

APPROVED  
by the Russian Federation Government Decree  
dated September 18, 2020, No. 1487

**RULES**  
**of navigation in the water area of the Northern Sea Route**

I. General provisions

1. These Rules are applied in order to ensure the safety of navigation of ships and to prevent, reduce and control pollution of the marine environment from ships and contain:

- a) the procedure for organizing the navigation of ships in the water area of the Northern Sea Route;
- b) the regulation on navigational and hydrographic support for the navigation of ships in the water area of the Northern Sea Route;
- c) other provisions concerning the organization of navigation of ships in the water area of the Northern Sea Route.

II. Procedure for organizing navigation of ships in the water area  
of the Northern Sea Route

2. The organization of navigation of ships in the water area of the Northern Sea Route is carried out by the State Atomic Energy Corporation "Rosatom" (hereinafter referred to as State Corporation "Rosatom") in accordance with paragraph 3 of article 5.1 of the Merchant Shipping Code of the Russian Federation in the manner prescribed by this section.

In order to organize the navigation of ships, by the decision of the State Corporation "Rosatom" the Marine Operations Headquarters (hereinafter referred to as the Headquarters) is established, which ensures icebreaker assistance for ships and escort of ships on the navigation routes of ships along the water area of the Northern Sea Route. In addition, it develops routes for navigation of ships and arranges the icebreaker ships along the water area of the Northern Sea Route, taking into account the hydrometeorological, ice and navigational conditions in the specified water area.

3. The permitting procedure for navigation of ships is in force in the water area of the Northern Sea Route.

The ship in respect of which permission for ship's navigation in the water area of the Northern Sea Route (hereinafter referred to as Permission) has been not received in the manner prescribed by this section, may not enter the water area of the Northern Sea Route.

The Permissions are issued by the Federal Agency of Maritime and River Transport (hereinafter referred to as Authorized body) or its subordinate organization in agreement with the Headquarters.

4. To obtain a Permission, an application in electronic form (pdf file) shall be submitted to the Authorized body or its subordinate organization by the shipowner, a representative of the shipowner or the Master of the ship (hereinafter referred to as Applicant), in Russian and/or English (hereinafter referred to as Application).

The Application shall contain information about Applicant with indication of the full name and identification number of the ship assigned by the International Maritime Organization (hereinafter referred to as Ship Identification Number) (if any), as well as surname, first name, patronymic (if any) of the head of the Applicant – legal entity, contact phone number, fax, e-mail address (for a legal entity) or surname, first name, patronymic (if any) of the Applicant, contact phone number, fax, e-mail address (for natural person who applied with a Statement on his own behalf).

5. The following documents are attached to the Application in electronic form (pdf file), in Russian and/or English:

- a) information on the ship and the voyage as per Appendix No. 1;
- b) a copy of the Classification Certificate, issued in the prescribed manner by an organization, authorized for classification and survey of ships;
- c) a copy of the Tonnage Certificate;
- d) a copy of a Certificate of insurance or other financial security of civil liability for pollution damage from ships, issued in accordance with the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001, International Convention on Civil Liability for Oil Pollution Damage, 1969;
- e) a copy of the Certificate issued by an organization, authorized for classification and survey of ships that has approved the Project of a one-time passage (a ferry), confirming the possibility of implementation a passage with an indication of the conditions for its completion (for a ship passing outside its designated areas and sailing seasons);
- f) a copy of the standard towing Manual or towing Project, approved by an organization authorized for the classification and survey of ships (for towed floating objects in their designated navigating area, including towed floating drilling rigs);
- g) a copy of the Polar Ship Certificate, required by the International Code for Ships Operating in Polar Waters (Polar Code) (for ships to which the specified International Code applies);
- h) a copy of the Certificate of Ownership of the ship (Certificate of Registry) (or other document confirming such ownership);
- i) a copy of the Contract for Icebreaker Escort Services (for ships for which such escort is mandatory according to the criteria for the admission of ships to the water area of the Northern Sea Route, provided for in Appendix No. 2 (hereinafter referred to as Admission Criteria)).

6. For pleasure yachts, small boats, sports sailing ships a copy of the Ship's Ticket shall be attached in addition to the Application and the document specified in subparagraph (a) of paragraph 5 of these Rules (for pleasure yachts, small boats,

sports sailing ships navigating under a foreign flag – a copy of a document, similar to the Ship's Ticket issued by the this ship Flag State Administration or an organization recognized by it).

7. The Application with the documents attached according to paragraphs 5 and 6 of these Rules shall be sent by the Applicant not earlier than 120 calendar days and not later than 15 working days before the estimated date of the ship's entry to the water area of the Northern Sea Route.

8. The Application is accepted for consideration on the day it is received to the Authorized body or its subordinate organization, and if the Application is received on a weekend or a non-working holiday – on the first working day following this weekend or non-working holiday.

9. Authorized body or its subordinate organization sends copies of the Application and the documents attached thereto to the Headquarters and posts information about the Application received (including the date of acceptance of the Application for consideration) on its official website in the Internet Information and Telecommunication Network (hereinafter referred to as official website of the Authorized body or its subordinate organization) no later than 2 working days after acceptance of the Application for consideration.

10. The Application with the documents attached thereto shall be considered by the Authorized body or its subordinate organization within 10 working days of its acceptance for consideration.

The Headquarters shall ensure the consideration and inform the Authorized body or its subordinate organization of the approval of the issue or a reasoned refusal to approve the issue of a Permission within 5 working days from the date of receipt of the copies of the documents specified in paragraphs 5 and 6 of these Rules.

11. Grounds for refusal to approve the issue of a Permission by the Headquarters are:

- a) non-compliance of the ship with the Admission criteria;
- b) non-submission by the Applicant of a copy of the Contract for Icebreaker Escort Services, if such assistance is mandatory according to the Admission criteria.

12. In the event that within 5 working days from the day of dispatch to the Headquarters of the documents specified in paragraphs 5 and 6 of these Rules, no information about the approval of the Permission by the Headquarter or a reasoned refusal to approve it will be received to the Authorized body or its subordinate organization the Permission is considered to be approved by the Headquarter.

13. If the Headquarter has agreed on the issue of a Permission and there are no grounds for refusal to issue the Permission specified in paragraph 15 of this Rules, the Permission shall be posted on the official website of the Authorized body or its subordinate organization within the time period specified in passage 1 of paragraph 10 of this Rules which indicates the following information:

- a) the ship's name for which the Permission was issued;
- b) the flag of the ship for which the Permission was issued;
- c) the Identification Number of the ship (if any) for which the Permission was issued;

d) the start and end dates of the Permission taking into account the expected start and end dates of the ship's navigation in the water area of the Northern Sea Route (the validity of the Permission may not exceed 365 calendar days);

e) the route of navigation (area of work) of the ship in the water area of the Northern Sea Route;

f) information on the need for icebreaker assistance in heavy, medium and light types of ice conditions with an indication of the period of navigation (time period) and the area (areas) of the Northern Sea Route, where the ship is to navigate under icebreaker assistance according to the Admission criteria;

g) information on the ice class and gross tonnage of the ship.

