

**MSI Self Assessment NAVAREA XVI**

Submitted by

PERÚ - DIRECTORATE OF HYDROGRAPHY AND NAVIGATION

**SUMMARY**

Executive Summary: THIS DOCUMENT REPORTS ON THE ACTIVITIES OF  
NAVAREA XVI

Action to be taken: 12

Related documents: NONE

**1. Background:**

The Directorate of Hydrography and Navigation of the Peruvian Navy (DHN) is the NAVAREA XVI coordinator and transmits the MSI in force (MESSAGES IN FORCE) by SafetyNET Service through the web site ASTRUM in the AOR-W satellite at 0500 and 1700 UTC.

They also transmit the MSI messages when the warnings are identified as immediate priority.

**1.1 NAVAREA XVI, Maritime zone covering the SAFETYNET server**

NAVAREA	Country	Area covered	Time (UTC)	Satellite	Safetynet Server
XVI	PERÚ	Among the parallels 3° 24'S and 18°21'S, and of the Peruvian coast to the meridian 120°00'W	0500, 1700	AOR-W	ASTRIUM



“Navarea XVI”

## 1.2 Operational Points of Contact for National Co-ordinators within the NAVAREA

<b>National Coordinator:</b> “Directorate of Hydrography and Navigation (DHN)”				
Responsible	Contac Person	Telephone	Fax	E-mail
Director of Hydrography and Navigation	Rodolfo SABLICH LunaVictoria	00-51-1-2078160 Extension 6400-6401	00-51-1-4658312	<a href="mailto:rsablich@dhn.mil.pe">rsablich@dhn.mil.pe</a>
Head of the Navigation Department	Rosa ACOSTA Urbina	00-51-1-2078160 Extension 6480	00-51-1-6136759	<a href="mailto:racosta@dhn.mil.pe">racosta@dhn.mil.pe</a>

## 2. Comments:

- No changes on GMDSS Master Plan.
- The Maritime Safety Information (MSI) within NAVAREA XVI is performed in accordance with the publication Joint IMO/IHO/WMO Manual on Maritime Safety Information (revised.)
- equipment used and updated software version

Equipment Type	Software Version	Date of Up-date
Transceiver Inmarsat mini- c	Felcom 16	none

➤ Specifics of information and data received

2012				2013				2014			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
100	0	3	90	190	1	0	2	200	2	5	27

The following Table shows the quantity of NAVAREA messages transmitted by the SafetyNET service through satellite ASTRUM provider.

SafetyNET				
MONTH	2012	2013	2014	2015
JANUARY	15	21	45	71
FEBRUARY	21	26	26	70
MARCH	30	33	11	72
APRIL	26	32	08	62
MAY	12	44	46	62
JUNE	06	28	57	49
JULY	18	42	65	41
AUGUST	24	18	69	
SEPTEMBER	16	24	84	
OCTOBER	16	33	71	
NOVEMBER	14	20	79	
DECEMBER	09	21	21	
ANNUAL	207	342	582	

- The table below shows the number of NAVAREA warnings identified as immediate priority (required transmission within 30 minutes) and the average elapsed time per broadcast via SafetyNET:

2012		2013		2014	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
30	27.4 minutes	23	29.6 minutes	34	19.8 minutes

