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ITEM

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**MARINE METEOROLOGICAL SERVICES MONITORING PROGRAMME
QUESTIONNAIRE**

MSI Self Assessment METAREA XVIII

Year 2010

(Submitted by Meteorological Service of Canada)

SUMMARY

As the designated issuing service for METAREA XVIII, the Meteorological Service of Canada under the authority of Environment Canada has commenced promulgation of Marine Safety Information (MSI) in the form of meteorological forecasts and warnings to sections of METAREA XVII, as per Global Maritime Distress and Safety System (GMDSS) guidelines.

The promulgation of MSI to this region is in accordance with the June 2010 IMO/IHO declaration of an International SafetyNET service to METAREA XVII to be in "Initial Operational Capability". Promulgation of MSI to ships at sea is via broadcasts over SafetyNET and, for high Arctic waters north of SafetyNET coverage, via HF telex.

Environment Canada expects to transition to a "Full Operational Capability" service to METAREA XVIII by June 2011 in accordance with the June 2010 IMO/IHO announcement regarding the expansion of the IMO/IHO World-Wide Navigational Warning Service (WWNWS) into Arctic waters.

1. Background

METAREA XVIII boundary: From the Canadian coastline near 69°30'N 120°00' W to 90°00' N along the 120°00' W meridian, thence from 90°00' N to the Greenland coast along the 035°00' W meridian, thence southward following the Greenland coastline to 67°00' N, thence westward back to the 120°00' W meridian where it intersects the Canadian coastline near 69°30'N 120°00' W.

Sub-Area for Preparation Services: The Canadian-assigned Sub-Area for Preparation Services within METAREA XVIII include waters within the area bounded by the Canadian coastline near 69°30'N 120°W to 90°00' N along the 120°00' W meridian, thence from 90°00' N southward along the 060°00' W meridian to the boundary between Canadian and Greenlandic forecast waters, thence southward following the boundary between Canadian and Greenlandic forecast waters to 67°00' N, thence westward back to the 120°00' W meridian where it intersects the Canadian coastline near 69°30'N 120°00' W.

The Danish Meteorological Institute (DMI) has agreed to act as a Sub-Area Preparation Service for waters outside the designated Canadian-assigned Sub-Area.

SafetyNET Satellite broadcast for METAREA XVIII south of 75N is over the Atlantic Ocean Region - West (AOR-W) Inmarsat-C satellite. SafetyNET broadcast service consists of two broadcasts per day at 0300 UTC and 1500 UTC.

The **GMDSS SafetyNET service provider** for broadcast over Inmarsat-C SafetyNET to METAREA XVIII south of 75N is Stratos Global Inc. <http://www.stratosglobal.com/>.

The **GMDSS High Frequency Narrow Band Direct Printing (HF NBDP) service provider** for broadcast via HF NBDP to METAREA XVIII north of 75N is the Canadian Coast Guard (CCG) <http://www.ccg-qcc.gc.ca/>. The broadcast times are twice daily at 0330 and 1530 UTC.

GTS WMO telecommunication headers: For the Canadian-assigned Sub-Area for Preparation Services, the WMO headers are of the marine weather forecast bulletins are FQCN03 CWNT for coverage north of 75N, and FQCN04 CWNT for coverage south of 75N. The WMO headers are of the sea-ice bulletins are FICN23 CWIS for coverage north of 75N, and FICN24 CWIS for coverage south of 75N.

Subject to availability, additional MSI marine forecast bulletins prepared by the Danish Meteorological Institute (DMI) for waters within METAREA XVIII but outside the Canadian-assigned Sub-Area for Preparation Services that may be broadcast over Inmarsat-C SafetyNET are the English language marine forecast FBGL50 EKMI and the English language warning bulletins and warnings prepared by the Danish Meteorological Institute (DMI), WMO header FBDN51 EKMI and FBGL50 EKMI.

2. Comments

For the Canadian-assigned Sub-Area for Preparation Services, the MSI marine forecast bulletins will state any synoptic marine warnings in effect, marine winds, and any weather conditions resulting in forecast visibility of 1 mile or less. Ice Edge information is provided in a separate Ice Bulletin.

The METAREA XVIII service will be seasonal as operations begins, to reflect the nature of the shipping season in the Arctic and our current domestic marine and ice services programs. Initial plans include twice daily broadcasts between May and November (with flexibility in start and end due to seasonal ice cover). During the winter months once weekly bulletins issued on Mondays at 0300Z will indicate the seasonality of the messages. Current plans are for 365, 24/7 coverage by 2014.