14. If there are grounds for refusal to issue a Permission specified in paragraph 15 of these Rules, within the time period specified in the first passage of paragraph 10 of these Rules, the Authorized body or its subordinate organization shall send to the Applicant's e-mail address specified in the Application a notice of refusal to issue a Permission which indicates the grounds for such refusal.

The Applicant may re-apply according to paragraphs 4-7 of these Rules after elimination of the defects that were the basis for refusal to issue a Permission.

15. The Authorized body or its subordinate organization shall refuse to issue a Permission if one or more of the following grounds are present:

a) the presence of a reasoned refusal to approve the issue of a Permission by the Headquarters;

b) the providing of incomplete or unreliable information in the Application or the documents attached thereto by the Applicant;

c) the documents are presented in an unreadable view (format);

d) incomplete set of in documents specified in paragraphs 5 and 6 of these Rules has been attached to the Application, or invalid documents have been submitted;

e) the Application is not signed by the Applicant;

f) ship's planned navigation route or area of work in the water area of the Northern Sea Route and/or the period of navigation are outside the areas and/or seasons of operation of the ship, established by the organization authorized for the classification and survey of ships.

16. The Authorized body or its subordinate organization posts the relevant information on the official website of the Authorized body or its subordinate organization no later than 2 working days after sending a notice of refusal to issue a Permission.

17. A ship for which the Permission has been issued shall not enter the water area of the Northern Sea Route earlier than the date of the Permission's validity and shall leave the water area of the Northern Sea Route no later than the date of expiry of the Permission.

If a ship is unable to leave the water area of the Northern Sea Route before the expiry date of the Permission, the Master shall immediately inform the Headquarters about this, explaining the reasons why the requirement specified in the first passage of this paragraph cannot be fulfilled, and shall act in accordance with the instructions

of the Headquarters, which shall inform the Authorized body or its subordinate organization about its instructions within 2 hours.

18. When a ship enters the water area of the Northern Sea Route from the West 48 hours before approaching the western borders of the Straits of Kara Gate, Matochkin Shar or Yugorsky Shar, or before approach the meridian of 68 degrees 35 minutes east longitude (hereinafter referred to as Western border) and when the ship enters the water area of the Northern Sea Route from the East 48 hours before approach the parallel of 66 degrees 05 minutes north latitude and/or the meridian of 168 degrees 58 minutes 37 seconds west longitude (hereinafter referred to as Eastern border) or immediately after departure from a seaport located outside the water area of the Northern Sea Route (if the time of proceeding of the ship after leaving a seaport to the Western or Eastern border is less than 48 hours), the Master will inform the Headquarters about the planned time (Moscow time) of the ship's arrival, respectively to the Western or Eastern border, and also sends the following information:

- a) the ship's name;
- b) Ship Identification Number (if any);
- c) the port (place) of the ship's departure, actual date and time (Moscow time) of the departure;
- d) the port (place) of the ship's destination, estimated date and time (Moscow time) of arrival;
- e) the maximum draft of the ship (in meters);
- f) type and quantity (in metric tons) of the transported cargo (information on the floating object being towed);
- g) class and quantity (in metric tons) of the transported dangerous cargo (if any);
- h) fuel oil bunker with indication of the type of fuel oil (in metric tons) and the number of days during which the ship can proceed without bunkering at the time of information direction;
- i) fresh water supply taking into account fresh water replenishment from the ship's desalination plant (if any) at the time of information direction (indicate the number of days during which the ship can proceed without replenishment of the fresh water supply);
- j) provisions and other ship's stores at the time of information direction (indicate the number of days during which the ship can proceed without replenishment of the provisions and other ship's stores);
- k) the number of crew members and passengers on board;
- l) information on damage to the ship's hull, malfunctions of ship's engines, machineries and/or technical facilities (if any);
- m) the names, Ship Identification Numbers of towed (pushed) ships (if any), other floating objects, type and quantity of cargo, number of crew members and passengers on their board (if any);
- o) estimated date and time (Moscow time) of the ship's entry to the water area of the Northern Sea Route, indicating the geographical coordinates of the planned crossing point of the Northern Sea Route border.

19. When a ship leaves the seaport of the Russian Federation located in the water area of the Northern Sea Route (departure from the cargo operations place outside the seaport water area), the Master will send to the Headquarters the information provided for by subparagraphs (a) – (n) of paragraph 18 of these Rules with indication of the planned time (Moscow time) of exit from the water area of the Northern Sea Route, including the entrance to the inland waterways, or the planned time of arrival at a seaport located in the water area of the Northern Sea Route (approach the cargo operations place outside the seaport water area), whichever comes first.

20. When a ship enters the water area of the Northern Sea Route from the inland waterways of the Russian Federation, the Master will send the information to the Headquarters about the date and actual time (Moscow time) of the ship's entry in the water area of the Northern Sea Route, geographical coordinates, and information, provided for by subparagraphs (a)-(n) of paragraph 18 of these Rules, indicating the planned time (Moscow time) of departure from the water area of the Northern Sea Route, including the entrance to inland waterways, or the planned time (Moscow time) of the arrival at a seaport located in the water area of the Northern Sea Route (approach the cargo operations place outside the seaport water area), whichever comes first.

21. When a ship enters in the water area of the Northern Sea Route, the Master will send the information to the Headquarters on the ship's name, Ship Identification Number (if any), date and actual time (Moscow time) of the ship's entry in the water area of the Northern Sea Route, geographical coordinates, course and speed of the ship at the sending information time, as well as the planned time (Moscow time) for leaving the water area of the Northern Sea Route, including the entrance to inland waterways, or the planned time (Moscow time) for arrival at a seaport located in the water area of the Northern Sea Route (approach the place of cargo operations outside the seaport water area), whichever comes first.

22. When the ship leaves the water area of the Northern Sea Route, including the entrance to inland waterways, the Master will send the information to the Headquarters on the name of the ship's name, Ship Identification Number (if any), date and actual time (Moscow time) of the ship's departure from the water area of the Northern Sea Route, geographical coordinates, course and speed of the ship at the time of information direction.