### 3. NAVTEX Coverage:

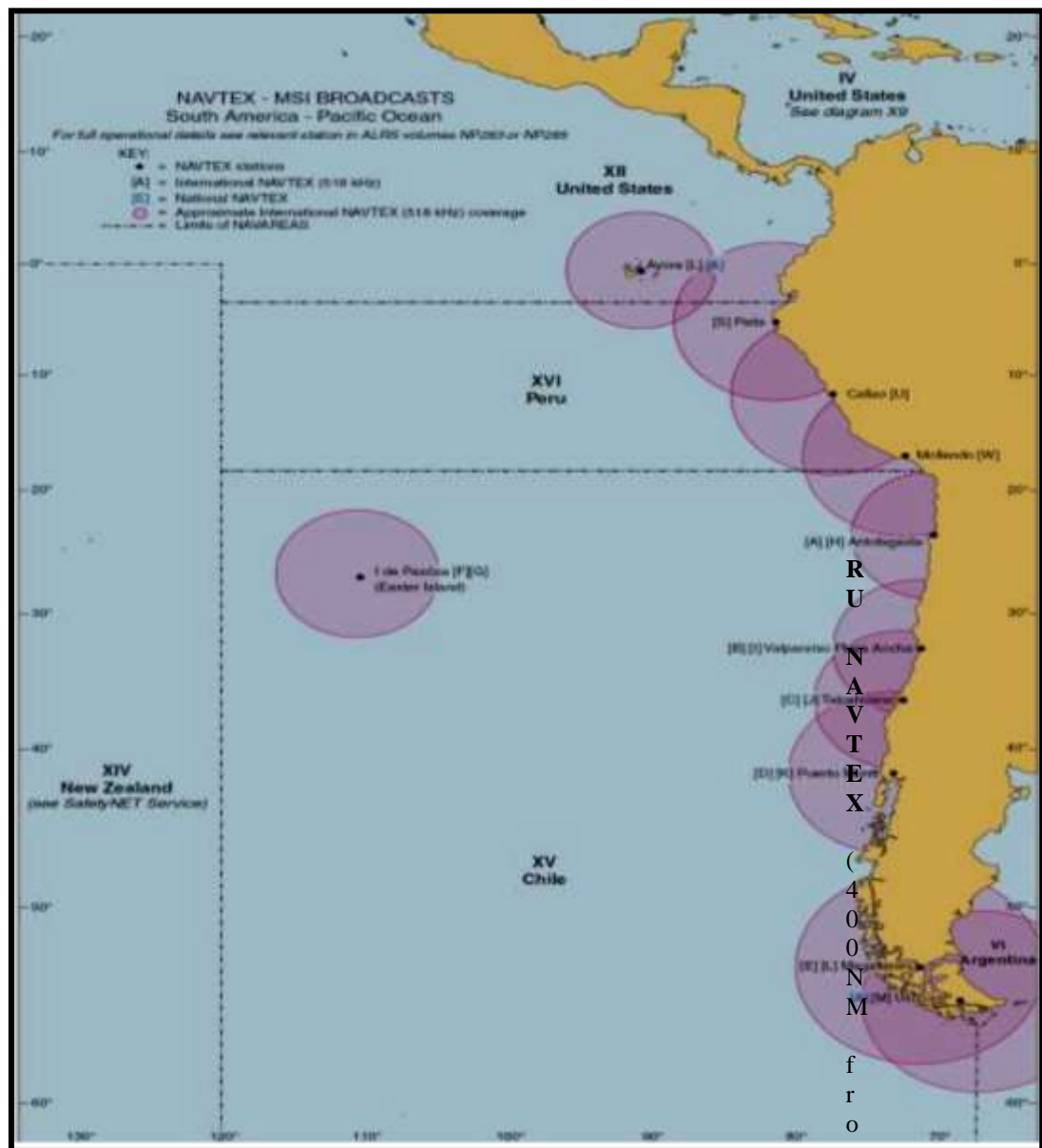
#### PERU NAVTEX contact points and status of the stations

Station Name	Contact Person	Telephone/Mobile phone	Status
Paita [S]	On duty personnel	00-51-73-211670 00-51-969520961	Working
Callao[U]	On duty personnel	00-51-1-4299798/ 00-51-998849812	Working
Mollendo[W]	On duty personnel	00-51-54-534383/ 00-51-959036759	Working

### 3.1 PERU NAVTEX Transmission Schedules in 518 khz (English/Spanish)

Station Name	Transmission Schedules NAVAREAS (UTC)	Transmission Schedules FORECAST (UTC)	Location
Paita [S]	0700 1100 1900 2300	0300 1500	Lat. 05°06.0' S, Long. 81°07.0' W
Callao [U]	1120 1520 2320 0320	0720 1920	Lat. 12°04.0' S, Long. 77°09.0' W
Mollendo [W]	1540 1940 0340 0740	1140 2340	Lat. 17°00.0' S, Long. 72°02.0' W

