

**DEPARTMENT OF NAVIGATION AND OCEANOGRAPHY  
OF THE MINISTRY OF DEFENSE OF THE RUSSIAN FEDERATION**

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**NATIONAL REPORT  
OF THE RUSSIAN FEDERATION**



**The 6<sup>th</sup> MEETING of the ARCTIC REGIONAL  
HYDROGRAPHIC COMMISSION**

**Iqaluit, Canada, 3-6 October 2016**

## **1. Hydrographic Office.**

In accordance with the legislation of the Russian Federation matters of nautical and hydrographic services for the purpose of navigation in the water areas of the national jurisdiction of Russia and in the high sea except the water area of the Northern Sea Route are carried to competence of the Ministry of Defense of the Russian Federation.

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

The DNO is authorized by the Ministry of Defense of the Russian Federation to represent the State in the civil law relations arising in the field of nautical and hydrographic services for aiding navigation. It 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.

The National Hydrographic Service includes the Department of Navigation and Oceanography and the Naval Chart Division which are situated in Saint Petersburg and the regional hydrographic divisions for the Arctic, Pacific, Baltic Sea, Black Sea and Caspian Sea regions.

The regional hydrographic divisions include oceanographic and hydrographic survey vessels and hydrographic survey divisions carrying out hydrographic surveys and collecting and processing of hydrographic data.

## 2. Surveys.

### 2.1. Areas covered by new surveys.

**Table 1**

#### **Hydrographic survey coverage in 2015 - 2016**

№	Water area	Type of works	Period of works	Scale	Volume	
					Sq. km	Km
<b>Barents Sea</b>						
1	The Kol'skiy Bay, water area of Seaport Murmansk	area survey, soundings, topographical survey	2015	1: 500 1:1 000	2	22
2	The Franz Joseph Land archipelago	area survey	2015	1:5 000	5	
3	Water area of offshore section № 2 of Seaport Arkhangel'sk	area survey	2015	1:5 000	5	

4	The Kol'skiy Bay, water area at the Berth № 2 of Public Joint-stock Company Mining and Smelting Company «Noril'skiy Nickel'» in Murmansk; water area of the submarine dumping ground situated in the vicinity of Mys Chalmpushka on Center Bend of the Kol'skiy Bay	area survey, topographical survey	2016	1:2 000 1:5 000	2	2
<b>Kara Sea</b>						
5	Obskaya Guba, water area from the Southern Limit of the Maritime Canal to Northern Limit of the Approach Canal of Seaport of Sabetta	area survey	2015	1:10 000 1:25 000		15053
6	Obskaya Guba, water area of the Port Sabetta under construction, Approach and Maritime Canals	area survey, topographical survey	2015	1:2 000	5	3
7	Obskaya Guba, water area of the Object, «Construction of Seaport in the vicinity of Posyolok Sabetta on the Poluostrov Yamal, including creation of the Navigation Approach Canal in the Obskaya Guba. Main Objects of the Seaport»	area survey	2015	1:5 000	18	
8	Obskaya Guba, Port Sabetta to Novoportovskiy mines-and-carries	area survey	2015	1:25 000		14998
9	Obskaya Guba, Region of the Remote Terminal «Vorota Arktiki»	area survey	2016	1:10 000		415

White Sea						
10	Delta of Severnaya Dvina River, Kuznechikha River, leading lights Kuznechevskiy Transitional to Water Area Berth Limited Company «PN-Arkhangel'sknefteprodukt».	Area survey and Topographical survey	2015	1:5 000	2.61	46- soundin g

