



## National Report of the Russian Federation

The 9<sup>th</sup> Conference of the Arctic Regional Hydrographic Commission  
17-19 September 2019, Murmansk, Russian Federation

Submitted by:  
the Department of Navigation and Oceanography of the Ministry of Defense of the Russian Federation

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- 8. Oceanographic activities** (general, GEBCO/IBC's activities, tide gauge network, new equipment, problems encountered)
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## 1. Hydrographic Office / Service

General:

planning, management and administration in nautical and hydrographic services for the purpose of aiding navigation in the water areas of the national jurisdiction except the water area of the Northern Sea Route and in the high sea are carried to competence of the Department of Navigation and Oceanography of the Ministry of Defense of the Russian Federation (hereinafter - DNO).

DNO is in charge of the National Hydrographic Service of the Russian Federation.

The main activities of the National Hydrographic Service are the following:

to carry out the hydrographic surveys adequate to the requirements of safe navigation in the water areas of the national jurisdiction and in the high sea;

to prepare and issue nautical charts, sailing directions, lists of lights, tide tables and other nautical publications, satisfying the needs of safe navigation in the water areas of the national jurisdiction and in the high sea;

to promulgate notices to mariners in order that nautical charts and publications are kept up to date;

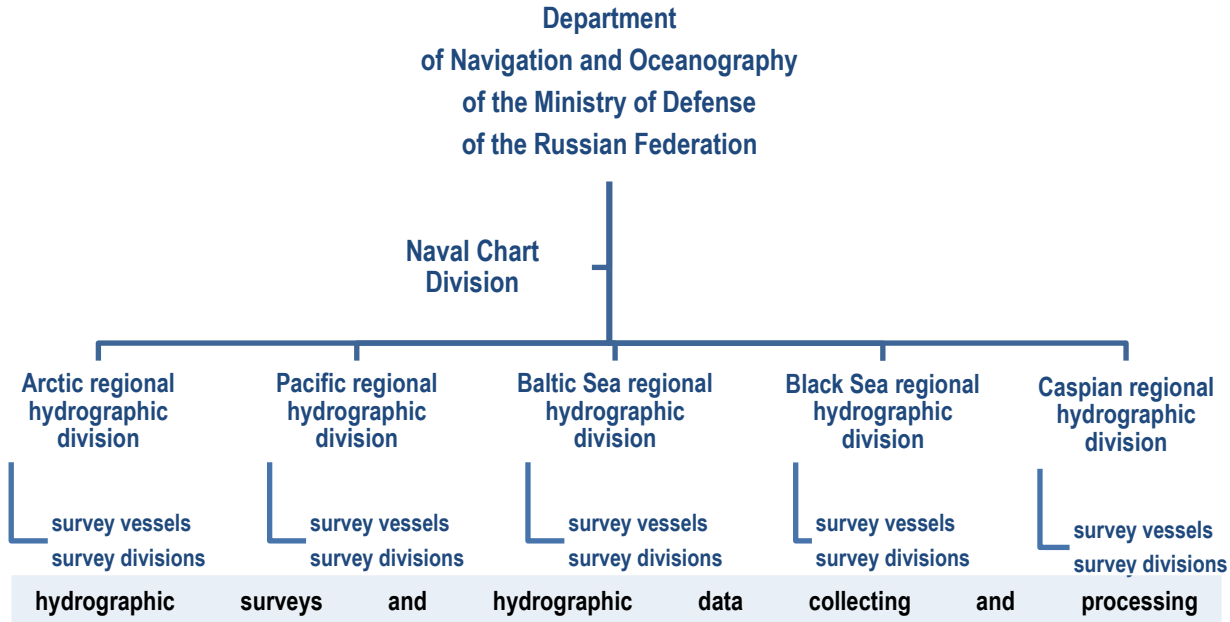
to provide such aids to navigation as the volume of traffic justifies and the degree of risk requires in the water areas of the national jurisdiction and in the high sea and to arrange for information relating to aids to navigation to be made available to all concerned;

to provide the nautical charts, sailing directions and other nautical publications to Russian and foreign mariners.



