

MSI Self Assessment - NAVAREA V  
Submitted by BRAZIL

**SUMMARY**

Executive Summary: NAVAREA V provides the paper of MSI Self Assessment for CPRNW 10

Action to be taken: Paragraph 3.2.1

Related documents:

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 Tanguá Land Earth Station (LES) - AOR-E satellite. Warnings in force for more than six (6) weeks are not included in these messages, since they are issued in NAVAREA V Notice to Mariners.

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

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 languages) 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, 1430Z and 1230Z. Warnings in force for more than six (6) weeks are not included in these messages, since they are issued in NAVAREA V Notice 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 languages) and Local Warnings (in Portuguese) are available in the INTERNET. The list of Navigational Warning are update at least twice a day.

d) Notice to Mariners

Some 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 the NAVAREA V Notice to Mariners.

**1.2 - The Meteorological Warnings and the Weather and Sea Bulletins of METAREA V are broadcast through the following services:**

a) SafetyNET Service (Tanguá Land Earth Station (LES) - AOR-E satellite).

Weather and Sea Bulletins (in English), twice a day, in programmed schedules 0730Z and 1930Z;

Meteorological Warnings (in English) are broadcast immediately, whenever necessary.

b) Radio (VHF/HF) Services

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

Meteorological Warnings and the Weather and Sea Bulletins are broadcast by:

- radiodata (J2D), in programmed schedule 0230Z to 0330Z (English and Portuguese languages);

- radiotelegraphy (A1A), in programmed schedules 0600Z to 0730Z, and 1845Z to 1930Z (English and Portuguese languages);

- radio-facsimile (F3C), in programmed schedule 0745Z to 0925Z, and 1630Z to 1810Z, graphical products (e.g. surface analysis, waves significant height and wind at 10m).

b.2 – Coast Stations National Net (RENEC)

Meteorological Warnings (English and Portuguese languages) and Weather and Sea Bulletins (only in Portuguese language), are broadcast by radiotelephone, on request, in the VHF /HF bands.

c) INTERNET

Meteorological Warnings and the Weather and Sea Bulletins are broadcast (English and Portuguese languages) and graphical products are also available for access in the INTERNET.

More details on promulgation of Navigational Warning and Meteorological Information, as well as other Maritime Safety Information, are presented at Annex C.

## 2. **Comments:**

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

<b>Type/Year</b>	<b>2006</b>	<b>2007</b>	<b>2008 (by JUL)</b>
<b>NAVAREA</b>	730	730	421
<b>COASTAL*</b>	xx	306	418

\* See item 4.1.

2.2 - The following table shows the number of Radio Navigational Warning that were promulgated through all services (SafetyNET, VHF/HF and Internet), considering the warnings inside each bulletin and some that were transmitted as individual messages as trail:

<b>Type/Year</b>	<b>2006</b>	<b>2007</b>	<b>2008(byJUL)</b>
<b>NAVAREA</b>	907	1084	449
<b>COASTAL</b>	1063	1182	563
<b>LOCAL</b>	2183	2028	1162

2.3 - The following table shows the number of Meteorological Warnings and the Weather and Sea Bulletins that were promulgated:

<b>Type/Year</b>	<b>2006</b>	<b>2007</b>	<b>2008(byJUL)</b>
<b>WARNINGS</b>	987	922	498
<b>BULLETINS</b>	730	730	366

## 3. **NAVTEX Coverage:**

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

## 4. **Operational Issues:**

### 4.1 **Radio Navigational Warnings**

#### 4.1.1 **Transmissions by SafetyNET**

Until August 1<sup>st</sup> 2007, Coastal Warnings were transmitted with NAVAREA Warnings as unique NAVAREA bulletins by SafetyNET System. Up to August 1<sup>st</sup> 2008, warnings were transmitted as separately bulletins for NAVAREA Warnings and Coastal Warnings. During this period, all Coastal Warnings were transmitted by messages codified as "1.1.13.05AA.01.00" (the use of letter "A" as code B1 at C3 Address code was previously broadcasted by a NAVAREA warning).

From August 1<sup>st</sup> 2008 on, new changes, as depicted on item 4.1.2, will be done so as to comply NAVAREA V SafetyNET service with international rules.

#### 4.1.2 Classification and Codification within NAVAREA V

From 1<sup>st</sup> August 2008 on, the following criteria will be considered for classification, edition and 5C codes for transmission of the Navigational Warnings:

a) According to the distance from shore

NAVAREA Warnings: information considered of interest to the ocean navigation (average distance more than 250 nautical miles from the shore);

Coastal Warnings: information considered of interest to the coastal navigation (average distance between 3 miles and 250 nautical miles from the shore); and

Local Warnings: information considered of interest to the inshore navigation (average distance less than 3 nautical miles from the shore and inland waters – e.g. ports, rivers and lakes).

b) According to geographic limits (See Annex A):

North (N): between shore and the points 04-30.00N 051-38.00W; 07-00.00N 049-25.00W; 03-00.00S 029-00.00W; 05-10.00S 029-35.00W; e 05-10.00S 035-30.00W.

