSC.1/Circ. 1417.

The company must implement routines in their safety management system ensuring that crew members engaged in tender operations are trained in accordance with the appendix to MSC.1/Circ. 1417. It must be possible to document the training.

³² Section 11 of the Regulations of 5 June 2014 No. 805 on life-saving appliances on ships

There are no certification requirements for tenders, but the company must be able to produce documentary evidence upon request that the vessel complies with the requirements.

Third paragraph:

Tenders which are CE approved or similar and additionally comply with the requirements of MSC.1/Circ. 1417 paragraphs 3 to 15 may carry 12 passengers or less and operate at a maximum of 2,5 nautical miles from the ship.

If the company chooses to use a CE-labelled vessel, it is important to take note of the additional requirements set out in MSC.1/Circ. 1417 paragraphs 3 to 15. Most of the requirements apply to equipment, but there are also a few construction-related requirements for machinery and machinery spaces, including fire-extinguishing equipment, operational requirements and manning and training requirements. CE-labelled vessels using petrol or other fuel with a flashpoint of less than 43°C will not be in compliance with the requirements set forth in these Regulations. The company must not make alterations to a vessel affecting the validity of the CE marking.

The NMA is aware that there are certain very small vessels in use today that will not be capable of satisfying all the equipment requirements set out in this section without this affecting the vessel's capacity considerably. These are very small and vulnerable vessels which are not desirable as tenders in Svalbard. This often applies to inflatable boats or rigid hull inflatable boats of 4–5 metres in length.

On how to interpret the equipment requirements of MSC.1/Circ. 1417:

- The NMA accepts extinguishers with a minimum capacity of 2 kg dry powder to satisfy the requirement of 4.4.4 regarding portable fire extinguishers on board tenders.
- Paragraph 5.1.3 sets out a requirement for an “appropriate quantity of drinking water”. The company must make their own assessment of what is an “appropriate quantity” with regard to the tender's limited operational radius of up to 5 nautical miles from the ship. The assessment could be that drinking water is not necessary.

The fire extinguisher required to carry in the tender shall be approved by the flag State in accordance with the IMO's performance and test standards³³, unless expressly provided otherwise.

Fourth paragraph:

The NMA is proposing that all tenders shall be equipped with AIS. The industry was positive to this proposal as it was discussed during the dialogue meeting. Moreover, this equipment requirement is a condition for the increase of the maximum operational distance in this section compared to the proposal which was presented during the dialogue meeting with the industry. AIS is intended to allow for communication and information about the tender, even though it travels outside the line of unobstructed visibility.

Fifth paragraph

As for the reason for the proposed requirement regarding the distance from glacier fronts, we refer to the background for section 4 second paragraph. We have not proposed requirements regarding measurement of the mother ship's distance from glacier fronts, as all passenger ships are already fitted with equipment that may be used for measuring distances.

Sixth paragraph:

³³ For Norwegian ships, this includes a requirement for “wheel-marking”, cf. Regulations of 30 August 2016 No. 1042 on marine equipment

The NMA proposes that open tenders shall not be required to carry liferafts. However, all persons on board open tenders shall wear a full-body suit with thermal protection in accordance with the requirements of section 2.3 or 2.4 of the LSA Code.

To ensure the safety of the passengers, it is being proposed that all persons shall wear flotation devices when on board open tenders. It is important to wear the flotation devices when embarking or disembarking. In 2013, an inflatable boat was flipped over by a massive wave on the north side of Fjordende Julibukta in the Krossfjord in Svalbard while making a trip away from the mother ship.

The thermal suit shall be approved in accordance with the LSA Code.

Children and infants on board the tender must have life-saving appliances appropriate to their size and weight.

The proposal to use personal life-saving appliances approved in accordance with the LSA Code is stricter than the current provisions of the 12 Pax Regulations. However, the provision does not have the operational limitations set out in the 12 Pax Regulations. Higher standards of the personal life-saving appliances are compensating factors. Companies may still choose to operate small vessels not complying with the requirements for tenders, pursuant to the 12 Pax Regulations.

Seventh paragraph:

The NMA is proposing that the ship be provided with an appropriate platform, accommodation ladders or similar that enable passengers to embark the tender safely. The provision allows for different solutions, but prohibits the use of rope ladder/pilot ladder for embarkation purposes.

Eighth paragraph:

The NMA is proposing to allow the use of the ship's tenders for other purposes than tendering, without the operation having to comply with the requirements of the 12 Pax Regulations. We have seen that many companies wish to offer trips in small vessels, among other things to let the passengers get closer to nature. This is not tender activity in a traditional sense.

In terms of safety, there is no significant difference as to whether the ship's vessels are being launched to travel between ships and shore or to carry passengers on short excursions with the ship as both starting and end point. Furthermore, this implies a simplification for the companies, which will then have the possibility of complying only with the provisions related to tender activity, and not with the 12 Pax Regulations. Therefore, the NMA is proposing to allow tenders to be used for sightseeing trips from the ship without having to satisfy the requirements of the 12 Pax Regulations. However, the requirements for tenders differ greatly from the requirements for passenger ships. Tenders used for the carriage of more than 12 passengers on sightseeing trips with the ship as starting and end point must thus satisfy the requirements for passenger ships.

A precondition for considering sightseeing in tenders to have a level of safety equivalent to operation in accordance with the requirements of the 12 Pax Regulations, is that the operation must take place sufficiently close (max. 2,5 or 5 nautical miles) to the mother ship. The emergency response plan of the mother ship ensures a higher level of safety for the operation of tenders compared to small vessels operating independently.