23. When a ship arrives at the seaport of the Russian Federation located in the water area of the Northern Sea Route (approach the place of cargo operations outside the seaport water area), the Master will send the information to the Headquarters on the ship's name, Ship Identification Number (if any), date and actual time (Moscow time) of the ship's arrival at the seaport with the indication of the seaport name (place of cargo operations outside the seaport water area).

24. When the ship navigates in the water area of the Northern Sea Route after crossing the Western or Eastern border and before leaving the water area of the Northern Sea Route once a day at 12.00 (Moscow time) the Master will send the following information to the Headquarters as of the time of information direction:

a) the ship's name;

- b) Ship Identification Number (if any);
- c) geographic coordinates (latitude, longitude);
- d) the planned date and time (Moscow time) of the ship's departure from the water area of the Northern Sea Route or the planned time (Moscow time) of the ship's arrival at the seaport located in the water area of the Northern Sea Route (approach the cargo operations place outside the seaport water area), whichever comes first;
- e) the ship's course (accurate to one degree);
- f) the ship's speed (accurate to one knot);
- g) fuel oil bunker with indication of the type of fuel oil (in metric tons);
- h) fresh water supply taking into account fresh water replenishment from the ship's desalination plant (in metric tons);
- i) information on incidents with a crew member or passenger (if any);
- j) information on damage to the ship's hull, malfunctions of ship's engines, machineries and/or technical facilities (if any);
- k) other information relating to safety of navigation and protection of the marine environment from pollution from ships (if any);
- l) air temperature in Celsius degrees (accurate to one degree);
- m) atmospheric pressure (in millibars);
- n) wind direction and speed (accurate to ten degrees and one meter per second);
- o) visibility in nautical miles (accurate to one mile);
- p) weather phenomena (fog, haze, rain, snow, etc.);
- q) seawater temperature in Celsius degrees (accurate to one degree);
- r) presence of icebergs, bergy bits and glowlers with indication of their coordinates, linear dimensions and drift direction;
- s) total ice concentration on a 10-point scale, age of ice with indication of its particular concentration (for fast ice, the code word "Fast-ice" is indicated);
- t) ice compacting (in points);
- u) ice hummocking (in points);
- v) ice destruction (in points);
- w) the presence of icing of ship;
- x) ice phenomena as intense pack ice, ice river;
- y) detection of malfunction or absence of aids to navigation indicated on the nautical charts or in guides to navigation.

25. The headquarters transfers to the Authorized body or its subordinate organization the information received according to paragraphs 18 - 24 of these Rules, within 2 hours from the moment it is received.

26. In order to ensure the safety of navigation of ships and prevention of accidents with ships, as well as in order to protect the marine environment in the water area of the Northern Sea Route, ice pilotage of ships is carried out.

The person carrying out ice pilotage of ships in the water area of the Northern Sea Route must have a Certificate of authorization of ice pilotage of ships in the water area of the Northern Sea Route, issued by the Authorized body or its subordinate organization in the manner prescribed by the Rules of the ice pilotage

of ships in the water area of the Northern Sea Route, approved by the Ministry of Transport of the Russian Federation according to agreement of the State Corporation "Rosatom".

### III. Regulation on navigational and hydrographic ensuring the navigation of ships in the water area of the Northern Sea Route

27. Navigational and hydrographic support of navigation of ships in the water area of the Northern Sea Route includes:

- a) hydrographic research of the water area in order to generate navigational information;
- b) collection, preparation and bringing to marines of operational information on changes in the navigating situation and the mode of navigation in the water area;
- c) equipment of the water area with aids to navigation.

28. Navigational and hydrographic support of navigation of ships in the water area of the Northern Sea Route is carried out by the Federal Agency for Maritime and River Transport and the State Corporation "Rosatom" in the manner established by the Russian Federation Government in accordance with paragraph 4 of article 5 of the Merchant Shipping Code of the Russian Federation.

29. Hydrographic research in the water area of the Northern Sea Route is carried out in the areas agreed with the Authorized body or its subordinate organization and Headquarters.

### IV. Other provisions relating to the organization of navigation of ships in the water area of the Northern Sea Route

30. Icebreaker escorting of ships which navigation in the water area of the Northern Sea Route should be carried out with the icebreaker escort (hereinafter referred to as Icebreaker assistance) according to the Admission criteria is carried out by icebreakers who have the right to navigate under the State Flag of the Russian Federation.

Icebreaker assistance is carried out in accordance with the Rules of icebreaker assistance of ships in the water area of the Northern Sea Route approved by the Ministry of Transport of the Russian Federation in agreement with the State Corporation "Rosatom", and includes the navigation of the ship (caravan of ships) with the help of an icebreaker (the icebreakers), as well as the activities of the icebreaker fleet that ensure the specified navigation, including the formation of a convoy and the placement of ships in the caravan to follow icebreakers, preliminary laying a lead, towing ships in ice conditions, ice reconnaissance by an icebreaker, ensuring safe lying (drift) of ships in the ice while waiting for improvement of ice conditions.

Conducting ships along the routes in the water area of the Northern Sea Route is carried out by the Headquarters, which provides the Masters with detailed information on the ice situation, recommended routes, warnings about especially

dangerous ice phenomena. The Headquarters monitors the ships' passage in ice conditions and, if necessary, gives instructions on actions to be taken to ensure the safety of navigation.

Taking into account the actual ice and hydrometeorological situation on a specific route of navigation of ships in the water area of the Northern Sea Route, ice class and technical characteristics of ships, the Headquarters shall determine the type of escort of ships and the composition of the convoy when Icebreaker assistance is carried out.

31. Communication among the ships, the icebreakers, the Authorized body or its subordinate organization and the Headquarters shall be carried out using radio equipment intended for use in the coverage zone of sea areas A1, A2, A3 and A4 of the Global Maritime Distress and Safety System, in accordance with the Radio Communication Regulations for the Marine Mobile Service and Marine Mobile Satellite Service of the Russian Federation approved by the authorized federal executive authorities.

32. During Icebreaking assistance, the icebreaker (icebreakers) and ships carry a constant radio watch on the channel 16 of ultra-short radio waves.

33. Contact information for communication with the Authorized body or its subordinate organization and Headquarters shall be posted on the official website of the Authorized body or its subordinate organization and on the official website of the Headquarters of the Internet Information and Telecommunications Network.

34. During Icebreaker assistance, radio communication between the ships and between a ship and an icebreaker (the icebreakers) is carried out on the ultra-short radio wave channel established by the Master of the icebreaker who is in charge of the movement of the convoy.

35. Conducting radio communications not related to the movement of the convoy or ensuring the safety of navigation on the ultra-short radio wave channel established according to paragraph 34 of these Rules is prohibited.