PE

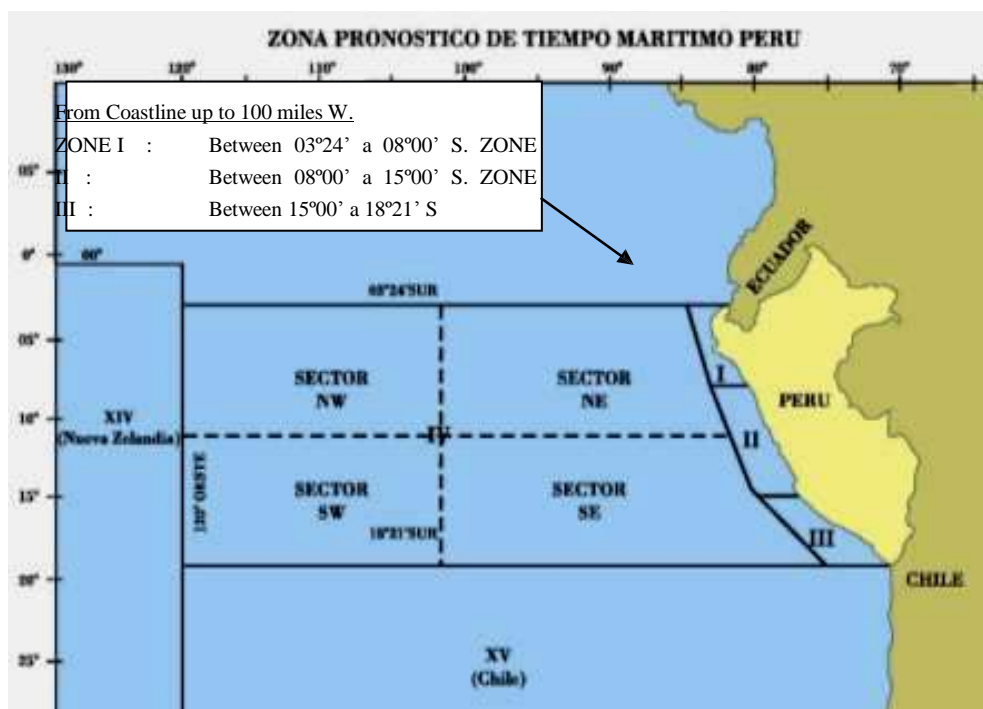


the coast) Coverage Area

Coastal stations which transmit weather warnings for  
maritime navigation

Station Name	Forecast Area	Information
Paíta [S] RADIO OBY2	Coastal region I up to 100 miles approximately	Weather and sea conditions
Callao [U] RADIO OBC3	Coastal regions I, II, III up to 100 miles aprox. and Oceanic regions IV up to Meridian 120° West	Weather and sea conditions
Mollendo[W] RADIO OBF4	Coastal region III up to 100 miles approximately	Weather and sea conditions

FORECAST coverage



### 3.2 Local coastal stations that broadcast special weather warnings

COASTAL	CALL SIGN	VHF (F3E) CHANNEL	GEOGRAPHICAL LOCATION	
			Latitude	Longitude
ZORRITOS	OBU2	16	03°40' S	80°40' W
TALARA	OBT2	16	04°35' S	81°17' W
PAITA	OBY2	16 12	05°05' S	81°07' W
PIMENTEL	OBH2	16	06°57' S	79°52' W
SALAVERRY	OBR3	16	08°13' S	78°59' W
CHIMBOTE	OBZ3	16	09°05' S	78°38' W
HUACHO		16	11°07' S	77°37' W
CALLAO	OBC3	16	12°03' S	77°09' W
PISCO		16	13°43' S	76°14' W
MOLLENDON	OBF4	16	17°01' S	72°01' W
ILO		16	17°38' S	71°21' W

The good working of the Callao Coastal Station is verified by the Navtex NX-700 receiving equipment installed in the Navarea XVI Coordination Center in the Directorate of Hydrography and Navigation. The good working of the Paita/Mollendo Coastal Stations is checked by the Navtex equipments of the Naval and Hydrographic Units.

#### 4. Operational Issues:

- Warnings Messages with less than 42 days old are broadcasted daily through SafetyNet to 0500-1700 UTC.
- Warnings Messages with more than 42 days old are published monthly in the Notice to Mariners Bulletin and posted on the web page of this Directorate.

#### 5. Quality Management Survey

NAVAREA	ISO 9001 - 2008	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
XVI	YES	YES	YES	YES	YES	YES	YES

## 6. Contingency Planning

The NAVAREA XVI Coordination Center is located on the premises of the Directorate of Hydrography and Navigation in Calle Roca N° 118 Chucuito – Callao on the shores of Chucuito beach. The DHN is permanently exposed to natural disasters that may affect its premises.

In this regard, a timely warning, a good approach and adequate training before the arrival of these waves will minimize their destructive effects.

This contingency plan provides for the planning and implementation of actions to face emergency situations caused by natural disasters as well as provisions for the dissemination of the alert in the event of Tsunami.

### 6.1 Implementation

When the operator of the NAVARAREA XVI Coordination Center receives a tsunami warning, a navigational warning will be broadcasted immediately via INMARSAT MINI “C”.

If an earthquake caused inoperability of INMARSAT MINI “C” and UPS of the NAVARAREA XVI Coordination Center, the operator shall transmit the radio navigational warning from the Tsunami Warning Hall via ASTRUM website.

If it was not possible to use the systems of the Directorate of Hydrography and Navigation, the operator on duty will contact the Alternate Tsunami Warning Center to broadcast the corresponding warning via ASTRUM website.