We have therefore opted to make this provision apply only to ship-carried tenders operated by the crew members (in this regard, crew members include all persons working on board, including guide, etc.). Vessels operated independently of the ship must comply with the rules that apply to passenger ships in Svalbard or the 12 Pax Regulations, depending on the number of passengers being carried. The reason for this limitation is that the adaptations are based on the company's responsibilities and the ship's ability to handle a situation involving its own tender. This is associated with the executive

responsibility of the company and master for ship and passengers, cf. section 6 of the Ship Safety and Security Act.

We also refer to the Governor of Svalbard's environmental regulations, which may impose limitations on travelling and operation.

Moreover, the requirement for at least one other vessel of sufficient capacity to be immediately available to provide emergency assistance (cf. MSC.1/Circ. 1417) contributes to reduced consequences of a single incident.

Any ship-carried craft operated by the passengers (such as kayaks, jet skis, etc.) shall be regarded as recreational craft (rental without master).

To section 7 Protection against polar bears

The NMA finds it likely that people will try to get to shore after an evacuation, while awaiting assistance. Therefore, we are proposing a requirement for procedures for taking into account the risk of encountering polar bears and equip the ship with means that can protect the crew and passengers against polar bears. We also refer to the Governor of Svalbard's provisions on weapons on the archipelago.

To section 8 Passenger high-speed craft

Passenger high-speed craft shall be constructed and equipped in compliance with this section, in lieu of meeting the requirements of chapter 4. Additionally, general provisions of chapter 2 apply.

In the first paragraph, the NMA is proposing that passenger high-speed craft shall be certified in accordance with the International Code of Safety for High-Speed Craft adopted by IMO Resolution MSC.97(73), as amended by MSC.175(79), MSC.222(82), MSC.260(84), MSC.271(85), MSC.326(90), MSC.352(92) and MSC.439(99) (the 2000 HSC Code).

This code contains a complete safety standard that, when the code is fully applied, is considered to be equivalent to the SOLAS provisions introduced in chapter 4 of the Regulations. For Norwegian ships, the proposal implies that the ships will be certified in accordance with existing regulations regarding 2000 HSC Code vessels³⁴.

Furthermore, we are proposing to make the Polar Code applicable to passenger high-speed craft. A high-speed, light-built vessel may be said to be less suitable for operation in polar waters than a conventional SOLAS ship. It is therefore important to ensure that such ships are sufficiently equipped and have taken all the safety precautions necessary for the waters in which they are operating.

It is essential that the ship's characteristics are mapped based on the conditions in which it is intended to operate. Risk assessments may uncover weaknesses, and necessary measures may be taken, either in the form of operational limitations or adaptations/improvements of the ship and its equipment. The conclusion following such an assessment may be that the ship should only operate in the "mildest" conditions, e.g. in "ice-free waters". Technical innovations and alternative designs may in the long term expand the areas of application of the high-speed craft. All in all, the Polar Code is very much relevant for high-speed craft operating in Svalbard, and the NMA sees many advantages in applying it.

First paragraph:

³⁴ Regulations of 5 January 1998 No. 6 on the construction, equipment and operation of high-speed craft used as passenger craft or cargo craft

SOLAS allows for the application of both the 1994 HSC Code and the 2000 HSC Code, as well as the 1978 DSC Code³⁵ for ships constructed before 1996. Ships constructed in accordance with the 1978 DSC Code and the 1994 HSC Code have a significantly lower standard of safety than ships constructed pursuant to the 2000 HSC Code. We have therefore decided to propose that only the latter be allowed in Svalbard. In the opinion of the NMA, high-speed craft should only be allowed on the condition that the highest standard of safety is used.

Second paragraph:

The HSC Code separates between Category A and Category B craft. In general, the preconditions for being able to survive or manage on your own following an incident will be better with a Category B craft. For instance, Category B craft have stricter requirements for fire protection and damage stability, including a requirement for an alternative safe area on board, which enables people to stay in a safe area on board the ship during and following an incident, along with a requirement for at least two independent means of propulsion and the ability to manoeuvre to a port of refuge under its own power following an incident in any one compartment on board.

The NMA proposes that high-speed craft intending to operate in Svalbard should mainly be Category B craft. This is not an amendment of the current requirements, but a specification of our interpretation of the Code's definitions. Based on the definition of Category A craft, we are specifying that such craft may be used in the Isfjord due to proximity to central areas and shorter time of rescue after an incident.

Third paragraph:

Chapter 13 of the 2000 HSC Code states that every flag State should determine whether the chapter should apply to craft below 150 gross tonnage. Norway has a practice for requiring compliance with this chapter for craft certified under the 2000 HSC Code which operate along the coast of mainland Norway. The conditions in Svalbard are at least as demanding to navigate in, and we see no reason for an expanded application of exceptions in that area. The navigational aids on land (lighthouses, navigation marks) along the coast of Svalbard are less developed than on the coast of mainland Norway. This means that the craft have to carry appropriate navigational equipment. The NMA proposes that Chapter 13 of the 2000 HSC Code should apply to high-speed craft regardless of size.

Fourth paragraph:

The 2000 HSC Code includes elements which partly cover the same conditions as the Polar Code, but is nevertheless relatively general in terms of special considerations in polar waters. In order to ensure a systematic approach to polar conditions, we are in the fourth paragraph proposing to make the Polar Code applicable to high-speed craft.

The 2000 HSC Code has a focus throughout on defining operational limitations, and to stay within these limitations. For high-speed craft, the worst intended conditions (2000 HSC Code paragraphs 1.2.1.4, 1.4.61) shall be defined, operating limitations (2000 HSC Code paragraph 1.4.42) shall be set, and the craft shall not be allowed to be used in conditions it is not intended to endure. Ideally, all conditions to which a craft may be exposed should then have been accounted for, and by staying within the operating limitations you avoid the craft operating in waters or in conditions for which it is not constructed or equipped.

