

MSI Self Assessment - NAVAREA V

Submitted by: BRAZIL

SUMMARY

Executive Summary: Synopsis of Activities within NAVAREA V since WWNWS1.

Action to be taken: Note report

Related documents: None

1. Background:

1.1 - The Radio Navigational Warnings broadcast in NAVAREA V is performed through the following services:

a) SafetyNET Service

The NAVAREA and Coastal warnings are broadcast by SafetyNET, in English, with messages transmitted twice a day, in programmed schedules 0030Z and 1230Z, by Burum Stratos Mobile Land Earth Station (LES) - AOR-E satellite (112), (tel e fax e-mail) in Brazil counterside is represented by OnixSAT (tel: +55 43 3371-3765; fax: +55 43 3371-3765(5); joao.morini@onixsat.com.br). NAVAREA V warnings in force for more than six (6) weeks are not included in these messages, since they are issued in Notices to Mariners.

The Coastal Warnings are also transmitted by SafetyNET since Brazil does not use NAVTEX service.

The geographic boundaries of the NAVAREA V and Coastal areas are shown at Annex A.

b) Radio (VHF/HF) Services

b.1 - Navy's Radio Station in Rio de Janeiro (PWZ33)

NAVAREA and Coastal Navigational Warnings (in English and Portuguese) and Local warnings (in Portuguese) are broadcast by messages in HF band (for radio data and radio-telex) and transmitted three times a day, in programmed schedules 0400Z, 1230Z and 1430Z. Warnings in force for more than six (6) weeks also are not included in these messages, since they are issued in Notices to Mariners; and

b.2 - Coast Stations National Net (RENEC)

NAVAREA, Coastal and Local Navigational Warnings considered urgent or of great relevance are timely broadcast, by radiotelephony messages, in Portuguese, in the VHF/HF bands.

c) INTERNET

All NAVAREA and Coastal Warnings (in English and Portuguese) and Local Warnings (in Portuguese) in force are available on the INTERNET. The lists of Navigational Warnings are updated at least twice a day.

d) Notices to Mariners

NAVAREA V warnings in force for more than six (6) weeks are issued in Section II (NAVAREA, Coastal and Local, in Portuguese) and Section VII (NAVAREA and Coastal, in English) of Maritime Area and Inland Waters in General (edited fortnightly) in Notices to Mariners. More details on promulgation of NAVAREA V Warnings, as well as other Maritime Safety Information as a whole are presented in Table 1 of the booklet, and shown at Annex B.

2. Comments:

2.1. The following table shows the number of Radio Navigational Warnings that were promulgated as SafetyNet messages:

Type/Year	2008*	2009	2010 (by JUN)
NAVAREA	529	68	210
COASTAL	1.422	1289	992

(*) Transmission by SafetyNET:

Until August 1st 2007, the Coastal Warnings were transmitted together with the NAVAREA Warnings as unique NAVAREA messages (in the form of bulletins) by SafetyNET System. From that date to August 1st 2008, the warnings were put into two different messages (but still in the form of bulletins), transmitted separately, one message for the NAVAREA Warnings and the other for the Coastal Warnings. From 1st August 2008 onwards, to comply with NAVAREA V SafetyNET service international rules, new criteria was adopted:

a) distances from shore:

- NAVAREA Warnings - average distance more than 250 nautical miles;
- Coastal Warnings - average distance between 3 miles and 250 nautical miles; and
- Local Warnings - average distance less than 3 nautical miles and inland waters (e.g. ports, rivers and lakes); and

b) Messages Codes:

- NAVAREA warnings are transmitted by individual messages codified as "1.1.31.05.01.00".

- Coastal warnings are transmitted by individual messages codified as "1.1.13.05B₁A.01.00" (being B₁ "I", "N", "E" or "S" according to the coastal area the warning refers to - see Annex A).