### 1. Hydrographic Office / Service

General:



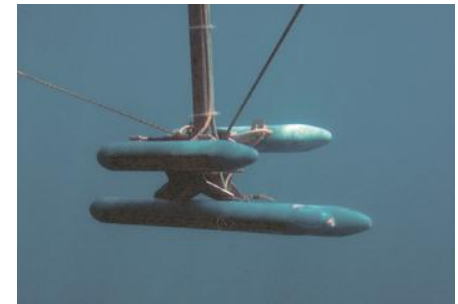
No updates for the IHO Yearbook.

## 2. Surveys

New technologies and / or equipment:

in 2018 - 2019 the modern mobile single- and multi-beam echo-sounders, side-scanning sonars, sub-bottom profilers and hydrographic data processing products were provided to the regional hydrographic divisions.

**Mobile side scan sonar complex «Neman GBOE»:**



**Basic specifications:**

operating frequency, kHz	- 240 – 290
downrange on one board, max, m	- 300
downrange detection of objects, max, m	- 180 – 220
swath width, m	- 300 – 350
resolution, cm	- 4
weight, kg	- 17

## 2. Surveys

New ships:

in 2018 – 2019 the regional hydrographic divisions received modern hydrographic surveying echo-sounding launches equipped with the multi-beam echo-sounders and side-scanning sonars.



### Hydrographic surveying echo-sounding launch

Basic specifications:

overall length, m	– 36,4
beam, m	– 7,8
draft, m	– 2,0
speed, knots	– 8
crew	– 11

## 2. Surveys

New ships:

in 2018 – 2019 the regional hydrographic divisions received modern hydrographic surveying echo-sounding launches equipped with the multi-beam echo-sounders and side-scanning sonars.



### Hydrographic surveying echo-sounding launch

Basic specifications:

overall length, m	– 8,6
beam, m	– 2,5
draft, m	– 0,7
speed, knots	– 6
crew	– 2

### 3. New charts & updates

ENCs:

№	Cell №	Name of the area	Scale	Year of new edition
1	RU3OIOR0	Kara Sea Obskaya Inlet Payota Point to Sandibe Point and Delta of Ob' River	180 000	2018
2	RU4P3P71	Kara Sea Obskaya Inlet 71°21.05'N to Sabuto Light Beacon	1: 45 000	2018
3	RU4P4P68	Kara Sea Obskaya Inlet Parod''yakha River to Khonarasalya Point	1: 45 000	2018
4	RU4P4P69	Kara Sea Obskaya Inlet Poludenny Point to Shtormovoy Point	1: 45 000	2018
5	RU4PFQNO	Kara Sea Taymyr Peninsula From Markema Island to Sterlegov Light Beacon	1: 45 000	2018
6	RU5ONPE0	Kara Sea Obskaya Inlet Port Yamburg with approaches	1: 8 000	2018
7	RU5OQL80	Barents Sea Kol'skiy Gulf Port Murmansk Anna-Korga Bank to Abram Point	1: 4 000	2018
8	RU5ORL81	Barents Sea Kol'skiy Gulf Port Murmansk Pinagoriy Point to Lavna River	1: 4 000	2018
9	RU5OSL80	Barents Sea Rybachiy Peninsula Tsyprnavolok Bay Laush Inlet and Bol'shaya Korabel'naya Inlet	1: 12 000	2018
10	RU5P3P50	Kara Sea Obskaya Inlet Approaches to Port Sabetta	1: 22 000	2018
11	RU6OQL91	Barents Sea Kol'skiy Gulf Port Murmansk Berths of the First Loading and Passenger areas	1: 2 000	2018
12	RU3OPPE0	Kara Sea Obskaya Inlet Tazovskaya Inlet Entrance	1: 90 000	2019

