

MSI Self-Assessment 01 August 2019 to 01 January 2021 – NAVAREA VII

Submitted by: South Africa

SUMMARY

Executive Summary: This document provides MSI information related to NAVAREA VII for the period 01 August 2019 to 01 January 2021.

Action to be taken: Report to be noted by the SAIHC 17 Meeting.

Related documents: None.

1. **Background.** The South African Navy Hydrographic Office (SANHO), Coordinator of NAVAREA VII, in conjunction with the South African Meteorological Service, promulgates and disseminates shipping safety messages and weather information. Cape Town Radio, via Telkom Radio services, is the GMDSS service provider and as such, transmits all MSI on behalf of the Coordinator.

SafetyNET

MSI transmission is to Indian Ocean Region (IOR) and to Atlantic Ocean Region East (AOR-E).

Meteorological Forecasts and NAVAREA VII Warnings: 0940 and 1940 UTC.

Land Earth Station 12 Burum; Service Provider: Stratos Mobile Networks.

NAVTEX

NAVTEX coverage out to 200 nm from the Namibian and South African Coasts is passed from the Coast Radio Stations at Cape Town (**C**), Port Elizabeth (**I**) Durban (**O**) and Cape Columbine (**U**). The Coast Radio Station at Walvis Bay, Namibia (**B**) NAVTEX service is operational since 28 June 2019. Cape Town Radio includes Namibian Maritime Safety Information with its scheduled NAVTEX and SafetyNET MSI broadcasts.

Radio Telephony

South Africa

For the benefit of non-GMDSS adapted vessels, the Cape Town, Port Elizabeth and Durban Radio Coastal Weather Bulletins and Navigational Warnings in force are combined and presented as one single-voice broadcast from Cape Town Radio at 1015 and 1815 UTC daily. The coastal weather report as at 1200 UTC is broadcast at 1333 UTC. Transmission is on HF on 4375, 8740 and on 13146 kHz and on 29 VHF traffic channels sited around the South African coast from Alexander Bay in the West to Kosi Bay in the East.

Namibia

All RT MSI broadcasts are on VHF LZ Ch23; WVS Ch26 & 27 and on HF: 4357 & 8719 kHz

0903 UTC: Navigational Warnings

0935 UTC: Weather Forecasts and Traffic List

1235 UTC: Coastal Weather Reports

1635 UTC: Weather Forecasts and Traffic List

Newly received navigational warnings are broadcast on receipt and thereafter are included in the once daily navigational warning broadcast at 0903 UTC.

Geographical Limits of NAVAREA VII:

Southern Africa – South Atlantic Ocean (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 – Indian Ocean (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.

Operational Point of Contact for the National Coordinator within NAVAREA VII is:

Country	Institution	Telephone	Facsimile	Email
South Africa	South African Navy Hydrographic Office	+27 21 787 2445 +27 21 787 2408	+27 21 787 2233	hydrosan@iafrica.com

Port Control Vessel Traffic Services in South African hub ports provide information necessary for safe navigation within VTS routes and port approaches. However, a concerted effort is to be made to promote the dissemination of local warnings regarding hazards inside of the fairway buoy of any harbours by local port authorities within NAVAREA VII for safe navigation within VTS routes and port approaches. This would reduce the requirement to disseminate this information via Voice or NAVTEX or SafetyNET broadcasts via Cape Town Radio. SafetyNET coverage is available through the NAVAREA VII Coordinator for Angola, Namibia, Mozambique and Madagascar.

Progress with regards to MSI reports from **Angola** was made, complementing the **Oil and Gas Industry** which regularly reports on the movements of rigs, as well as other industry related matters. The rig information is published as a NAVAREA VII warning in the form of a rig list. Although limited MSI reports from Angola were received, progress was made and Angola is encouraged to further and continuously report on MSI related matters in terms of events taking place on its coastal areas and ports. Vessels transiting NAVAREA VII report MSI via coast radio stations or directly to SANHO. Resulting broadcasts are made via NAVTEX and SafetyNET.

The **Namibian Port Authority (NAMPORT)** is in regular contact with the NAVAREA VII Coordinator and as such, both SafetyNET and NAVTEX MSI concerning the Namibian coast are provided for promulgation by the SANHO. MSI reports mainly consist of gunnery exercise warnings, port construction operations and the status of Aids to Navigation.

The **Mozambique Institute of Hydrography and Navigation (INAHINA)** promulgate monthly Notices to Mariners. Relevant MSI is passed to the NAVAREA VII Coordinator for transmission on SafetyNET. MSI reports mainly consist of Aids to Navigation being out of order, and the concern still exists that no other information regarding maritime safety is generated and communicated to South Africa.