The Polar Code goes further than that, and sets out requirements for procedures in order to not only stay within the operating limitations; procedures should also be drawn up regarding what to do if the ship encounters ice and/or temperatures which exceed the ship's design capabilities or limitations (Polar Code paragraph 2.3.5).

³⁵ IMO Resolution A.373(X) on 14 November 1977, as amended by Resolution MSC.37(63) of 19 May 1994 (DSC Code)

The 2000 HSC Code furthermore does not take into account that the areas regulated by the Polar Code are very remote areas, where it is necessary to lay down additional requirements based on distance and time of rescue in the event of an accident. Time is a crucial factor for survival, especially if you have evacuated to a survival craft.

The Polar Code moreover includes a number of operational requirements and practical safety measures that may be applied to all types of ship, regardless of construction, design and trade area. These will be just as useful and safety-promoting on a high-speed craft as on any other type of ship. The same applies to marine equipment requirements, such as life-saving appliances. In addition, the Polar Code sets out requirements that go beyond what can be expected to take into account through operational limitations; namely survival after evacuation of the ship. It is particularly important that this is met in Svalbard.

As for requirements for safety management, please see comments to section 17.

To section 9 Scope of application for chapter 4

The NMA is proposing that sections 10 to 19 shall apply to passenger ships not holding a Passenger Ship Safety Certificate according to SOLAS Chapter I Regulation 12 (a)(i) nor a High-Speed Craft Safety Certificate according to the 2000 HSC Code chapter 1 section 1.8.1. That is to say, only ships with national certificates have to satisfy the minimum requirements of Chapter 4.

Both ships with Passenger Ship Safety Certificate (SOLAS) and passenger high-speed craft³⁶ shall satisfy the Polar Code. This will typically be ships referred to as overseas cruise ships or expedition cruise ships in the Governor of Svalbard's statistics.³⁷ The overseas cruise ships often have shorter stays in Svalbard, which only constitute a small part of longer voyage, with few landing sites. According to the Governor of Svalbard's annual report for 2014, these primarily go to Longyearbyen, and some on the Isfjord with landings in Barentsburg and Pyramiden. Expedition cruise ships operate longer in the waters than the overseas cruise ships, often the entire season. They often have their starting point in Longyearbyen and have several landing sites in the course of a voyage.

To section 10 Construction – subdivision and stability, machinery and electrical installations

First paragraph:

Existing ships of EU Class C constructed before 1992 and ships constructed between 1992 and 2000 carrying less than 100 passengers are not subject to any requirements for damage stability. This means that these ships have a significantly lower survivability than SOLAS ships in the event of collisions, groundings and collisions with ice. For ships constructed after 1 May 2000 in accordance with the EU Regulations in EU Class A, B, C or D, there is a requirement for damage stability pursuant to SOLAS, since the EU Regulations set out that the ship shall have a standard equivalent to the International Convention for the Safety of Life at Sea, 1974, as amended by MSC.1(XLV), MSC.6(48), MSC.11(55) and MSC.12(56) (SOLAS 90).

An implementation of requirements for damage stability in accordance with SOLAS for existing ships in EU Class C will mean that existing EU Class C ships in Svalbard will have to be converted. The NMA currently know of one ship in Svalbard with existing EU Class C standard.

A requirement for damage stability may be decisive for whether the ship remains afloat or sinks after an incident. A ship with damage stability may in many damage scenarios remain afloat, and evacuation of the ship may thus not be necessary. With regard to the chance of survival in the event of an accident in Svalbard, it will be of great significance that the passengers may remain on board as long as

³⁶ See section 18 of the proposed Regulations.

³⁷ The Governor's "Reiselivsstatistikk for Svalbard 2014" (tourism statistics).

<https://www.sysselmannen.no/globalassets/sysselmannen-dokument/trykksaker/reiselivsstatistikk-for-svalbard-2014.pdf>

possible. A situation involving evacuation is demanding and difficult, and it is essential in a place with such cold temperatures that the passengers are kept dry.

The requirement for safe return to port in SOLAS Chapter II-1 regulation 8-1 applies to ships constructed on or after 1 July 2010 of 120 metres or more in length or having three or more main vertical zones. The requirement means that passenger ships should be designed so that the most important systems remain operational in the event of flooding of any single watertight compartment.

Second paragraph:

The requirement for design of passenger spaces already applies to Norwegian passenger ships irrespective of trade area constructed or having undergone major conversion on or after 1 January 2010³⁸ or 1 October 2004³⁹.

The provision is meant to establish a minimum standard for the design of passenger spaces, primarily with regard to preventing injuries. The provision will also contribute to increased accessibility. We propose basing the accommodation requirements on the IMO's guidelines for safety measures for the elderly and persons with reduced functional ability, as these are internationally recognised. These guidelines for example include measures for preventing serious injuries from falling.

The requirement is only proposed implemented for ships which are constructed or the keel of which is laid on or after the entry into force date of these Regulations. The companies will thus not suffer any extra costs related to conversion of existing tonnage.

Third paragraph:

This requirement already apply to all Norwegian ships. Among other things, the international standard sets specific requirements for lift installations to be used on moving ships, and thus has some important additional requirements with regard to lift installations which may be used in buildings ashore. The standard is considered to be internationally recognised and to provide satisfactory safety for persons using a lift on board ships.