# The scheme of hydrographic survey coverage in 2015-2016

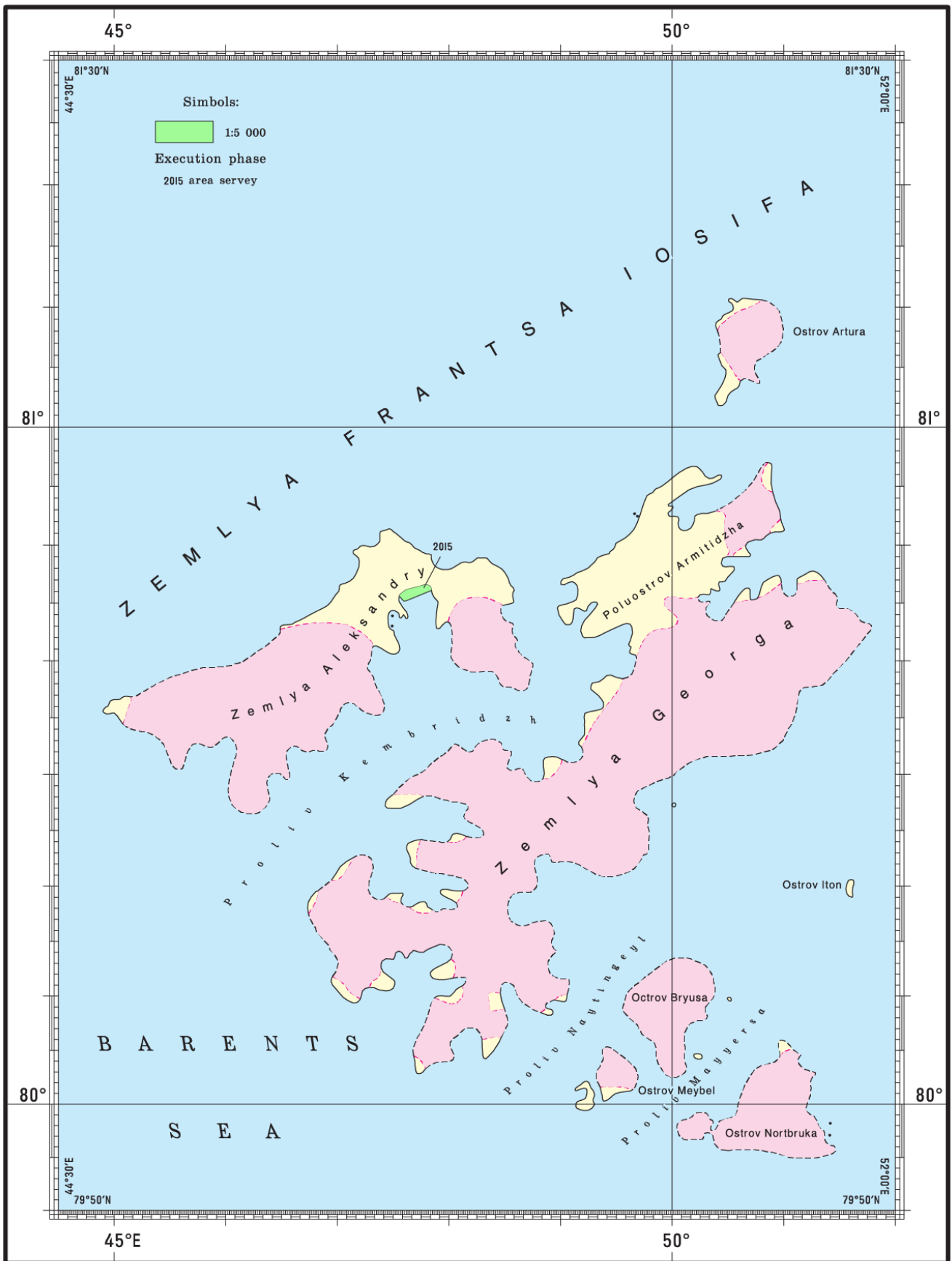


Fig. 1

# The scheme of hydrographic survey coverage in 2015-2016



Fig. 2

# The scheme of hydrographic survey coverage in 2015-2016

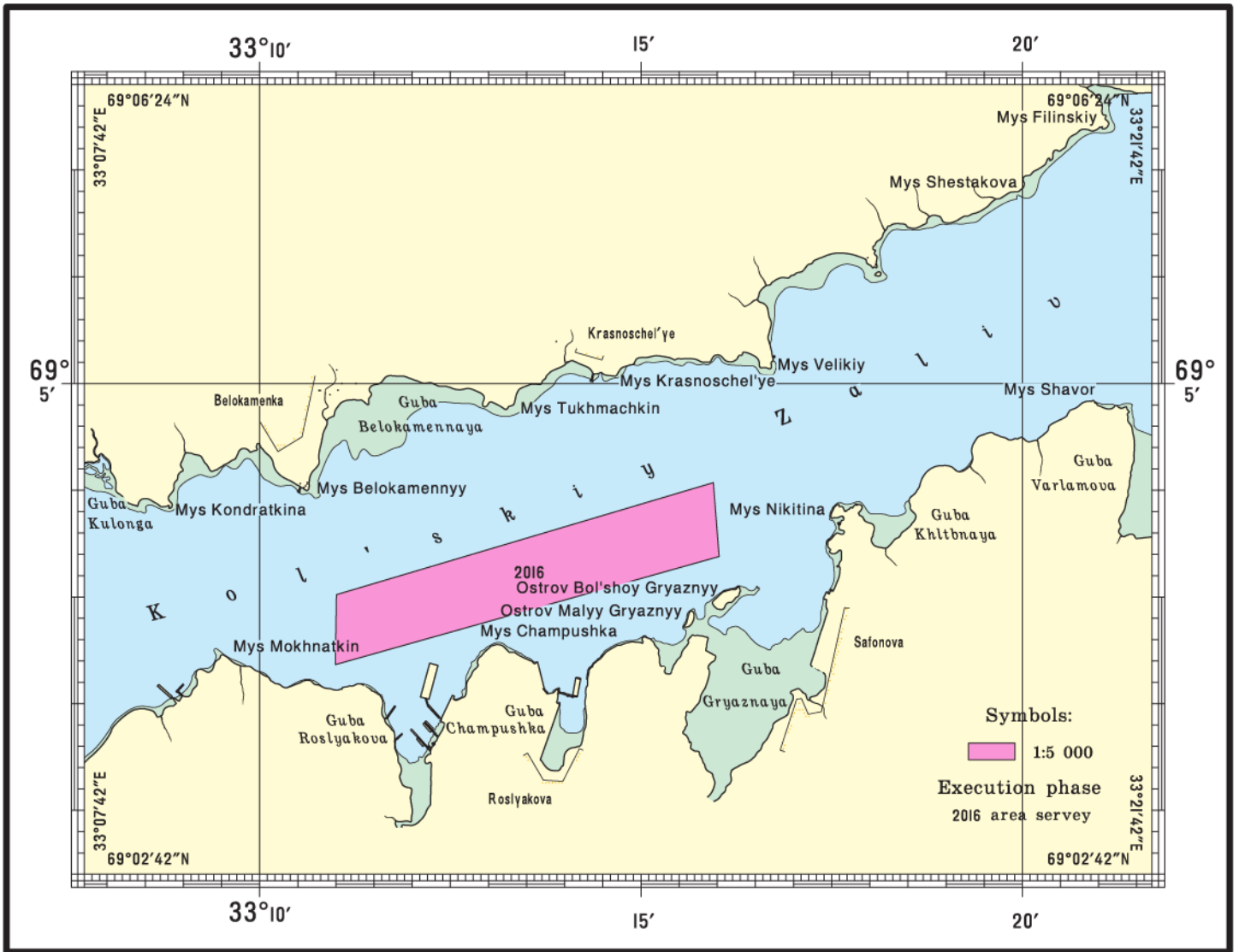
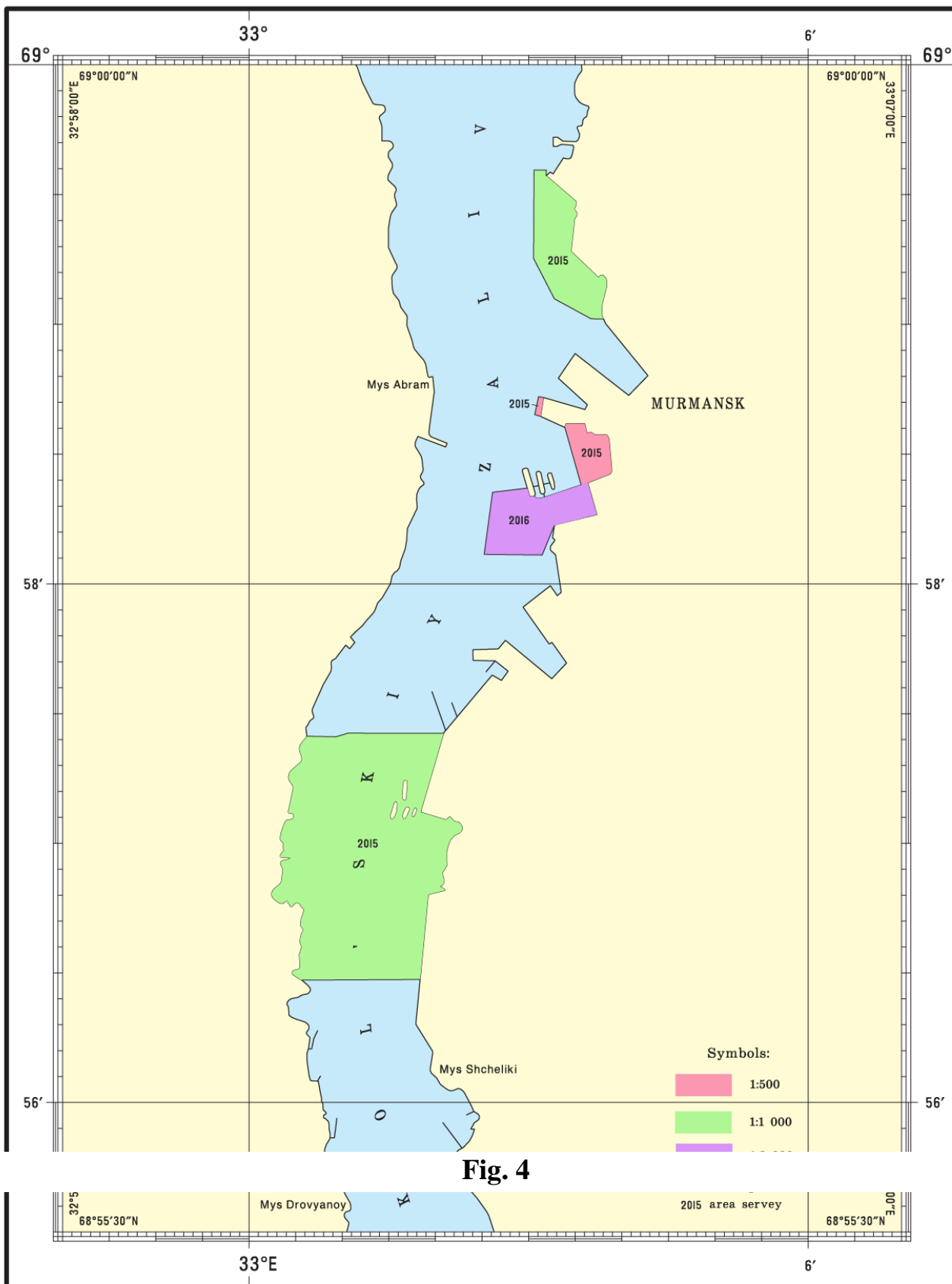


