

WORLD METEOROLOGICAL ORGANIZATION

JOINT WMO-IOC TECHNICAL COMMISSION FOR
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EXPERT TEAM ON MARITIME SAFETY SERVICES

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**MARINE METEOROLOGICAL SERVICES MONITORING PROGRAMME
QUESTIONNAIRE**

MSI Self Assessment METAREA XVII

Year 2010

(Submitted by Meteorological Service of Canada)

SUMMARY

As the designated issuing service for METAREA XVII, 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 sections of 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 XVII 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 XVII boundary: From 67°00' N 168°58' W to 90°00' N along the 168°58' W meridian, thence southward along the 120°00' W meridian to the Canadian coastline near 69°30' N 120°00' W, thence westward following the coastline, thence westward from the Alaskan coast along 67°00' N back to 67°00' N 168°58' W.

Sub-Area for Preparation Services: The Canadian-assigned Sub-Area for Preparation Services within METAREA XVII include waters within the "wedge" bounded between latitudes 67°00' N to 90°00' N and longitudes 120°00' W to 141°00' W longitudes.

The U.S. National Weather Service (NWS) has expressed interest as a possible Sub-Area Preparation Service for waters outside the designated Canadian sector, however, the NWS has not formally committed to undertake such.

SafetyNET Satellite broadcast for METAREA XVII south of 75N is over the Pacific Ocean Region (POR) 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 XVII 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 XVII north of 75N is the Canadian Coast Guard (CCG) <http://www.ccg-gcc.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 of the marine weather forecast bulletins are FQCN01 CWNT for coverage north of 75N, and FQCN02 CWNT for coverage south of 75N. The WMO headers of the sea-ice bulletins are FICN21 CWIS for coverage north of 75N, and FICN22 CWIS for coverage south of 75N.

For offshore waters north of Alaska, Environment Canada also broadcasts the FZAK69 PAFG experimental offshore waters forecast issued by the National Weather Service.

2. Comments

For the Canadian-assigned Sub-Area for Preparation Services, the marine forecast bulletin content comprising the Marine Safety Information (MSI) includes a marine synopsis, any synoptic marine warnings in effect, the 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 reflects 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.

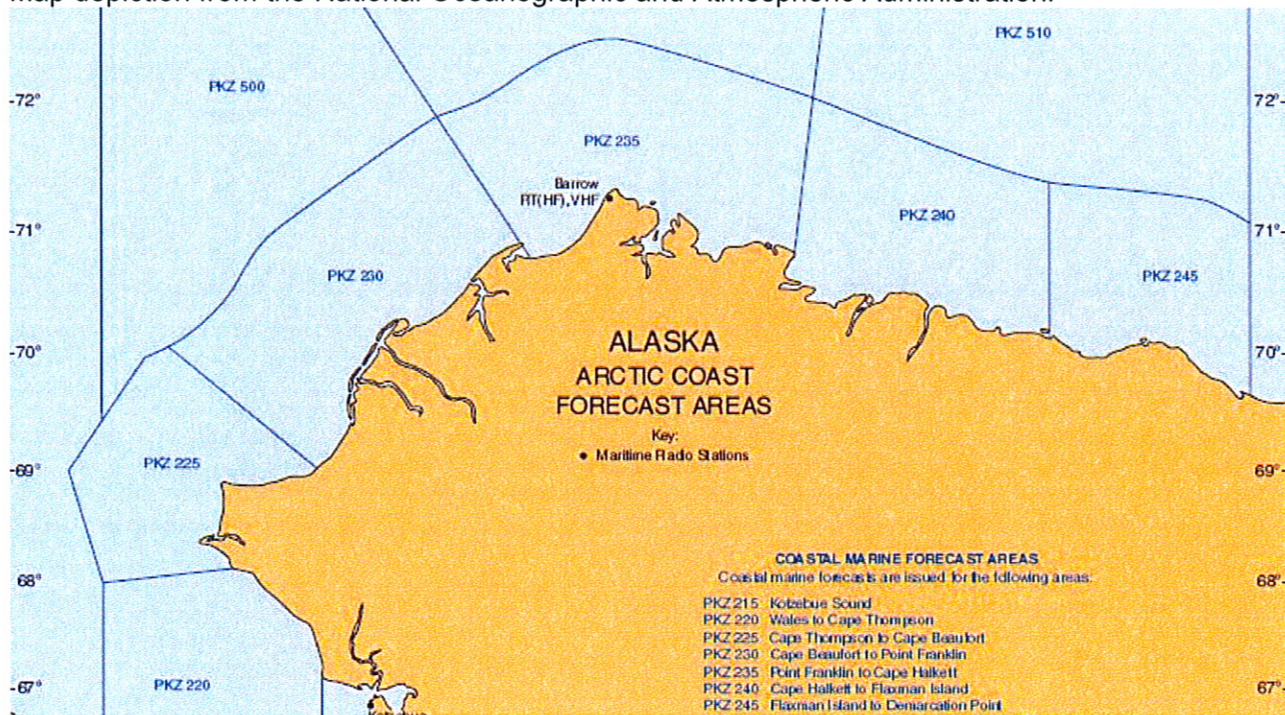
In accordance with the IMO's announced expansion of the IMO/IHO World-Wide Navigational Warning Service (WWNWS) into Arctic waters, Environment Canada initiated broadcasts of marine meteorological MSI via SafetyNET and CCG's HF telex in early July 2010.

The promulgation of marine meteorological MSI to METAREAXVII 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):

Map depiction from the National Oceanographic and Atmospheric Administration.



NAVTEX marine forecast WMO telecommunication header: FZAK61 PAFG

NAVTEX sea ice advisory WMO telecommunication header: FZAK80 PAFC

Preparation service: NWS Fairbanks Alaska.

Broadcast service: U.S. Coast Guard Kodiak Alaska.

NAVTEX broadcast times (UTC): 0040, 0440, 0840, 1240, 1640, 2040

Coastal marine forecast areas served are:

PKZ 225 - Cape Thompson to Cape Beaufort

PKZ 230 - Cape Beaufort to Point Franklin

PKZ 235 - Point Franklin to Cape Halkett

PKZ 240 - Cape Halkett to Flaxman Island

PKZ 245 - Flaxman Island to Demarcation Point

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 XVII have been developed and was implemented on July 6, 2010.

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

5.a Quality Management Survey

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
XVII	N/A	Yes	Yes	Wind yes, Sea State no.	Yes	Yes, during shipping season.	Yes.

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 is ongoing.

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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 XVII 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 XVII.

8. METAREA Website

<http://weather.gmdss.org/XVII.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 XVII 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 XVII 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.