36. When a ship navigates independently in the coverage zone of sea area A4 of the Global Maritime Distress and Safety System (outside the coverage zone of the INMARSAT satellite system, north of the parallel 75 N), the Master shall inform the Headquarters on the planned geographical coordinates of the parallel 75 N crossing points when the ship moves from South to North and from North to South.

The Headquarters shall inform the Master about the ships that are used as intermediaries for communication (hereinafter referred to as Intermediary ships) and the scheme of communication between the ship and the Headquarters using Intermediary ships.

37. The Headquarters forwards the information on the appointed Intermediary ships to the Main Maritime Rescue Coordination Center of the State Budgetary Institution "Maritime Rescue Service" and to the corresponding Maritime Rescue Coordination Center, the Marine Rescue Sub-Center.

38. In addition to the requirements for equipment and supply of the ship when navigating in the water area of the Northern Sea Route stipulated by international treaties of the Russian Federation, legislation of the Russian Federation the ship must have on board:

- a) these Rules;
- b) nautical charts and guides to navigation along the whole route in the water area of the Northern Sea Route;
- c) additional emergency equipment including:
  - one searchlight with a power of at least two kilowatts with a set of spare bulbs that can be installed in the bow or on one of the ship's navigation bridge wings for the ship navigate at night time and/or in limited visibility conditions;
  - one set of warm clothes for each person on board, and 3 spare sets in addition to the specified number of sets of warm clothes;
  - immersion suits in an amount corresponding to the maximum number of people who can be on board during the ship's voyage, as well as additional immersion suits for watchmen on the navigation bridge and in the engine room.

39. When navigating in the water area of the Northern Sea Route the following requirements must be fulfilled on board:

- a) the capacity of the tank (tanks) for collecting of oil residues (sludge) must be sufficient taking into account the type of ship's power plant and the duration of the voyage in the water area of the Northern Sea Route;
- b) tanks for collecting of waste (slop) generated during the operation of the ship must have sufficient capacity, taking into account the duration of the voyage in the water area of the Northern Sea Route;
- c) ship's fuel oil bunker, fresh water supply and provisions must be sufficient to navigate in the water area of the Northern Sea Route without replenishment, taking into account the maximum possible voyage duration;
- d) in the period from November to June (inclusive), ballast wing tanks (capacities) above the actual waterline must have heating devices or other devices to prevent freezing of liquid in ballast tanks approved by this ship's Flag State Administration.

40. The Master or the Chief Officer should be present on the navigating bridge of the ship navigated in the water area of the Northern Sea Route in ice conditions of ice concentration over 3 points.

41. Discharge of oil residues (sludge) is prohibited in the water area of the Northern Sea Route.

42. The Authorized body or its subordinate organization shall post on the official website:

- a) contact information;
- b) these Rules in Russian and English;
- c) information on the Applications considered by the Authorized body or its subordinate organization;
- d) information on issued Permissions;
- e) information on the refusal to issue a Permission;
- f) data on organizations providing Icebreaker assistance in the water area of the Northern Sea Route, indicating their contact information;
- g) data on organizations providing ice pilotage, indicating their contact information;

h) information on the movement of ships in the water area of the Northern Sea Route, including:

- names of ships navigating or following to the water area of the Northern Sea Route;

- planned and actual time of crossing of the Western or Eastern border of the Northern Sea Route by each ship and their geographic coordinates, course and speed as of the time of this crossing;

- geographic coordinates, course and speed of each ship at 12.00 (Moscow time) of the reporting day;

- planned time of ships' exit from the water area of the Northern Sea Route or the planned time of ships' arrival at seaports located in the water area of the Northern Sea Route.

i) hydrometeorological and ice forecasts 72 hours in advance related to the water area of the Northern Sea Route including the forecast of assessing of the types of ice conditions "heavy", "medium", "light", "clear water" for the areas of the water area of the Northern Sea Route specified in Appendix No. 3;

j) hydrometeorological information products received from the institutions of the Federal Service for Hydrometeorology and Environmental Monitoring;

k) long-term ice forecasts and updates to them for the first half and the second half of the summer-autumn navigation in the water area of the Northern Sea Route;

l) recommendations for communication in the water area of the Northern Sea Route.

### INFORMATION ON THE SHIP AND VOYAGE

1. The name of ship.
2. The ship identification number assigned by the International Maritime Organization (if any).
3. The flag state of ship.
4. The call sign of ship.
5. Information on the shipowner with the indication of the full name and identification number of the organization, assigned by the International Maritime Organization (if any), the last name, the first name of the head of the shipowner, contact phone, fax, email address for a juridical person or the last name, the first name of the ship owner, contact phone number, fax, email address for an individual person.
6. Port (place) of departure.
7. Port (place) of destination.
8. Description of the proposed route of navigation of the ship in the water area of the Northern Sea Route (indicating the area and type of work).
9. Estimated dates of the start and completion of navigation of the ship in the water area of the Northern Sea Route.
10. Planned number of crew members and passengers on board.
11. Type and planned quantity of transported cargo in metric tons (information on the towed object).
12. Class and planned quantity of transported dangerous goods in metric tons (if any).
13. Ship's satellite telephone number (if available).
14. Ship's fax number (if available).
15. Ship's email address (if available).
16. Type of ship.
17. Ice class of ship, assigned by the organization authorized for the classification and survey of ship.
18. Length overall of ship (meters).

19. The extreme breadth of ship (meters).
20. Maximum draft of ship (meters).
21. Gross tonnage of ship.
22. Power of the ship's main power plant (in kilowatts).
23. Deadweight of ship.
24. Daily fuel oil consumption when the full speed in clear water (in metric tons).
25. Information on the construction features of the bow and stern of ship.

**CRITERIA FOR ADMISSION OF SHIPS IN THE AREA OF THE NORTHERN SEA ROUTE**

Table №1. For ships without ice classes and with ice classes Ice1 - Ice3 from July the 1<sup>st</sup> to November the 15<sup>th</sup> <sup>1</sup>

Ice class of the ship	Ice navigation method	Water area of the Northern Sea Route <sup>2</sup>						
		1, 2, 3, 4, 5, 6, 7	8, 9, 10, 11	12, 13, 14	15, 16, 17	18, 19, 20, 21	22, 23, 24, 27	25, 26, 28
		HMLC	HMLC	HMLC	HMLC	HMLC	HMLC	HMLC
Without ice class	IN	---+	---+	---+	---+	---+	---+	---+
	NI	--++	--++	--++	--++	--++	--++	--++
Ice1	IN	--++	--++	--++	--++	--++	--++	--++
	NI	--++	--++	--++	--++	--++	--++	--++
Ice2	IN	--++	--++	--++	--++	--++	--++	--++
	NI	-+++	-+++	--++	--++	--++	--++	--++
Ice3	IN	--++	--++	--++	--++	--++	--++	--++
	NI	-+++	-+++	--++	--++	--++	--++	-+++