To section 11 Construction – fire protection, fire detection and fire extinction

The NMA is proposing that SOLAS Chapter II-2 be made applicable as regulation. In Svalbard, the ships are largely dependent on being self-reliant, as there may be considerable distances between the ship and a rescue service and between the individual ships in the territorial waters. SOLAS lays down a requirement for subdivision into main zones, which means that the passengers in the event of a fire on board the ship may escape to a safe zone on board the ship. This is especially important in the event of a fire in polar areas, where staying warm and dry is essential, and where you therefore want to avoid evacuating the ship for as long as possible.

The insulation requirements set out in SOLAS are furthermore based on a special categorisation of the ship. This means that the spaces on board are categorised by the fire hazard they represent, and are insulated against adjacent spaces based on this, so as to limit the fire from spreading.

SOLAS also includes a requirement for a sprinkler system in the accommodation. This contributes to increasing the level of safety significantly, as a sprinkler system limits or extinguishes a fire in an early phase. It also helps to prolong the time available for an evacuation.

At present, ships engaged on domestic voyages in Svalbard have the option of satisfying the Regulations of 1 July 2014 No. 1099 on fire protection on ships, which in principle include a

³⁸ Section 7 of the Regulations of 1 July 2014 No. 1072 on the construction of ships

³⁹ Section 8D of the Regulations of 28 March 2000 No. 305 on passenger ships engaged on domestic voyages and section 33 of the Regulations of 5 January 1998 No. 6 on the construction, etc. of high-speed craft

requirement for SOLAS standard with some alleviations. The alleviations are mainly related to fire insulation where the ships do not have to satisfy the requirements for subdivision into main zones and the insulation requirements based on spacial categorisation, nor the requirement for sprinkler systems in the accommodation. Some less comprehensive relaxations have also been made for requirements related to fire pumps, fire mains, fire hydrants, hoses and fire-fighter's outfits. The conditions in Svalbard with polar weather conditions and great distances to search and rescue resources are the reason why we are not proposing such alleviations in Svalbard.

For newbuildings, there will in practice be no difference between the requirements of the EU Regulations and SOLAS, with the exception of the requirement for safe return to port, which is set out in SOLAS.

The requirement for safe return to port in SOLAS Chapter II-2 regulation 21 applies to ships constructed on or after 1 July 2010 of 120 metres or more in length or having three or more main vertical zones. The requirement means that a passenger ship should be designed so that the most important systems remain operational in the event of a fire and that the ship may proceed to a safe port under its own power following such an incident. This requirement involves a considerable increase in the standard compared to the current requirement for passenger ships operating in Svalbard.

To section 12 Life-saving appliances and arrangements

The proposal from the NMA includes strengthened requirements for life-saving appliances on most ships which are not already certified pursuant to SOLAS including the upgrade requirements set out by the Polar Code.⁴⁰ The difference between existing requirements and the NMA's proposal will vary depending on the ship's current certificate, age and size. It will mainly result in a requirement for increased capacity of survival craft as well as for more lifebuoys. For some ships, it will also involve a requirement for an extra hand-held VHF for survival craft.

First paragraph:

The first paragraph implements SOLAS Chapter III as regulation. Regulation 2 is not implemented into these Regulations, as it lays down the possibility of exempting all ships subject to the Regulations from all requirements of Chapter III. Furthermore, regulation 21 is not implemented, as the second to sixth paragraphs in this section replace SOLAS regulation 21.

SOLAS Chapter III regulation 34 sets out a requirement that all life-saving appliances and arrangements must satisfy relevant requirements of the International Code for life-saving appliances (LSA Code). Since SOLAS Chapter III is made applicable as regulation, this Code will legally also apply as regulation without having to mention it specifically.

Second paragraph:

SOLAS Chapter III regulation 21.1.1 and regulation 21.1.2 are solely directed at passenger ships engaged on international voyages and short international voyages. SOLAS does not include explicit requirements for survival craft on ships not engaged on international voyages. This makes it necessary with a separate provision for these ships.

We propose requiring the equivalent capacity as SOLAS, but we are proposing to leave it up to the company to choose liferafts, lifeboats or a combination of liferafts and lifeboats. This is in practice a continuation of the requirements applicable to "new ship" Class C.

The second paragraph may involve a tightening of the rules for existing ships that have complied with the EU Regulations.

⁴⁰ The phase-in of the Polar Code is meant to be completed for all ships with Passenger Ship Safety Certificate by 2020.

It will vary from ship to ship whether this tightening will have any practical implications, since the requirement of the fourth paragraph for spare capacity has often turned out to be dimensioning for the rescue capacity on board, particularly on small ships. The new requirement will for example result in a tightening on certain ships with more than 700 persons on board, if the ship is equipped with survival craft each having a capacity of 150 persons, or on ships carrying more than 100 persons on board, if the ship is equipped with survival craft each having a capacity of 25 persons.

Ships often have a combination of different survival craft, which could result in a different outcome. Let us look at a ship with a Class C certificate, which is certified to carry 96 people on board. The ship has two rafts with a capacity for 35 people, one with capacity for 25, one for 20 and one for 16 people, i.e. a total capacity of 136%. In the event of one survival craft being lost, this ship has a remaining capacity of 96, which will thus be dimensioning in this case, even after the proposed tightening.

The requirement for compliance with the LSA Code is proposed made applicable to all ships irrespective of year of construction. The NMA finds that the LSA Code expresses a necessary level of safety, and proposes that survival craft shall be in compliance with the LSA Code, irrespective of year of construction.

