

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 WWNWS2 Meeting.

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 *and*

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

2. **Comments:** NAVTEX coverage out to 200nm 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. 747 Coastal Navigation Warnings were originated in 2009.

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 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. The NAVTEX transmitter on 518 kHz has been performing well with a 100 percent transmission record. There is a slight concern regarding the NAVTEX antennae, which is getting old. Namibia is still planning to introduce NAVTEX transmissions on 4209.5 kHz but this is not a priority at this stage. The old GMDSS software has proved to be out of date and not very user friendly. Arrangements have been made to install new and more modern GMDSS software shortly. Mini-C equipment and the Digicons have been installed. Transmissions of navigational information via Inmarsat C will commence once the new Radio Station is operational. However, the move into the new station has been delayed until approximately 15 September 2010 to allow for the tender process, training of the Radio Officers and testing to take place before finalizing 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 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.

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 significant improvement with the Hydrographic Offices or authorities responsible for navigation safety in **Angola** and **Madagascar**. 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 VI, VIII and XI. 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.

SafetyNET Messages Promulgated

	2007	2008	2009
NAVAREA VII	188	202	245

3. **NAVTEX Coverage:** See diagram attached at end of document.
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 (see Table below) 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 true that vessels greater than 500 gross tons operate on these waters. Several maritime ferry disasters occurred in the recent past due to the lack of adequate MSI measures and some might well have been weather related incidents. These inland waterways are important as it offers 60% of these states main means of transport.

Lake Victoria fishermen get cell phones for 'help'

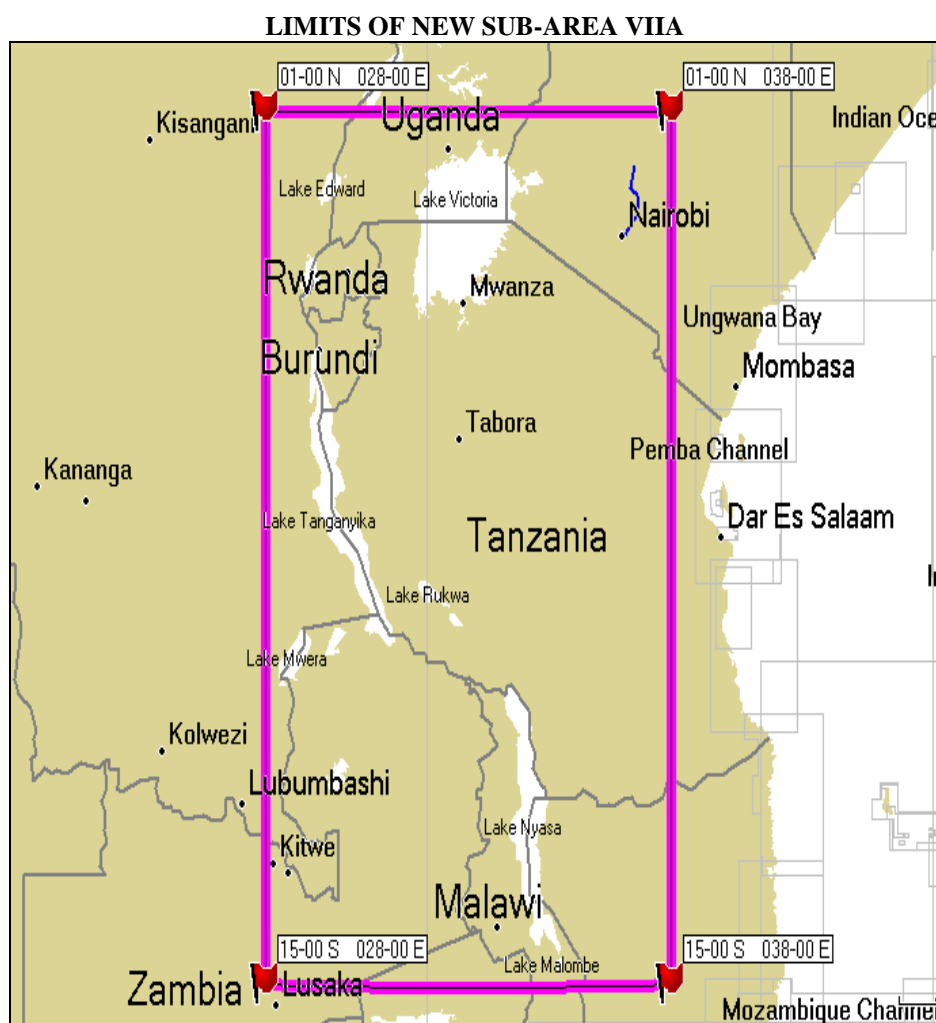
In September 2009 it was reported that up to 5,000 people die each year on Lake Victoria as a result of piracy, drowning and other accidents. Now the 200,000 fishermen who earn their living on Lake Victoria can use cell phones to call for help, free-of-charge, should they run into trouble on the 69,000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

- 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.
- 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.
- 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	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 the situation arise.	Yes	Yes	Yes	Yes Also see para 4 above.

- Contingency Planning:** At present NAVAREA VII has no contingency plan in place.

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 Course has been approved for SAIHC for 2011 at the 8th CBSC Meeting and has been incorporated in the 2011 Capacity Building work programme.

8. **Other Activities:** The 8th SAIHC Meeting is scheduled for 2011 tentatively in Angola. 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 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.

10. *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, excluding Namibia, north of the South African international borders.
- b. The Master Plan is updated as indicated in the GMDSS Table.

13. **Synopsis for meeting minutes:** The Sub-Committee to note the following:

- 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.
- c. At RHC (SAIHC) meetings member states are kept reminded of the importance of maritime safety and encouraged to implement MSI measures.

LIMITS OF NAVAREAS AND NAVTEX STATIONS