EAST (E): between shore and the points 05-10.00S 035-30.00W; 05-10.00S 029-35.00W; 23-00.00S 035-00.00W; e 23-00.00S 042-00.00W.

South (S): between shore and the points 23-00.00S 042-00.00W; 23-00.00S 035-00.00W; 35-50.00S 050-10.00W; e 33-44.00S 053-22.00W.

Amazon Basin (I), Amazon and Para rivers estuaries: between shore and the points 01-40.00N 049-54.50W; 01-40.00N 048-35.00W; e 00-37.00S 047-21.00W.

Obs: other classifications for assignment of inland areas exist, but are not of interest.

c) Messages Codes

NAVAREA warnings will be transmitted by individual messages codified as "1.1.31.05.01.00".

Coastal warnings will be transmitted by individual messages codified as "1.1.13.05B1A.01.00" (been B<sub>1</sub> "I", "N", "E" or "S" according to the coastal area the warning refers to).

#### 4.2 Meteorological Warnings and the Weather and Sea Bulletins

##### 4.2.1 Classification within METAREA V

The following criteria are considered for classification:

a) Wind – whenever the wind force is expected to become greater than force 7 (Beaufort Scale) is issued the warnings: Near Gale, Gale, Severe Gale and so on, as the Beaufort Scale Nomenclature.

b) Waves - whenever the waves are expected to become higher than 3 m is issued the sea warning, starting with the rough, very rough and so on as the Sea state Nomenclature.

c) Visibility – whenever the visibility is forecast to become lower than 1 km is issued the low visibility warning.

d) High Surf – whenever the waves are expected to break against the coast with a height greater than 2.5 m is issued the High Surf Warning.

The sub-areas inside METAREA V are shown at Annex B.

5. **Capacity Building:**

xxxx

6. **Other Activities:**

xxxx

7. **NAVAREA/METAREA V Websites:**

7.1 NAVAREA V

a) Address: [www.mar.mil.br/dhn/dhn/index.html](http://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.

7.2 METAREA V

a) Address: [www.mar.mil.br/dhn/dhn/index.html](http://www.mar.mil.br/dhn/dhn/index.html)

b) Links: “English” → “Meteorology”.

c) Number of hits: not quantified.

8. **NAVAREA/METAREA V Information:**

Coordinator: Diretoria de Hidrografia e Navegação (DHN)

Rua Barão de Jaceguay S/Nº

Niterói - Rio de Janeiro, Brazil

CEP: 24048-900

NAVAREA V Contacts:

Commander Alexandre Borges **Briones**

Tel: +55 (21) 2189-3023

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

E-mails: [briones@chm.mar.mil.br](mailto:briones@chm.mar.mil.br); or [segnav@chm.mar.mil.br](mailto:segnav@chm.mar.mil.br)

METAREA V Contacts:

Lieutenant Commander (T) **Emma** Giada Matschinske

Tel: +55 (21) 2189-3270

Telefax: +55 (21) 2620-8861

E-mails: [emma@chm.mar.mil.br](mailto:emma@chm.mar.mil.br); or [previsao@chm.mar.mil.br](mailto:previsao@chm.mar.mil.br); or [previsor@smm.mil.br](mailto:previsor@smm.mil.br)

9. **Recommendations:**

Commission is invited to note subitems 4.1 and 4.2 on this report.

10. **Actions requested:**

Xxx

11. **Synopsis:**

NAVAREA V coordinator has been making efforts to comply SAFETYNET service with international rules for the “World-Wide Navigational Warning Service” and give users more facility to use the information. As of 01AUG08, a significant change in operational procedures will be put in force, been the principals listed bellow:

a) the new scheduled time for transmission of NAVAREA V Radio Navigational Warnings will be 0030 UTC and 1230 UTC;