Table №3. For icebreakers with ice classes Icebreaker6 - Icebreaker7<sup>3</sup>  
from January the 1<sup>st</sup> to June the 30<sup>th</sup> and from December the 1<sup>st</sup> to the 31<sup>st</sup>

Ice class of the ship <sup>4</sup>	Ice navigation method	Water area of the Northern Sea Route <sup>2</sup>						
		1, 2, 3, 4, 5, 6, 7	8, 9, 10, 11	12, 13, 14	15, 16, 17	18, 19, 20, 21	22, 23, 24, 27	25, 26, 28
		HMLC	HMLC	HMLC	HMLC	HMLC	HMLC	HMLC
Icebreaker6	IN	- - + +	- - + +	- - + +	- - + +	- - + +	- - + +	- - + +
	NI	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +
Icebreaker7	IN	- + + +	- + + +	- + + +	- + + +	- + + +	- + + +	- + + +
	NI	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +

**Note.**

Symbols used in this annex:

IN – independent navigation;

NI – navigation under icebreaker assistance;

H – heavy type of ice conditions;

M – medium type of ice conditions;

L – light type of ice conditions;

C – clean water;

+ – navigation of the ship is permitted;

- – navigation of the ship is prohibited;

\* – independent navigation is allowed from July the 1st to November the 30th.

<sup>1</sup> For ships without ice classes and with ice classes Ice1 - Ice3, navigation in the water area of the Northern Sea Route from November the 16th to December the 31st and from January to June is prohibited.

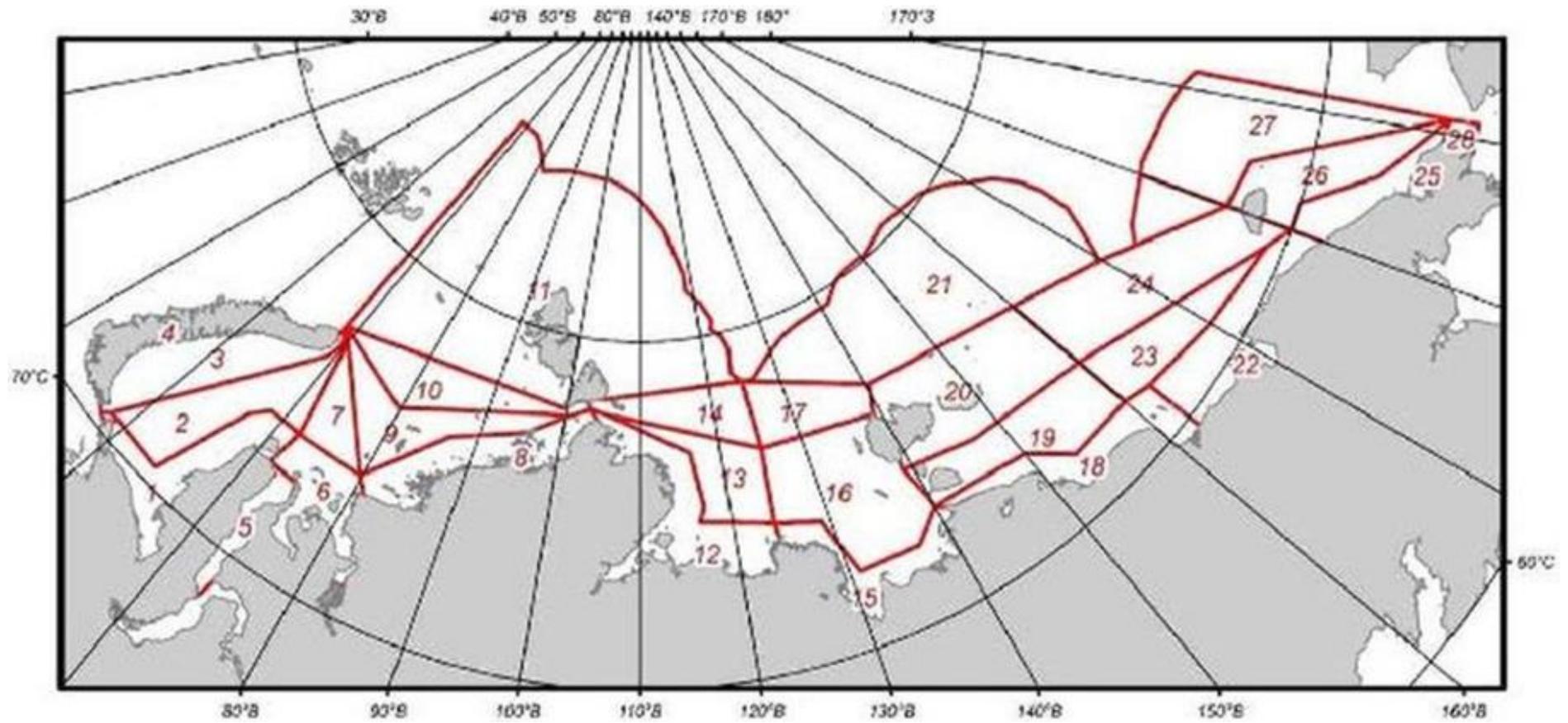
<sup>2</sup> Description of the boundaries of the Northern Sea Route water area is given in Appendix No. 3 to the Navigation Rules in the Water Area of the Northern Sea Route, approved by the Government of the Russian Federation of September the 18th, 2020 N 1487 "On Approval of the Navigation Rules in the Water Area of the Northern Sea Route".

<sup>3</sup> For icebreakers with ice class Icebreaker6 - Icebreaker7 during the navigation period from July the 1st to November the 30th, navigation without icebreaker assistance is allowed.

<sup>4</sup> For icebreakers with ice class Icebreaker8 and Icebreaker9, there are no restrictions on navigation without icebreaker assistance in the water area of the Northern Sea Route.

