

## MSI Self Assessment NAVAREA XVI

Submitted by

PERÚ - DIRECTORATE OF HYDROGRAPHY AND NAVIGATION

### SUMMARY

Executive Summary: Report of activities within NAVAREA XVI since WWNWS9

Action to be taken: Note this Report

Related documents: *None*

### 1. Background:

The Directorate of Hydrography and Navigation of the Peruvian Navy (DHN) is the NAVAREA XVI Coordinator and transmits MSI in force (MESSAGES IN FORCE) by SafetyNET Service through the server MARLINK which uses AOR-W satellite.

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

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
PERU	Directorate of Hydrography and Navigation	00-51-1-2078160	00-51-1-4658312	navareaxvi@dhn.mil.pe

### 2. Comments:

- No changes on GMDSS Master Plan.
- The Maritime Safety Information (MSI) within NAVAREA XVI is followed according to the Joint IMO/IHO/WMO Manual on Maritime Safety Information Revised.
- Equipment and software versions used up to date
- The following table shows the equipment installed in NAVAREA XVI Operation Center to monitor all MSI messages broadcasted by NAVAREA XVI Coordinator:

Equipment Type	Software Version	Date of Up-date
Transceiver Inmarsat Mini- C	Felcom 16	None
NAVTEX receiver	N/A	Original

### Specifics of information and data received

2015				2016				2017			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
760	1	0	0	751	0	0	0	687	0	0	0

#### 2.1 SafetyNET:

i) NAVAREA XVI Warnings are broadcasted on SafetyNET through the AOR (W) satellite, as well as NAVTEX when appropriate.

ii) The following table shows the number of SafetyNET messages (including weekly bulletins) that were promulgated:

SAFETYNET				
MONTH	2015	2016	2017	2018
JANUARY	73	74	53	84
FEBRUARY	72	68	54	75
MARCH	83	74	60	81
APRIL	63	80	56	78
MAY	68	69	61	71
JUNE	53	70	59	72
JULY	58	69	66	70
AUGUST	59	60	76	6
SEPTEMBER	62	61	82	---
OCTOBER	69	65	85	---
NOVEMBER	59	59	68	---
DECEMBER	55	53	91	---

*Detail the number of NAVAREA warnings identified as immediate priority (requiring transmission within 30 minutes) and the average elapsed time per broadcast via SafetyNET]:*

2015		2016		2017	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
34	19.8 minutes	79	22.6 minutes	57	20.2 minutes

*[Specifics of requests for list of in-force navigations warnings]*

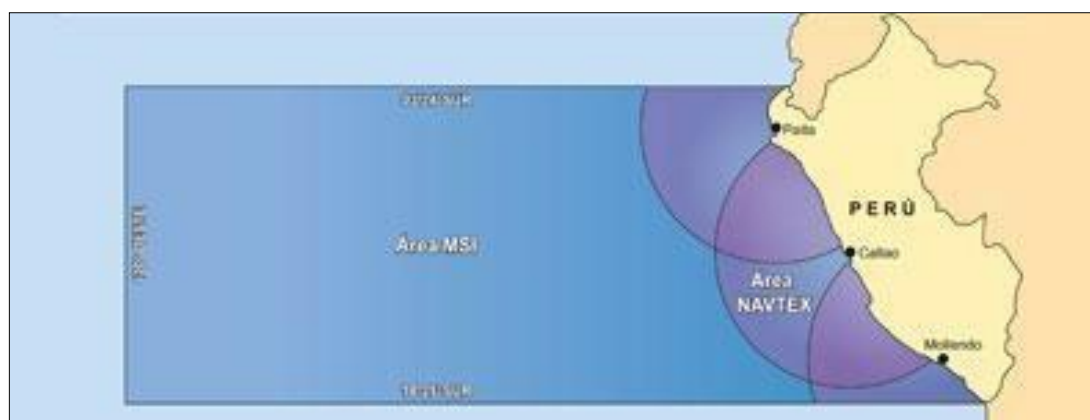
[Detalles de las solicitudes de lista de advertencias de navegación en vigor]

