WORLD METEOROLOGICAL ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (OF UNESCO)

JOINT WMO/IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY (JCOMM)

EXPERT TEAM ON SEA ICE - FOURTH SESSION

STEERING GROUP FOR THE PROJECT GLOBAL DIGITAL SEA ICE DATA BANK (GDSIDB) – TWELTH SESSION

ST PETERSBURG, RUSSIAN FEDERATION 1 TO 5 MARCH 2010 ETSI-IV GDSIDB-XI/Doc. 2.5.6 Russia (27.II.2010)

ITEM 2.5.6

Original: ENGLISH

Progress Report from the Coordinator of METAREAS XX and XXI

(Submitted by Valery Martyschenko and Sergey Brestkin, Roshydromet and AARI)

Summary and Purpose of Document

This document contains a report on the status of preparations for issuing marine safety information for METAREA XX and METAREA XXI.

ACTION PROPOSED

The Expert Team on Sea Ice (ETSI) is invited to:

- (a) Note and comment on the information in this document;
- (b) Discuss the coordination of preparations for issuing sea ice and iceberg information among all of the Arctic METAREAs;
- (c) Discuss and recommend means to resolve the issues identified in Paragraph 8;
- (d) Recommend further steps toward ensuring the optimum delivery of sea ice and iceberg Information for the Arctic METAREAs.

Annex 1 - Weather Bulletin for west (METAREA XX) and east (METAREA XXI) Northern Sea Route, 2009-10-30 1800Z

DISCUSSION

- 1. In 2007, Russia accepted official recognition as the Issuing Service for marine weather forecasts and warnings for METAREAS XX and XXI as part of the Global Maritime Distress and Safety System (GMDSS). Russia (Federal Agency of Marine and River Transport) is the Issuing (and preparation) Service for Associated NAVAREAS XX and XXI
- 2. Canada is recognized as the Issuing Service for METAREAS XVII and XVIII and Norway is recognized as the Issuing Service for MetArea XIX.
- 3. It should be noted that Arctic METAREAs are characterized by the ice cover occurrence during the whole year which is the serious obstacle for navigation and a factor of

risk. The Russian approach is that the sufficient safety level can be reached only with individual (customer-oriented) support with provision of detailed ice information, but the goal of the GMDSS ice information circular transmission is to warn on the ice with definite characteristics in a certain area to prevent incidental entry of vessels into this area.

- 4. The broadcast of METAREA information beyond 76N is the problem which is in the process of solving. At the moment INMARSAT-C is used to transmit the information on the safety of navigation to the ships in the Western and Eastern zones of the Northern Sea Route.
- 5. NAVAREA, METAREA, and NAVTEX coverage diagrams, including service areas and times of transmission are being developed as products and transmission times are negotiated.
- 6. Discussions with Canada and Norway, for coordination and consistency across METAREA boundaries are planned at the nearest ETMSS or METAREA coordinators dedicated GMDSS meeting of . in Melbourne in late April however it is hoped that some planning will take place prior to this.
- 7. Plain language sea ice information will consist of NAVTEX and SafetyNET bulletins describing the ice edge and concise description of sea ice conditions. An overlap of 300 nautical miles between adjacent METAREAs will be taken into account in the future plans.
- 8. Issues that must be resolved generally correspond to those proposed by Canada and Norway and may include:
 - <u>Broadcast times</u> need to be clarified and staggered so each Issuing Service can properly follow the previous.
 - <u>Definition of ice edge</u> it is necessary to consider the proposal of Canada and Norway to use 10% ice concentration as the ice edge with a disclaimer that there may be trace ice and bergs outside the ice edge
 - <u>Ice edge reconciliation</u> there must be continuity of the ice edge from one METAREA to the adjacent METAREAs. An 24/7 ftp/http site could be organized (e.g. by the AARI) and used by all Issuing Services to place their ice information in advance of the broadcast allowing the next Issuing Service to integrate into their material as soon as possible.
 - <u>Disclaimer</u> Concern was expressed that the more detailed local ice information may be missed or ignored in favour of the METNAV bulletin. It is proposed that all the METNAV area bulletins take a common approach to providing a Disclaimer such as "For detailed local ice information go to...."
 - <u>Training</u> It is recommended that the 3 Issuing Services regularly meet together for joint training / back-up plan discussion. One of possible choices may be Ice Analysts Workshops.