2.2. The following table shows the number of Radio Navigational Warnings that were broadcast through all services (SafetyNET, VHF/HF and Internet), considering the warnings inside each bulletin and those that were transmitted as trial individual messages:

Type/Year	2008	2009	2010 (by JUN)
NAVAREA	529	68	210
COASTAL	1.422	1289	992
LOCAL	2.102	1077	976
TOTAL	4.153	2434	2178

2.3. Monitoring of MSI: in August 2008, NAVAREA V installed a Inmarsat Mini-C 3026S station and since then has being monitoring the MSI promulgated.

3. NAVTEX Coverage:

There are no NAVTEX stations operating within NAVAREA/METAREA V.

4. Operational Issues:

Stratos Mobile Company - Burum LES was contracted for the OUT2009/SET2010 period as a new NAVAREA V SafetyNET provider. NAVAREA V Coordinator is planning to install some NAVTEX stations in the coastline positions, where they could increase the efficiency on promulgating Maritime Safety Information.

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
V	YES	YES	YES	YES	YES	YES	YES*

(*) GMDSS Master Plan updates: Last update 30 April 2010 (GMDSS.1/Circ.12). Some items need to be updated such as:

- Annex 5, page 2, for Location Collun, change "Tanguá" to "Burum";
- Annex 8, page 2, for NAV/MET Area V-NAV, cancel information about French Guiana (France) Country;
- Annex 9, page 1, for Frequency Band Collun, insert "4 MHz (4,266,0 kHz)", corresponding to the expression "On demand" on the Schedule (UTC) Collun;
- Annex 9, page 1, for Frequency Band and Scheduled (UTC) Colluns, cancel lines separation (all frequencies transmit the information).

Changes required will be send to IMO in the Questionnaire on Shore-Based facilities for GMDSS.

6. Contingency Planning

NAVAREA V Coordinator (Diretoria de Hidrografia e Navegação - DHN, Brazil) and the NAVAREA VI Coordinator (Servicio de Hidrografia Naval - SHN, Argentina) have started an agreement to establish a common Contingent Plan. It is underway to set the procedures to be taken for a mutual support in case of a catastrophic or eventual failure occurring in the SafetyNET Service of one of each NAVAREA. The purpose is to guarantee that MSI warnings from the NAVAREA affected will continue being broadcast and monitored, until such failure has been corrected.

As NAVAREA VI broadcast via SafetyNET service are made through AOR-W satellite with LES at EIK (Norway) and NAVAREA V broadcast were made only through AOR-E satellite with LES at Tanguá (Brazil), an incompatibility arised in the LES configuration for broadcast of NAVAREA VI warnings by NAVAREA V. From last 2009 WNWNS meeting in Monaco to June 2010, both countries have been reviewing and looking for an alternative way to carry out the current agreement. NAVAREA V LES has shifted from Tanguá to Burum (Netherlands) and now agreement can keep going and tests will be done to garantee the correct procedures to be put in the Contigent Plan.

7. Capacity Building:

In agreement with NAVAREA VI Coordinator, NAVAREA V Coordinator presented to the SWAtHC, during the 3rd and again during the 4th Meeting of that Comission, a proposal of one IMO/IHO MSI Capacity Building Course that their members should attend, extending the invitation to others South American countries. It started the process of organizing a practical IHO Course on how to control, process and disseminate the Maritime Safety Information (MSI). The purpose of the Course is to optimize operational proceedings putting them accordingly international rules. It will be a great opportunity for NAVAREA Coordinators and Hidrographic Services to share their experiences too.

The course is already included in the IHO CBSC program and probably will be scheduled for 16 - 20 May 2011, at DHN - Rio de Janeiro. NAVAREA V coordinator and the WNWNS Chairman will define the period.

8. Other Activities:

IHO (HSSC, IRRIC, CBSC, TSMAD, SNPWG, DQWG, CSPCWG TWLWG, HDWG, ABLOS, GEBCO, SCUNF, WNWNS);
RHC (MACHC, SWATHC, SAICH, HCA); and
IMO (NAV).

9. NAVAREA Website:

NAVAREA V

a) Address: www.mar.mil.br/dhn/dhn/index.html

Links: "English" → "Notices to Mariners and Radio Navigational Warnings and SAR".

b) Frequency of update: twice a day, as a rule.

c) Number of hits: not quantified.