If the requirement is met by using liferafts, it is recommended that these be of a type with inflatable double bottom. Section 4.2.2.2 of the LSA Code requires the raft floor to provide sufficient insulation against cold. This can be done by either having an inflatable floor (4.2.2.2.1) or having other equivalent solutions (4.2.2.2.2). The systematics of the LSA Code is that performance requirements shall be supported by test or evaluation requirements in resolution MSC.81(70) (“Revised recommendation on testing of life-saving appliances”). However, there are no test requirements that describe the insulation properties of the raft floor, and there are therefore no parameters with which to measure equivalence. The results from the exercises SARex1⁴¹ and SARex2⁴², which were carried out with rafts manufactured in accordance with paragraphs 4.2.2.2.2 and 4.2.2.2.1 respectively, document a significantly lower heat loss when using an inflatable floor. The results are supported by research from Transport Canada⁴³. We have therefore decided to propose an inflatable floor until the IMO introduces a test standard that will ensure equivalence by establishing measurable requirements for insulation properties/heat loss.

The requirement for launching arrangement or marine evacuation system (MES) is meant to contribute to dry-shod evacuation on all passenger ships. It is essential for survival in cold climates to avoid getting wet.

Third paragraph:

Continues current law for Norwegian ships.

Fourth paragraph:

This is a continuation of current law for Norwegian ships.

Fifth paragraph:

The ship shall carry at least one rescue boat.

⁴¹ SARex Spitzbergen : Search and rescue exercise conducted off North Spitzbergen : Exercise report
<https://brage.bibsys.no/xmlui/handle/11250/2414815>

⁴² SARex2 : Surviving a maritime incident in cold climate conditions
<https://brage.bibsys.no/xmlui/handle/11250/2468805>

⁴³ Thermal protection in liferafts: assessment of occupant heat balance and development of performance criteria, TR-2009-06: <http://doi.org/10.4224/18227279>

A lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements comply with the requirements for a rescue boat. This is a continuation of current law for Norwegian ships.

Sixth paragraph:

The number of rescue boats and/or lifeboats shall be sufficient to ensure that no more than nine liferafts need to be marshalled by each rescue boat or lifeboat after evacuation. This will lead to some ships being required to carry more than one rescue boat. This requirement corresponds to the requirement applicable to ships engaged on a short international voyage in SOLAS.

To section 13 Radio communication

The provision for the most part continues current requirements. The Circular requires A2 for all trade in Svalbard (including requirements for Telex), whereas SOLAS Chapter IV sets out that ships shall be equipped in accordance with the radio coverage available in the area of operation⁴⁴. This could result in relaxed requirements for some ships depending on their area of operation.

For ships only operating in the Isfjord, for instance, it will be sufficient to be equipped for sea area A1.

The company must nevertheless take into account the equipment's possible limitations and access to public transmissions of safety messages via the selected equipment.

The industry has asked whether the Telex service will be replaced by Iridium in the near future. However, Iridium has not yet been approved by the IMO as part of the GMSDD system.

To section 14 Safe navigation

The provision for the most part continues current law. The NMA is now proposing to make the requirements for AIS applicable to all passenger ships irrespective of size, cf. SOLAS Chapter V regulation 19.2.1.

The intention of the AIS when it was introduced was to improve ship safety, contribute to safer and more effective navigation and protection of the marine environment. Moreover, the purpose was to simplify the identification of ships, assist in ship tracking, simplify exchange of information and provide a better overview for situational awareness, both for navigators on board the ships and in connection with traffic monitoring from shore.

The greatest weakness of the AIS is that it does not necessarily show the complete picture of the traffic situation since not all ships are required to carry this equipment (e.g. recreational craft, fishing vessels and government ships). The system is also dependant on all ships required to carry AIS having activated the equipment and transmitting correct information.

The advantage of AIS is that the signals are not weakened by weather or sea like the radar signal. This means that the two pieces of equipment complement each other by having different advantages and disadvantages. In addition, the navigator gets useful information about the surrounding traffic that would otherwise not be available, or that the navigator would have to obtain by using radio communication.

The NMA has received comments from the emergency response agencies that they wish to equip all ships in the territorial waters surrounding Svalbard with AIS. The NMA also uses AIS data, inter alia for general risk assessment and risk assessments on ship level (risk-based supervision).

⁴⁴ Radio signal chart ALRS Vol. 5

To section 15 Carriage of cargoes and fuel oil

The section implements SOLAS Chapter VI. This is not a new requirement for Norwegian ships.

To section 16 Carriage of dangerous goods

The section implements SOLAS Chapter VII. This is not a new requirement for Norwegian ships.

The NMA specifies that vehicles which are not survival craft or tender vessels, such as jet skis and snowmobiles, etc., which have combustion engines, along with fuel for such vehicles, are considered cargo and not part of the ship's stores and provisions, cf. SOLAS Chapter VII regulation 2.2.

When the mentioned vehicles are considered cargo, they are classified as UN 3166, cf. the IMDG⁴⁵ Code, if they have a combustion engine. Special provision (SP) 961 of the IMDG Code determines whether the vehicle should be considered dangerous cargo or other cargo, depending on the deck or the space on/in which they are stowed.

Reserve fuel for the vehicles is also cargo, and must be transported in spaces or on decks suitable for such transport, depending on the type of fuel. This means that some types of fuel may not be acceptable; there are for instance strict limitations for the transport of petrol (UN 1203) on passenger ships.

In remote areas, it is particularly important to carry out risk mitigation measures. The NMA's interpretation maintains a level of safety which is necessary for the transport of this type of vehicles. We thus avoid passenger ships carrying flammable liquids with a low flashpoint, such as petrol. By way of comparison, the main rule in the other regulations is that passenger ships must use fuel with a flashpoint above 60°C. For some types of marine equipment, such as emergency generators, emergency fire pumps and survival craft, the main rule is that they may use fuel with a flashpoint of 43°C. Both ships and survival craft may in exceptional circumstances use fuel with a lower flashpoint, but this requires special measures. The most relevant comparison is rescue boats which may use petrol under certain conditions (the LSA Code 5.1.1.8). The NMA's view is that there is no foundation for expanded acceptance of petrol on other vehicles even if they were to be equipped with the same safety measures, as this would result in a larger amount on board, and thus greater risk for the ship during transport.