2015		2016		2017	
Total	E-mail	Total	E-mail	Total	E-mail
760	760	751	751	687	687

### 3. NAVTEX Coverage:

**3.1** Coastal Warnings for all National Coordinators in NAVAREA XVI are promulgated on NAVTEX.

**3.2** The diagram below shows NAVTEX Service Areas for the International NAVTEX Service within NAVAREA XVI. PERU NAVTEX (400NM from coastline)



PERU NAVTEX (250NM off the coast) Coverage area

**3.3** PERU NAVTEX contact points and status of the stations Station Name Contact Person Telephone/Mobile

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	Not Working

#### 4. Operational Issues:

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
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**4.1** Only coastal stations Paita and Callao within NAVAREA XVI transmit coastal warnings through NAVTEX and local warnings through VHF system.

**4.2** No new infrastructure has been added to NAVAREA.

**4.3** Warnings Messages with less than 42 days old; are daily broadcasted on SafetyNET at 0500-1700 UTC.

**4.4** 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	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 Centre is located at the Directorate of Hydrography and Navigation in Calle Roca N° 118 Chucuito – Callao, and since it is located at Chucuito beach waterfront, it is permanently exposed to natural disasters that may affect its infrastructure.

This Contingency Plan provides actions needed to face emergencies caused by natural disasters as well as provisions for the dissemination of alerts in case of a Tsunami warning occurrence.

##### 6.1 Implementation

When the operator of the NAVAREA XVI Coordination Centre receives the Tsunami warning, he/she will broadcast immediately the radio navigational warning through MARLINK website.

If it is not possible to use the equipment of the Directorate of Hydrography and Navigation, the operator on duty will contact the Alternate Tsunami Warning Centre (10 minutes) to transmit the corresponding warning message via MARLINK website.

Currently, a Contingency Plan has not been implemented with another NAVAREA coordinator. There was a proposal on implementing a Contingency Plan with Chile (NAVAREA XV).

## **7. Capacity Building:**

- a. Operators of NAVAREA XVI Coordination Centre use Arcgis 10 Geographical Information System to monitor and update In-Force navigation warnings.
- b. The NAVAREA XVI Coordination Centre operators follow training programs given in English language.

## **8. Other Activities:**

In July 2016, in response to our request, WMO established a series of activities that should be carried out to obtain this certification. The first stage consisted of evaluating issuing weather forecasts for METAREA XVI. This activity was carried out during a test period developed between 22 August and 20 September 2016. It was supervised by the Expert Team on Maritime Safety Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM), who at the end, they confirmed that the forecasts issued by the DHN met all expectations regarding content and timeliness. This assessment has been jointly with the Coordinator of METAREA XVI (US National Weather Service - National Oceanic and Atmospheric Administration (NWS - NOAA) of the United States of America, as well as with the International Maritime Organization (OMI) and the International Hydrographic Organization (OHI).

The second stage consisted of the technical visit from 24-26 October 2016, to our facilities of Mr. Edgar Cabrera, Head of the **Marine Meteorology and Ocean Affairs. Division of the Weather and Disaster Risk Reduction Services Department of the WMO**, in order to verify the procedures used for making weather forecasts and their subsequent broadcast via SafetyNET and NAVTEX communication systems.

After fulfilling these two stages, WMO informed the OMI and OHI that the DHN was in a position to take responsibility for issuing forecasts for the METAREA XVI area. Therefore, in compliance with the Examination Protocol, OMI issued the Certificate of Authorization No. 78 on 8 November 2016, where appointed the DHN as a provider of Meteorological Information for the METAREA XVI area.

Once obtaining this certificate, in a coordination meeting between WMO, NWS - NOAA and the DHN, they agreed that the official transfer of responsibility for issuing weather forecasts should be made on 30 June 2017 at 1800 UTC, issuing the final NWS - NOAA forecast at 1715 UTC this day. This was recorded in a letter sent to WMO by Mr. Louis Uccellini, Permanent Representative of the United States.

It is, therefore, the first weather forecast issued by the DHN for the METAREA XVI area

was on 30 June 2017 at 2315 UTC hours, with a validity of 12 hours, in order to comply with the Global Maritime Distress and Safety System we belong to and whose information is vital for all ships.