Few MSI reports are received from **Madagascar** and mainly consist of the deployment of Aids to Navigation and related equipment being out of order.

There remains a lack of communication from **Iles Comores**.

La Reunion does not fall within NAVAREA VII, however, due to the island's location being relatively close to the eastern limit of the NAVAREA VII, regular MSI reports are received. This mainly consists of gunnery exercise warnings and reports regarding objects reported adrift ie small vessels, buoys, etc. This remains an important part of the service as mariners proceeding from NAVAREA VII to NAVAREA VIII are warned timeously of events taking place around the island of La Reunion.

Copies of NAVAREA Messages are received from the Coordinators of NAVAREAS II, VI, VIII and XI. Where necessary, MSI relevant to an adjacent area is retransmitted for the benefit of transiting traffic.

There is a lack of NAVTEX transmitting stations north of the South African international borders and there is still no apparent acquisition of MSI transmitting apparatus or implementation of MSI dissemination by States in the Great Rift Valley in the Southern African region.

2. Comments.

Equipment Type	Software Version	Date of Up-date
SafetyNET MSI via E-mail (SATCOM C)	Outlook 2016	June 2017
Navtex 518 kHz NBDP	Frequentis Tracking and Tracing Message Centre	2019
MSI via VHF and HF voice broadcast	Frequentis PC Dispatcher	2019

The GMDSS Master Plan for NAVAREA VII is up to date.

SafetyNET Messages Promulgated

2017 (420)				2018 (424)				2019 (376)			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
144	276	Nil	Nil	154	270	Nil	Nil	173	203	Nil	Nil

Coastal Navigational Warning Messages Promulgated

2017 (748)				2018 (754)				2019 (643)			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
80	668	Nil	Nil	85	669	Nil	Nil	147	496	Nil	Nil

NAVTEX coverage out to 200nm from the South African Coast is passed from the Coast Radio Stations at Cape Town (**C**), Port Elizabeth (**I**), Durban (**O**) and Cape Columbine (**U**). The Coast Radio Station at Walvis Bay, Namibia (**B**) NAVTEX, is operational since June 2019. These Coastal Navigation Warning messages are also transmitted by voice twice a day for the benefit of fishing vessels and leisure craft. See diagram attached at end of document.

COVID-19. There has been a marked reduction of SafetyNET Messages and Coastal Navigational Warning Messages Promulgated from the 2019/20 reporting period compared to 2018 and 2017, which both showed an upward trend. This reduction is due to the global effects the COVID-19 pandemic has had on international shipping and maritime operations. The first half of the reporting period was on par with the previous year in terms of messages promulgated, but drastically reduced from February 2020 as the effects of COVID-19 took hold globally as well as locally. Message traffic is currently gradually increasing with global and local shipping and operations returning to normal. As far as capacity is concerned, both the SANHO, Telkom Radio Services and all associated MSI role-players in South Africa maintained operational functions throughout the South African COVID-19 Lockdown period. Watches were instituted and closely monitored, and in cases where staff was placed in quarantine or isolation, duties and functions were transferred off site in order to maintain operability and functionality.

NAVAREA VII Messages with Immediate Priority

2017		2018		2019	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
420	30 minutes	424	30 minutes	376	30 minutes

All MSI messages are promulgated with Immediate Priority. Average time elapsed between receipt of the message request by the SANHO and promulgation of the message by Cape Town radio is 30 minutes.

Iridium. South Africa has participated in Iridium training in June 2020, and is still in the negotiations phase in terms signing an agreement between South Africa (represented by Telkom Radio Services) and Iridium. South Africa will comply with IMO and IHO directives regarding the implementation of Iridium as a GMDSS provider.