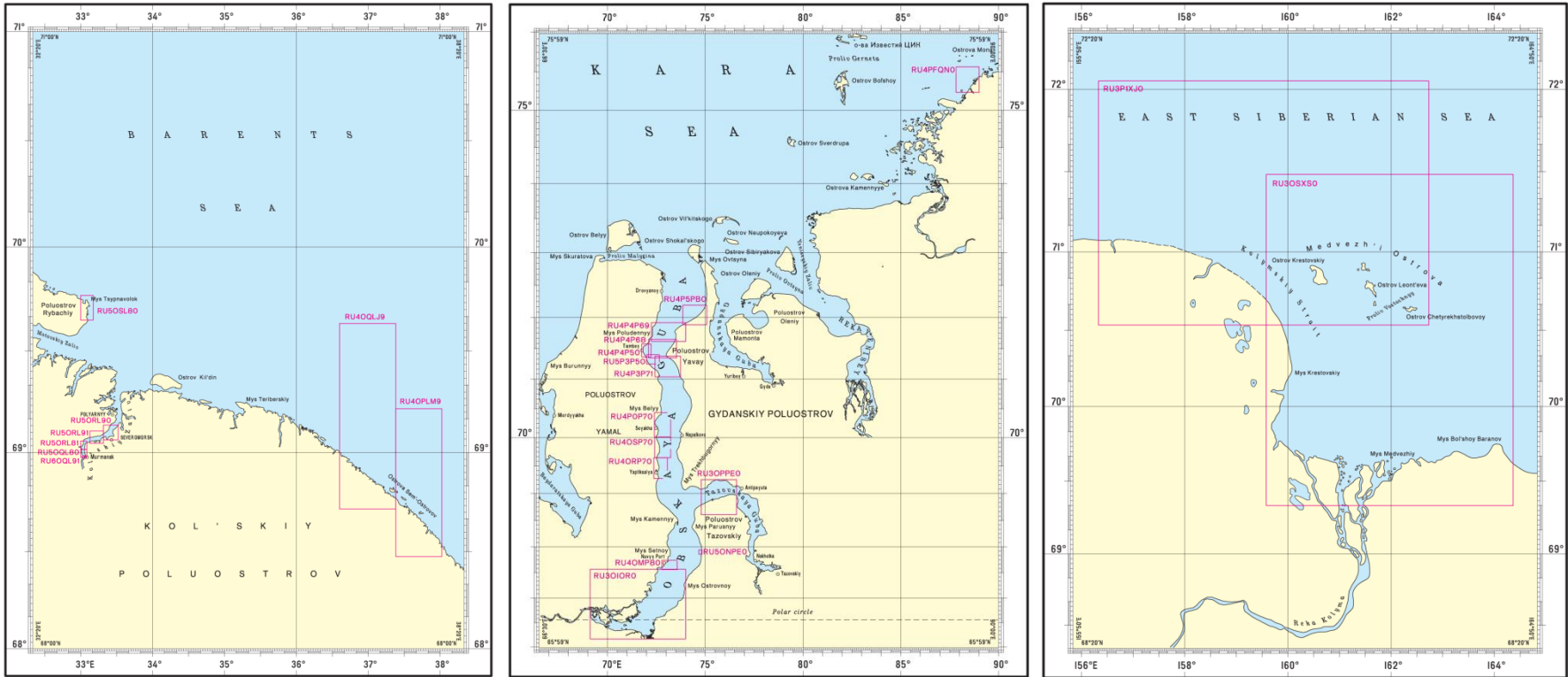


### 3. New charts & updates

ENCs:

№	Cell №	Name of the area	Scale	Year of new edition
13	RU3OSXS0	East Siberian Sea Krestovcskiy Point to Bol'shoy Baranov Point	1: 180 000	2019
14	RU3P1XJ0	East Siberian Sea Gal'gavaam River to Chetyryokhstolbovoy Island	1: 180 000	2019
15	RU4OMP80	Kara Sea Obskaya Inlet Novyy Port Bay with approaches	1: 45 000	2019
16	RU4OPLM9	Barents Sea Murmanskiy Coast Semiostrovskiy Roads to Belyy Point	1: 45 000	2019
17	RU4OQLJ9	Barents Sea Murmanskiy Coast Malyy Vyashchin Point to Semiostrovskiy Roads	1: 45 000	2019
18	RU4ORP70	Kara Sea Obskaya Inlet Munga River to Sinovayakha River	1: 45 000	2019
19	RU4OSP70	Kara Sea Obskaya Inlet Lyadkheyakha River to Yuribeytoyakha River	1: 45 000	2019
20	RU4P0P70	Kara Sea Obskaya Inlet Nyudyakosalya Point to Labtasalya Point	1: 45 000	2019
21	RU4P4P50	Kara Sea Obskaya Inlet Tambey Bay with approaches	1: 22 000	2019
22	RU4P5PB0	Kara Sea Obskaya Inlet Yadareyyakha River to Nyudya-Tetnedayakha River	1: 45 000	2019
23	RU5ORL90	Barents Sea Kol'skiy Gulf Sal'nyy Island to Shavor Point	1: 8 000	2019
24	RU5ORL91	Barents Sea Kol'skiy Gulf Nikitin Point to Kondratkin Point	1: 8 000	2019

### 3. New charts & updates ENCs (the schemes):



### 3. New charts & updates

ENC distribution method, RNCs, INT charts, national paper charts, other charts, e.g. for pleasure craft:

- ENC are distributed via the official distributor of cartographic products of the National Hydrographic Service;
- the DNO does not distribute Raster navigational charts;
- the INT charts were not published at the moment;
- national paper charts:

there are 901 nautical charts issued by the DNO on the water areas of the Arctic Ocean.