**AREAS OF THE NORTHERN SEA ROUTE**

## I. The layout of the areas of the Northern sea route



## II. DESCRIPTION OF THE BOUNDARIES OF THE AREA OF THE NORTHERN SEA ROUTE

### District 1

The boundaries of the region run from Cape Rogaty (70 ° 15 'N and 58 ° 26' E (1) along the line connecting points with coordinates: 70 ° 21 'N and 57 ° 47' E (2); 70 ° 35 'N and 58 ° 20' E (3); 70 ° 30 'N and 64 ° 15' E (4); 73 ° 30 'N and 67 ° 00' E (5); 74 ° 00 'N and 68 ° 30' E (6); 74 ° 00 'N and 72 ° 15' E (7); Cape Hasala (72 ° 53 'N and 71 ° 37' E ( 8); further along the northern and western shores of the Yamal Peninsula to the south; further along the eastern and northern shores of the Yugorsky Peninsula to the western border of the Yugorsky Shar Strait, passing along the line of Cape Bely Nos (69 ° 36 'N and 60 ° 12' E ( 9) and Cape Greben of Vaigach Island (69 ° 39 'N and 59 ° 59' E (10); further along the eastern coast of Vaygach Island to Cape Bolvansky Nos (70 ° 28 'N and 59 ° 05' E ( 11); further along the northern coast of Vaygach Island to Cape Rogaty.

### District 2

The boundaries of the region pass along the line connecting points with coordinates: 70 ° 35 'N and 58 ° 20' E (3); 76 ° 15 'N and 69 ° 15' E (12); 76 ° 45 'N and 69 ° 45' E (13); 77 ° 15 'N and 68 ° 35' E (14); 76 ° 45 'North and 70 ° 15' East (15); 74 ° 00 'N and 72 ° 15' E (7); 74 ° 00 'N and 68 ° 30' E (6); 73 ° 30 'N and 67 ° 00' E (5); 70 ° 30 'N and 64 ° 15' E (4); 70 ° 35 'N and 58 ° 20' E (3).

### District 3

The boundaries of the region run from Cape Kusov Nos (70 ° 28 'north latitude and 57 ° 08' east longitude (16) along the northern coast of the Kara Gate Strait to Cape Menshikov (70 ° 42 'N and 57 ° 37' E (17) South islands of the Novaya Zemlya archipelago; further along the eastern coast of the archipelago to Cape Zhelaniya (76 ° 57 'N and 68 ° 35' E (18); further along the line connecting points with coordinates 77 ° 15 'N and 68 ° 35' E (14); 76 ° 45' N and 69 ° 45' E (13); 76 ° 15' N and 69 ° 15' E (12); 70 ° 35' N and 58 ° 20' E (3); 70 ° 21' N and 57 ° 47' E (2); further - north to Cape Kusov Nos.

### District 4 (the Matochkin Shar Strait)

The boundaries of the region run from Cape Serebryany (73 ° 21 'N and 54 ° 04' E (19) of the Northern Island of the Novaya Zemlya archipelago to the east along the coast of the island to Cape Vykhodnoy (73 ° 14 'N and 56 ° 44' E) (20); further through the Matochkin Shar Strait to Cape Rok (73 ° 09 'N, 56 ° 34' E (21) of the South Island of the Novaya Zemlya archipelago; further along the coast of the island to Cape Stolbovoy (73 ° 17 'N and 53 ° 53' E (22) and through the Matochkin Shar Strait to Cape Serebryany.

## District 5 (the Obskaya Guba)

The boundaries of the region run from Cape Turysal ( $72^{\circ} 48' \text{ N}$  and  $74^{\circ} 50' \text{ E}$ ) (23) of the northwestern point of the Java Peninsula; further through the Gulf of Ob to Cape Khasalya ( $72^{\circ} 53' \text{ N}$  and  $71^{\circ} 37' \text{ E}$ ) (8) of the northeastern tip of the Yamal Peninsula; further south along the eastern coast of the Yamal Peninsula to Cape Kamenny ( $68^{\circ} 30' \text{ N}$  and  $73^{\circ} 35' \text{ E}$ ) (24); further through the Gulf of Ob Bay to Cape Trekhbugorny ( $69^{\circ} 05' \text{ N}$  and  $73^{\circ} 52' \text{ E}$ ) (25) of the Java Peninsula; further north along the western coast of the Java Peninsula to Cape Turysal.

## District 6

The boundaries of the region pass along the line connecting points with coordinates  $74^{\circ} 00' \text{ N}$  and  $72^{\circ} 15' \text{ E}$  (7);  $74^{\circ} 00' \text{ N}$  and  $79^{\circ} 45' \text{ E}$  (26); Polynya Cape ( $73^{\circ} 35' \text{ N}$  and  $81^{\circ} 04' \text{ E}$ ) (27) on the coast of the Petr Chichagov Coast; further through the port of Dikson along the coast of the Ob-Yenisei region, including the coasts of the Oleniy and Yavai peninsulas, to Cape Turysal ( $72^{\circ} 48' \text{ N}$  and  $74^{\circ} 50' \text{ E}$ ) (23) at the northwestern point of the Java Peninsula; further through the Gulf of Ob to Cape Khesalya ( $72^{\circ} 53' \text{ N}$  and  $71^{\circ} 37' \text{ E}$ ) (8) northeastern extremity the Yamal Peninsula; further north to the starting point  $74^{\circ} 00' \text{ N}$  and  $72^{\circ} 15' \text{ E}$  (7).

## District 7

The boundaries of the region pass along a line connecting points with coordinates:  $77^{\circ} 15' \text{ North}$  and  $68^{\circ} 35' \text{ East}$  (14);  $74^{\circ} 00' \text{ North}$  and  $79^{\circ} 45' \text{ East}$  (26);  $74^{\circ} 00' \text{ North}$  and  $72^{\circ} 15' \text{ East}$  (7);  $76^{\circ} 45' \text{ North}$  and  $70^{\circ} 15' \text{ East}$  (15);  $77^{\circ} 15' \text{ North}$  and  $68^{\circ} 35' \text{ East}$  (14).

## District 8

The boundaries of the region run from Cape Polynya ( $73^{\circ} 35' \text{ North}$  and  $81^{\circ} 04' \text{ East}$ ) (27) along the Peter Chichagov Coast, along the Khariton Laptev Coast, along the western coast of the Taimyr Peninsula to Cape Chelyuskin ( $77^{\circ} 43' \text{ North}$  and  $104^{\circ} 15' \text{ East}$ ) (28); further along the line connecting points with coordinates:  $78^{\circ} 00' \text{ North}$  and  $103^{\circ} 15' \text{ East}$  (29);  $77^{\circ} 43' \text{ North}$  and  $100^{\circ} 30' \text{ East}$  (30);  $77^{\circ} 00' \text{ North}$  and  $95^{\circ} 30' \text{ East}$  (31);  $76^{\circ} 10' \text{ North}$  and  $86^{\circ} 45' \text{ East}$  (32);  $74^{\circ} 00' \text{ North}$  and  $79^{\circ} 45' \text{ East}$  (45); further south to Cape Polynya.

