

MSI Self Assessment – NAVAREA VII

Submitted by: South Africa

SUMMARY

Executive Summary: This document provides MSI information related to NAVAREA VII.

Action to be taken: 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 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 (primary) and Goonhilly, UK (secondary).

Operational Point of contact for the National Coordinators within NAVAREA VII.

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

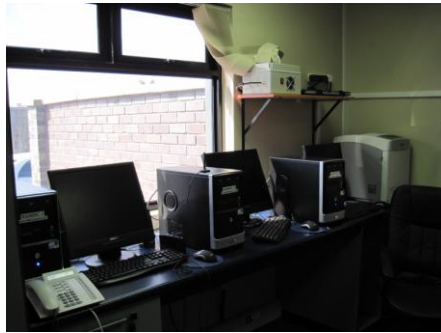
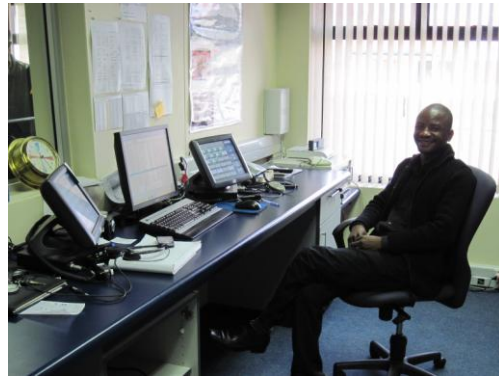
2. **Comments:** Status of the GMDSS Master Plan: The call for an update from IHO dated 15 April 2011, reflects all entries are up-to-date for NAVAREA VII.

NAVTEX coverage out to 200nm from the Namibian and South African Coasts is passed from the Coast Radio Stations at Walvis Bay, not presently as their NAVTEX antennae is down since February 2011, - 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. **529 Coastal Navigation Warnings were originated in 2010.**

Local warnings for port information is covered by transmissions from the Port Control Centres. Most hub ports of South Africa have been equipped with VTS systems. 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 and Coastal Navigation Warnings (NAVTEX) to the Namibian coast is passed 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 has been completed and is in operation. (*See images below*). A new switch had to be purchased for the VHF System and additional VHF Stations are still outstanding, but should be available by 31st August 2011. (*also see GMDSS Table*).



In the interim until the NAVTEX service has been restored to normal, NAVAREA VII will broadcast messages via SafetyNET.

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 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.

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 coordinators 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

	2008	2009	2010
NAVAREA VII	202	245	262

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) – B1 Character	Contact No
Walvis Bay Maritime Radio	B	+264 64 203581 (24H) Mobile: +264 811242697
Cape Town (CT)	C	+27 21 551 0700
Port Elizabeth	I	PE and Durban is remotely controlled from CT Radio.
Durban	O	

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 and Zambia, which share the waters of Lake Tanganyika. The establishment of a coordinated 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 to the lack of adequate MSI measures although some might well have been weather related incidents. These inland waterways are important as it offers 60% of these states main mode of transport.

Some intervention has been made, as reported in the following article as Source:

The Whitaker Group, Registered Foreign Agent for Uganda dated Wed, 16 Sep 2009
<http://www.screenafrica.com/news/industry/264992.htm>

Lake Victoria fishermen get cell phones for ‘help’

”In September 2009 it was reported that up to 5,000 people die each year on Lake Victoria as a result of piracy, drowning and other accidents. Now the 200,000 fishermen who earn their living on Lake Victoria can use cell phones to call for help, free-of-charge, should they run into trouble on the 69,000 km² body of water, the world’s second largest inland lake.