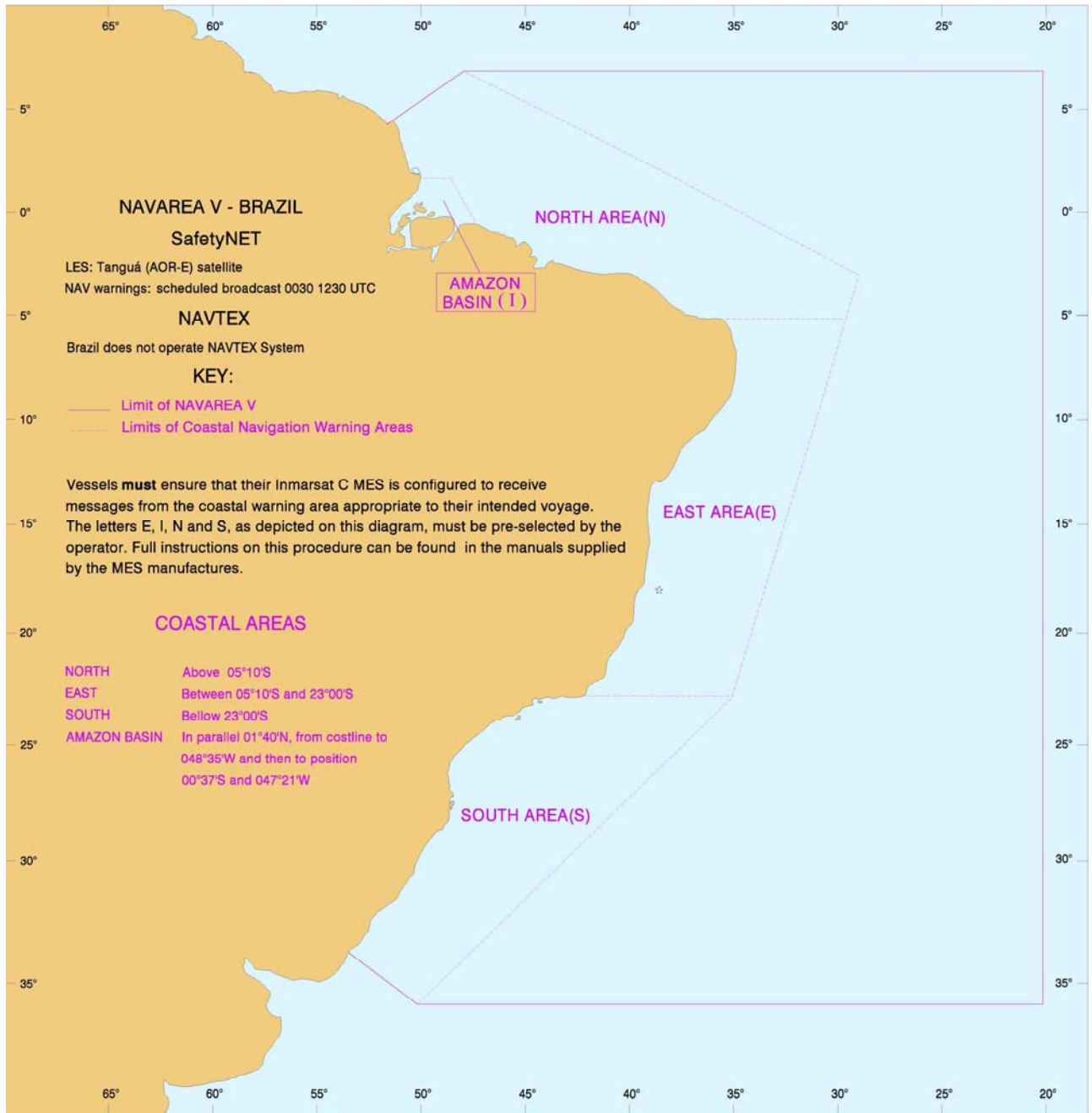
b) new geographic limits of the NAVAREA V Coastal areas will be adopted;

c) each NAVAREA warnings will be transmitted as individual messages codified as "1.1.31.05.01.00";

d) each Coastal warnings will be transmitted as individual messages codified as "1.1.13.05B<sub>1</sub>A.01.00" (been B<sub>1</sub> “I”, “N”, “E” or “S” according to the Coastal area the Warning refers to). Users are supposed to select the correspondent letter to receive these warnings.

Some details about Meteorological Information broadcast for METAREA V were presented on this Report too.

NAVAREA V



METAREA V





## ISSUE OF MARITIME SAFETY INFORMATION

A) TRANSMISSIONS VIA RADIO (HF BAND) – BRAZILIAN NAVY'S RADIO STATION IN RIO DE JANEIRO					
SERVICES	SCHEDULES (DAILY)	CHANNELS	FREQUENCIES	CONTENTS	
NAVIGATIONAL WARNINGS AND SAR INFORMATION	0400-0445Z	Radio-Telex	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	Radio Data			
	2130-2215Z	Radio-Telex			
METEOROLOGICAL BULLETINS	0230-0330Z	Radio Data		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	Radio-Telex			
	1845-1930Z				
METEOROLOGICAL CHARTS	0745-0925Z	Radio Facsimile	4.266,0 KHz (on demand of mariner) 6.448,0 KHz 8.580,0 KHz 12.709,0 KHz 16.974,0 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		FREQUENCIES	CONTENTS
METEOROLOGICAL BULLETINS, NAVIGATIONAL WARNINGS AND SAR INFORMATION	on demand of mariner	Radiotelephone		VHF: 156,8 MHz (16) and traffic channels.	- Meteorological Forecast - Meteorological warnings - NAVAREA, Coastal and Local Warnings
METEOROLOGICAL WARNINGS, 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) – TANGUÁ RADIO STATION OF EMBRATEL					
SERVICES	SCHEDULES (DAILY)	SATELLITE	CONTENTS		
NAVIGATIONAL WARNINGS AND SAR INFORMATION	0030Z 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.		

(\*) SAR Information and NAVWarnings related to short duration activities are not included.