Fig. №3

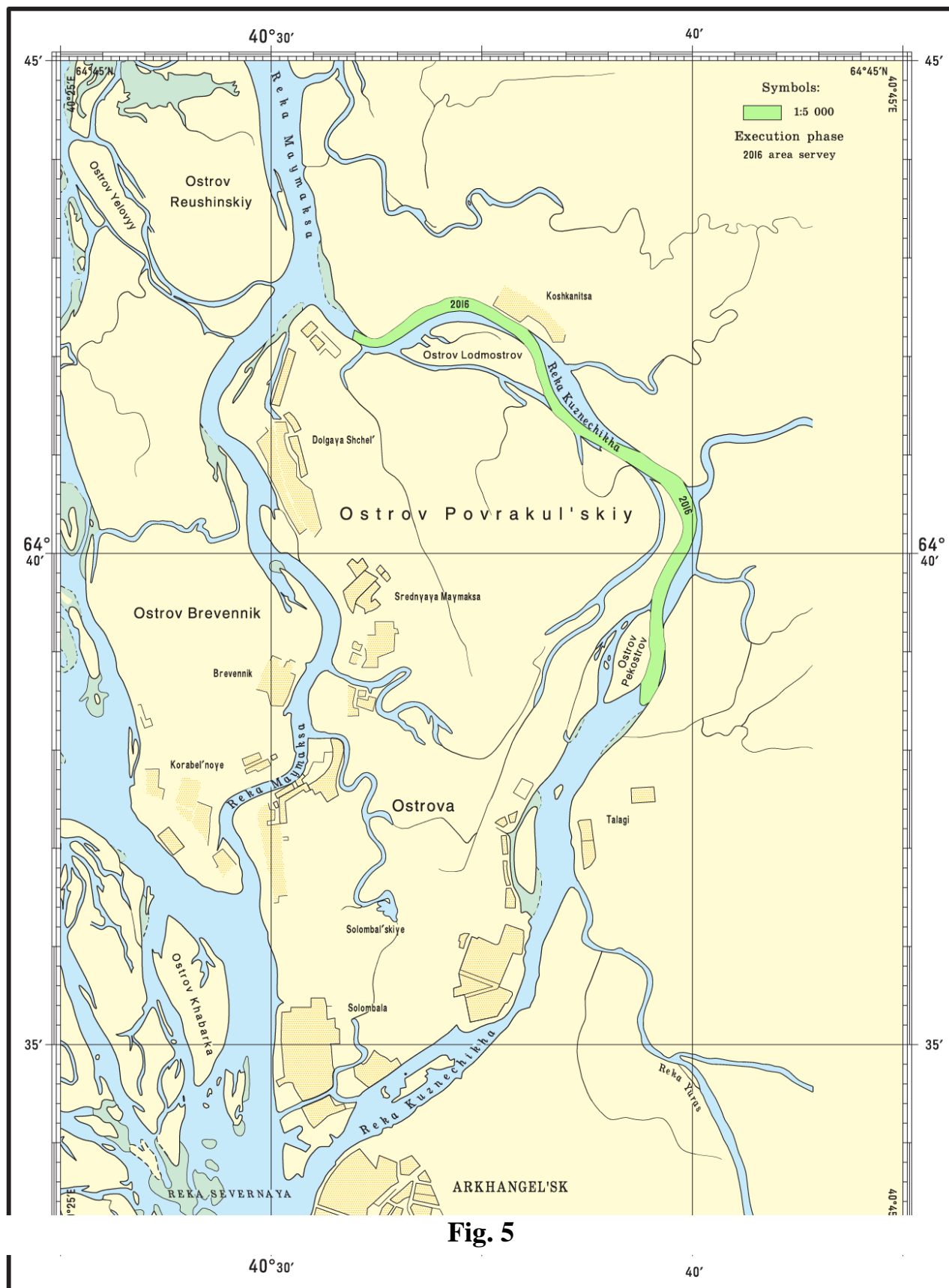
Fig. 3



## The scheme of hydrographic survey coverage in 2015-2016



## The scheme of hydrographic survey coverage in 2015-2016



**Fig. 5**

New technologies and/or equipment.