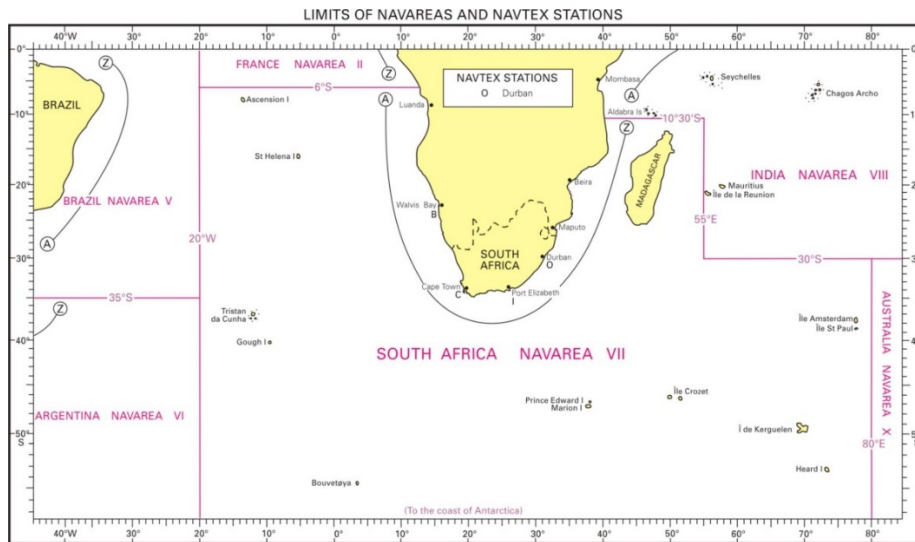
Requests for list of in-force navigational warnings

2017	2018	2019
194 approx.	270 approx.	303 approx.

3. NAVTEX Coverage.

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	C	+27 21 551 0700
Port Elizabeth	I	Port Elizabeth, Cape Columbine and Durban is remotely controlled from CT Radio.
Durban	O	
Cape Columbine	U	



4. Operational Issues.

Country	Number Of MSI Messages	Number Of MSI Messages From National Coordinator	General Topics/Subjects Of Messages
Angola	36	3	Oil rig and diamond vessel position updates, provided by vessel/rig operators.
Ascension (UK)	2	0	Survey operations (provided by vessel operators)
Bouvet Island (Norway)	1	0	Iceberg sightings (provided by vessel operators)
Comoros	0	0	
Eparses Islands (France)	0	0	
French Southern Territories	0	0	
Gough Island (UK)	1	0	Survey operations (provided by vessel operators)
Heard Island and McDonald Islands (Australia)	0	0	
Madagascar	29	3	Buoys and Lights not in position or unlit, vessels adrift, towing and surveying operations, mostly provided by vessel operators.
Mayotte (France)	3	0	Towing operations provided by vessel operators. Nil input from National Coordinator.

Country	Number Of MSI Messages	Number Of MSI Messages From National Coordinator	General Topics/Subjects Of Messages
Mozambique	10	19	Buoys and Lights not in position or unlit provided by INAHINA, vessels adrift, towing and surveying operations provided by vessel operators
Namibia	39	8	Oil rig and diamond vessel position updates, provided by vessel/rig operators. Gunnery exercise warnings and port operations requested from National Coordinator.
Saint Helena (UK)	1	0	Survey operations (provided by vessel operators)
South Africa & Prince Edward Islands	217	217	Marine mining vessels and oil/gas rig positions, vessels adrift, towing operations, survey operations, weather alerts, and cancellations.
Tristan da Cunha (UK)	4	0	Survey operations (provided by vessel operators)

Angola and Iles Comores has been encouraged to communicate with the NAVAREA VII Coordinator and to adapt to the GMDSS and to implement MSI measures accordingly so that, where the degrees of hazard are known, that this information may be disseminated to warn mariners operating in the relevant area. Although Angola has improved its communication with South Africa, further growth in the promulgation of MSI with Angola is encouraged.

For the safety of life, MSI awareness must be improved and the installation of radio communication equipment and the associated operator training is imperative. The lack of NAVTEX Stations north of South African borders, namely Angola, Mozambique and Madagascar, is a persistent challenge. The installation of radio communication network equipment, and operator training, are the two most important components that need to be addressed.

The current state of MSI in the SAIHC Region is listed in the GMDSS table below:

STATUS OF SHORE BASED FACILITIES FOR GMDSS

Country	A1 Area	A2 Area	A3/A4 Area	NAVTEX	SafetyNET	Notes
Angola	P	P	P	No	Yes	warnings broadcast by SafetyNET
Madagascar	P	P	NI	No	Yes	warnings broadcast by SafetyNET
La Reunion	No	No	Yes	No	Yes	warnings broadcast by SafetyNET
Comores	NI	NI	NI	NI	Yes	
Mozambique	P	Yes	P	No	Yes	warnings broadcast by SafetyNET
Namibia	P	P	P	No	Yes	warnings broadcast by SafetyNET
South Africa	P	NI	Yes	Yes	Yes	

P = Planned or to be decided

NI = No Information

Note: South Africa Area A2 not planned. Ultimately, DSC on 2187.5 kHz will not be introduced. DSCVHF Ch70 is operational and vessels in the vicinity are requested to test with the Coastal Radio Station. MSI information transmitted pertains to the West Coast. NAVTEX service will consequently provide 1 broadcast every hour of the day, i.e. TIC C, I, O and U will have 24 transmission time slots at: 0020, 0120, 0220, 0320, 0420, 0520, 0620, 0720, 0820, 0920, 1020, 1120, 1220, 1320, 1420, 1520, 1620, 1720, 1820, 1920, 2020, 2120, 2220, 2320 (all times SAST) respectively.

