

## 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 noted at the WWNWS4 Meeting.

Action to be taken: The Sub-Committee's attention is drawn to paragraph 12.

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 (ZSC) 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.

Geographical Limits of new Sub-Area VIIA has been identified, but is as yet not operational. It includes the Great Rift Valley Lakes ie Lake Victoria, Lake Tanganyika and Lake Malawi (Nyasa).

Lat: 001° 00'N to 015° 00'S

Long: 028° 00'E to 038° 00'E

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 Land Earth Station (LES) Satellite broadcast service provider is:

Station 12 BURUM, Netherlands is the primary provider with the Operator being Stratos Mobile Networks. South Africa no longer uses Goonhilly, UK as a secondary provider.

Operational Point of contact for the National Co-ordinator within NAVAREA VII is:

Country	Telephone	Facsimile	E-mail
South Africa	+27 21 7872444 +27 21 7872445	+27 21 7872233	hydrosan@iafrica.com

2. **Comments:** Status of the GMDSS Master Plan: No change. All entries are up-to-date for NAVAREA VII.

NAVTEX coverage out to 200nm from the Namibian and South African Coasts is passed from the Coast Radio Stations at Cape Town (**C**), Port Elizabeth (**I**) and Durban (**O**). The Coast Radio Station at Walvis Bay, Namibia (**B**) NAVTEX is currently not operational. These Coastal Navigation Warning messages are also transmitted by voice twice a day for the benefit of fishing vessels and leisure craft. **597 Coastal Navigation Warnings were originated in 2011.**

Local warnings for port information are covered by transmissions from the Port Control Centres. Most hub ports of South Africa have been equipped with VTS systems. Port Control Radio 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 Co-ordinator (HYDROSAN) and both the SafetyNET messages and Coastal Navigation Warnings (NAVTEX) to the Namibian coast are provided for promulgation by the South African Hydrographic Office.

The Directorate Maritime Affairs (DMA) of the Republic of Namibia, through promulgation of Marine Circular 009/2007 dated 27 March 2007, informed all stakeholders of upgrading communication (Telecom Namibia) equipment to conform to GMDSS standards. The NAVTEX transmitter on 518 kHz performed well with a 100 percent transmission record, but the NAVTEX antennae broke in February 2011 and it is not clear when this will be replaced. DMA is aware of the issue and is addressing it. There are thus currently no NAVTEX transmissions and local warnings are transmitted by voice. Namibia is still planning to introduce NAVTEX transmissions on 4209.5 kHz. The old GMDSS software proved to be out of date and not very user friendly and it has been replaced with new and more modern GMDSS software. Mini-C equipment and the Digicons have been installed. Transmissions of navigational information via Inmarsat C may still happen, but not done at present. The move into the new GMDSS station building has been completed and is in operation.

In the interim until the NAVTEX service has been restored to normal, NAVAREA VII is broadcasting all Namibian warnings on NAVTEX and voice.

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 monthly Notices to Mariners, any messages of maritime safety are passed to South Africa and first transmitted as SafetyNET messages.

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 significant improvement with the reception of MSI from **Angola**. Transiting vessels 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 Co-ordinators of NAVAREAS II, VI, VIII and XI. Where necessary, maritime safety matters, relevant to an adjacent area is retransmitted for the benefit of transiting traffic.

### SafetyNET Messages Promulgated

	2009	2010	2011
NAVAREA VII	245	262	250

3. **NAVTEX Coverage:** See diagram attached at end of document.

#### Contact details for NAVTEX Stations (Operational status is confirmed)

Station	Transmitter Identification Character (T.I.C) – B <sub>1</sub> Character	Contact No
Walvis Bay Maritime Radio	<b>B</b>	+264 64 203581 (24H) Mobile: +264 811242697
Cape Town (CT)	<b>C</b>	+27 21 551 0700
Port Elizabeth	<b>I</b>	PE and Durban is remotely controlled from CT Radio.
Durban	<b>O</b>	

4. **Operational Issues:** From RHC (SAIHC) Meetings and past technical visits it is clear that some member states and associate members are far from being GMDSS compliant and that MSI awareness needs to improve. MSI is disseminated mostly via local warnings on VHF.