2015 - 2016 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.

### 2.3. New survey vessels.

In 2015 - 2016 the regional hydrographic divisions received modern hydrographic survey echo-sounding launches equipped with the multi-beam echo-sounders and side-scanning sonars.



**Fig. 6. Hydrographic survey echo-sounding launch**

The Hydrographic survey echo-sounding launch is designed and constructed to provide bathymetric surveying and gathering underwater data in coastal waters at 400 meters depths and at 100 miles from the shore.

The main launch characteristics:

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

### 3. New Charts and updates.

### 3.1. Electronic Navigational Charts.

**Table 2**

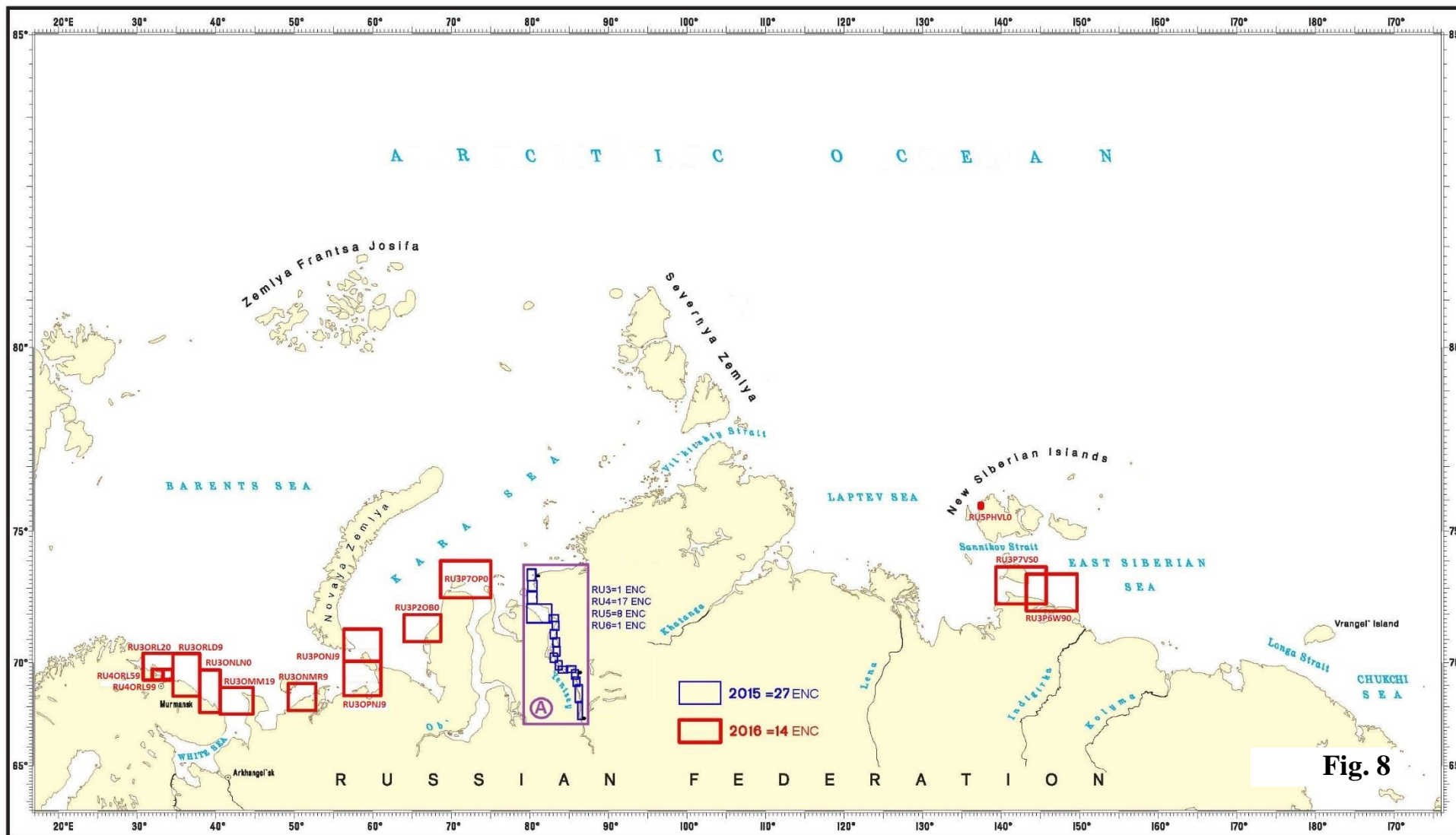
**The list of electronic navigational charts issued in 2015 - 2016**

<b>№</b>	<b>Cell №</b>	<b>Name of the area</b>	<b>Scale</b>	<b>Year of issue</b>
1	RU3P5PS0	Yeniseyskiy Gulf. Bol'shoy Korsakovskiy Island to Sopochnaya Karga Point	1:90 000	2015
2	RU4OMQI0	Yenisey River. Verkhnekhtayskiy Leading Line to Igarka Port	1:45 000	2015
3	RU4OOQH0	Yenisey River. Malyy Luzinskiy Island to Verhnekhtayskiy Leading Line	1:45 000	2015
4	RU4OQQG0	Yenisey River. Gribanovskiy Island to Nikol'skiy Recommended Track	1:45 000	2015
5	RU4ORQG0	Yenisey River. Malyy Leont'yevskiy Island to Kabatskiy Island	1:45 000	2015
6	RU4OSQA0	Yenisey River. Kazantsevskiy Point to Nikitinskiy Island	1:45 000	2015
7	RU4OSQE0	Yenisey River. Nikitinskiy Island to Malyy Leont'yevskiy Island	1:45 000	2015
8	RU4OTQ90	Yenisey River. Sechenskaya Bank to Kazantseva Kosa Point	1:45 000	2015
9	RU4P0Q70	Yenisey River. Okhotskiy Opechek Island to Karaul Settlement	1:45 000	2015
10	RU4P0Q80	Yenisey River. Baykalovsk Settlement to Peschanyye Islands	1:45 000	2015
11	RU4P2Q80	Yenisey River. Yakovlev River to Baykalovsk Settlement	1:45 000	2015

