Meeting 10
Agenda Item 3.2.1

CPRNW

21 July 2008

MSI Self Assessment – NAVAREA VII

Submitted by: South Africa

SUMMARY

Executive Summary: This document provides MSI information related to NAVAREA VII and is to be taken into consideration at the CPRNW10 Meeting.

Action to be taken: Paragraph 10.

Related documents: None

1. **Background:** The Co-coordinator of NAVAREA VII in conjunction with the South African Meteorological Service currently transmits all the necessary NAVAREA VII and METAREA VII (SafetyNET) Weather Information and Shipping Safety messages via the IOR and AOR-E satellites. These messages are backed up by HF transmissions from Cape Town Radio as the GMDSS service provider.

Geographical Limits of NAVAREA VII:

Southern Africa (AOR-E)
6° 00’S, 020° 00’W (Angola international border with The Democratic Republic of the Congo (DRC), West Coast) to the coast of Antarctica.

and

Southern Africa (IOR)
10° 30’S, 055° 00’E (Mozambique international border with Tanzania, East Coast) to 30° 00’S, 055° 00’E to
30° 00’S, 080° 00’E to
The coast of Antarctica.

The GMDSS Transmission Schedules for SafetyNET (INMARSAT C) NAVAREA VII and METAREA VII Weather Bulletins are twice daily with broadcast times at 09:40 and 19:40 UTC for both the AOR-E and IOR regions.

The Coast Earth Station (CES) Satellite broadcast service provider is:
Station 12 BURUM, Netherlands and Goonhilly, UK.

2. **Comments:** NAVTEX coverage out to 200 nm from the Namibian and South African Coasts is passed from the Coast Radio Stations at Walvis Bay - Namibia (B), Cape Town (C), Port Elizabeth (I) and Durban (O). These Coastal Navigation Warnings and NAVAREA VII messages are also transmitted by voice radio twice a day for the benefit of fishing vessels and leisure craft. 702 Coastal Navigation Warnings were originated in 2007.
Local warnings for port information is covered by transmissions from the Port Control Centres.

Most major ports of South Africa have been equipped with VTS systems. The Port Control Radio will transmit such information as is necessary for safe navigation within the VTS Routes and port approaches.

The Namibian Port Authorities (NAMPORT) are in regular contact with the NAVAREA VII Coordinator (HYDROSAN) and both the SafetyNET messages as well as Coastal Navigation Warnings (NAVTEX) to the Namibian coast is passed for promulgation by the South African Hydrographic Office. The Directorate Maritime Affairs of the Republic of Namibia, through promulgation of Marine Circular 009/2007 dated 27 March 2007, has informed all stakeholders of upgrading communication (Telecom Namibia) equipment to conform to GMDSS standards. Their main concern is the reliability of the 518 kHz NAVTEX transmitter. The NAVTEX transmissions on 518 kHz is still operational and is holding its own at the moment and monitored on a daily basis. Namibia will continue with this until an alternative is resolved. Also planned is the introduction of NAVTEX transmissions on 4209.5 kHz at a later stage. Mini-C equipment has already been installed at their new Radio Station premises and once moved in, around August/September 2008, depending on the arrival of the Digicons, will be transmitting navigational information via Inmarsat C. Arrangements have been made for the installation of all the software and training of Radio Officers, whereafter testing for a minimum of two weeks will take place to finalize the implementation of GMDSS and the change over to the new Radio Station. (see GMDSS Table below).

The Mozambique Institute of Hydrography and Navigation (INAHINA) is also in direct communication with HYDROSAN concerning matters of maritime safety in Mozambique waters. Although INAHINA promulgate their own local Notices to Mariners in the Portuguese language, any messages of maritime safety is passed to South Africa and first transmitted as SafetyNET messages and then incorporated in a special section of the South African monthly Notices to Mariners.

Charting

Authorities worldwide are notified monthly by airmailing express copies of the South African Notices to Mariners to their Hydrographic Offices. In addition to postal methods, the South African Hydrographic Office also publishes Notices to Mariners (archived to the year 2000), SafetyNET messages and Coastal Navigational Warnings on its website (http://www.sanho.co.za).

There has been a degree of improvement with the Hydrographic Offices or authorities responsible for navigation safety in ANGOLA and MADAGASCAR. Transiting vessels and Drill Ships however, when in NAVAREA VII tend to pass matters pertaining to maritime safety via the local South African Coast Radio Stations or E-mailed directly to SANHO, which is then broadcasted via SafetyNET.

Copies of NAVAREA Messages are received on a regular basis from the coordinators of NAVAREAS II, VI, VIII, X, XI, and XIII. Where necessary, maritime safety matters, relevant to an adjacent area is retransmitted for the benefit of transiting traffic.

There are four transmitters, an unencrypted public Differential Global Positioning System (DGPS) facility, situated at strategically positioned sites where poor visibility, presence of Vessel Traffic Services (VTS) and high concentration of traffic can be expected. They are in operation at the following four land reference stations along the South African coastline – Cape Columbine, Cape Agulhas, Cape Recife and Cooper Lighthouses. Any changes in transmission detail will be promulgated by Coastal Navigation Warning and/or monthly Notices to Mariners.
3. **NAVTEX Coverage:** See diagram attached at end of document.

4. **Operational Issues:** From RHC (SAIHC) Meetings and past technical visits it became clear that some member states and associate members are far from being GMDSS compliant (see Table below) and that MSI awareness needs to improve. MSI is disseminated mostly via local warnings on VHF. The lack of NAVTEX Stations north of South African borders, excluding Namibia, have been identified. The emphasis is on radio communication network equipment installation and operator training being the two most important components that needs to be addressed. The landlocked states in particular are encouraged to work towards becoming more GMDSS compliant for possible inclusion into the existing NAVAREA as a Sub-area division.

