



## **TWENTY SIXTH MEETING OF THE COUNCIL**

**7 – 8 March 2018, Tromsø, Norway**

**DOCUMENT NPR-R-2016 National Progress Report – Russia - 2016**

**Submitted by: Russia**

**This document contains**

The National Progress Report for activities in 2016 from Russia.

Catches are reported in Document “NAMMCO-26-Catches-2016”

**Action requested:**

- For Information

**RUSSIAN NATIONAL PROGRESS REPORT FOR THE 24<sup>th</sup> SC NAMMCO MEETING  
RESULTS OF MARINE MAMMALS RESEARCH IN THE NORTH ATLANTIC  
IN 2016-2017**

**(PREPARED ON BASE OF RESEARCH BY THE N.M. KNIPOVICH POLAR  
RESEARCH INSTITUTE OF MARINE FISHERIES AND OCEANOGRAPHY (PINRO)  
IS CARRIED OUT)**

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## **I INTRODUCTION**

Below presented proceeding prepared under requirements and structure by the NAMMCO Secretariat prepared for the 24<sup>th</sup> SC NAMMCO Meeting.

This Report is presented results of the Russian marine mammals research (Cetacean and Pinniped) in the North Atlantic (the Irminger and the Labrador Seas, NAFO Regulatory Area, areas of Eastern and Western Greenland), the Norwegian and the Barents Seas which were carried out in 2016. Here also information about research and surveys in 2017 are presented. Their results cannot be presented this proceeding, it is ongoing research.

The main purpose this research is studying of Cetacean and Pinniped place and role in marine ecosystems and in the first their preying to fish species and other marine organisms in fisheries activities from one side, and from other side, estimation of climatic change and anthropogenic factors influence to marine mammals. During research carrying out traditionally make following work directions, two first of it are special research:

1. In open sea (marine research) collect data about marine mammals meetings (distribution and numbers) as part of marine ecosystem complex research including oceanographic data, acoustic sounding, making special trawling - expedition works (surveys and observations), so named dedicated research;
2. Cetacean and Pinniped observations and accounting in coastal zone, so named coastal surveys (research);
3. Marine mammals accounting (location and numbers) specially touch observers or PINRO specialists onboard fisheries vessels – additional (extra) research.

Besides, various marine mammal research carry out in the Russia some Scientific-Research Institute (SRI) and Institution by National Academy of Science, SRI Ministry of Environmental Resources, and also make monitoring research by difference companies which work and exploit shelf of hydrocarbon raw materials in the Barents and Kara Seas.

## **II RESEARCH BY SPECIES IN 2016**

### **1). Expedition works (surveys and sightings) in open sea and coastal zone – dedicated research**

In *February* marine mammals sightings during many species (MS) trawl-acoustic survey (TAS) of demersal (bottom) fishes onboard PINRO R/V “Fritijof Nansen” was made. Research carried out in area of the Russian Exclusive Economic Zone (REEZ) between 32°E and 47°E from Kola Peninsula coastal zone to 74°. It is figure 1 is presented. Total length of accounted transects was some more than 720 n. miles and accounted area square – about 493 n. miles<sup>2</sup>.

During research white-beaked dolphin (*Lagenorhynchus albirostris*) and fin whale (*Balaenoptera physalus*) were recorded that in Figure 1 is presented. White-beaked dolphin two groups (12 and 35 individuals in each) in the Murmansk Bank northwestern slope were recorded, once more one group (12 individuals) some eastward from here was observed. Total numbers calculation both species did not make as their meetings was small.