12	RU4P3Q70	Yenisey River. Dorofeyevskiy Point to Yakovlev River	1:45 000	2015
13	RU4P4Q80	Yenisey River. Gol'chikha River to Dorofeyevskiy Point	1:45 000	2015
14	RU4P5Q70	Yenisey River. Sopochnaya Karga Point to Gol'chikha River	1:45 000	2015
15	RU4P6Q00	Yeniseyskiy Gulf. Krestovskiy and Moskva Straits and Approaches	1:45 000	2015
16	RU4P7PT0	Yeniseyskiy Gulf. From Krest'yanka River to Krestovskiy Island	1:45 000	2015
17	RU4P8PT0	Yeniseyskiy Gulf. Isachenko Point to Krest'yanka River	1:45 000	2015
18	RU4P9PT0	Kara Sea. Dikson Island and Approaches	1:45 000	2015
19	RU5OIQJ0	Yenisey River. Khantayka River Mouth	1:4 000	2015
20	RU5OMQJ0	Yenisey River. Port Igarka and Approaches	1:12 000	2015
21	RU5OPQI0	Yenisey River. Lipatnikovskiy Ford and Approaches	1:22 000	2015
22	RU5ORQH0	Yenisey River. Approachts to Port Dudinka	1:22 000	2015
23	RU5ORQH1	Yenisey River. Sitkovskaya and Gribanovskay Distributarys	1:22 000	2015
24	RU5OTQA0	Yenisey River. Fairway SE of Bol'shoy Island	1:8 000	2015
25	RU5P1Q90	Yenisey River. Turushinskiy Ford	1:22 000	2015
26	RU5PAQ09	Kara Sea. Port Dikson and Approaches	1:22 000	2015
27	RU6OSQI0	Yenisey River. Approachts to Port Dudinka	1:4 000	2015
28	RU3OMM19	Barents and White Seas. Obornyy Point to Madakha Lighthouse	1:180 000	2016
29	RU3ONLN0	Barents and White Seas. Murmanskiy and Terskiy Coasts. 38°00'E to Lumbovskiy Gulf	1:180 000	2016

30	RU3ONMR9	Barents Sea. SE Part Pomorskiy Strait. Kolokolkova Inlet	1:180 000	2016
31	RU3OPLD9	Barents Sea. Murmanskiy Coast. Malyy Oleniy Island to Belyy Point	1:180 000	2016
32	RU3OPNJ9	Barents and Kara Seas. Chyornaya Lopatka Point to Yarasalya Point. Yugorskiy Shar Strait	1:180 000	2016
33	RU3ORL20	Barents Sea. Vor'yema Point to Kil'din Island	1:180 000	2016
34	RU3PONJ9	Barents and Kara Seas. Karskiye Vorota Strait and Approaches	1:180 000	2016
35	RU3P2OB0	Kara Sea. Yamal Peninsula. Kharasavey Point to Toyakha River	1:180 000	2016
36	RU3P6W90	East Siberian Sea. Eastern Approaches to Dmitriy Laptev Strait	1:180 000	2016
37	RU3P7OP0	Kara Sea. Approaches to Obskaya Inlet	1:180 000	2016
38	RU3P7VS0	East Siberian Sea. Dmitriy Laptev Strait	1:180 000	2016
39	RU4ORL59	Barents Sea. Murmanskiy Coast. Motovskiyy Gulf	1:45 000	2016
40	RU4ORL99	Barents Sea. Murmanskiy Coast. Approaches to Kol'skiy and Motovskiyy Gulfs and Kil'din Island	1:45 000	2016
41	RU5PHVL0	Laptev Sea. Novosibirskiye Islands. Kotelnyy Island. Temp Bay and Approaches	1:22 000	2016

## The scheme of electronic navigational charts issued in 2016



**Fig. 8**

# The scheme of electronic navigational charts issued in 2015

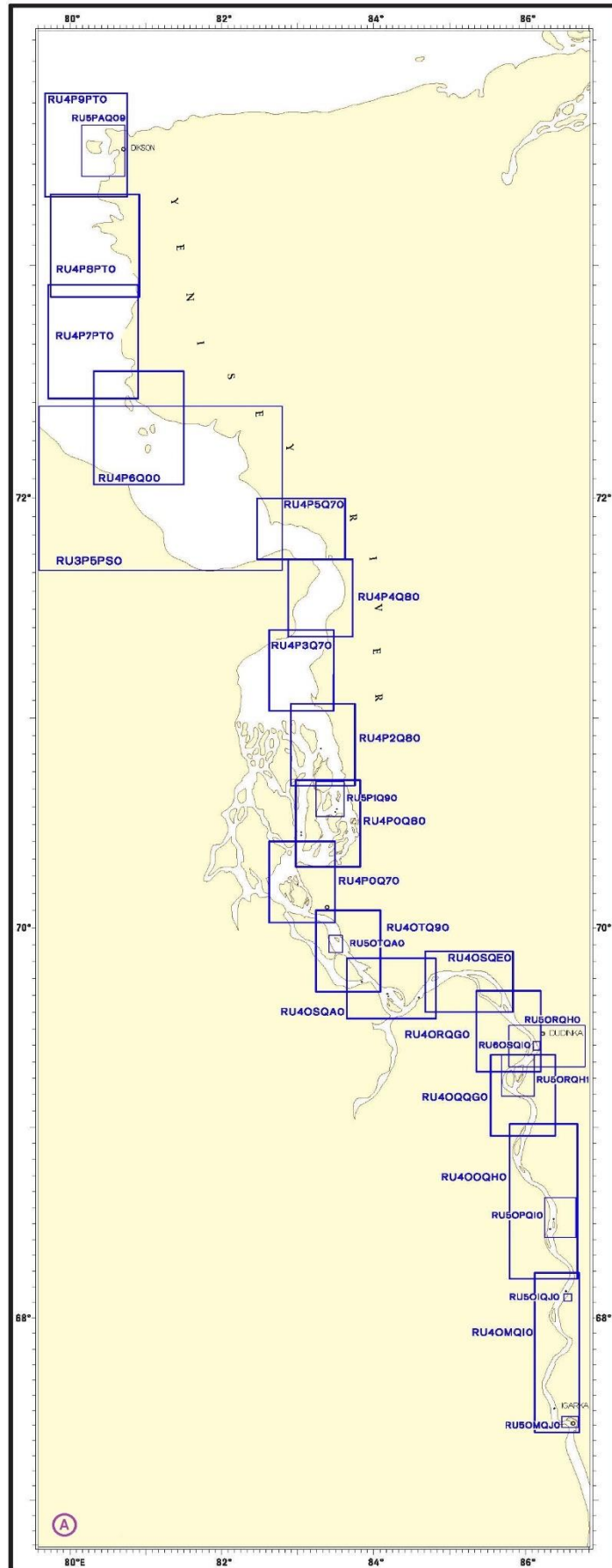


Fig. 9



### 3.2. ENC's distribution method.

The ENC's are distributed through the official distributor of cartographic products of the National Hydrographic Service of the Russian Federation.

