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MSI Self-Assessment 01 August 2020 to 31 July 2021

NAVAREA VII

Submitted by: Republic of South Africa
(South African Navy Hydrographic Office)

IHO, Monaco 30th August – 3rd September 2021

BACKGROUND

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

- SafetyNET II: MSI transmission IOR and AOR-E. Meteorological Forecasts and NAVAREA VII Warnings: 0940 and 1940 UTC. Land Earth Station 12 Burum; Service Provider: Stratos Mobile Networks.
- SafetyCAST: SafetyCAST satellite broadcast service provider: Iridium.

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

  These broadcasts form part of NAVAREA VII and Iridium test and evaluation operations.
- 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), Cape Columbine (U) and Walvis Bay, Namibia (B)

COMMENTS

2. Comments.

The GMDSS Master Plan entries for NAVAREA VII remain current. The master plan does not include Iridium SafetyCAST.

Equipment Type	Software Version	Date of Up-date
SafetyNET MSI	SafetyNET II SafetyNET I Outlook 2016 (backup)	2021 2020
Iridium MSI	SafetyCAST (ver 32.5.4)	2021
Navtex 518 khz nbdp	Frequentis T&T Message Centre	2020
MSI via VHF and HF voice broadcast	Frequentis PC Dispatcher	2020

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COMMENTS

IHO Member States within NAVAREA VII which have not provided MSI - NAVAREA or Coastal - for 2019 and 2020:

Member State	2019	2020
United Kingdom	0	3
Norway	0	0
Comoros	0	0
Australia	0	0

Note: St Helena Island (United Kingdom) has established communication with the SANHO in July 2021, requesting assistance in setting up a NAVAREA VII MSI capability.

The following table shows the number of SafetyNET II and SafetyCAST messages that were transmitted within NAVAREA VII:

	2018	2019	2020
SafetyNET I/II	424	376	366
SafetyCAST	n/a	n/a	98 (excluding test broadcasts
Coastal Navigational Warnings	754	643	752

COMMENTS

3. Iridium.

- Training: Iridium training in June 2020, and again refresher training in April 2021.
- Agreement: No agreement between South Africa (represented by Telkom Radio Services) and Iridium has been signed yet.
- Trials: Despite not having an agreement in place, South Africa commenced with broadcast trials in April 2021, with Telkom Radio Services broadcasting all NAVAREA VII messages as well as METAREA messages, and the SANHO broadcasting test messages while monitoring Telkom Radio Services' broadcasts.
- There has been no issues of note, and Iridium has reported that the system is functioning as designed, with periodic remote checks on NAVAREA/METAREA VII broadcasts. There has also been several commercial vessels that has confirmed receipt of Iridium broadcasts within NAVAREA VII as promulgated.
- South Africa will consider IMO and IHO directives regarding the implementation of Iridium as a GMDSS provider.

COMMENTS

4. COVID-19.

- 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.
- 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.

OPERATIONAL ISSUES

4. NAVAREA VII Region.

- Angola. Regular MSI regarding the Oil and Gas Industry which reports to the movements of rigs. Angola is encouraged to continuously report on MSI matters.
- Namibia. The Namibian Port Authority (NAMPORT) is in regular contact with the NAVAREA VII Coordinator. MSI reports mainly consist of gunnery exercise warnings, port construction operations and the status of Aids to Navigation.
- Mozambique. The Mozambique Institute of Hydrography and Navigation (INAHINA) MSI reports mainly consist of Aids to Navigation being out of order, and the concern exists that no other information regarding MSI is generated and communicated.
- Madagascar. Few MSI reports are received from Madagascar and mainly consist of the deployment of Aids to Navigation and related equipment being out of order.
- Iles Comores. There remains a lack of communication from Iles Comores.
- La Reunion. Does not fall within NAVAREA VII, however, due to the island's location to the eastern limit of the NAVAREA VII, regular MSI reports are received.
- General. Lack of NAVTEX transmitting stations north of the South African international borders.

QUALITY MANAGEMENT SURVEY & CONTINGENCY PLANNING

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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	YES	YES	YES	YES	YES

6. Contingency Planning.

- NAVAREA VII. To ensure the continuous operational capability of MSI dissemination via SATCOM C SafetyNET II, a contingency plan exists between South Africa, France and Australia. India to be approached as well.
- COVID-19. Both the SANHO, Telkom Radio Services and associated MSI role-players maintained operational functions throughout the South African COVID-19 Lockdown periods. 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.

CAPACITY BUILDING

7. Capacity Building.

- Besides the possible hosting of capacity building initiatives at the improved SANHO Training Facility, capacity building will be facilitated through an eLearning initiative hosted by the SANHO.
- The eLearning package, which focuses on MSI, has been developed, gone through internal and external verification and rolled out to SAIHC members for comment and testing. This initiative was strongly supported by both Chairpersons of the WWNWS and SAIHC.
- South Africa has also joined the IHO Capacity Building eLearning Project Team to share information and knowledge.
- Capacity building within the SA Navy structures is an ongoing process to ensure radio operators at NAVCOMCEN CAPE, the node for MSI distribution between the SANHO and Telkom Radio Services, are kept up to date and qualified.

RECOMMENDATIONS & ACTIONS

8. Recommendations.

- Angola, Madagascar and Iles Comores are 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.

9. Actions.

- Report to be noted by the WWNWS 13 Meeting

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THANK YOU

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