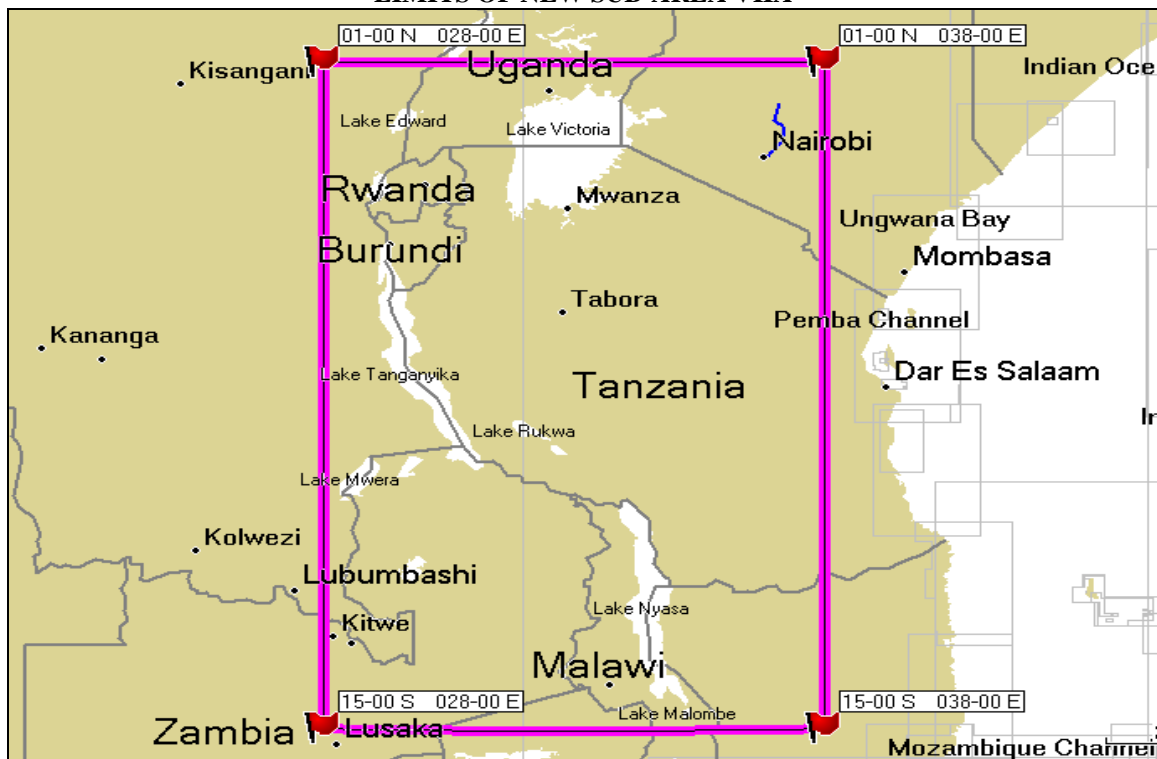
**Lake Victoria** like the Caspian Sea is not at present considered as coming under the SOLAS Convention. The Convention applies only to vessels greater than 500 gross tons and on an international voyage, which may apply with more than one State sharing a large inland body of water. States like Kenya, Tanzania and Uganda share the waters of Lake Victoria. Malawi, Mozambique and Tanzania share the waters of Lake Malawi (Nyasa) and alike Burundi, Tanzania, Democratic Republic of the Congo (DRC) and Zambia, which share the waters of Lake Tanganyika. The establishment of a co-ordinated MSI service would require the agreement of the coastal States concerned. It is fact that vessels greater that 500 gross tons operate on these waters. Several maritime ferry disasters has occurred in the recent past due and the lack of adequate MSI measures may have played a role. These inland waterways are important as it offers 60% of these States main mode of transport.

Some intervention has been made as since July 2009 the 200,000 fishermen who earn their living on Lake Victoria can use cell phones to call for assistance, free-of-charge, should they run into trouble on the 69,000 km<sup>2</sup> body of water, the world's second largest inland lake. This initiative introduced technology for a maritime communication system for Lake Victoria, as well as providing increased safety and security.