All “In Force warnings” are published on the SANHO website in summary and full text bulletin format.

5. **Quality Management Survey.**

NAVAREA	ISO 9001 -2008	Promulgate “In-Force” Bulletins	Promulgate “No-Warning” Messages	Monitor Broadcast	24/7 contact information provided	Promulgate two scheduled broadcasts	Certificates for all recognized service providers	IMO Master Plan updated
VII	NO	YES	YES	NO	YES	YES	YES	YES

6. **Contingency Planning.** To ensure the continuous operational capability of MSI dissemination via SATCOM C SafetyNET, a contingency plan exists between South Africa, France and Australia. During WWNWS-SC 9th Meeting, South Africa, France and Australia agreed to test the contingency plan during 2018, and the joint exercise subsequently took place on 06 June 2018. In October 2019 the NAVAREA IX coordinator proposed a contingency exercise with NAVAREAVII, to take place in 2020. Planning for the exercise started in March 2020, the exercise itself scheduled for April 2020. However, the exercise was postponed until further notice.

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 seed-corn activities such as technical workshops, visits and training courses within the region. As part of the SAIHC16 meeting in September 2019 in Cape Town, MSI responsibilities and capacity building initiatives was on the agenda for discussion. The possible hosting of such workshops at the SANHO Training Facility, as well as an eLearning initiative has also taken shape, hosted by the SANHO, in order to facilitate capacity building initiatives into the future. The eLearning package, which will initially focus on MSI, has been developed and rolled out to SAIHC members for comment and testing in December 2020. Since roll-out, several Member States have commenced review of the eLearning package. Member States are invited to review and comment on the package by 28 February 2021. This initiative was strongly supported by both Chairpersons of the WNWNS and SAIHC.

8. **Other Activities.** MSI awareness must be improved and the installation of radio communication equipment and associated operator training is imperative. The continuous efforts of SAIHC through courses, technical visits and discussions at conferences are aimed to achieve this objective.

9. **NAVAREA Website. (http://www.sanho.co.za/navarea7_bulletins/bulletin.htm).**

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 MSI messages. All navigational warnings in force are published and displayed on the SA Navy Intranet, as well as the Internet. These include messages older than 42 days.

10. **Contact details.**

Urgent navigation information (24 Hour Service):

Fax : +27 21 787 2228
E-mail : ncc@sanavy.co.za

Other navigation information (0730 - 1600 SAST Mon - Fri):

Fax : +27 21 787 2233
Phone : +27 21 787 2445/2444
E-mail : hydrosan@iafrica.com

General information (0730 - 1600 SAST Mon - Fri):

Phone : +27 21 787 2408

11. **Recommendations.** Angola, Madagascar and Iles Comores should be encouraged to communicate with the NAVAREA VII Coordinator, adapt to the GMDSS and implement MSI measures accordingly so that, where the degrees of hazard are known, that this information may be disseminated to warn mariners operating in the relevant area.

The lack of NAVTEX Stations north of South African borders, namely Angola, Mozambique and Madagascar, is a persistent challenge. The installation of radio communication network equipment, and operator training, are the two most important components that need to be addressed. This requirement is constantly communicated to the delegates of these countries at SAIHC Conferences.

12. **Action requested.** Report to be noted by the SAIHC 17 Meeting.

13. **Summary.**

- a. The lack of NAVTEX Stations north of South African borders, namely Angola, Mozambique and Madagascar, is a persistent challenge. The installation of radio communication network equipment, and operator training, are the two most important components that need to be addressed. A dedicated Namibian NAVTEX service back has been brought into operation, and the station at Cape Columbine is now fully operational.
- b. The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region remains a persistent matter of concern.
- c. The RHC (SAIHC) continuously strives to instill the awareness of maritime safety and encourages the implementation of MSI measures by member states.
- d. All navigational warnings in force at are published and available at **http://www.sanho.co.za/navarea7_bulletins/bulletin.htm**. These include messages older than 42 days.