10. NAVAREA Contact Information:

Coordinator: Diretoria de Hidrografia e Navegação (DHN)
Barão de Jaceguay Street, S/Nº, Ponta d`Areia
Niterói - Rio de Janeiro, Brazil
CEP: 24048-900

NAVAREA V Contacts:

Commander Josué Alexandre **Fontainha**

Tel: +55 (21) 2189-3023

Fax: +55 (21) 2189-3210, +55 (21) 2620-0073

E-mails: fontainha@chm.mar.mil.br; or segnav@chm.mar.mil.br

11. Recommendations:

None

12. Actions requested:

Note the information provided

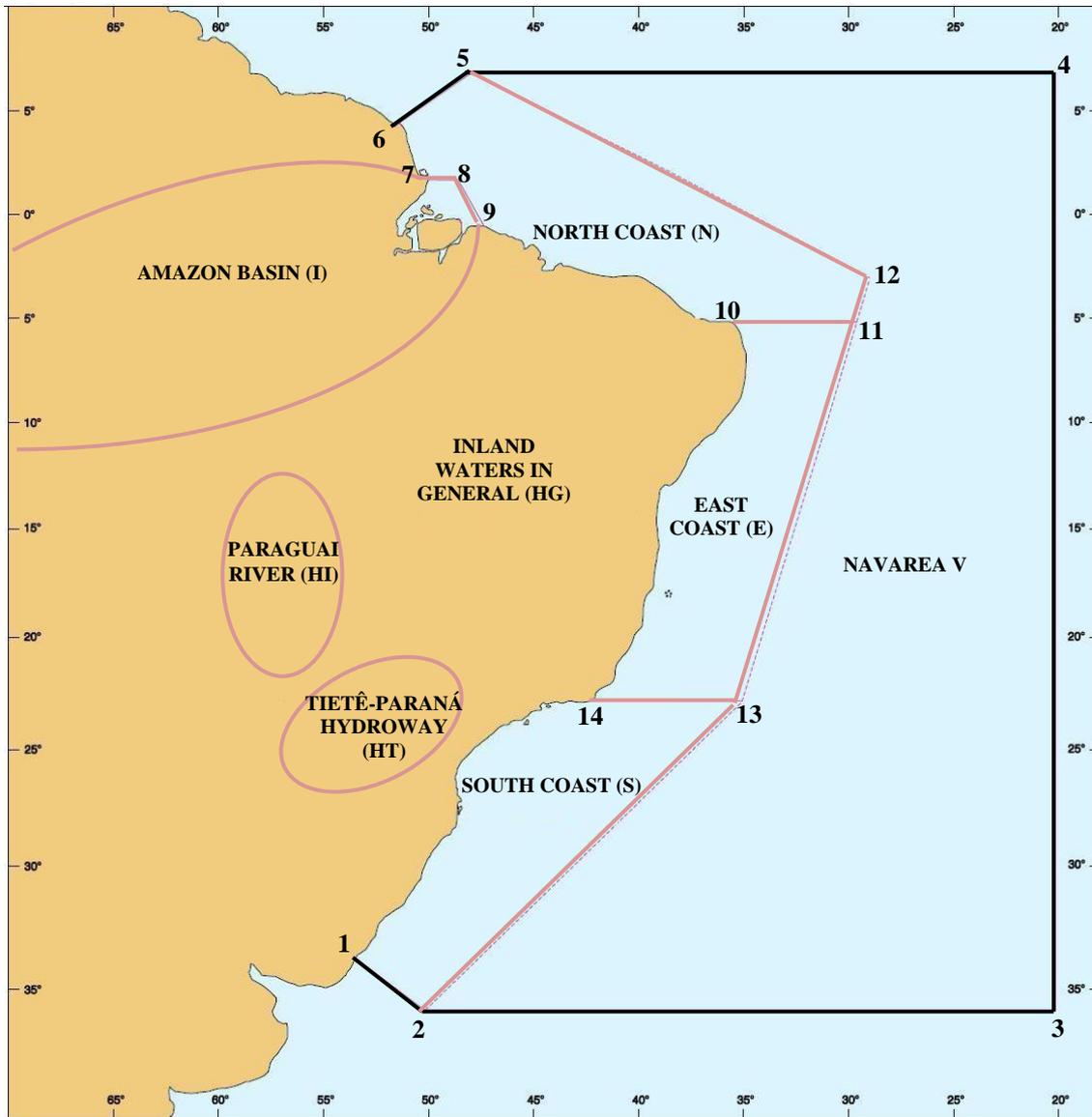
13. Synopsis:

As of 01AUG08, NAVAREA V has been making a significant change in operational procedures as the new scheduled time for transmission (0030 UTC and 1230 UTC) and the new geographic limits of the Coastal areas adopted.

NAVAREA V is operating with Stratos Mobile-Burum LES, in an annual contract.

NAVAREA V in agreement with NAVAREA VI is continuing the process to establish a common Contingent Plan, now using the Burum LES capabilities. Also presented a proposal for a IMO/IHO MSI Capacity Building Course, schedule for 16-20 May 2011, for them and other interested South American countries.

Representation of NAVAREA V, Coastal Regions and Inland Waters, for classification and identification of Radio Navigational Warnings.



a) NAVAREA V - Is comprised of the maritime area pointed by the following coordinates:

Point	LATITUDE	LONGITUDE
1	33° 45' S	053° 22' W
2	35° 50' S	050° 10' W
3	35° 50' S	020° 00' W
4	07° 00' N	020° 00' W
5	07° 00' N	049° 28' W
6	04° 30' N	051° 35' W

b) COASTAL REGIONS - Is comprised of the maritime areas pointed by the geographic coordinates mentioned below, as well as bays, inlets and ports covered by them:

AMAZON BASIN (I)¹

Point	LATITUDE	LONGITUDE
7	01° 40' N	049° 55' W
8	01° 40' N	048° 35' W
9	00° 37' S	047° 22' W

NORTH COAST (N)

Point	LATITUDE	LONGITUDE
5	07° 00' N	049° 28' W
6	04° 30' N	051° 35' W
7	01° 40' N	049° 55' W
8	01° 40' N	048° 35' W
9	00° 37' S	047° 22' W
10	05° 10' S	035° 29' W
11	05° 10' S	029° 33' W
12	03° 00' S	028° 55' W

EAST COAST (E)

Point	LATITUDE	LONGITUDE
10	05° 10' S	035° 29' W
11	05° 10' S	029° 33' W
13	23° 01' S	035° 00' W
14	23° 01' S	042° 00' W

SOUTH COAST (S)

Point	LATITUDE	LONGITUDE
1	33° 45' S	053° 22' W
2	35° 50' S	050° 10' W
13	23° 01' S	035° 00' W
14	23° 01' S	042° 00' W

¹ - comprises Amazon and Pará rivers estuaries;
 - In Amazonas river, downstream Santana Leste light;
 - In Pará river, downstream the leading line Chapéu Virado light - Coroa Grande light.