Seeing this in connection with the proposal in section 7, the NMA bases its decision on the fact that the companies will be able to operate their business about the same way as today, but that some companies may have to replace vehicles/engines, and/or implement measures on board the ship to create suitable stowage areas for both vehicles and fuel.

To section 17 Safety management

The NMA is proposing to introduce requirements for Safety Management Certificate pursuant to SOLAS Chapter IX (the International Safety Management (ISM) Code, adopted by Resolution A.741(18), as amended by Resolutions MSC.104(73), MSC.179(79), MSC.195(80), MSC.273(85) and MSC.353(92).

Ships holding a Passenger Ship Safety Certificate (SOLAS) satisfy this requirement.

⁴⁵ International code for the transport of dangerous goods by sea

For ships with national certificates, this will be a new requirement. The NMA believes that the ISM Code maintains a sound level of safety management, and that this should be a requirement for all passenger ships engaged on voyages between ports in Svalbard.

To section 18 Safety measures in polar waters

The safety part of the Polar Code is drawn up as an addendum to Chapters II-1, II-2, III, IV and V of SOLAS. Since we want to use the same systematics in these Regulations as in SOLAS, the additional requirements set out by the Polar Code have been set up in a separate section.

Ships with national certificates, which have previously complied with Circular RSV 1-2017, have not been subject to the new Polar Code. This provision thus involves a tightening of the rules for these ships.

Paragraph 8.3.3.1.1 of the Polar code implements what has previously been a special Norwegian requirement for thermal protection for all persons on board passenger ships. The requirement was introduced as an immediate measure for all Norwegian passenger ships following the *Sleipner* casualty in 1999. After the accident, the commission of inquiry recommended that the requirement for thermal anti-exposure suits should be expanded to apply to all ships operating in cold waters⁴⁶.

Both our Circular RSV 1-2017 and the Polar Code allow thermal protection in the form of either thermal protective aids (TPA) or insulated immersion suits. These two alternatives provide very different protection, and there is a significant difference in price. We are proposing to continue these options for the companies, cf. the Polar Code. The companies must base their choice on a holistic evaluation of the overall protection provided by the life-saving appliances and how long the expected time of rescue is. Based on the research referenced in the comments to section 12 second paragraph (double bottomed rafts), we are recommending that TPAs are primarily used on ships with lifeboats adapted to polar conditions or on ships where the maximum time of rescue is assumed to be short, and which do not operate in low air temperatures (minus 10 degrees or colder). The SARex exercises show an expected survival time of less than 24 hours if an uninsulated suit is used in rafts or lifeboats without active heating.

First paragraph:

The first paragraph implements SOLAS Chapter XIV as regulation. The exceptions from regulations 2.1 and 3 are made because these Regulations do not require ships to be certified pursuant to SOLAS Chapter I.

Second paragraph:

If the ship does not have certificates pursuant to SOLAS, including a separate Polar Ship Certificate, the documentation required pursuant to section 2 shall nevertheless include the same information as the Polar Ship Certificate required pursuant to Appendix 1 to the Polar Code, cf. regulation 1.3.5.

Third paragraph:

One of the principles in the Polar Code's rescue chapter is that ships shall be equipped to ensure survival in a predefined time period, based on how far from assistance the ship is operating. There is no upper limit for how long the expected time of rescue may be, but the Polar Code has set a lower limit. All ships must therefore be equipped to ensure that all persons on board may survive for a minimum of five days after evacuation. The emergency preparedness in Svalbard indicates that assistance in many cases will be available in less time than that, and in our opinion, it would be unreasonable to require equipment for five days for ships only operating in the most central areas in Svalbard, such as the Isfjord. We are therefore proposing that the minimum requirement for number of days shall not apply.

⁴⁶ NOU 2000:31 paragraph 12.4.1

We have kept the functional requirement as set out by the Polar Code, i.e. that every ship must be equipped to ensure survival for the expected time of rescue. We stress that this time may exceed five days in Svalbard as well, particularly for ships with a large number of persons on board operating in the most remote parts of the archipelago.

To section 19 Load line

The NMA proposes in the first paragraph to make the Load Line Convention, Annex B, Annex I applicable to ships of 24 metres in length (L) and upwards.

In the second paragraph, we are proposing that some of the technical requirements for construction shall be made applicable to ships of less than 24 metres in length (L). This means that all requirements related to means of closure, height of coamings and sills, height of air pipes and ventilators, freeing port area and overboard discharge valves specified in the Load Line Convention shall be complied with for both convention and non-convention ships.

For Norwegian ships, an equivalent requirement for ships of between 15 and 24 metres in length (L) was set out by section 26 third paragraph of the former Regulations of 15 September 1992 No. 695 on the construction of passenger ships, cargo ships and barges.

The requirement for documentation and survey in section 2 will satisfy the need for control of whether the requirements of the Regulations are met.

To section 20 Exemptions

In the previous sections, it is being proposed that the alternative design provisions of the various chapters of SOLAS be made applicable. There are provisions for alternative design in SOLAS Chapter II-1 part B regulation 4.2, Chapter II-1 part F regulation 55, Chapter II-2 part F regulation 17, Chapter III part C regulation 38, and Chapter XIV regulation 4.

The exemption provisions of the various codes incorporated in SOLAS apply when processing applications for exemption from any requirements of the codes. High-speed craft, for instance, comply with the exemption provision of regulation 1.11 of the 2000 HSC Code.