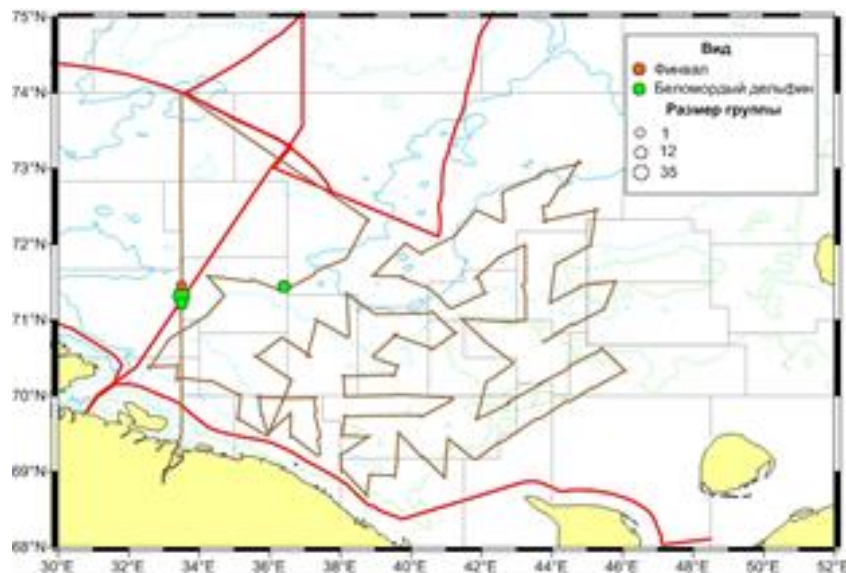


Figure 1 – Area and route of R/V “Fritjof Nansen” research in MS TAS demersal fishes and marine mammals meetings in it carrying out

In the Murmansk Bank northwestern slope together with white-beaked dolphin fin whale as one individual was recorded. Fin whale in winter time last years regularly observes in the Barents Sea, and it is in its western part and along Murmansk coastal line. Has probability that summer-autumn fin whale group does not make migration westward direction and in the Barents Sea area is remained.

On results compared analyze of marine mammals meetings with acoustic data and trawls in research area was defined that animals was observed in sections where capelin fisheries aggregations were recorded.

In **May** marine mammals sightings as part of the north seas annual International ecosystem survey (IES) in the area of PINRO research (southern part of the Barents Sea) were carried out. It was made onboard PINRO R/V “Fritjof Nansen”. Research area and transect positions including marine mammals recorded in Figure 2 is presented. Total surveyed of transect length was more than 2 670 n. miles and accounted area square – 2 125 n. mile<sup>2</sup>.

During carried out research in total 5 marine mammals species (all Cetacean) were recorded in total numbers 202 individuals (look table 1). Marine mammals distribution in figure 2 is presented.

Among Mysticeti minke whale (*Balaenoptera acutorostrata*), fin whale and humpback whale (*Megaptera novaeangliae*) were recorded. Minke whale meetings in 2016 was less than in 2014 and 2015. Minke whale in research area on herring and fry of cod fishes species aggregations under acoustic and trawl data were marked. Calculation of abundance this Cetacean was not conducted as his recording was small (not enough). Under calculations from 2011-2015 minke whale average abundance in research area can be estimated in total as about 1 500 individuals.

Fin whale was the most meeting and numbers species among Cetacean. It is known that he consumes marine organisms wide spectrums among them in the most often are krill, capelin, and herring. During research fin whale as single as in small groups (to 4 individuals in each) was recorded, and it was in the Kopytov and the Nordkin Bank regions closely macroplankton, capelin and herring aggregations under acoustic and trawl data. It is need to mark that in 2016 fin whale registration numbers was less than in previous years. His total calculated numbers in 2016 was 132 individuals, and it quantity in 2014-2015 was between 198-242.

In 2016, increasing meeting of humpback whale in comparison with previous years when was recorded also. This species as single and small groups (to 4 individuals in each) in the Kopytov

and the Bear Bank southern slope regions were marked. Humpback whale above areas on acoustic and trawl data fed by crustacean, herring and capelin.