The Scales are shown in the table. The collection is being updated using corrections and re-issues of the charts as new hydrographic data become available.

Notices to Mariners are issued weekly and are available in .pdf on the website of the National Hydrographic Service:

<http://structure.mil.ru/structure/forces/hydrographic/info/notices.htm>

Scale	Paper charts
1:2 500 000	1
1:2 000 000	7
1:750 000-1:700 000	2
1:500 000	45
1:200 000	109
1:100 000	218
1:50 000	236
1: 20 000-1:25 000	178
1:10 000	70
1:5 000	26
1:2 000 - 1:1 000	9
$\Sigma$	901

### 3. New charts & updates

National paper charts:

№	Admiralty №	Name of the area	Scale	Year of new edition
1	91115	Central Arctic Basin	1:2 500 000	2017
2	11163	Barents Sea Novaya Zemlya Ostrov Mezhdusharskiy to Poluostrov Admiralteystva	1:700 000	2017
3	12321	Kara Sea Poluostrov Yavay to Ostrov Dikson	1:200 000	2017
4	12430	East Siberian and Chukchi Seas Ostrov Vrangelya	1:200 000	2017
5	12433	Chukchi Sea Chukotskiy Poluostrov Mys Dzhenretlen to Mys Dezhnyova	1:200 000	2017
6	15341	Kara Sea Obskaya Guba Reka Ser'yakha to Mys Belyy	1:50 000	2017
7	15344	Kara Sea Obskaya Guba Mys Kotel'nyy to Mys Povorotnyy	1:50 000	2017
8	15354	Kara Sea Obskaya Guba Reka Parod'yakha to Mys Khonarasalya	1:50 000	2017
9	17014	Barents Sea Poluostrov Rybachiy Bukhta Tsypnavolok and Guba Lush and Guba Bol'shaya Korobel'naya	1:10 000	2017
10	18332	Kara Sea Obskaya Guba Approaches to Port Sabetta	1:25 000	2017
11	19240	Barents Sea Zemlya Frantsa-Iosifa Ostrov Zemlya Aleksandry Zaliv Dezhnyova and Bukhta Zverboev	1:25 000	2017

### 3. New charts & updates

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1	91115	Central Arctic Basin	1:2 500 000	2017
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7	15344	Kara Sea Obskaya Guba Mys Kotel'nyy to Mys Povorotnyy	1:50 000	2017
8	15354	Kara Sea Obskaya Guba Reka Parod'yakha to Mys Khonarasalya	1:50 000	2017
9	17014	Barents Sea Poluostrov Rybachiy Bukhta Tsypnavolok and Guba Lush and Guba Bol'shaya Korobel'naya	1:10 000	2017
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11	19240	Barents Sea Zemlya Frantsa-Iosifa Ostrov Zemlya Aleksandry Zaliv Dezhnyova and Bukhta Zverboev	1:25 000	2017