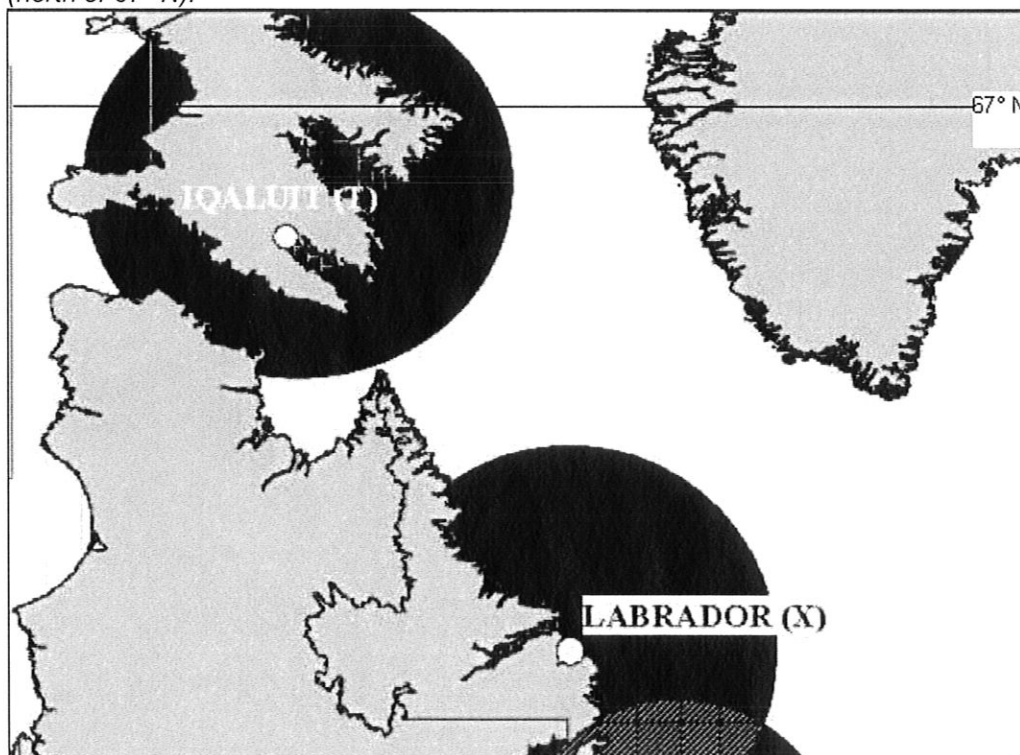
In accordance with the IMO's announced expansion of the IMO/IHO World-Wide Navigational Warning Service (WWNWS) into Arctic waters, Environment Canada initiated broadcasts of marine meteorological MSI via SafetyNET and CCG's HF telex in early July 2010.

The promulgation of marine meteorological MSI to METAREAXVIII is ongoing, however, this service is declared by the IMO to be in an Initial Operational Capability, as such, the production and/or dissemination of marine meteorological MSI may be intermittent or subject to outages without notice. Transition to Full Operational Capability is planned for June 2011.

3. NAVTEX Coverage (Note that maps are very coarse and draft based upon information that we found available):

Some NAVTEX coverage exists over southern portions of METAREA XVIII. CCG Marine Communications and Traffic Services (MCTS) Iqaluit provides NAVTEX coverage during the shipping season, and there is a NAVTEX station in Nuuk Greenland that provides NAVTEX coverage to the southeastern portions of METAREA XVIII within Davis Strait.

Map depiction from the CCG Radio Aids to Marine Navigation. Note that MCTS Iqaluit provides some NAVTEX coverage to extreme southern sections of METAREA XVIII (north of 67° N).



Iqaluit Nunavut NAVTEX Service.

NAVTEX marine forecast - WMO telecommunication header FQCN36 CWNT.

NAVTEX ice hazard bulletin - WMO telecommunications header: FICN16 CWIS.

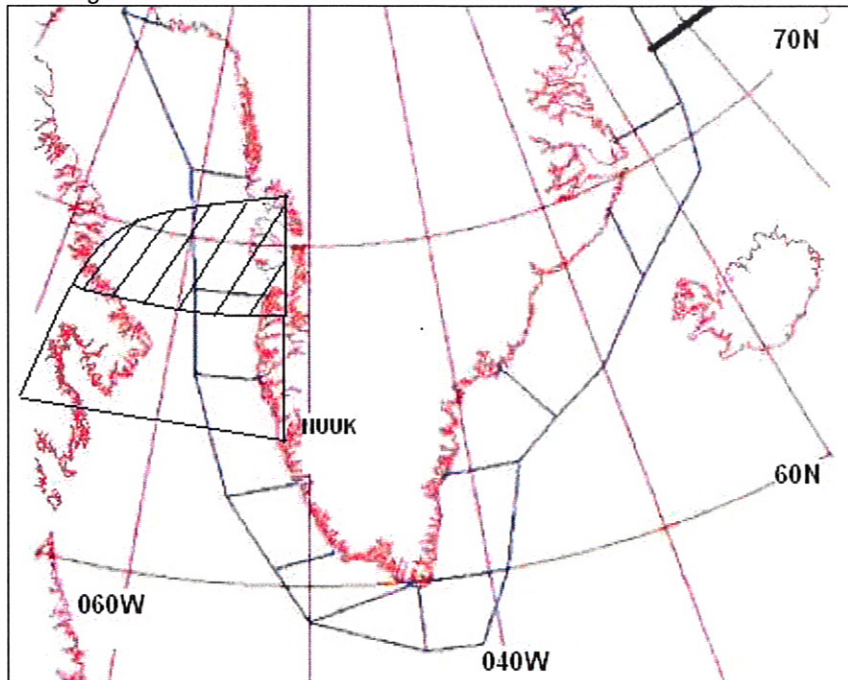
Preparation services: Environment Canada.