## District 9

The boundaries of the region pass along the line connecting points with coordinates: 77 ° 15 'North and 68 ° 35' East (14); 76 ° 15 'North and 79 ° 45' East (33); 77 ° 40 'North and 97 ° 45' East; 77 ° 43 'North and 100 ° 30' East (30); 77 ° 00 'North and 95 ° 30' East (31); 76 ° 10 'North and 86 ° 45' East (32); 74 ° 00 'North and 79 ° 45' East (26); 77 ° 15 'North and 68 ° 35' East (14).

## District 10

The boundaries of the area run from the point 77 ° 15 'North and 68 ° 35' East (14) to Cape Neupokoeva (77°55 'North and 99°34' East (35) of Bolshevik Island; further along the southern coast of Bolshevik Island to Cape Taimyr (78 ° 08 'North and 102 ° 48' East (36); further along the line connecting points with coordinates: 78 ° 00 'North, 103 ° 15' East (29); 77 ° 43 'North, 100 ° 30' East (30); 77 ° 40 'North and 97 ° 45' East (34); 76 ° 15 'North and 79 ° 45' East (33); 77 ° 15 'North and 68 ° 35' East (14).

## District 11

The boundaries of the region run from the point with coordinates 77 ° 15 'North and 68 ° 35' East (14) along the meridian 68 ° 35 'East to the intersection with the border line of the 200-mile exclusive economic zone of the Russian Federation (hereinafter - the EEZ of the Russian Federation) ; further to the southeast along the border of the EEZ of the Russian Federation to a point with coordinates 78 ° 30 'North and 124 ° 45' East (37); further to Cape Evgenova (78 ° 18 'North and 104 ° 49' East (38); further along the southern coast of Bolshevik Island to Cape Neupokoeva (77 ° 55 'North and 99 ° 34' East) to the starting point 77 ° 15 'North and 68 ° 35' East (14).

## District 12

The boundaries of the region run from the northern tip of the Danube Island in the Lena River delta (73 ° 55 'North and 124 ° 30' East (39) to the west along the Laptev Sea coast, including Oleneksky, Anabarsky, Khatangsky bays and the eastern coast of the Taimyr Peninsula, to Cape Chelyuskin (77 ° 43 'North and 104 ° 15' East (28); further along the line connecting points with coordinates: 78 ° 00 'North and 103 ° 15' East (29); 77 ° 54 ' North and 105 ° 23 'East (40); 76 ° 45' North and 116 ° 15 'East (41); 75 ° 10' North and 117 ° 10 'East (42); 74 ° 45 'North and 116 ° 30' East (43); 74 ° 20 'North and 124 ° 20' East (44); 73 ° 55 'North and 124 ° 30' East (39).

## District 13

The boundaries of the region pass along the line connecting points with coordinates: 77 ° 54 'North and 105 ° 23' East (40); 76 ° 30 'North and 125 ° 00' East (45); 74 ° 20 'North and 124 ° 20' East (44); 74 ° 45 'North and 116 ° 30' East (43); 75 ° 10 'North and 117 ° 10' East (42); 76 ° 45 'North and 116 ° 15' East (41); 77 ° 54 'North and 105 ° 23' East (40).

## District 14

The boundaries of the area pass along the line connecting points with coordinates: 78 ° 30 'North and 124 ° 45' East (37); 76 ° 30 'North and 125 ° 00' East (45); 77 ° 54 'North and 105 ° 23' East (40); 78 ° 00 'North and 103 ° 15' East (29); Cape Taimyr (78 ° 08 'North and 102 ° 48' East (36); further east along the coast of Bolshevik Island to Cape Evgenov (78 ° 18 'North and 104 ° 49' East (38) and to the initial point 78 ° 30 'North and 124 ° 45' East (37).

## District 15

The boundaries of the region run from the northern point of the Danube Island in the Lena River delta (73 ° 55 'North and 124 ° 30' East (39) along a line connecting points with coordinates: 74 ° 20 'North and 124 ° 20' East (44); 74 ° 00 'North and 129 ° 00' East (46); 72 ° 15 'North and 131 ° 00' East (47); 72 ° 15 'North and 137 ° 00' East (48); 73 ° 00 'North and 140 ° 00' East (49); to Cape Svyatoy Nos (72 ° 52 'North and 140 ° 43' East (50); further west along the sea coast Laptev to the Danube Island.

## District 16

The boundaries of the region run from Cape Anisiy (76 ° 12 'North and 139 ° 08' East (51) of Kotelny Island along a line connecting points with coordinates: 76 ° 30 'North and 125 ° 00' East (45); 74 ° 20 'North and 124 ° 20' East (44); 74 ° 00 'North and 129 ° 00' East (46); 72 ° 15 'North and 131 ° 00' East (47) ; 72 ° 15 'North and 137 ° 00' east (48); 73 ° 00 'North and 140 ° 00' East (49); further to Cape Kigilyakh (73 ° 21 'North and 139 ° 52 'East (52) of Bolshoi Lyakhovsky Island and to the point 74 ° 23' North and 139 ° 00 'East (53); further to Cape Bear (74 ° 38' North latitude and 139 ° 06 'East longitude (54) along the western coast of Kotelny Island to Cape Anisy.

## District 17

The boundaries of the region run from Cape Anisiy ( $76^{\circ} 12' \text{N}$  and  $139^{\circ} 08' \text{E}$  (51) of Kotelny Island along the line connecting points with coordinates:  $77^{\circ} 00' \text{N}$  and  $140^{\circ} 30' \text{E}$  (55);  $78^{\circ} 30' \text{N}$  and  $124^{\circ} 45' \text{E}$  (37);  $76^{\circ} 30' \text{N}$  and  $125^{\circ} 00' \text{E}$  (45) to Cape Anisiy.

## District 18

The boundaries of the area pass along a line connecting points with coordinates:  $73^{\circ} 00' \text{north}$  and  $140^{\circ} 00' \text{east}$  (49);  $73^{\circ} 00' \text{North}$  and  $143^{\circ} 40' \text{East}$  (56);  $72^{\circ} 45' \text{North}$  and  $150^{\circ} 00' \text{East}$  (57);  $71^{\circ} 45' \text{North}$  and  $153^{\circ} 30' \text{East}$  (58);  $71^{\circ} 45' \text{North}$  and  $160^{\circ} 00' \text{East}$  (59);  $71^{\circ} 30' \text{North}$  and  $162^{\circ} 30' \text{East}$  (60); to Cape Bear ( $69^{\circ} 40' \text{North}$  and  $162^{\circ} 27' \text{East}$  (61) on the coast of Chukotka; further west along the coast of the East Siberian Sea through the mouth of the Kondratyev River to Cape Svyatoy Nos ( $72^{\circ} 52' \text{North}$  and  $140^{\circ} 43' \text{E}$  (50) to the origin  $73^{\circ} 00' \text{N}$  and  $140^{\circ} 00' \text{E}$  (49).