These provisions of SOLAS may be applied when the company wants to use an alternative design or arrangement which deviates from the requirements of the convention, but fulfils the purpose of the provision from which they deviate, while the alternative design contributes to ensuring that the Regulations' level of safety is maintained. The SOLAS provisions on alternative design give guidance on processes that need to be undertaken in order to document alternative design.

In section 20 first paragraph, it is being proposed that the flag State of the ship may grant exemptions from requirements of the Regulations when the company upon written application establishes that the arrangement provides an equivalent measure of safety. This is meant to provide a legal basis for exemption in the cases not covered by the mentioned legal bases for alternative design. The wording of this section is general and can be used to approve solutions providing a level of safety corresponding to the requirements of the Regulations. This legal basis may be used for applications for exemption both from requirements set out by the Conventions and from requirements not set out by the Conventions.

In section 2, it is being proposed that the ship, provided that acceptance of equivalent solutions have been granted, shall have on board a list of equivalent solutions accepted by the flag State.

To section 21 Transitional provisions

The transitional provision shall take account of those who are already operating passenger ships in Svalbard. They will be given sufficient time to adjust after the entry into force of the new Regulations.

The goal is to phase in more stringent safety requirements as soon as practicable, while at the same time taking into account the industry's need for time to adjust. The transitional arrangement shall first and foremost take into consideration companies that currently have established a business in the waters surrounding Svalbard. In the opinion of the NMA, there is no need for separate transitional arrangements for companies that have only exceptionally operated in Svalbard, as these have not based their operation on income from activities in Svalbard, and thus should be seen as equal to new actors wanting to enter the market. Therefore, we are proposing that the transitional provision be applicable to ships having operated in the Norwegian territorial waters surrounding Svalbard every year for the last three years. These ships are not required to meet the requirements of these Regulations, with the exception of sections 4 and 7, until five years after the entry into force.

To section 22 Entry into force

Scheduled entry into force on 1 January 2020.

Yours faithfully,

Olav Akselsen
Director General of Shipping and Navigation

Bjørn Pedersen
Head of Department

This document has been electronically approved, and therefore does not contain handwritten signatures.

Attachment: Proposed Regulations on the construction, equipment and operation of passenger ships in the Norwegian territorial waters surrounding Svalbard
Circulation list

Copy: Ministry of Trade, Industry and Fisheries

Regulations on the construction, equipment and operation of passenger ships in the Norwegian territorial waters surrounding Svalbard

Laid down by the Norwegian Maritime Authority on dd.mm.yy under the Act of 16 February 2007 No. 9 relating to ship safety and security (Ship Safety and Security Act) sections 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 21, 22, 27 and 43, cf. Formal Delegation of 16 February 2007 No. 171 and Formal Delegation of 31 May 2007 No. 590.

Chapter 1 General provisions

Section 1 Scope of application

Subject to limitations set out in international law, these Regulations shall apply to Norwegian and foreign passenger ships engaged on voyages in the Norwegian territorial waters surrounding Svalbard.

Section 2 Survey and documentation

The ship shall have on board a confirmation from the flag State that surveys have been carried out in accordance with IMO Resolution A.1120(30), and that the requirements of these Regulations are met. The confirmation shall:

- a) be in Norwegian or English;
- b) be renewed every five years.

Section 3 Definitions

For the purpose of these Regulations, the following definitions shall apply:

- a) "Passenger" means every person other than:
 - 1) the master and members of the crew, or other persons employed or engaged in any capacity on board a ship on the business of that ship;
 - 2) a child under one year of age.
- b) "Passenger ship" means a ship carrying more than 12 passengers.
- c) "SOLAS" means the International Convention for the Safety of Life at Sea, 1974, consolidated edition 2014, as amended by IMO Resolutions MSC.392(95), MSC.394(95), MSC.395(95), MSC.435(98) and MSC 436(99).

Chapter 2 Common provisions

Section 4 Planning and monitoring of the voyage

The Polar Code Part I-B paragraphs 10.2 and 10.3 shall apply as regulation.

Ships shall be operated at a safe distance from glacier fronts. The distance shall be at least five times the height of the glacier front, but not less than 200 metres.

Section 5 Hospital accommodation and procedures for evacuation by helicopter

The ship shall be provided with hospital accommodation, medical supplies and equipment in accordance with the recommendations of MSC.1/Circ. 1129.

The ship shall have procedures for evacuation by helicopter in compliance with the recommendations of the "International Aeronautical and Maritime Search and Rescue Manual" (IAMSAR Manual).

Section 6 Requirements for vessels used as tenders

A vessel which is regarded as part of the passenger ship's equipment and which is used to transport passengers between shore and ship (tender) shall meet the requirements of this provision.

Tenders satisfying the requirements of MSC.1/Circ. 1417 paragraphs 1 to 15 may operate not more than 5 nautical miles from the ship.

Tenders which are CE approved or similar and additionally comply with the requirements of MSC.1/Circ. 1417 paragraphs 3 to 15 may carry 12 passengers or less and operate at a maximum of 2,5 nautical miles from the ship.

Tenders shall be fitted with AIS class B.

Tenders shall be operated at a safe distance from glacier fronts. The distance shall be at least five times the height of the glacier front, but not less than 200 metres. The tender shall be provided with equipment to measure the distance to glacier fronts.

Tenders are not required to have a liferaft. All persons on board open tenders shall wear a full-body suit with thermal protection in accordance with the requirements of section 2.3 or 2.4 of the LSA Code.

The ship shall have an arrangement for safe embarkation into the tender when launched. A pilot ladder or rope ladder shall not be used for embarking passengers.

Vessels satisfying the requirements of this section may also be used for other excursions with passengers from the ship, provided that the number of passengers is 12 or less.