### 3.3. Raster Navigational Charts (RNCs).

DNO does not distribute RNCs.

### 3.4. The INT Charts.

The INT was not published.

### 3.5. National Paper Charts.

There are 46 nautical charts issued by the DNO on the Arctic Ocean water area. Scale row is shown in the table 3. The collection is updated using corrections and re-issues of the charts as new hydrographic data become available.

Electronic versions of Notices to Mariners and Navigational Warning Bulletins in **.pdf** are available on the official website of the Ministry of Defense of the Russian Federation:

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

**Table 3**

<b>Scale</b>	<b>Number</b>
1:2 000 000	6
1:500 000	4
1:200 000	10
1:100 000	9
1:50 000	7
1:25 000	6
1:10 000 and larger	4
$\Sigma$	46

Table 4

## The list of the national navigational paper charts issued in 2015-2016

№	Adm. №	Name of the area	Scale	Year of issue
1	10102	Arctic Ocean. Kara Sea Northern Part	1:2 000 000	2015
2	10104	Arctic Ocean. Laptev Sea	1:2 000 000	2015
3	10105	Arctic Ocean. East Siberian Sea	1:2 000 000	2015
4	11132	Kara Sea. Poluostrov Taymyr. Port Dikson to Bukhta Lomonosov	1:500 000	2015
5	11136	Kara and Laptev Seas. Proliv Shokal'skogo and Proliv Borisa Vil'kitskogo	1:500 000	2015
6	11149	East Siberian Sea. Ostrov Ayon to Proliv Longa	1:500 000	2015
7	11150	Chuckchi Sea. Proliv Longa	1:500 000	2015
8	12310	Kara Sea. Poluostrov Yamal. Mys Kharasavey to Reka Pilyoyakha	1:200 000	2015
9	12406	Laptev Sea. Mys Terpyay-Tumus to Ostrova Dunay	1:200 000	2015
10	13330	Kara Sea. Obskaya Guba. Reka Sabkolyang''yakha to Bukhta Tambey	1:100 000	2015
11	13331	Kara Sea. Obskaya Guba. Bukhta Tambey to Banki Vil'kitskogo (Severnyye)	1:100 000	2015
12	14006	White Sea. Dvinskiy Zaliv. Mys Kerets to Mys Golets with Port Arkhangel'sk	1:100 000	2015
13	14244	Barents Sea. Zemlya Frantsa-Iosifa. Proliv Markema and Proliv Yermak	1:100 000	2015
14	14247	Barents Sea. Zemlya Frantsa-Iosifa. Southern Part of Avstriyskiy Proliv and Approaches	1:100 000	2015
15	14249	Barents Sea. Zemlya Frantsa-Iosifa. Northern Part of Avstriyskiy Proliv and Proliv Beryozkina	1:100 000	2015
16	15120	Norwegian Sea. Coast of Norway. Hammerfest to Fruholmen Light	1:50 000	2015

17	15420	Laptev Sea. Reka Khatanga. Mys Bol'shaya Korga to Reka Popigay.	1:50 000	2015
18	15421	Laptev Sea. Reka Khatanga. Ostrov Popigay-Ary (Bezymyanny) to Ostrov Mosienko	1:50 000	2015
19	15422	Laptev Sea. Reka Khatanga. Ostrov Mosiyenko to Ostrov Zelyonny	1:50 000	2015
20	16030	White Sea. Zimniy Bereg. Kedovskiye Koshki	1:50 000	2015
21	18026	Barents Sea. Southeast Part. Approach to Varandeykaya Guba	1:25 000	2015
22	18037	Barents Sea. Murmanskiiy Bereg. Proliv Bol'shoy Oleniy. Western Part of Guba Porchnikha	1:2 000	2015
23	18319	Kara Sea. Karskaya Guba. Approaches to Posyolok Ust'-Kara	1:10 000	2015
24	18424	Laptev Sea. Reka Khatanga. Ostrov Dolgan-Ary to Ostrov Zelyonny	1:25 000	2015
25	19464	Chuckchi Sea. Proliv Longa. Laguna Rypil'gyn Entrance to Rypil'gyn Light-Beacon	1:25 000	2015
26	10100	Arctic Ocean. Barents Sea. Southern Part	1:2 000 000	2016
27	10101	Arctic Ocean. Barents Sea. Northern Part	1:2 000 000	2016
28	10106	Chuckchi Sea and Bering Strait	1:2 000 000	2016
29	12213	Barents Sea. Zemlya Frantsa-Iosifa. Ostrov Rudol'fa to Ostrov Greem-Bell	1:200 000	2016
30	12214	Barents Sea. Zemlya Frantsa-Iosifa. Ostrov Artura to Ostrov Rudol'fa	1:200 000	2016
31	12305	Kara Sea. Proliv Karskiye Vorota and Approaches	1:200 000	2016
32	12337	Kara Sea. Severnaya Zemlya. Ostrov Pioner to Mys Arcticheskiy	1:200 000	2016
33	12402	Laptev Sea. Poluostrov Taymyr. Ostrov Severnyy to Ostrov Psov	1:200 000	2016
34	12421	East Siberian Sea. Proliv Dmitriya Lapteva	1:200 000	2016
35	12422	East Siberian Sea. Eastern Approaches to Proliv Dmitriya Lapteva	1:200 000	2016
36	12438	Chuckchi Sea. Area to Northeast from Ostrov Vrangelya	1:200 000	2016