Annex 1 - Weather Bulletin for west (METAREA XX) and east (METAREA XXI) Northern Sea Route, 2009-10-30 1800Z

SECURITY

WEATHER BULLETIN FOR WEST NORTHERN SEA ROUTE 67N44E/80N44E/67N125E/80N125E

ISSUED BY THE ARCTIC AND ANTARCTIC RESEARCH INSTITUTE ST PETERSBURG

ON THE 30 OCTOBER 2009 AT 1800UTC

PART 1

AT 301800UTC

GALE WARNING

PECHORSKOYE SEA FROM 301800UTC TO 311200UTC WINDS N/E GUSTS 17 TO 20 MS

SOUTHWEST PART OF THE KARA SEA STRAITS OF NOVAYA ZEMLYA

FROM 301800UTC TO 310900UTC WINDS E N/E GUSTS 17 TO 20 MS $\,$

PART 2

SINOPSIS AT 301800UTC

LOW 999 HPA 62N 52E MOVING N/E HIGH 1050 HPA 65N 100E MOVING S 45 KMH INCREASE LOW 1018 HPA 82N 70E MOVING E 13 KMH FILLING LOW 1001 HPA 63N 52E MOVING N/E 11 KMH FILLING

ICE

PECHORSKOYE SEA OPEN WATER

STRAITS OF NOVAYA ZEMLYA OPEN WATER

SOUTHWEST PART OF THE KARA SEA OPEN WATER,7-10 BALLS OF GREY ICE AND NILAS

FROM 72N TO 75N FROM 70E TO 85E OPEN WATER,7-10 BALLS OF GREY ICE AND NILAS

YENISEYSKIY GULF 7-10 BALLS OF GREY ICE AND NILAS

FROM 75N TO 78N FROM 80E TO 98E OPEN WATER,7-10 BALLS OF GREY ICE AND NILAS

FROM 76N TO 78N FROM 98E TO 108E OPEN WATER.7-10 BALLS OF GREY ICE AND NILAS

LAPTEV SEA: FROM 73N TO 78N FROM 108E TO 128E OPEN WATER,7-10 BALLS OF GREY ICE AND NILAS

KHATANGSKIY GULF 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 75N FROM 113E TO 119E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 75N FROM 119E TO 128E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 74N FROM 128E TO 133E 7-10 BALLS OF GREY ICE AND NILAS

PART 3

FORECAST FROM 301800UTC TO 311800UTC

PECHORSKOYE SEA

WINDS N/E 10 TO 15 MS GUSTS 17 TO 20 MS

AFTER 311200UTC N/E 8 TO 13 MS
VIS 4 TO 6 KM LOCALLY SNOW
TEMP MINUS 4 TO MINUS 9 DEGREES
SEAS 1.5 TO 2.0 M AFTER 311200UTC 1.0 TO 1.5 M

SOUTHWEST PART OF THE KARA SEA STRAITS OF NOVAYA ZEMLYA WINDS E N/E 10 TO 15 MS GUSTS 17 TO 20 MS $\,$

WINDS E N/E 10 TO 15 MS GUSTS 17 TO 20 MS AFTER 310900UTC N/E N 10 TO 15 MS VIS 4 TO 6 KM SOMETIMES 1 TO 2 KM LOCALLY SNOW TEMP MINUS 7 TO MINUS 12 DEGREES SEAS 1.5 TO 2.5 M

FROM 72N TO 75N FROM 70E TO 85E YENISEYSKIY GULF WINDS E N/E 11 TO 16 MS YENISEYSKIY GULF S/E E 11 TO 16 MS

VIS 10 KM LOCALLY 1 TO 2 KM SNOW WEAK SNOWSTORM TEMP MINUS 20 TO MINUS 25 DEGREES AFTER 310600UTC MINUS 15 TO MINUS 20

FROM 75N TO 78N FROM 80E TO 98E WINDS S/W S 9 TO 14 MS
VIS 10 KM
TEMP MINUS 12 TO MINUS 17 DEGREES

FROM 76N TO 78N FROM 98E TO 108E WINDS W S/W 11 TO 16 MS
VIS 10 KM LOCALLY 1 TO 2 KM SNOW WEAK SNOWSTORM TEMP MINUS 8 TO MINUS 13 DEGREES