### 3. New charts & updates

#### National paper charts:

№	Admiralty №	Name of the area	Scale	Year of new edition
1	11126	Kara Sea Novaya Zemlya to Poluostrov Yamal	1:500 000	2018
2	12322	Kara Sea, Ostrov Dikson, Ostrov Vil'kitskogo and Ostrov Sverdrupa	1:200 000	2018
3	12416	East Siberian Sea, Novosibirskiye Ostrova Ostrova Anzhu, Mys Anisiy to Mys Nerpichiy	1:200 000	2018
4	12425	East Siberian Sea, Reka Bol'shaya Kuropatoch'ya to Ostrov Chetyryokhstolbovoy	1:200 000	2018
5	13036	Barents Sea 70°00'N to 70°47'N, 33°12'E to 34°50'E	1:100 000	2018
6	13439	East Siberian Sea, Novo-Sibirskiye Ostrova Blagoveshchenskiy Proliv	1:100 000	2018
7	14012	White Sea Western Part 65°30'N to 66°06'N, 35°28'E to 37°30'E	1:100 000	2018
8	14018	White Sea, Onezhskiy Zaliv Proliv Zapadnaya Solovetskaya Salma	1:100 000	2018
9	15013	Barents Sea, Murmanskij Bereg Mys Set'navolok to Ostrov Kil'din	1:25 000	2018
10	15053	Barents Sea, Murmanskij Bereg Motovskiy Zaliv	1:50 000	2018
11	15058	Barents Sea, Murmanskij Bereg Mys Teriberskiy to Ostrova Gavrilovskiye	1:50 000	2018
12	15060	Barents Sea, Murmanskij Bereg Guba Vyashchina to Ostrov Harlov	1:50 000	2018
13	15061	Barents Sea Murmanskij Bereg Ostrov Harlov to Mys Yagodnyy	1:50 000	2018
14	16001	White Sea, Dvinskij Zaliv Mouth of Reka Severnaya Dvina West Part of Nikol'skiy Rukav	1:25 000	2018

№	Admiralty №	Name of the area	Scale	Year of new edition
15	16002	White Sea, Dvinskij Zaliv Reka Severnaya Dvina Nikol'skiy Rukav	1:25 000	2018
16	16005	White Sea, Del'ta of Reka Severnaya Dvina Port Arkhangel'sk, Chizhovskiy Road to Nizhnegorodskoy Road	1:25 000	2018
17	16007	White Sea, Dvinskij Zaliv Ostrov Mud'yugskiy to Chizhovskiy Road	1:25 000	2018
18	17006	Barents Sea, Kol'skiy Zaliv, Port Murmansk Tri Ruch'ya to Banka Molochnaya Korga	1:5 000	2018
19	17008	Barents Sea, Kol'skiy Zaliv, Port Murmansk Banka Anna-Korga to Mys Abram	1:5 000	2018
20	17009	Barents Sea, Kol'skiy Zaliv, Port Murmansk Mys Pinagoriy to Reka Lavna	1:5 000	2018
21	17053	Barents Sea, Kol'skiy Zaliv Guba Pit'kova to Mys Shavor	1:10 000	2018
22	17054	Barents Sea, Kol'skiy Zaliv Mys Shavor to Mys Belokamenny	1:10 000	2018
23	17060	Barents Sea, Kol'skiy Zaliv, Port Murmansk Berths of the First Loading and Passenger areas	1:2 000	2018
25	18003	Barents Sea, Motovskiy Zaliv Guba Vichany and Guba Eyna	1:10 000	2018
26	18331	Kara Sea, Obskaya Guba Port Sabetta	1:5 000	2018
27	18332	Kara Sea, Obskaya Guba Approaches to Port Sabetta	1:25 000	2018
28	19030	White Sea, Reka Severnaya Dvina Port Arkhangel'sk	1:10 000	2018