Broadcast service: CCG MCTS Iqaluit (call sign VFF).

NAVTEX broadcast times (UTC): 0310, 0710, 1110, 1510, 1910, 2310.

Marine forecast areas served are: West Clyde, West Davis Cumberland, Central & West Brevoort, extreme Northwest Labrador Sea, Frobisher Bay, Resolution, Ungava, Nottingham, Foxe, and Igloodik.

Map depiction from the Danish Meteorological Institute.
Cross-hatched area shows approximate area of NAVTEX coverage over extreme southeastern sections of METAREA XVIII.



Nuuk Greenland provides NAVTEX coverage to extreme southeastern portions of METAREA XVIII within the Davis Strait. Broadcast range is reported to be 400 NM.

Nuuk Greenland NAVTEX Service.

NAVTEX marine forecast WMO telecommunication header: WMO warning header is FBDN51 EKMI. The WMO header for the marine forecast NAVTEX bulletin is unknown.

Preparation service: Danish Meteorological Service

Broadcast service: Island Command Greenland (GLK)

NAVTEX broadcast times (UTC): 0340, 0740, 1140, 1540, 1940, 2340

Marine forecast areas served are: Attu, Ulfqaq, Qimusseriarsuaq, and Kiatak..

4. Operational Issues:

In accordance with the IMO's Initial Operational Capability declaration. Environment Canada is pleased to report that the production, dissemination and monitoring systems for the promulgation of marine meteorological MSI to portions of METAREA XVIII have been developed and implemented.

Environment Canada expects to be fully prepared for the transition to "Full Operational Capability" of marine forecast services to METAREA XVIII in accordance with the IMO's stated transition date of June 2011.

5.a Quality Management Survey

[Please complete the following table with Yes / No or provide a comment]

METAREA	ISO 9001 - 2008	Warnings for 8 Beaufort and above	Promulgate at least two scheduled broadcasts per day	Include wind and sea state in scheduled	Visibility in descriptive terms	24/7 watch	Monitor Broadcast in almost real time
XVIII	N/A	Yes	Yes	Wind yes,	Yes	Yes,	Yes, upon

				Sea State no.		during shipping season.	implementation of monitoring system.
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Note: Ice information also falls within the QMS system.

5.b Quality Management Training Survey

i) Has your organisation implemented a quality management system to achieve certification of compliance with the ISO 9001:2008 (or the old ISO 9001:2000) Quality Management Standard?

☒ YES

☐ NO

ii) If the answer to the above was YES, was one or both of the following organisational activities certified as compliant with the ISO 9001:2008 (2000) Quality Management Standard?

Oceanographic Services ☒ YES ☐ NO

Marine Weather Services ☒ YES ☐ NO

iii) Have you received any formal training on the ISO 9001:2008 (2000) Quality Management Standard?

☒ YES ☐ NO

iv) If the answer to the above was YES, please provide a brief description of the training received.

Training on the theory and principles of ISO as well as operational application and use of the Quality Management System to the MSC Meteorological Program.

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v) Have you received any training as auditor of quality management systems?

☐ YES ☒ NO

and if YES to what level?

☐ Internal Auditor **or** ☐ Lead Auditor (Tick both if appropriate)

vi) If you have received auditor training, how much practical experience do you have as an auditor in terms of the number of audits conducted?

☐ Number of audits conducted

vii) On the scale provided below, please circle what you believe to be your level of knowledge and understanding of quality management and the ISO 9001:2008 (2000) Quality Management Standard.

Knowledge & Understanding

Very Good

Good X

Poor

Nil

6. Capacity Building**7. Other Activities**

In collaboration with the World Meteorological Organization and Météo France, Environment Canada is in the process of developing the informational web page for METAREA XVIII on the weather GMDSS web site (see Section 8 of this Self-Assessment update). Environment Canada anticipates that the development of this web page and its associated links will be completed before the June 2011 transition to "Full Operational Capability" of marine forecast services to METAREA XVIII.

8. METAREA Website

<http://weather.gmdss.org/XVIII.html>

9. METAREA GMDSS focal point contact:

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10. Actions or suggestions proposed:

Nil

11. Synopsis

Environment Canada has developed and implemented the production, dissemination, and monitoring systems necessary for the promulgation of Maritime Safety Information (MSI) in the form of meteorological forecasts and warnings to portions of METAREA XVIII as per commitments under International Maritime Organization (IMO) treaties, subject to the guidelines as stated in the Global Maritime Distress & Safety System (GMDSS) Manual.

SafetyNET and HF telex broadcasts of marine meteorological MSI to portions of METAREA XVIII commenced July 2010, and remain ongoing in accordance with the IMO Initial Operational Capability declaration.

Environment Canada expects to transition to Full Operational Capability by June 2011 in accordance with the announcement by the IMO/IHO/WMO regarding the expansion of the IMO/IHO World-Wide Navigational Warning Service (WWNWS) into Arctic waters.