The lack of NAVTEX Stations north of South African borders, including now Namibia, has been identified. The radio communication network equipment installation and operator training are the two most important components that need 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 new Sub-Area VIIA division. The geographical area has been identified. *See diagram below:*

#### LIMITS OF NEW SUB-AREA VIIA



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

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

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

Country	A1 Area	A2 Area	A3/A4 Area	NAVTEX	SafetyNET	Notes
Angola	P	P	P			b
Kenya	P	P			NAVAREA VIII	a
Madagascar	P	P				a
Malawi	NI	NI	NI			c
Mauritius	O	O	P	O	NAVAREA VIII	
Mozambique	P	O	P			a, b
Namibia	P & T	P & T	P & T		P	b
Seychelles	P	P	P		NAVAREA VIII	a
South Africa			O	O	O	
Tanzania	P	P	P		NAVAREA VIII	a
Uganda	NI	NI	NI			c

**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 Co-ordinator.
- 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. **Quality Management Survey**

NAVARE A	ISO 9001 - 2000	Promulgated "In-Force" Bulletins	Promulgated "No-Warning" Messages	Monitor Broadcast in almost real time	24/7 contact information provided	Promulgated two scheduled broadcasts	IMO Master Plan updated
Yes	No	Yes	Yes	Yes	Yes	Yes	Yes Also see para 4 above.

6. **Contingency Planning:** To ensure the continuing operational capability as a Radio Navigational Warning (RNW) Co-ordinators, South Africa, France (NAVAREA II) and Australia (NAVAREA X) are in the process of establishing a contingency planning arrangement.

NAVAREA II has offered that in case of failure of LES, Station 12 Burum as primary provider for NAVAREA VII, to broadcast its RNW for the AOR-E, LES Aussaguel. France agrees to develop a procedure and then to test it but will only be able to propose a draft procedure after WWNWS4.

NAVAREA X has responded that they are prepared to consider a contingency plan with South Africa. We have an agreement in principle and there are still system modifications to be made and a procedure to be developed and tested but this would not be in place before the WWNWS4 meeting. If so, it would mean that Australia would provide backup for South Africa in the IOR.

It is gratifying to know that France and Australia is prepared to form an alliance with SA. South Africa has therefore no objection and is willing to respond in the reciprocal to both NAVAREAS and agrees that a procedure needs to be developed and tested.

South Africa's primary Coast Radio Station, Cape Town Radio (ZSC), reports that essentially and in theory, South Africa could backup UK, France, Greece, USA, Brazil and Norway and vice versa as far as the AOR-E MSI SafetyNET transmissions are concerned. Similarly, South Africa can backup France, India, Australia, Pakistan, New Zealand and China and vice versa for the IOR MSI transmissions.

7. **Capacity Building:** SAIHC have identified Capacity Building initiatives with MSI as a very important first phase component. The IHO Capacity Building Sub-Committee (CBSC) has established a capacity building fund (CBF) to facilitate capacity building

through seed-corn activities such as technical workshops and visits, courses and training within the region. MSI training courses were conducted over the past years in Mozambique, Maputo in 2007 and Namibia, Walvis Bay in 2010. Member States are encouraged to submit capacity building initiatives through the RHC (SAIHC).

A Phase 1 Skills and Chart Awareness Course have been approved for SAIHC for 2012 at the 9<sup>th</sup> CBSC Meeting and have been incorporated in the 2012 Capacity Building work programme.

8. **Other Activities:** The 9<sup>th</sup> SAIHC Meeting is scheduled for 18-19 September 2012 in Mauritius. Capacity Building remains a standing agenda item. Member States and associated members will once again be 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 need to be done within the region to fully achieve this.

9. **NAVAREA Website:** <http://www.sanho.co.za>

SafetyNET and NAVTEX messages are published on both the website and internal SA Navy website (Intranet) and updated daily during office hours from Mon to Fri (07:30 – 16:00 SAST). The date and time is displayed at the very top of the messages in force. Outside normal office hours, MSI is monitored by Cape Naval Radio who provides a 24H watch keeping service and is in constant telephone contact with the MSI Officer. Cape Town Radio is the primary 24H service operator responsible for the dissemination of maritime safety messages.

10. **NAVAREA VII Contact Information:** *No change.*

11. **Recommendations:** Nil

12. **Actions required:**

- a. The Sub-Committee is invited to note the report and take cognizance of the lack of NAVTEX stations, including now Namibia, north of the South African international borders.

13. **Synopsis for meeting minutes:**

- a. The lack of NAVTEX Stations north of the South African international borders. Namibia, Walvis Bay Maritime Radio (B<sub>1</sub> Character – B) remains non-operational.
- b. Slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region and that a Sub-Area VIIA has been identified.
- c. The RHC (SAIHC) instills the awareness of maritime safety and encourages the implementation of MSI measures by member states.
- d. A contingency plan arrangement between NAVAREA VII, NAVAREA II as backup for the AOR-E and NAVAREA X as backup for the IOR have been agreed in principle but a procedure still needs to be developed and tested.

### LIMITS OF NAVAREAS AND NAVTEX STATIONS