### 3. New charts & updates

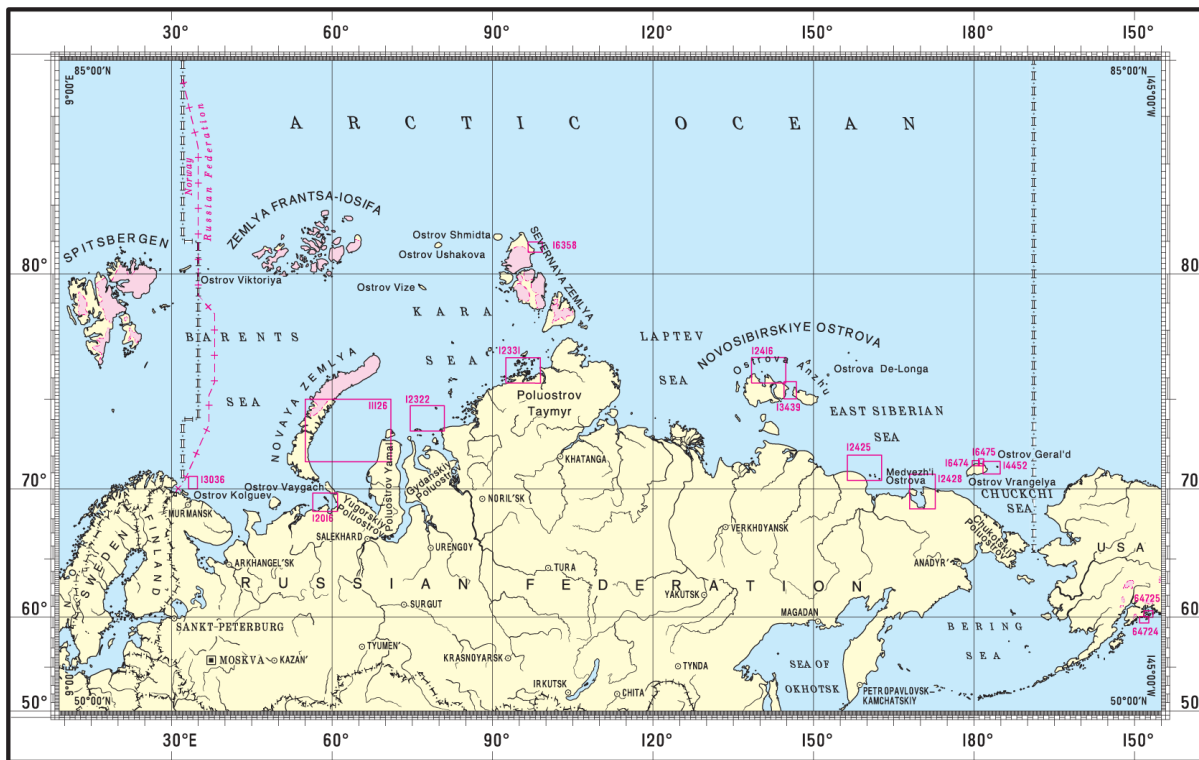
#### National paper charts:

№	Admiralty №	Name of the area	Scale	Year of new edition
29	19043	White Sea, Kandalakshskiy Zaliv Guba Lupcha and Port Kandalaksha	1:10 000	2018
30	64724	Gulf of Alaska, Coast of USA Whidbey bay to Montague Island	1:100 000	2018
31	12016	South-east Part of Barents Sea Mys Chyornaya Lopatka to Proliv Yugorskiy Shar	1:200 000	2019
32	12331	Kara Sea South Part of Arkipelag Nordenshel'da	1:200 000	2019
33	12428	East Siberian Sea Chaunskaya Guba and approaches	1:200 000	2019
34	14452	Chukchi Sea Ostrov Vrangelya to Ostrov Geral'd	1:100 000	2019
35	16009	White Sea, Reka Severnaya Dvina Mouth Port Arkhangel'sk Ostrov Brevennik to Novodvinsk	1:25 000	2019
36	16046	White Sea, Central Part of Basin 65°30'N to 65°54'N 36°52'E to 37°36'E	1:50 000	2019
37	16047	White Sea, Central Part of Basin 65°30'N to 65°54'N 36°12'E to 36°57'E	1:50 000	2019
38	16358	Laptev Sea, Severnaya Zemlya Ostrov Komsomolets Reka Kapriznaya to Reka Truba	1:50 000	2019
39	16474	East Siberian Sea and Chukchi Sea Ostrov Vrangelya Laguna Drem-Khed to Bukhta Pestsovaya	1:50 000	2019
40	16475	Chukchi Sea, Ostrov Vrangelya Laguna Mushtakova to Laguna Chicherina	1:50 000	2019
41	17007	Barents Sea, Kol'skiy Zaliv Port Murmansk, Mys Abram to Tri Ruch'ya	1:5 000	2019
42	64725	Gulf of Alaska, Coast of USA Knight Island Passage, Montague Strait and Hinchinbrook Entrance	1:100 000	2019



### 3. New charts & updates

National paper charts (the schemes):