The current state of MSI in the SADC Region is as listed in the GMDSS Table below:

- O = Operational
- T = Under trial
- P = Planned or to be decided
- NI = No Information

### STATUS OF SHORE-BASED FACILITIES FOR THE GMDSS

<table>
<thead>
<tr>
<th>Country</th>
<th>A1 Area</th>
<th>A2 Area</th>
<th>A3/A4 Area</th>
<th>NAVTEX</th>
<th>SafetyNET</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Kenya</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td>NAVAREA VIII</td>
<td>a</td>
</tr>
<tr>
<td>Madagascar</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td>a</td>
</tr>
<tr>
<td>Malawi</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
<td></td>
<td></td>
<td>c</td>
</tr>
<tr>
<td>New Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauritius</td>
<td>O</td>
<td>O</td>
<td>P</td>
<td>O</td>
<td>NAVAREA VIII</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>P</td>
<td>O</td>
<td>P</td>
<td></td>
<td></td>
<td>a, b</td>
</tr>
<tr>
<td>Namibia</td>
<td>P &amp; T</td>
<td>P &amp; T</td>
<td>P &amp; T</td>
<td>O</td>
<td>P</td>
<td>b</td>
</tr>
<tr>
<td>Seychelles</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td>NAVAREA VIII</td>
<td>a</td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
<td>O</td>
<td>O</td>
<td></td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td>NAVAREA VIII</td>
<td>a</td>
</tr>
<tr>
<td>Uganda</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
<td></td>
<td></td>
<td>c</td>
</tr>
<tr>
<td>New Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

a. Proposals for NAVTEX or SafetyNET should be clarified during the establishment of the East African MRCC in Mombasa and MRSCs in Dar es Salaam, Maputo and Antananarivo.
b. Currently NAVTEX coverage for Namibia is provided by arrangement with South Africa. SafetyNET coverage is available for Angola, Namibia, Mozambique and Madagascar through the NAVAREA VII Coordinator.

c. Under the auspices of the RHC (SAIHC) landlocked states surrounding the inland Great Rift Valley Lakes are encouraged to implement MSI and become more GMDSS compliant.

5. **Capacity Building:** SAIHC have identified Capacity Building initiatives with MSI as a very important first phase component. The IHOCBC has established a capacity building fund (IHOCBF) to facilitate capacity building through seed-corn activities such as technical workshops and visits, courses and training within the region. Funding is an essential requirement in establishing a radio communication network in support of MSI. A SAIHC Capacity Building management plan has been formulated in which a 2nd CPRNW training course as a capacity building initiative was conducted from 13-15 November 2007 in Mozambique, Maputo. This has stimulated a capability increase through the empowerment of national coordinators. Namibia has shown further interest in a similar course to be presented to their NAMPORT staff. They have been advised to approach this as a capacity building initiative through the Regional Hydrographic Commission (RHC). Maybe consideration to be given to have the next MSI course in Namibia.

6. **Other Activities:** At the 6th SAIHC Meeting which was held in Malawi from 27-28 August 2007, MSI and Capacity Building remain listed as standing agenda items. Member States and associated members were once again encouraged to carry out MSI Self Assessments to determine their need for maritime safety. MSI is seen as a first phase contribution towards capacity building development, but it has been identified through technical visits that much more needs to be done within the region to fully achieve this.

7. **NAVAREA Website:** [http://www.sanho.co.za](http://www.sanho.co.za)

---

SafetyNET and NAVTEX messages are published on both the website and internal SA Navy website (Intranet) and updated daily only during office hours from Mon to Fri (07:30 – 16:00 SAST). Outside normal office hours, MSI is monitored by Cape Naval Radio who provides a 24H watchkeeping service and is in constant telephone contact with the MSI Officer.

8. **NAVAREA VII Contact Information:** **REPUBLIC OF SOUTH AFRICA**

The Hydrographer, SA Navy
Hydrographic Office (HYDROSAN)
Private Bag X1
TOKAI
7966
CAPE TOWN
Republic of South Africa
Tel: +27 21 787 2408
Fax: +27 21787 2228
E-mail: hydrosan@iafrica.com

9. **Recommendations:** The Commission takes note that a follow-up MSI course in the region is recommended. This capacity building initiative will be tabled for discussion at the next SAIHC7 Meeting in 2009.

10. **Actions required:**

a. That IHO CPRNW take note of the lack of NAVTEX stations, excluding Namibia, north of the South African international borders.
b. At CPRNW 9 Meeting it was stated by the Chairman that the SOLAS Convention only applied to vessels greater than 500 gross tons and on an international voyage which may apply with more than one country sharing a large inland body of water. This statement is indeed correct with states like Kenya, Tanzania and Uganda sharing the waters of Lake Victoria and alike Malawi, Mozambique and Tanzania sharing the waters of Lake Malawi (Nyasa). No vessel operating on these waters exceed 500 gross tons but we cannot loose sight of the fact that several maritime ferry disasters happened in the recent past due to the lack of adequate MSI measures. Some may well have been weather related. These inland waterways offer 60% of these states main mode of transport.

In support, the IMO representative stated that he would inquire as to an official ruling on this matter from the legal office at IMO and that a decision on this matter should be deferred until a response from them were received. Did this indeed happen?

c. The Master Plan be updated as indicated in the GMDSS Table.

11. **Synopsis for meeting minutes:** The Commission to note the following:

a. The lack of NAVTEX Stations north of the South African international borders.

b. The lack of adequate MSI implementation by states in the Great Rift Valley region.

c. MSI is a standing agenda item at SAIHC meetings where member states are kept informed of the importance of maritime safety and encouraged to implement MSI measures.