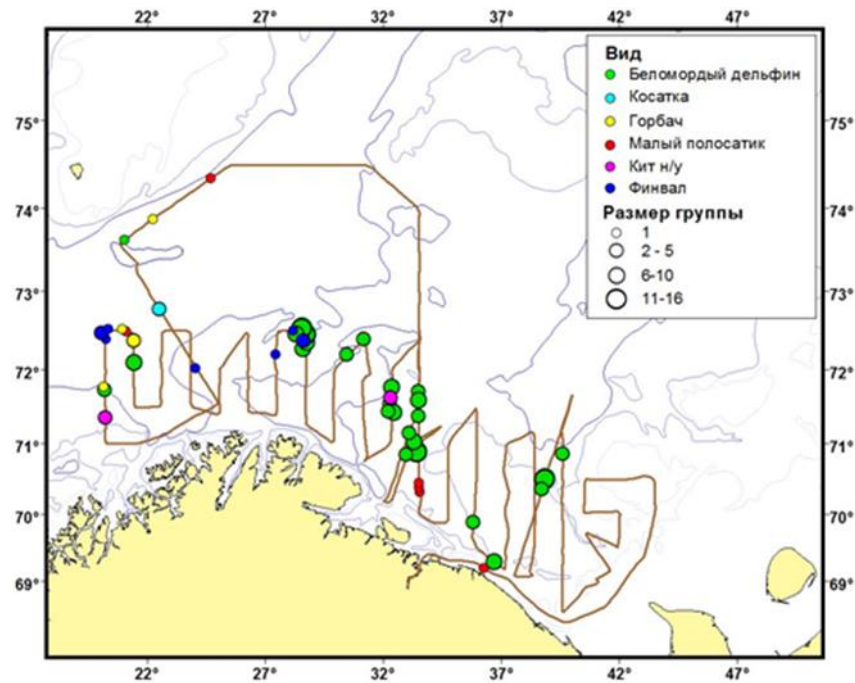


Figure 2 – Area and route of R/V “Fritjof Nansen” research in the north seas annual IES and marine mammals meetings in it carrying out

Table 1 – Marine mammals species and numbers composition in the north seas annual IES are recorded in it carrying out in the area of PINRO research

Species	Numbers		Meetings	
	individuals	%	quantity	%
Minke whale	6	3.0	6	12.8
Fin whale	12	5.9	8	17.0
Humpback whale	7	3.5	4	8.5
Not identified whale	5	2.5	2	4.3
White-beaked dolphin	167	82.6	26	55.3
Killer whale	5	2.5	1	2.1
Total	202	100	47	100

Average calculated numbers this species for PINRO research area for 2011-2015 was between from 145 to 151 individuals. On rough data from 2016 the same calculation was not carried out as humpback meetings were low for it.

Among Odontoceti whales white-beaked dolphin and killer whale (*Orcinus orca*) were recorded. White-beaked dolphin during research was the most numbers and often meetings species not only among Odontoceti but and all recorded Cetacean. White-beaked dolphin diet is not enough touch. Now it is known that he can feed by cod fishes species fry and also by herring, capelin, and flounder. In 2016 white-beaked dolphin as single and groups (from 2-8 to 15-20 individuals in each) in wide PINRO research area was recorded. His meetings was less in comparison with previous years. Marked animals in the first closely capelin and herring aggregations were recorded under acoustic and trawl data. The most density of white-beaked dolphin concentrations in regions

of the Murmansk Tongue, the Finmarken Bank and the Nordkin Bank western part were recorded. Total calculated numbers this species in PINRO research area for 2016 was estimated as about 5 540 individuals. It is some lower in comparison with previous years (2011-2015) when this quantity was about 5 780.

In the Kopytov region, killer whale one group in 5 individuals was recorded. It was first time for all period when the same research is carried out. Animals actively fed by herring and capelin aggregations under acoustic and trawl data.

In **August-September** marine mammals observations carried out onboard R/V “Fritjof Nansen” during annual joint Russian-Norwegian ecosystem survey in the Barents Sea (AJRNES) in area which was for PINRO appointed. It was the Barents Sea eastern part in direction from south to north that in figure 3 is presented. Total accounted of transects length was some more than 2 200 n. miles, and square of surveyed area – about 2 222 n. miles<sup>2</sup>. In total 5 marine mammals species was recorded, from them 4 – Cetacean and 1 – Pinnipedia, in total numbers – 295 individuals that in table 2 is presented.

The most often meeting and numbers species among all marine mammals recorded was white-beaked dolphin (86.4% of all observed animals), and it is traditional. This species was single only among Odontoceti whales. White-beaked dolphin the most part of meetings closely schools of polar cod, capelin and fry of cod fishes species with different density under acoustic and trawl data were recorded. It was between 75°N and 80°N of the Barents Sea. White-beaked dolphin the most numbers groups (15-20 individuals in each) in the region of the Admiralty Peninsula and Novaya (New) Zemlya (Land) were observed. White-beaked dolphin separate groups in region of the Teriberka and Kola Gulf were recorded. Here under acoustic and trawl data herring aggregations by different density were observed. White-beaked dolphin calculated numbers in PINRO research area was some more than 23 500 individuals. It is few less in comparison with previous years.