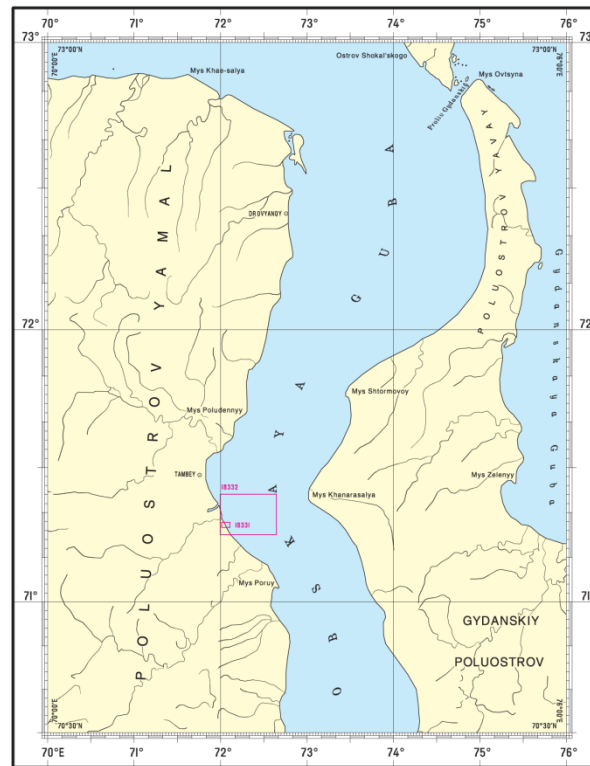
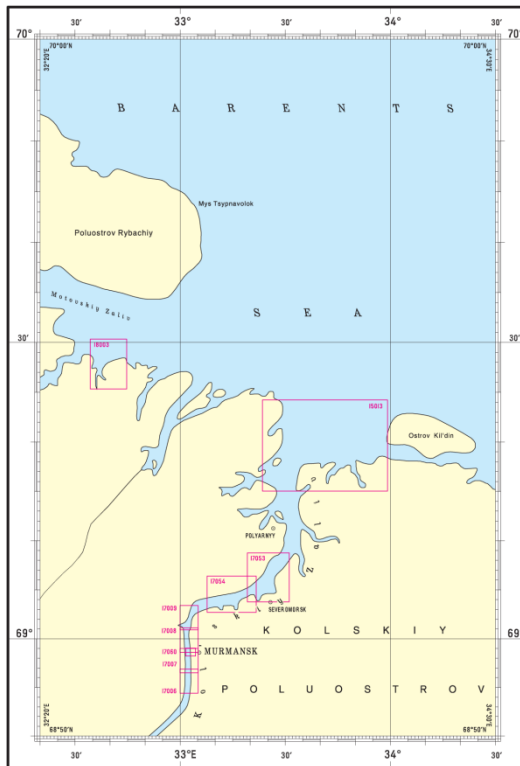
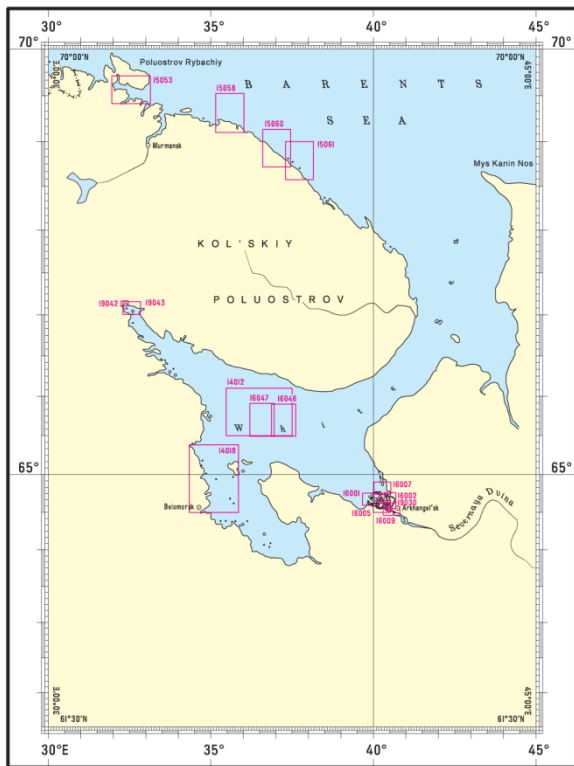






### 3. New charts & updates

National paper charts (the schemes):



### 3. New charts & updates

Print-on-Demand Chart System:

since 2011 national paper charts are being circulated via the Print-On-Demand Chart System.  
Currently the base of Print-On-Demand Chart System contains more than 4111 charts.

### 4. New publications & updates

New publications:

1. Sailing Directions. Coasts of Norway, Admiralty № 1102, 2019.
2. Sailing Directions. Coasts of Norway, Admiralty № 1103, 2019.
3. Light lists. Coasts of Norway, Admiralty № 2102, 2019.