At present, a Contingency plan has not been implemented with another NAVAREA coordinator.

### 6.2 Resources

The NAVAREA XVI Coordination Center counts on a 24 hours service staff.

The NAVAREA XVI Coordination Center has the following equipments:

ONE (1) INMARSAT MINI “C” equipment, FURUNO brand, model FELCOM XVI is used as the main means of broadcasting SafetyNET warnings. This computer is set up to transmits alerts via e-mail in NAVAREA XVI using Astrum.

ONE (1) NAVTEX equipment, FURUNO brand, MX-700 model is used to verify the warning transmission along the Peruvian coast.

ONE (1) TX/RX VHF-FM equipment, ICOM brand, STANDARD HORIZON model. It is used to communicate with the units within an area of 20 nautical miles, and Captaincies and a coastal station within a range of VHF-FM.

ONE (1) Centralion UPS, Titan Vista Pro 200000 model, 220 VAC, 60 Hz with 4 hours of backup time power.

ONE (1) generator set, Motyrep brand of 220 volts to be used 24 hours in case of no electric power.

## 7. Capacity Building:

- The NAVAREA XVI Coordination Center has implemented new transmission equipments for In Force Bulletins. Likewise, the operators have been trained in the Arcgis 10 software and geographical information system for updating In Force Bulletins on the web page.
- The NAVAREA XVI Coordination Center operators are training in the English language
- With regard to multilateral development, we have issued maritime safety information messages along with the Navarea VIII-INDIA coordinator.

## 8. Other Activities:

None

## 9. NAVAREA Website:

Our web site is updated when a Warning Bulletin is issued or when the latest updating is displayed on the web site.

Web site: <https://www.dhn.mil.pe/radioavisos>

The screenshot displays the NAVAREA XVI website interface. The top navigation bar includes links for INICIO, NOSOTROS, SERVICIOS Y PRODUCTOS, BOLETINES, FENÓMENO DEL NIÑO, GALERÍA DE FOTOS, and CONTACTOS. The main content area is divided into several sections:

- NAVAREA XVI**: Features a satellite image and the title "Servicio Radio Avisos Náuticos NAVAREA - XVI". Below it, there is a brief description of the service and a link to "Radioavisos Vigentes Navarea XVI".
- SHINA**: Features a photo of a boat and the title "Servicio Hidrografía y Navegación de la Amazonía". Below it, there is a brief description of the service and a link to "Boletín de Avisos de los Navegantes Fluviales".
- Radioavisos Navarea XVI - Warnings**: A link to "Radioavisos Navarea XVI - Warnings".
- Boletín de Avisos de los Navegantes Fluviales**: A link to "Boletín de Avisos de los Navegantes Fluviales".
- Histograma de los Niveles del río Amazonas en Iquitos**: A link to "Histograma de los Niveles del río Amazonas en Iquitos".
- AVISO ESPECIAL**: Two special notices are listed, both from the "CENTRO NACIONAL DE PRONÓSTICOS MARÍTIMOS DE LA MAR".
- TABLA DE MAREAS**: A tide table for July 2018, showing the days of the week (LU, MA, MI, JU, VI, SA, DO) and the corresponding tide levels.

The tide table for July 2018 is as follows:

LU	MA	MI	JU	VI	SA	DO
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

On the right side of the page, there is a vertical sidebar with a Facebook logo and a "COMPRAR" button.



#### 10. NAVAREA Contact Information:

Responsible	Telephone	FAX	EMAIL
Head of the Navigation Department	00-51-1-2078160 Extension-6480	00-51-1-2078178	<a href="mailto:racosta@dhn.mil.pe">racosta@dhn.mil.pe</a>
Operator of the Navarea XVI	00-51-1-2078160 Extension -6463 6482	00-51-1-4533273	<a href="mailto:navarea@dhn.mil.pe">navarea@dhn.mil.pe</a> <a href="mailto:anieto@dhn.mil.pe">anieto@dhn.mil.pe</a> <a href="mailto:vquispe@dhn.mil.pe">vquispe@dhn.mil.pe</a>

#### 11. Recommendations:

- MSI courses be conducted at regular basis.

#### 12. Actions requested:

none

#### 13. Summary:

With the purpose of improving the nautical warning service, changes were made. The fulfillment of scheduled transmissions as well as register of transmission with a back up of files has been prioritized. The quality standards and changes generated at this stage are reflected in the quantity of monthly transmissions that exceed the previous them.

For the fulfillment of the transmission, both In Force Bulletins and Warning Messages were already scheduled to increase the quality of the service. Likewise, the ISO 90001 quality management is already in progress.