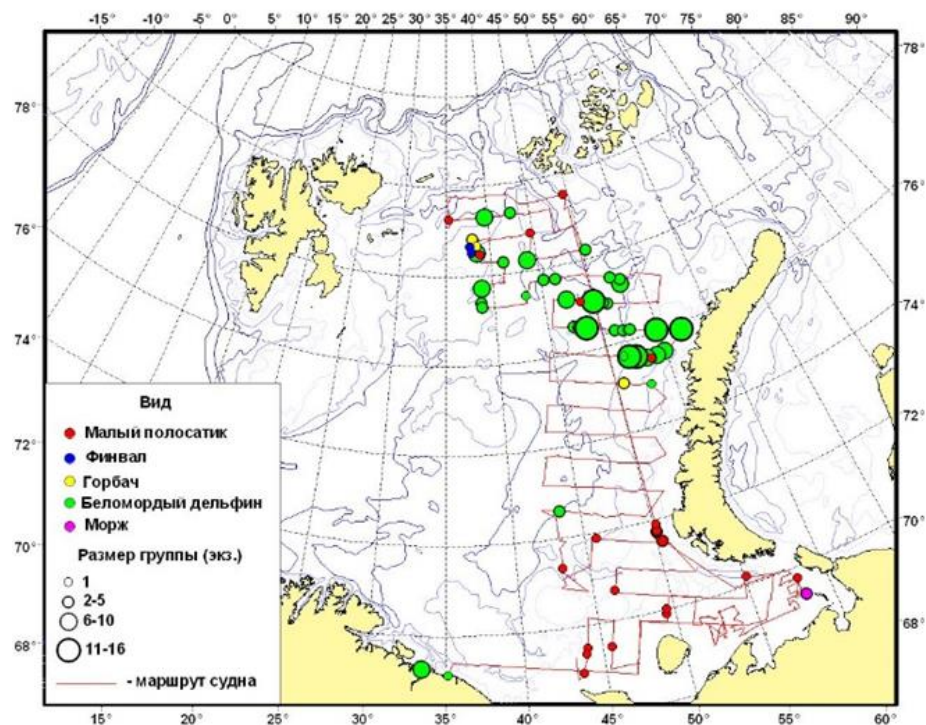


Figure 3 – Area and route of R/V “Fritjof Nansen” research in AJRNES and marine mammals meetings in it carrying out

Table 2 – Information about marine mammals who were recorded in AJRNES carrying out in PINRO research area

Order/suborder	Species	Quantity of recorded animals, individuals (N)	% of N
Cetacean/ Mysticeti	Fin whale	2	0.7
	Humpback whale	6	2.1
	Minke whale	29	9.8
Cetacean/ Odontoceti	White-beaked dolphin	255	86.4
Pinnipedia	Walrus ( <i>Odobenus rosmarus</i> )	3	1.0
Total		295	100

Among Mysticeti whales minke whale was the most recorded (9.8% of all observed animals). Also humpback whale and fin whale were marked. Minke whale observed in northern, southern, and southeastern parts of PINRO research area. Here some increase his meeting is marked that has about 13% in comparison with previous years. This species the most aggregations density in regions of the Gusinaya (Goose) Zemlya (Land) Melkovodie (Shoal) was recorded closely herring fisheries schools. Minke whale in northeastern regions closely polar cod and capelin aggregations was marked on acoustic and trawl data. In southeastern part it was closely of cod fishes fry, herring and other fishes. Minke whale calculated numbers in PINRO research area was estimated as about 2 680 individuals. The same numbers was in previous years but quantity meeting this animal was few more.

Humpback whale observed in regions of the Persey Vozvyshennosti (Hills) and on the south of the Novozemelsky Bank. Under acoustic and trawl data in first case here mixed polar cod and capelin schools were marked, and in second case were capelin schools only. Fin whale met together with humpback whales and minke whales in the northern region of PINRO research area where he fed the same fishes. As humpback whale and fin whale meetings here had very low meetings level, their calculation numbers did not carry out.

Among Pinnipedia walrus was observed only. One group of 3 animals in the Vaygach Region closely Matveev Island was recorded. In 2016 as in several previous last years harp seal (*Phoca groenlandica*) was not recorded. The main reason it is very far ice edge distribution to north in comparison with traditional (climatic) position that was caused by considerable warmer of surface waters in the Barents Sea. This reason in northern of PINRO research area polar bears were not observed also.

## **2. Coastal research**

This direction of special research carried out in **June-July** in southern part of the Barents Sea along coastal line of the Kola Peninsula. This work made onboard small motor boat. Total length of accounted transects was about 100 n. miles. Section where this observation was made in figure 4 is presented.

During carrying out this work were recorded as Cetacean (minke whale and white whale (*Delphinapterus leucas*)) as Pinnipedia (grey seal (*Halichoerus grypus*) and bearded seal (*Erignathus barbatus*)) were recorded.

Minke whale. This species as single individuals three times was observed in section between Bolishoy (Large) Oleniy Island and Dalinezelentskaya Inlet.