Updated Publications:

issued publications are being updated via the DNO Notices to Mariners.

Means of delivery:

all publications are delivered on a paper basis.

## 5. MSI existing infrastructure for transmission

Existing infrastructure for transmission:

within the World Wide Navigational Warning Service (WWNWS) existing infrastructure for transmission of the MSI extends:

on the region of the WWNWS XIII as NAVAREA XIII Navigational Warnings (Pacific region);

on the region of the WWNWS XX and XXI as NAVAREA XX and NAVAREA XXI Navigational Warnings (Arctic region);

on the region of the Russian national zone of responsibility as Coastal Warnings covering the areas:

Arkhangelsk (the White Sea), Murmansk (the Barents Sea), the West (the seas along the western part of the water area of the Northern Sea Route, the East (the seas along the eastern part of the water area of the Northern Sea Route).

Transmission of MSI is carried out for four regions of Coastal Warnings entering two of the WWNWS NAVAREA regions:

the region of COASTAL WARNINGS (CW) Murmansk (the southern part of the Barents Sea) - a zone of responsibility of the Arctic regional hydrographic division;

the region of COASTAL WARNINGS (CW) Arkhangelsk (the White Sea) - a zone of responsibility of the Arctic regional hydrographic division;

the region of COASTAL WARNINGS (CW) the West (the southern part of the Kara Sea and the Laptev Sea to the West from a meridian of 125°E) - a zone of responsibility of the State Unitary Hydrographic Enterprise of the Ministry of Transport of the Russian Federation;

the region of COASTAL WARNINGS (CW) the East (the southern part of the Laptev Sea to the East from a meridian of 125°E, the East-Siberian Sea and the Chuckchee Sea) - a zone of responsibility of the State Unitary Hydrographic Enterprise of the Ministry of Transport of the Russian Federation;

The Federal State Unitary Enterprise «Rosmorport» of the Ministry of Transport of the Russian Federation is a coordinator of the WWNWS NAVAREA XX and NAVAREA XXI regions (the Arctic sector from a meridian of 30°E to a meridian of 168°W).

The MSI for the WWNWS NAVAREA XX and NAVAREA XXI regions is being transmitted in Safety Net and in SB the range (NBDP) by radio station Moscow.

## 5. MSI existing infrastructure for transmission

Announced Coastal Warnings for the WNWNS NAVAREA XX and NAVAREA XXI regions:

Region	2016	2017	2018
CW Murmansk	387	368	388
CW Arkhangelsk	65	61	73
CW West	128	163	92
CW East	99	78	35

NAVTEX stations in the Arctic region:

<b>Murmansk</b>	68°46'N	32°58'E	300 miles	518 kHz	K
<b>Archangelsk</b>	64°51'N	40°17'E	300 miles	518 kHz	L
<b>Sabetta</b>	71°17'N	72°02'E	280 miles	518 kHz	M
<b>Tiksi</b>	71°38'N	128°50'E	300 miles	518 kHz	Q

## 5. MSI existing infrastructure for transmission

The WNWWS NAVAREA XX and NAVAREA XXI regions and NAVTEX stations in the Arctic region (for Coastal Warnings):



## 5. MSI existing infrastructure for transmission

New infrastructure in accordance with GMDSS Master Plan:

Control of creation and functioning of GMDSS and informing the International Hydrographic Organization are assigned to the Ministry of Transport of the Russian Federation.

## 6. S-55 latest update

No information to include in the report.

## 7. Capacity building

No information to include in the report.

## 8. Oceanographic activities

No information to include in the report.

## 9. Other activities

the DNO participates in the IHO Committees and Working Groups: the Arctic Regional Hydrographic Commission, the Baltic Sea Hydrographic Commission, the Mediterranean and Black Seas Hydrographic Commission, the Hydrographic Commission on Antarctica, the World-Wide Navigational Warning Service Sub-Committee, the GEBCO Guiding Committee and Sub-Committee on Undersea-Feature Names, the ENC Standards Maintenance Working Group, the Nautical Information Provision Working Group, the Transfer Standard Maintenance and Application Development Working Group.

## 10. Conclusion

the present report reflects the activities of the National Hydrographic Service of the Russian Federation during the period since the last meeting of the commission.

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