ISSUE OF MARITIME SAFETY INFORMATION

A) TRANSMISSIONS VIA RADIO (HF BAND) – BRAZILIAN NAVY'S RADIO STATION IN RIO DE JANEIRO					
SERVICES	SCHEDULES (DAILY)	CHANNELS (*)	FREQUENCES	CONTENTS	
NAVIGATIONAL WARNINGS AND SAR INFORMATION	0400-0445Z	RI	4.266,0 KHz (on demand of mariner) 6.448,0 KHz 8.580,0 KHz 12.709,0 KHz 16.974,0 KHz	- NAVAREA, Coastal Warnings, except those already published in Notices to Mariners, and SAR Information (Portuguese/English) - Local Warnings, except those already published in Notices to Mariners, and SAR information (Portuguese).	
	1430-1530Z	RD			
	2130-2215Z	RI			
METEOROLOGICAL BULLETINS	0230-0330Z	RD		4.266,0 KHz (on demand of mariner) 6.448,0 KHz 8.580,0 KHz 12.709,0 KHz 16.974,0 KHz	- Meteorological forecasts (Portuguese/English) - Meteorological warnings (Portuguese/English)
	0600-0730Z	RI			
	1845-1930Z				
METEOROLOGICAL CHARTS	0745-0925Z	RS	12.665,0 KHz 16.978,0 KHz		- Analysis of atmospheric pressure on surface - Height and direction of waves - Wind at 10m above surface - Sea surface temperature
	1630-1810Z				
B) TRANSMISSIONS VIA RÁDIO (VHF E HF BANDS) – COASTAL STATIONS NATIONAL NET (RENEC) OF EMBRATEL					
SERVICES	SCHEDULES	CHANNELS (*)		FREQUENCES	CONTENTS
METEOROLOGICAL BULLETINS, NAVIGATIONAL WARNINGS AND SAR INFORMATION	on demand	RL		VHF: 156,8 MHz (16) and traffic channels.	- Meteorological Forecast - Meteorological warnings - NAVAREA, Coastal and Local Warnings
METEOROLOGICAL AND NAVIGATIONAL WARNINGS AND SAR INFORMATION	as necessary			HF: 4.125,0 KHz	- Meteorological warnings - Urgent NAVAREA, Coastal and Local Warnings
C) TRANSMISSIONS VIA SATÉLITE (INMARSAT-C) – BURUM RADIO STATION OF STRATOS MOBILE					
SERVICES	SCHEDULES (DAILY)	SATELLITE	CONTENTS		
NAVIGATIONAL WARNINGS AND SAR INFORMATION	0400Z e 1230Z or as necessary	East Atlantic (AOR-E)	- SAR Information (English) - NAVAREA and Coastal Warnings (English), except those already published in Notices to Mariners.		
METEOROLOGICAL BULLETINS	0730Z e 1930Z or as necessary		- Meteorological forecasts (English) - Meteorological warnings (English)		
D) INTERNET					
SERVICES	SITES AND LINKS		CONTENTS		
NAVIGATIONAL WARNINGS AND SAR INFORMATION	www.mar.mil.br/dhn/chm/avgantes/avgante.htm (choose the link of region of interest)		NAVAREA, Coastal and Local Warnings (Portuguese)		
	www.mar.mil.br/dhn/chm/avgantes/english/index.htm (choose the link of region of interest)		NAVAREA and Coastal Warnings (English)		
NOTICES TO MARINERS (**)	www.mar.mil.br/dhn/chm/avgantes/folheto/pdf.htm (choose the link of NT of interest)		- In Section II of NT: NAVAREA, Coastal and Local Warnings (Portuguese) in force more than 6 weeks.		
	www.mar.mil.br/dhn/chm/avgantes/english/pdfing.htm (choose the link of NT of interest)		- In Section VII of NT: NAVAREA and Coastal Warnings (English) in force more than 6 weeks.		
METEOROLOGICAL BULLETINS	www.mar.mil.br/dhn/chm/meteo/index.htm (choose the link "meteoromarinha" – in Portuguese) www.mar.mil.br/dhn/chm/meteo/indexing.htm (choose the link "bulletins" – in English)		- Meteorological forecasts (Portuguese/English) - Meteorological warnings (Portuguese/English)		
METEOROLOGICAL WARNINGS	www.mar.mil.br/dhn/chm/meteo/index.htm (choose the link "avisos de mau tempo" – in Portuguese) www.mar.mil.br/dhn/chm/meteo/indexing.htm (choose the link "severe weather warnings" – in English)		- Meteorological warnings (Portuguese/English)		
METEOROLOGICAL CHARTS	www.mar.mil.br/dhn/chm/meteo/index.htm (choose the link "cartas sinóticas" – in Portuguese) (choose the link "previsão numérica" - in Portuguese) www.mar.mil.br/dhn/chm/meteo/indexing.htm (choose the link "synoptic charts" – in English) (choose the link "numerical predictions" – in English)		- Analysis of atmospheric pressure on surface and other products.		