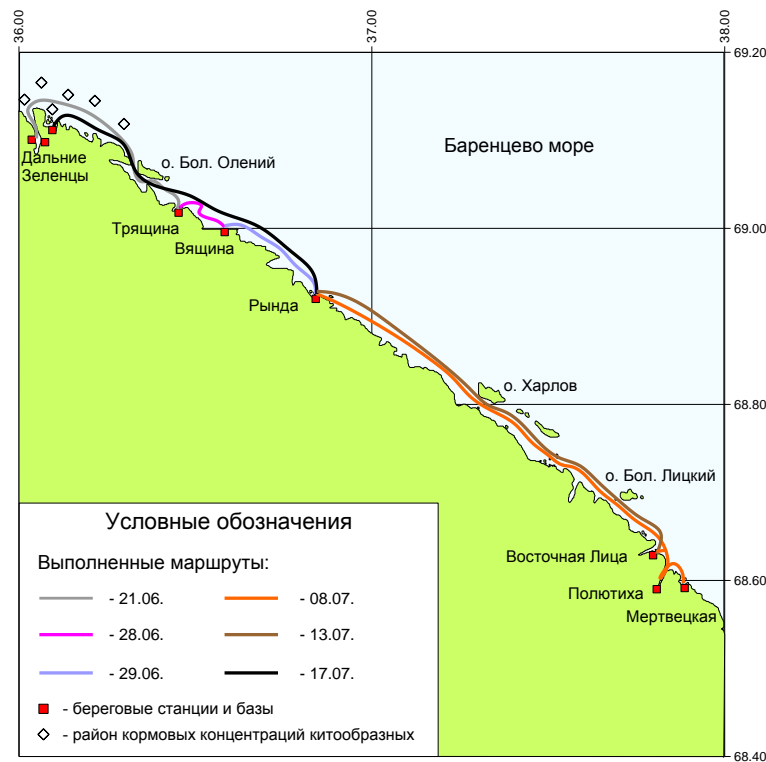


Figure 4 – Section of the Barents Sea southern part coastal zone where PINRO coastal research were carried out

White whale. This Cetacean as single individuals three times was recorded here also (look above). As minke whale as white whale came to coast after sand eel and haddock fry schools. In other places of sightings Cetacean was not observed that was caused by fish schools and other marine organisms absenting closely coast.

Grey seal and bearded seal distribution and quantity in coastal sightings were closely to traditional. These Pinnipedia distributed evenly in main as single or small local groups (to 3 individuals in each) from Rynda Inlet to Mervetskaya Inlet. Maximum quantity of grey seal in patch in 6 individuals in Mervetskaya Inlet (closely island) was recorded.

Summarizing above and analyzing previous years results in coastal sightings can remark in main following:

- in last years stable from year to year tendency to increase of storm duration and strength are marked;
- above circumstance negative influences to intensity of fish schools and other marine organisms come to coast that causes definable decrease of Cetacean meetings here along long distance of coastal line including full absenting, i.e. Cetacean far from coast are distributed;
- for Pinnipeds above circumstances have not so big influence in comparison with Cetacean as they inhabit inside bays, gulfs and inlets which have good protection from strong storms, and these places Pinniped can food by bentos in fish schools absenting.

### **3). Additional data collection onboard fisheries vessels – additional research**

This kind of activity carried out by PINRO specialists who was onboard commercial fisheries vessels (F/V) as observers, i.e. their main task was make ichthyology works. This reason marine mammals observation carried out not some regular and not in transects. Nevertheless these works for observers are obligatory and carry out them in all fisheries works onboard vessels where they are.

Below in summarized kind results of it will be presented for 2016. Data got in 2017 now study control check, analyze, interpretation and generalization.

**1. February-June.** Observer was onboard fishery vessel (F/V) “Oma”, research area was NAFO Regulatory Region (RR), divisions 3M (the Flemish Cap Bank southern slope) and 3O (the Newfoundland Grand Bank (NGB) southwestern slope), and also Faroe Island fisheries zone (FIFZ).

During this work marine mammals recorded by observer in RR NAFO only. Here locally in section with center position 43°25’N/51°44’W white-beaked dolphin group in quantity 20 individuals in trawling was observed. In carrying out the same activity in section with center position 43°19’N/51°34’W and 43°17’N/51°33’W bowhead whale (*Balaena mysticetus*) and sperm whale (*Physeter microcephalus*) accordingly both in one local group (in quantity of 8 animals in each) were marked.

**2. March-May.** Observer was onboard F/V “Zvezda of Murman”, research area was RR NAFO, divisions 3L (the NGB northeastern slope) and 3M.