FROM 73N TO 78N FROM 108E TO 113E WINDS N/W N 7 TO 12 MS
VIS 10 KM
TEMP MINUS 13 TO MINUS 18 DEGREES

KHATANGSKIY GULF WINDS N/W N 9 TO 14 MS VIS 10 KM

TEMP MINUS 15 TO MINUS 20 DEGREES

FROM 73N TO 78N FROM 113E TO 119E WINDS N/W N 7 TO 12 MS
VIS 10 KM
TEMP MINUS 13 TO MINUS 18 DEGREES

FROM COAST TO 75N FROM 119E TO 128E WINDS N/W 7 TO 12 MS AFTER 310900UTC N/E 7 TO 12 MS $\,$

VIS 4 TO 6 KM LOCALLY SNOW TEMP MINUS 13 TO MINUS 18 DEGREES

FROM COAST TO 74N FROM 128E TO 133E WINDS N/W 7 TO 12 MS AFTER 311200UTC N/E 7 TO 12 MS

VIS 4 TO 6 KM LOCALLY SNOW TEMP MINUS 15 TO MINUS 20 DEGREES

NNNN

SECURITY
WEATHER BULLETIN FOR EAST NORTHERN SEA ROUTE
63N125E/80N125E/63N165W/80N165W
ISSUED BY THE ARCTIC AND ANTARCTIC RESEARCH
INSTITUTE ST PETERSBURG

ON THE 30 OCTOBER 2009 AT 1800UTC

PART 1 AT 301800UTC

WARNING NIL

PART 2

SINOPSIS AT 301800UTC

LOW 1023 HPA 73N 134E MOVING N WEAK FILLING LOW 1017 HPA 68N 170E MOVING N/E WEAK FILLING LOW 1000 HPA 55N 178E MOVING E 10 KMH HIGH 1030 HPA 75N 120W STATIONARY

ICE

KHATANGSKIY GULF 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 75N FROM 113E TO 119E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 75N FROM 119E TO 128E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 74N FROM 128E TO 133E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 74N FROM 133E TO 141E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 75N FROM 141E TO 150E 7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 74N FROM 150E TO 159E 1-6 BALLS OF OLD ICE,7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 73N FROM 159E TO 171E 1-6 BALLS OF OLD ICE,7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 72N FROM 171E TO 178W OPEN WATER,7-10 BALLS OF GREY ICE AND NILAS

FROM COAST TO 71N FROM 178W TO 168W OPEN WATER

BERING STRAIT

ANADYRSKIY GULF OPEN WATER

PART 3
FORECAST FROM 301800UTC TO 311800UTC

KHATANGSKIY GULF WINDS N/W N 9 TO 14 MS VIS 10 KM TEMP MINUS 15 TO MINUS 20 DEGREES

FROM 73N TO 78N FROM 113E TO 119E WINDS N/W N 7 TO 12 MS VIS 10 KM

TEMP MINUS 13 TO MINUS 18 DEGREES

FROM COAST TO 75N FROM 119E TO 128E WINDS N/W 7 TO 12 MS AFTER 310900UTC N/E 7 TO 12 MS $\,$

VIS 4 TO 6 KM LOCALLY SNOW TEMP MINUS 13 TO MINUS 18 DEGREES

FROM COAST TO 74N FROM 128E TO 133E WINDS N/W 7 TO 12 MS AFTER 311200UTC N/E 7 TO 12 MS

VIS 4 TO 6 KM LOCALLY SNOW TEMP MINUS 15 TO MINUS 20 DEGREES

FROM COAST TO 74N FROM 133E TO 141E WINDS N/W 7 TO 12 MS
VIS 4 TO 6 KM LOCALLY SNOW
TEMP MINUS 15 TO MINUS 20 DEGREES

FROM COAST TO 75N FROM 141E TO 150E

WINDS N/E 7 TO 12 MS AFTER 310600UTC N/E 9 TO 14 $_{\mbox{\scriptsize MS}}$

VIS 4 TO 6 KM LOCALLY SNOW TEMP MINUS 17 TO MINUS 22 DEGREES

FROM COAST TO 74N FROM 150E TO 159E WINDS N/E 10 TO 15 MS
VIS 4 TO 6 KM LOCALLY SNOW
TEMP MINUS 11 TO MINUS 16 DEGREES

FROM COAST TO 73N FROM 159E TO 171E WINDS E 8 TO 13 MS
VIS 10 KM LOCALLY 2 TO 4 KM SNOW
TEMP MINUS 5 TO MINUS 10 DEGREES
SEAS 1.5 TO 2.0 M

FROM COAST TO 72N FROM 171E TO 178W WINDS S/E 8 TO 13 MS VIS 10 KM TEMP MINUS 2 TO MINUS 7 DEGREES SEAS 1.5 TO 2.0 M

FROM COAST TO 71N FROM 178W TO 168W WINDS S 6 TO 11 MS
VIS 10 KM
TEMP 0 TO MINUS 5 DEGREES
SEAS 1.5 TO 2.0 M

ANADYRSKIY GULF
WINDS S/E 6 TO 11 MS GUSTS 11 TO 16 MS
VIS 10 KM
TEMP MINUS 1 TO PLUS 4 DEGREES
SEAS 2.5 TO 3.0 M

NNNN