37	13215	Barents Sea. Novaya Zemlya. Mys Medvezhiy to Mys Zhelaniya	1:100 000	2016
38	13332	Kara Sea. Obskaya Guba. Banki Vil'kitskogo (Severnyye) to Yantosyo Light-Beacon	1:100 000	2016
39	13333	Kara Sea. Obskaya Guba. Light-Beacon Tadebyayakha to Mys Lebedinyy	1:100 000	2016
40	15004	Barents Sea. Murmanskiy Bereg. Kol'skiy Zaliv	1:50 000	2016
41	15355	Kara Sea. Obskaya Guba. Mys Poludenny to Mys Shtormovoy	1:50 000	2016
42	18331	Kara Sea. Obskaya Guba. Reka Sabetayakha Mouth	1:5 000	2016
43	18338	Kara Sea. Obskaya Guba. North Part of Port Sabetta Maritime Canal	1:25 000	2016
44	18339	Kara Sea. Obskaya Guba. Port Sabetta Maritime Canal 72°27'N to 72°18'N	1:25 000	2016
45	18340	Kara Sea. Obskaya Guba. Port Sabetta Seaway Canal 72°18'30"N to 72°10'12"N	1:25 000	2016
46	19046	White Sea. Kandalakshskiy Zaliv. Kandalakshskiy Approach Channel	1:10 000	2016

The scheme of cartographic coverage in 2015-2016

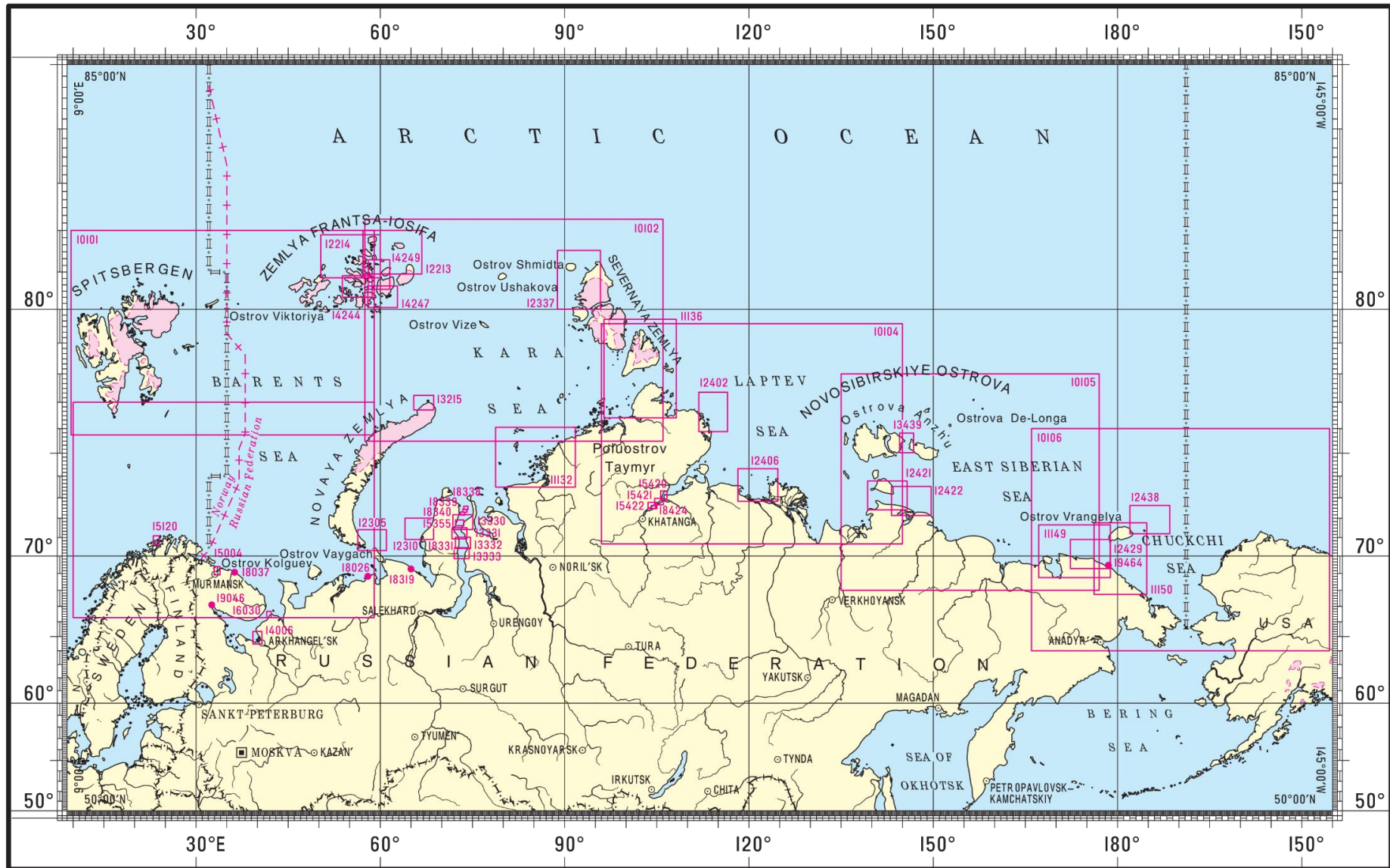


Fig. 10

### 3.6. Print-on-Demand Chart System.

Since 2011 paper nautical charts are being circulated through the Print-On-Demand Chart System. Currently the base of Print-On-Demand Chart System contains more than 3400.