During this work sperm whale was the most observed animals in total 16 his meetings were recorded and quantity all these animals were 22 individuals. This time marked some characterized of sperm whale behavior. All animals in trawling were recorded, they went closely of vessel in different distance, and they tried come to stern. In appearing of trawl bag whales began to eat by Greenland halibut who left from trawl bag in trawl up. Sperm whales continued to stay closely vessel in very strong whale even. Besides, one local group of harp seal was marked.

**3. April-July.** Observer was onboard F/V “Alexey Anichkin”, and in **July-August** he was onboard F/V “Osveyskoe”, research area was accordingly the Irminger Sea and the Norwegian Sea including FIFZ.

During all time above works in total 44 marine mammals meetings were marked, all of them are Cetacean (8 species), they are fin whale, humpback whale, minke whale, common dolphin (*Delphinus delphis*), killer whale, pilot whale (*Globicephala melaena*), northern bottlenose whale (*Hyperoodon ampullatus*), and sperm whale. In total 186 individuals were recorded. In summer time (June-August) animals closely section of mackerel, herring, blue whiting, and redfish aggregations were observed primarily.

Fin whale, during all observed time in total 82 individuals this species closely blue whiting and redfish schools were observed.

Humpback whale, only two times was met in one individual in each. All of them were in the Irminger Sea in Iceland Economic Zone.

Minke whale, one meeting only was marked, and it was closely Shetland Islands.

Common dolphin, several local groups this species in quantity of 1-10 individuals in each were recorded, and all it was during redfish fisheries in the Irminger Sea.

Killer whale, this species as local groups from 2 to 15 animals in each were observed, and it in the Irminger Sea closely big mackerel schools killer whales actively fed here. Also killer whale as separate groups from 3 to 6 individuals in each were observed in FIFZ. Here on acoustic data mackerel schools were recorded.



Pilot whale, during sightings in redfish fisheries in the Irminger Sea was observed. Here animals formed local groups in 3-5 individuals in each. Also pilot whale in the Northern Sea closely Norwegian coast was recorded, here 4 groups of animals were met in total numbers 11 individuals. All animals fed actively, under acoustic data here herring aggregations were recorded.

Northern bottlenose whale, this species as single individuals in the Norwegian Sea were recorded. Animals in northeastern direction migrated very actively.

Sperm whale, during all time observations 8 animals this species were recorded, all of them have been in the Norwegian Sea, couple animals in redfish fisheries were marked.

**4. April-July.** Marine mammals observation onboard F/V “Melkart-3” were carried out, research area was RR NAFO, divisions 3M and 3L.

During this cruise and marine mammals sightings only Cetacean was recorded, and it were:

- sperm whale (in total 64 meetings and quantity 153 individuals);
- white-sided dolphin (*Lagenorhynchus acutus*) – 3 meetings, total of observed animals was 17 individuals;
- pilot whale, 1 meeting as local group in quantity 7 individuals.

Thus in total 68 marine mammals were recorded, and their numbers was 177 individuals. All animals in section of Greenland halibut fisheries were observed. It is note that in considered area these marine mammals had definite stable conditioned reflex which was following – marine mammals moved over vessel during trawling, and then in up the trawl they approached to stern and took fishes who screened through mesh of trawl.

**5. July-August.** Marine mammals sightings onboard F/V “Iosif Shmelikin” were carried out, research area was the Irminger Sea.

During this cruise marine mammals very rarely were met. In fisheries area sperm whale meetings as single individual were recorded. They didn’t stay closely vessel as it traditionally can be in RR NAFO by Greenland halibut catching. Here animals actively migrated. During transition of vessel to port in Faroe Islands region local group of northern bottlenose whale in quantity of 16 individuals was observed which actively migrated in northern direction.

**6. August-September.** Marine mammals observations onboard F/V “Melkart-2” were carried out, research area was RR NAFO, divisions 3L and 3N (the NGB southern slope).

During all cruise sightings of surrounding vessel area were carried out regularly. However marine mammals were not recoded.

### III ONGOING (CURRENT) RESEARCH

During end of 2016 and in 2017, before preparing this document marine mammals observations carried out in following works:

1. Expedition works (surveys and sightings) in open sea – dedicated research, vessels marine research:

- May 2017 - the north seas annual IES in area of PINRO research (the Barents Sea south-western part), R/V PINRO “Vilnius”;
- August-September 2017 – AJRNES in area of PINRO research (the Barents Sea eastern part from coastal of the Kola Peninsula to 80°N), R/V “Vilnius”.