Section 7 Protection against polar bears

The ship shall be provided with equipment and procedures to protect people from polar bears after being evacuated to shore or ice.

Chapter 3 Passenger high-speed craft

Section 8 Passenger high-speed craft

Passenger ships defined as high-speed pursuant to SOLAS Chapter X Regulation 1 shall be certified in accordance with the International Code of Safety for High-Speed Craft adopted by IMO Resolution MSC.97(73), as amended by MSC.175(79), MSC.222(82), MSC.260(84), MSC.271(85), MSC.326(90), MSC.352(92) and MSC.439(99) (the 2000 HSC Code).

Category A craft may only operate in the Isfjord and shall be provided with liferafts satisfying the LSA Code.

Chapter 13 of the 2000 HSC Code also applies to ships of less than 150 gross tonnage.

Sections 17 and 18 of these Regulations shall apply accordingly to passenger high-speed craft.

Chapter 4 Passenger ships not holding a Passenger Ship Safety Certificate or a High-Speed Craft Safety Certificate

Section 9 Scope of application for chapter 4

Sections 10 to 19 shall apply to ships not holding a Passenger Ship Safety Certificate according to SOLAS Chapter I or a High-Speed Craft Safety Certificate according to chapter 1 of the 2000 HSC Code.

Section 10 Construction – subdivision and stability, machinery and electrical installations

SOLAS Chapter II-1 shall apply as regulation, with the exception of Regulations 1.4, 6.2.4 and 9.5.

Passenger spaces shall be designed in compliance with MSC.1/Circ.735 on ships the keel of which is laid or which are at a similar stage of construction on or after [entry into force date].

Personnel lifts shall be designed, constructed, installed, equipped, tested and inspected in accordance with the rules of a recognised classification society and the international standard (ISO) No. 8383 Lifts on Ships – Specific Requirements.

Section 11 Construction – fire protection, fire detection and fire extinction

SOLAS Chapter II-2 shall apply as regulation, with the exception of Regulation 1.4.4.1.

Section 12 Life-saving appliances and arrangements

SOLAS Chapter III shall apply as regulation, with the exception of Regulations 2.1 and 21.

The ship shall carry survival craft satisfying section 4.2 "inflatable liferafts", 4.5 "partially enclosed lifeboats" or section 4.6 "totally enclosed lifeboats" of the LSA Code shall be sufficient to accommodate 125% of the total number of persons the ship is certified to carry. The survival craft shall, as far as practicable, be equally distributed on each side of the ship. Liferafts shall be operated by a marine evacuation system (MES) in accordance with the requirements of section 6.2 of the LSA Code or launching appliances in compliance with paragraph 6.1.5 of the LSA Code.

The overall capacity of the survival craft shall be sufficient to accommodate the number of persons the ship is certified to carry, even if one survival craft is lost or rendered unserviceable. When calculating the capacity, consideration shall be given to whether one single fault in common components can result in several survival craft being lost or rendered unserviceable.

All survival craft required for abandonment of the ship by the total number of persons on board must be capable of being launched with their full complement of persons and equipment within 30 minutes from the time the abandon-ship signal is given.

The ship shall carry at least one rescue boat. A lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements comply with the requirements for a rescue boat.

The number of rescue boats and/or lifeboats shall be sufficient to ensure that no more than nine liferafts need to be marshalled by each rescue boat or lifeboat after evacuation.

Section 13 Radio communication

SOLAS Chapter IV shall apply as regulation, with the exception of Regulations 1.1 and 3.

Section 14 Safe navigation

SOLAS Chapter V shall apply as regulation, with the exception of Regulations 1.2, 1.4 and 3.

The ship is required to have minimum safe manning determined by the flag State.

Section 15 Carriage of cargoes and fuel oil

SOLAS Chapter VI shall apply as regulation, with the exception of Regulation 1.1.

Section 16 Carriage of dangerous goods

SOLAS Chapter VII shall apply as regulation, with the exception of Regulation 2.1.

Section 17 Safety management

The ship shall have a valid Safety Management Certificate in compliance with SOLAS Chapter IX, issued by its flag State.

Section 18 Safety measures in polar waters

SOLAS Chapter XIV shall apply as regulation, with the exception of Regulations 2.1 and 3.

The Polar Code Part I-A and the safety-related provisions in the introduction shall apply as regulation, with the exception of Part I-A chapter 1 paragraph 1.3 concerning certificate and survey.

Maximum expected time of rescue means the time adopted for the design of equipment and systems that provide survival support, and could be less than 5 days.

Section 19 Load line

For ships of 24 metres in length (L) and upwards, the requirements of the International Convention on Load Lines, 1966, as amended by the Protocol of 1988, consolidated edition 2005 as amended by MSC.223(82), MSC.270(85), MSC.329(90), MSC.345(91), MSC.345(91), MSC.356(92), and MSC.375(93) (the Load Line Convention), Annex B, Annex I, shall apply as regulation.

Ships of less than 24 metres in length (L) shall comply with all requirements related to means of closure, height of coamings and sills, height of air pipes and ventilators, freeing port area and overboard discharge valves specified in the Load Line Convention.

Chapter 5 Concluding provisions

Section 20 Exemptions

The flag State may upon written application from the company permit other solutions than those required by these Regulations when it is established that such solutions provide a level of safety equivalent to the requirements of the Regulations.

The ship shall have on board a list of equivalent solutions accepted by the flag State.

Section 21 Transitional provision

Ships having operated in the Norwegian territorial waters surrounding Svalbard each year for the last three years are not required to meet the requirements of these Regulations, with the exception of sections 4 and 7, until [entry into force + 5 years].

Section 22 Entry into force

These Regulations enter into force on [dd.mm.yy].