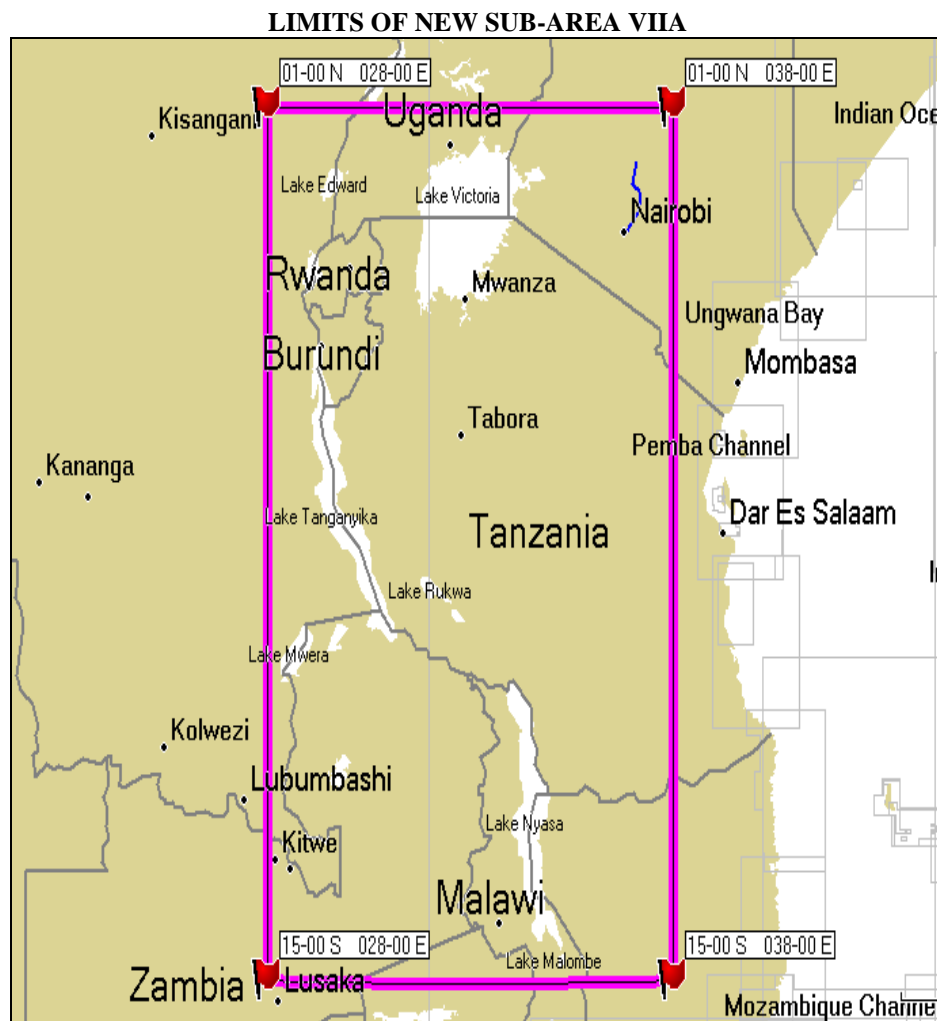
The new service, launched in July 2009, is the result of a collaboration between mobile operator Zain, global communications technology provider Ericsson and the GSMA Development Fund, the charitable arm of the trade association serving the mobile phone industry. Zain and Ericsson upgraded the existing infrastructure and built an additional 21 radio sites - three of them solar-powered - to provide cell phone coverage up to 20 kilometers into the lake. This ensures coverage to over 90% of fishing zones.

When fishermen in distress call the free emergency number, Ericsson’s Mobile Position System, which determines the geographical location of mobile subscribers, will enable emergency services to locate the mobile signal of the caller and relay the information to a Rescue Coordination Center run by Uganda’s National Lake Rescue Initiative (NLRI), which

operates rescue boats. The service also has the capacity to alert the crews of nearby boats to the location of the boat in distress.

The initiative was the result of a 2005 feasibility study conducted by the East African Community (EAC) to evaluate and recommend technologies for a maritime communications 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, 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 new Sub-Area VIIA division. The geographical area has been identified. See diagram below:



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	A1Area	A2Area	A3/A4 Area	NAVTEX	SafetyNET	Notes
Angola	P	P	P			b
Kenya	P	P			NAVAREA VIII	a
Madagascar	P	P				a
Malawi New Entry	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 New Entry	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 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. Quality Management Survey

NAVAREA	ISO 9001 - 2000	Promulgate "In-Force" Bulletins	Promulgate "No-Warning" Messages	Monitor Broadcast in almost real time	24/7 contact information provided	Promulgate two scheduled broadcasts	IMO Master Plan updated
Yes	No	Yes	No, but would if necessary.	Yes	Yes	Yes	Yes Also see para 4 above.

6. **Contingency Planning:** To ensure the continuing operational capability as a Radio Navigational Warning (RNW) Coordinator, France has offered the following arrangement:

NAVAREA II (France – Capt(Ret) Francois Lacroze) has offered that in case of failure of South Africa’s LES, Station 12 Burum as primary and Goonhilly as secondary, to broadcast its RNW at SA normal time schedules 09:40 and 19:40 UTC for AOR-E. An E-mail containing the content of the message is to be send to France who then takes charge of the broadcasts. In turn, South Africa would do the same with its LES in case of failure of LES

Aussaguel and broadcast RNW at France's normal time slots 04:30 and 16:30 UTC. This also applies to messages of any urgency. France expects to establish, as soon as possible, a secondary LES, Eik, as back-up for Aussaguel. However, the probability for a simultaneous failure of both primary and secondary LESs, is most unlikely.

It must be noted that this arrangement has not yet been tested and does not cover South Africa's situation in the IOR.

South Africa further intends to investigate an internal mutual support arrangement with the Centre for Seawatch and Response (MRCC, Cape Town) who have responsibilities in Search and Rescue (SAR) in approximately the same sea area as the NAVAREA VII Coordinator.

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 in Mozambique, Maputo in November 2007 and Namibia, Walvis Bay in April 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 9th CBSC Meeting and has been incorporated in the 2012 Capacity Building work programme.

8. **Other Activities:** The 8th SAIHC Meeting is scheduled for 6-7 September 2011 in Walvis Bay, Namibia. 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 needs 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 only 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 watchkeeping service and is in constant telephone contact with the MSI Officer. Cape Town Radio (Telcom) 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.

- 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. Namibia leads by example by working towards becoming fully GMDSS compliant albeit problems experienced with NAVTEX broadcasts.
- 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 with NAVAREA II for AOR-E has been put in place but as such not yet been tested. The IOR coverage plan has as yet not been resolved. South Africa intends to further investigate an internal mutual support arrangement with the Centre for Seawatch and Response (MRCC, Cape Town).

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LIMITS OF NAVAREAS AND NAVTEX STATIONS