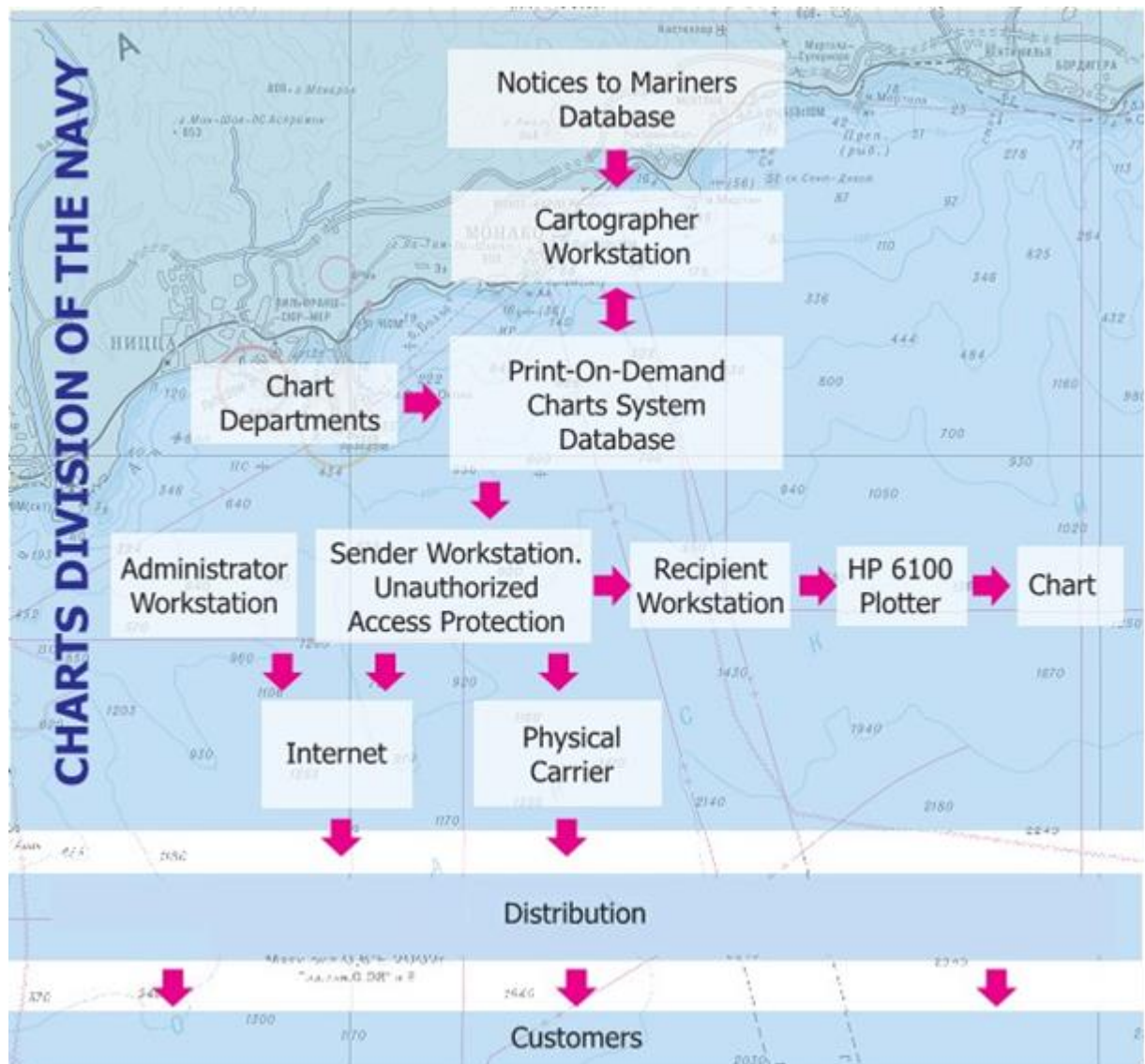


Fig. 11

## 4. New Publications and updates.

### 4.1. New Publications.

For period since the last meeting of the commission new publications have not been issued.

## 4.2. Updated Publications.

Issued publications are being updated through the DNO Notices to Mariners.

## 4.3. Means of Supply (e.g. paper, digital).

All publications are supplied on a paper basis.

## 5. Maritime Safety Information (MSI).

### 5.1. Existing Infrastructure for Transmission.

Within the World Wide Navigational Warning Service (WWNWS) Maritime Safety Information (MSI) in the Russian Federation extends:

on the region of the XIII WWNWS in the form of warnings of NAVAREA XIII (Pacific region);

on region of XX and XXI - in the form of warnings of NAVAREA XX and XXI (Arctic region);

On region of the Russian national zone of responsibility in the form of coastal warnings (COASTAL WARNINGS – in English, PRIP – in Russian) over regions:

Arkhangelsk (White Sea);

Murmansk (Barents Sea);

The West (the seas along the western part of the water area of the Northern Sea Route);

The East (the seas along east part of the water area of the Northern Sea Route).

Transfer of MSI of national Hydrographic Office is carried out on four regions of coastal warnings entering two regions of NAVAREA WWNWS:

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

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

the region of COASTAL WARNING (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 Federal State Unitary Enterprise (FSUE) «Hydrographic Enterprise» of the Ministry of Transport of the Russian Federation;

the region of COASTAL WARNING (CW) the East (the southern part of the Laptev Sea to the East from a meridian of 125°E, East Siberian Sea

and Chuckchee Sea) - a zone of responsibility of Federal State Unitary Enterprise (FSUE) «Hydrographic Enterprise» of the Ministry of Transport of the Russian Federation.

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

Maritime Safety Information on regions of XX and XXI WWNWS is transferred in Safety Net and in SB the range (NBDP) by radio station Moscow.

**Table 5**

**Quantity of the announced Coastal Warnings on regions of NAVAREA XX and XXI WWNWS in the Arctic region**

<b>Region</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
NAVAREA XX	150	158	218
NAVAREA XXI	83	70	61
CW Murmansk	297	314	410
CW Arkhangelsk	84	55	98
CW West	141	156	172
CW East	89	109	15

**Table 6**

**Russian NAVTEX station in the Arctic region**

Murmansk	68°46'N	32°58'E	300 miles	518 kHz	K
Archangelsk	64°51'N	40°17'E	300 miles	518 kHz	L
Tiksi	71°38'N	128°50'E	300 miles	518 kHz	Q



## The region of the announcement Coastal Warnings and NAVTEX stations in the Arctic region



**Fig. 12**

5.2. New infrastructure according to the Master plan of the Global Maritime Distress and Safety System (GMDSS).

Control over the implementation of obligations for creation and functioning of GMDSS and informing International Hydrographic Organization on the means of a radio communication providing GMDSS it is assigned to the Ministry of Transport of the Russian Federation.

### **5. S-55.**

No information to include in the report.

### **6. Capacity Building.**

No information to include in the report.

### **7. Oceanographic Activities.**

The prospect of oil and gas extraction on the Arctic continental shelf of the Russian Federation and development of the Northern Sea Route increased the role of hydrography.

The Arctic regional hydrographic division survey vessels carry out hydrographic surveys in the water areas near arctic archipelagoes of New Land, Franz Joseph Land, Northern Land and New Siberian Islands.



**Fig. 13. Hydrographic survey vessel SENEZH**



**Fig. 13. Hydrographic survey vessel VIZIR**

## **8. Other Activities.**

### 8.1. Participation in the IHO Committees and Working Groups.

The DNO participates in the IHO Committees and Working Groups as follows:

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;

the ENC Standards Maintenance Working Group;

the Nautical Information Provision Working Group;

the Transfer Standard Maintenance and Application Development Working Group.

## **9. Conclusion.**

The 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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(NtMs are available in English)

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