The weather forecast issued has a broadcast frequency of twice (02) daily at 1115 and 2315 hours UTC for the oceanic and coastal areas. Special Warnings of irregular and windy waves with the Hazard or Warning category are issued as safety to navigation. From 30 June 2017 to 17 July 2018; 764 weather forecasts, 59 Special warnings of irregular waves and 13 wind warnings have been published.

## 9. NAVAREA Website:

Our web site is daily updated and when a Warning Bulletin is issued. 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 EL NIÑO, and GALE. The main content area features several service highlights:

- Tabla de Mareas Agosto - 2017**: Pronósticos del nivel medio del mar por día y hora.
- Cartas de inundación en caso de Tsunami**: Accede y encuentra las nuevas áreas de inundación.
- Servicio de Hidrografía Navegación Puno**: Información para los navegantes del Lago Titicaca.
- Ediciones de la Bitácora Hidrográfica**: Revista producida por la DHN semestralmente.
- Centro Nacional de Alerta de Tsunami**: Represented by an image of a tsunami wave.
- Servicio Hidrografía y Navegación de la Amazonía**: Represented by an image of a boat on a river.
- Apps**: Promotions for 'APP MGPTsunami' (early alert) and 'APP MGPRÍOS' (Amazon river levels).

Below these highlights, the website is divided into two main sections:

- NAVAREA XVI**:
  - Text: La Organización Marítima Internacional (OMI) con resolución A.706 (17) de fecha 6 Noviembre de 1991, aprobó el Servicio de Radioavisos a los Navegantes de alcance mundial el mismo que fue adoptado por el Perú.....
  - Map: A map showing the Pacific Ocean area XVI, with Peru's coastline highlighted.
  - Radioavisos Vigentes Navarea XVI**: Lista de radioavisos dirigidos a los navegantes del área XVI.
  - Radioavisos Navarea XVI - Warnings**: Lista de radioavisos de advertencia dirigidos a los navegantes del área XVI.
- METAREA XVI**:
  - Text: La Organización Marítima Internacional, el 8 de noviembre del 2016, emite el Certificado N° 78 a la Dirección de Hidrografía y Navegación, mediante el cual nos autoriza a difundir información océano - meteorológica para el área METAREA XVI, en el servicio internacional SafetyNET.
  - Map: A map showing the METAREA XVI region, divided into sectors.
  - Pronóstico Meteorológico para la Zona Oceánica**: Pronóstico Meteorológico Vigentes.
  - Pronóstico Meteorológico para la Zona Costera**: Pronóstico Meteorológico Vigentes.

The footer of the website shows the URL: [pe/secciones/departamentos/.../tsunamis\\_inundacion.htm](https://www.dhn.mil.pe/secciones/departamentos/.../tsunamis_inundacion.htm).

**10. NAVAREA Contact Information:**

**PERU (NAVAREA XVI)**

Sr. Jorge PAZ Acosta

Postal code: 80 – Callao - 1

Street Roca N° 118 Chucuito - Callao

Tel .: 005112078160, annexed: 6401 / 6463

Fax: 005112078178

Email: [jpaz@dhn.mil.pe](mailto:jpaz@dhn.mil.pe)

Correo electrónico (MSI para NAVAREA XVI): navareaxvi@dhn.mil.pe

**11. Recommendations:**

None.

**12. Actions requested**

Note the information provided

**13. Summary:**

The Directorate of Hydrography and Navigation of the Peruvian Navy, as NAVAREA XVI coordinator, transmits in force MSI messages on a daily basis, at 0500 and 1700 hrs UTC time, by SafetyNET Service through the server MARLINK which uses AOR-W satellite; and by NAVTEX when required. Also, MSI messages will also be transmitted at any schedule upon reception of warning messages. NAVAREA XVI is divided in 3 sub-areas defined as Ocean Pacific Coastal Paita, Coastal Callao and Coastal Mollendo. These Coastal Centres operate autonomously promulgating Navigational Warnings via NAVTEX. Peruvian Contingency Plan provides actions needed to face emergencies caused by natural disasters, as well as provisions for the dissemination of alerts in case of a Tsunami warning occurrence. ISO 9001:2008 quality management certification for NAVAREA XVI Coordination Center is already in progress.