2. Marine mammals accounting (quantity and position) special touched observers or PINRO specialists onboard FV – additional research:

- December 2016-March 2017 – bottom fishes species catching in RR NAFO divisions 3M and 3O (the NGB south-western slope) and NEAFC area, section of Rocoll Bank, F/V “Oma”;
- March-April 2017 – bottom fishes species catching in RR NAFO divisions 3L and 3M, F/V “Zvezda of Murman”;

- *April 2017* - bottom fishes species catching in NEAFC area, section of Bill-Bayles and Rocoll Banks, F/V “Oma”;
  - *April-July 2017* – redfish catching in the Irminger Sea area and in Greenland Fisheries Zone, F/V “Alexey Anichkin (April-June) and F/V “Osveyskoe” (July).
- Results all above research will be presented in Russian NPR in next NAMMCO SC meeting in 2018.

#### **IV ADVICE GIVEN AND MANAGEMENT MEASURES TAKEN**

Studying and understanding situation with the White Sea/Barents Sea harp seal population stock for briefly – harp seal is paramount and principal direction the Russian and PINRO research in the North Atlantic area on marine mammal. This reason principal advices given and measures taken for this marine mammal species will be presented below.

As it is known that main advices and proposals on harp seal stock status assessment and management measures taken including TAC definition in WG ICES meetings on harp and hooded seal (WGHARP) is formed. Last WGHARP in Copenhagen (Denmark) during 26-30 September 2016 was held (WGHARP-2016). It was joint ICES/NAFO/NAMMCO meeting. Advices from WGHARP traditionally underlie for taking of final solution about measures regulatory by removal this Pinnipeds which establish in annual sessions of Joint Russian-Norwegian Fisheries Commission (JRNFC). This circumstance is caused that the White Sea/Barents Sea harp seal population stock exploits by Russia and Norway jointly.

In WGHARP-2016 taking into consideration results of PINRO research which were got in studying of pup production considerable Pinnipeds species, and also taking into account historical and modern data about biology these animals jointly with catch data, total stock abundance of the White Sea/Barents Sea harp seal population stock on modelling calculation was assessed in 1 408 200 individuals (95% C.I. 1 251 680-1 564 320).

This reason at present can make conclusion that considerable Pinnipeds stock has good status and stable level, it being known that his removal during about 40 years was lower TAC essentially, and beginning from 2009 this stock don't exploit on difference reasons practically.

Hence above circumstances and also that value of the White Sea/Barents Sea harp seal population stock numbers is in interval between  $N_{max}$  (maximum historical numbers of considerable Pinnipeds species) and  $N_{70}$  (70% of  $N_{max}$ ) in accord with principles of marine biological resources management and regulatory taking ICES which is harp seal current harp seal stock status allows to make his exploitation on base of ecosystem and social-economic principles approach. This reason in TAC assessment and definition is necessary to use modified population model and employ catch strategy which is based on precautionary approach. Under that in WGHARP-2016 modelled calculations for equilibrium catch level (defines as fixed for each year allowing define numbers of adult animals) were made. As alternative for that was used other approach also which base in catch on level of Potential Biological Removals (PBR). This circumstance was linked that harp seal stock in 2016 by WGHARP participants under taking criterions was characterized as “poor data”. This circumstance was caused that last harp seal reproductive rates available were based on data from 2006, i.e. more than 5 years. After carried out calculations and got data analyze was taken solution and prepared advice that the most acceptable is scenario which based on equilibrium catch level. It allows define TAC for the White Sea/Barents Sea harp seal population stock in numbers in 10 090 individuals of adult animals (age is more than 1 year, 1+). It ensures conservation of total stock numbers during the closest 15 years on level higher than  $N_{70}$ .

Following WGHARP-2016 advices PINRO specialists in last 46 JRNFC Session (October 2016) proposed for consideration and concordance following advices and management measures on taken (exploitation) for the White Sea/Barents Sea harp seal population stock:

1. Catch expediently to carry out on base of equilibrium removal level scenario which envisages total taken numbers in 10 090 individuals when adult animals only will be taken. It ensures conservation of total stock numbers during the closest 15 years on level higher than N<sub>70</sub>. Norwegian quota for catch in the Barents Sea south-eastern part (so named “east ice”) under historically established principle will be 7 000 animals difference age;
2. Time for harp seal catch expediently determine between 20 March – 15 May;
3. Catch activity is need to carry out by maximum humane methods and technologies only by specially trained people;
4. Taken adult female during breeding period remains as ban.