## District 19

The boundaries of the region pass along the line connecting points with coordinates:  $73^{\circ} 00' \text{North}$  and  $140^{\circ} 00' \text{East}$  (49);  $73^{\circ} 00' \text{North}$  and  $143^{\circ} 40' \text{East}$  (56);  $72^{\circ} 45' \text{North}$  and  $150^{\circ} 00' \text{East}$  (57);  $71^{\circ} 45' \text{North}$  and  $153^{\circ} 30' \text{East}$  (58);  $71^{\circ} 45' \text{North}$  and  $160^{\circ} 00' \text{East}$  (59);  $73^{\circ} 30' \text{North}$  and  $160^{\circ} 00' \text{East}$  (62);  $74^{\circ} 00' \text{North}$  and  $147^{\circ} 00' \text{East}$  (63);  $74^{\circ} 23' \text{North}$  and  $139^{\circ} 00' \text{East}$  (53); further from Cape Kigilyakh ( $73^{\circ} 21' \text{North}$  and  $139^{\circ} 52' \text{East}$  (52) of Bolshoy Lyakhovsky Island to the starting point (49).

## District 20

The boundaries of the region pass along the line connecting points with coordinates:  $77^{\circ} 00' \text{North}$  and  $140^{\circ} 30' \text{East}$  (64);  $76^{\circ} 00' \text{North}$  and  $160^{\circ} 00' \text{East}$  (65);  $73^{\circ} 30' \text{North}$  and  $160^{\circ} 00' \text{East}$  (62);  $74^{\circ} 00' \text{North}$  and  $147^{\circ} 00' \text{East}$  (63);  $74^{\circ} 23' \text{North}$  and  $139^{\circ} 00' \text{East}$  (53); to Cape Bear ( $74^{\circ} 38' \text{N}$  and  $139^{\circ} 06' \text{E}$  (54) Kotelny Island, then along the western coast of Kotelny Island through Cape Anisy ( $76^{\circ} 12' \text{N}$  and  $139^{\circ} 08' \text{E}$  (51) in starting point (64).

## District 21

The boundaries of the area run from a point with coordinates  $78^{\circ} 30' \text{North}$  and  $124^{\circ} 45' \text{East}$  (37) northeast along the border of the EEZ of the Russian Federation to the point with coordinates  $74^{\circ} 45' \text{North}$  and  $169^{\circ} 30' \text{East}$  (66); further along the line connecting points with coordinates:  $76^{\circ} 00' \text{North}$  and  $160^{\circ} 00' \text{East}$  (65);  $77^{\circ} 00' \text{North}$  and  $140^{\circ} 30' \text{East}$  (64);  $78^{\circ} 30' \text{North}$  and  $124^{\circ} 45' \text{East}$  (37).

## District 22

The boundaries of the area pass along the line connecting points with coordinates: 70 ° 00 'North and 180 ° 00' (67); 70 ° 30 'North and 178 ° 00' East (68); 71 ° 00 'North and 170 ° 00' East (69); 71 ° 30 'North and 162 ° 30' East (60); to Cape Bear (69 ° 40 'North and 162 ° 27' East (61); further east along the coast of Chukotka to the intersection with the 180 meridian and to the starting point (67).

## District 23

The boundaries of the region pass along the line connecting points with coordinates: 73 ° 30 'North and 160 ° 00' East (62); 70 ° 30 'North and 178 ° 00' East (68); 71 ° 00 'North and 170 ° 00' East (69); 71 ° 30 'North and 162 ° 30' East (60); 71 ° 45 'North and 160 ° 00' East (59); 73 ° 30 'North and 160 ° 00' East (62).

## District 24

The boundaries of the area pass along the line connecting points with coordinates: 70 ° 00 'North and 180 ° 00' (67); 70 ° 30 'North and 178 ° 00' East (68); 73 ° 30 'North and 160 ° 00' East (62); 76 ° 00 'North and 160 ° 00' East (65); 74 ° 45 'North and 169 ° 30' East (66); 74 ° 00 'North and 173 ° 00' East (76); 72 ° 00 'North and 180 ° 00' (70); further south along the 180th meridian to Wrangel Island, then from the west along the coast of the island until the intersection with the 180th meridian in the south of the island, then to the starting point (67).

## District 25

The boundaries of the area pass along a line connecting points with coordinates: 70 ° 00 'North and 180 ° 00' (67); 70 ° 00 'North and 177 ° 39' West (71); 68 ° 00 'North and 174 ° 00' West (72); 66 ° 16 'North and 168 ° 59' West (73); further to Cape Unikyn (66 ° 22 'north and 170 ° 35' West (74) in Chukotka, further west along the coast to the intersection with the 180 meridian and to the starting point (67).

## District 26

The boundaries of the region run from the point in the Long Strait with coordinates 70 ° 00 'North and 180 ° 00' (67) to the point of intersection of the 180 meridian with the coastline in the south of Wrangel Island, then from the eastern side along the coast of the island until the intersection with the 180 meridian on north of Wrangel Island, then along the line connecting points with coordinates: 72 ° 00 'N and 180 ° 00' (70); 71 ° 45 'North and 175 ° 30'

West (75); 66 ° 16 'North and 168 ° 59' West (73); 68 ° 00 'North and 174 ° 00' West (72); 70 ° 00 'North and 177 ° 39' West (71); 70 ° 00 'North and 180 ° 00' (67).

#### District 27

The boundaries of the area run from the starting point (the intersection of the 180th meridian and the border of the Russian Federation) to the east along the border of the EEZ of the Russian Federation to the intersection with the meridian of 168 ° 59 'West; further south along this meridian to the point with coordinates 66 ° 16 'North and 168 ° 59' West (73); further along the line connecting points with coordinates: 71 ° 45 'North and 175 ° 30' West (75); 72 ° 00 'North and 180 ° 00' (70); 74 ° 00 'North and 173 ° 00' East (76); further to the north-east along the border of the EEZ of the Russian Federation until the intersection with the 180th meridian; further to the starting point.

#### District 28 (the Bering Strait)

The boundaries of the region run from Cape Unikyn (66 ° 22 'N and 170 ° 35' W (74) on the coast of Chukotka to the point in the Bering Strait with coordinates 66 ° 16 'north and 168 ° 59' west (73); further south to 65 ° 26 'N and 168 ° 59' W; further west to Cape Kriguigun (65 ° 28 'N and 171 ° 03' W (78) on the coast of Chukotka, further north along the coast of Chukotka to Cape Unikyn (74).