## V PUBLICATIONS AND DOCUMENTS

All materials and publications PINRO specialists on results of marine mammals research in Russian were prepared in 2016. This reason to indicate its titles here are inexpedient. Exclusion can be below paper only which was prepared in English:

*Zabavnikov V.B. Russian National Progress Report on Results of Marine Mammals Research in the North Atlantic which was Carried Out in 2015 (Prepared on Base Results of PINRO Research)//Working Document for the 23<sup>d</sup> SC NAMMCO Meeting, Nuuk, Greenland, Denmark, 4-7 November 2016, 16 p.*

## VI APPENDIX 1 – CATCH DATA

### a. Short narrative

#### Pinniped

Russian commercial catch of Pinnipedia including the White Sea/Barents Sea harp seal population stock in 2016 and 2017 did not carry out.

In coastal zone of the White Sea and the Barents Sea catch of ringed seal and bearded seal by inhabitants for own necessity in 2016 was carried out. Numbers of removal animals this case was very small. Correct information about numbers of catch these animals now is absented.

#### Cetacean

Russia does not carry out Cetacean catch in North Atlantic as commercial as scientific purposes. Nevertheless at present catch of white whale is quoted every year. Removal this Cetacean is very seldom, and it for scientific-research and cultural-enlightenment is made. Correct information about it for 2016 and 2017 now is absented.

### b. Fill in Excel spreadsheet

Under above circumstances filled in Excel spreadsheet to present here is not necessary.

## VII APPENDIX 2 – BY-CATCH DATA

### a. Short narrative

#### Pinniped

PINRO has not data now about Pinnipeds by-catch in fisheries and other kind of marine activities in 2016 and 2017.

#### Cetacean

PINRO has not data now about Cetaceans by-catch in fisheries and other kind of marine activities in 2016 and 2017.

### b. Fill in Excel spreadsheet

Under above circumstances filled in Excel spreadsheet to present here is not necessary.

## VIII APPENDIX 3 – STRANDINGS

### a. Short narrative

#### Pinniped

In preparing this Report PINRO has following information about Pinniped who stranding which from local inhabitants was got:

1. **2016**, the White Sea area, Tersky Coast, cape Vesh Navolok, region of Uмба settlement (average position is 66°30'N/34°30'E). Here in **20 May** 9 carcasses of *the White Sea/Barents Sea harp seal population* and 2 of *Bearded seal* was discovered. Their total weight in discovery was 300 kg. All animals were young, age less than 1 year, traumas of mechanical occurring were presented. All carcasses by specialists of Veterinary Inspectors and Sanitary-Epidemiology Station were destroyed.
2. **2017** – not the same information.

#### Cetacean

In preparing this Report PINRO has following information about Cetacean who stranding which from local inhabitants was got:

1. **2016**, the Barents Sea coast, Kola District, region of Teriberka settlement (average position is 67°10'N/35°05'E). Here in **12 July** 1 *White whale* carcass was discovered. Animal had numerous injuries and first signs of decomposition. Carcass by specialists of Veterinary Inspectors and Sanitary-Epidemiology Station were destroyed.
2. **2017** – not the same information.

### b. Fill in Excel spreadsheet

Template for <b>Catch</b> reporting for PINNIPEDS										
Species (latin name)	Year or Season	Stock Area	Catch (pups)			Catch (group 1+ or adults)			Catch Total incl. Struck & Loss	Quota if applicable
			Male	Female	Total incl. Unkn.	Male	Female	Total incl. Unkn.		
			Fill in details only if relevant			Fill in details only if relevant				Ignore if inapplicable
Template for <b>By-catch</b> reporting for PINNIPEDS										
Species (latin name)	Year or Season	Stock Area	By-Catch			Comments on circumstances if applicable				
			Male	Female	Total incl. Unkn.	Fishery type	Live - release	Other details		
								e.g. method of reporting		
Template for <b>Strandings</b> reporting for PINNIPEDS										
Species (latin name)	Year or Season	Stock Area	Strandings			Comments on circumstances if applicable				
			Male	Female	Total incl. Unkn.	Fishery-related	Live	Beach-cast	Other details	
Phoca groenlandica	20.05.2016	66.5N/34.5E	Not ident.	Not ident	9			Beach-cast	Fresh, calf, destroyed	
Erignathus barbatus	20.05.2016	66.5N/34.5E	Not ident.	Not ident	2			Beach-cast	Fresh, calf, destroyed	

