

MSI Self Assessment NAVAREA XVI

Submitted by

PERÚ - DIRECTORATE OF HYDROGRAPHY AND NAVIGATION

SUMMARY

Executive Summary: Report of activities within NAVAREA XVI since WWNWS7

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.

1.1 NAVAREA XVI comprises of the waters of the SW Pacific Ocean.

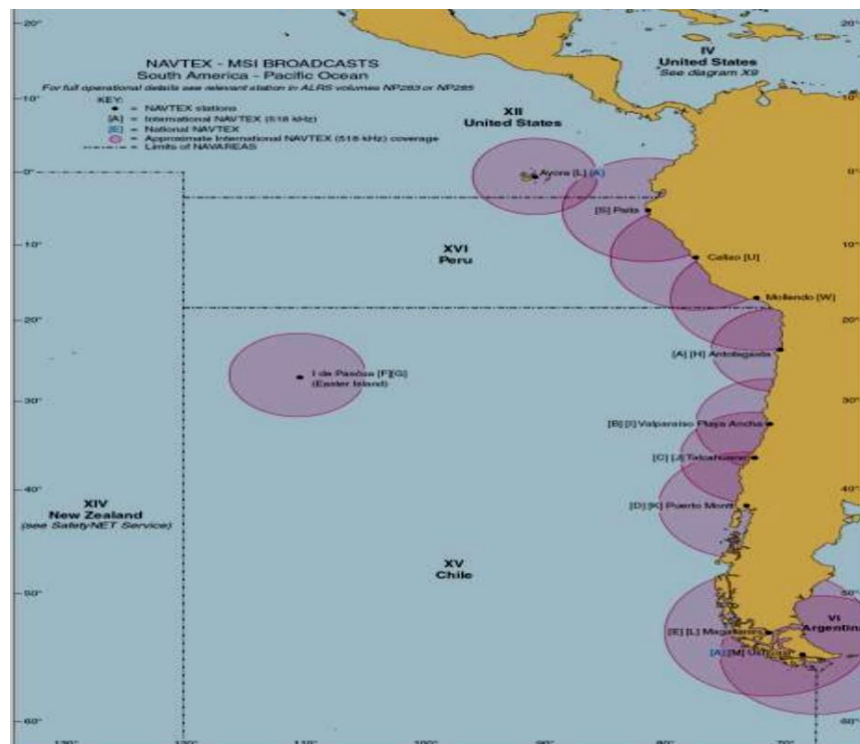
| NAVAREA | Country | Area covered | Time (UTC) | Satellite | Safetynet Server |
|---------|---------|---|------------|-----------|------------------|
| XVI | Perú | Among parallels 3° 24'S and 18°21'S, and from Peruvian coast to the meridian 120°00'W | 0500, 1700 | AOR-W | MARLINK |



1.2 NAVAREA XVI SUB-AREAS

NAVAREA XVI is divided in 3 sub-areas defined as Ocean Pacific Coastal Paita, Coastal Callao and Coastal Mollendo. These Coastal Centers operate autonomously promulgating Navigational Warnings via NAVTEX.

| Station Name | Transmission Schedules NAVAREAS (UTC) | Transmission Schedules FORECAST | 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 |



PERU NAVTEX (250NM off the coast) Coverage area

Note: MSI messages will also be transmitted at any schedule upon reception of warning messages in the water and waterways or when receiving messages related to security.

1.3 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 |

Note: NAVAREA XVI email was changed from navarea@dhn.mil.pe (not in use anymore) to navareaxvi@dhn.mil.pe.

2. Comments:

GMDSS Master Plan:

- 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

| 2013 | | | | 2014 | | | | 2015 | | | |
|--------|-----|-------|------|--------|-----|-------|------|--------|-----|-------|------|
| E-mail | Fax | Phone | Text | E-mail | Fax | Phone | Text | E-mail | Fax | Phone | Text |
| 190 | 1 | 0 | 2 | 200 | 2 | 5 | 27 | 760 | 1 | 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 | 2013 | 2014 | 2015 | 2016 |
| JANUARY | 21 | 45 | 73 | 74 |
| FEBRUARY | 26 | 26 | 72 | 68 |
| MARCH | 33 | 11 | 83 | 74 |
| APRIL | 32 | 08 | 63 | 80 |
| MAY | 44 | 46 | 68 | 69 |
| JUNE | 28 | 57 | 53 | 70 |
| JULY | 42 | 65 | 58 | 69 |
| AUGUST | 18 | 69 | 59 | |
| SEPTEMBER | 24 | 84 | 62 | |
| OCTOBER | 33 | 71 | 69 | |
| NOVEMBER | 20 | 79 | 59 | |
| DECEMBER | 21 | 21 | 55 | |
| TOTAL | 342 | 582 | 774 | |

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

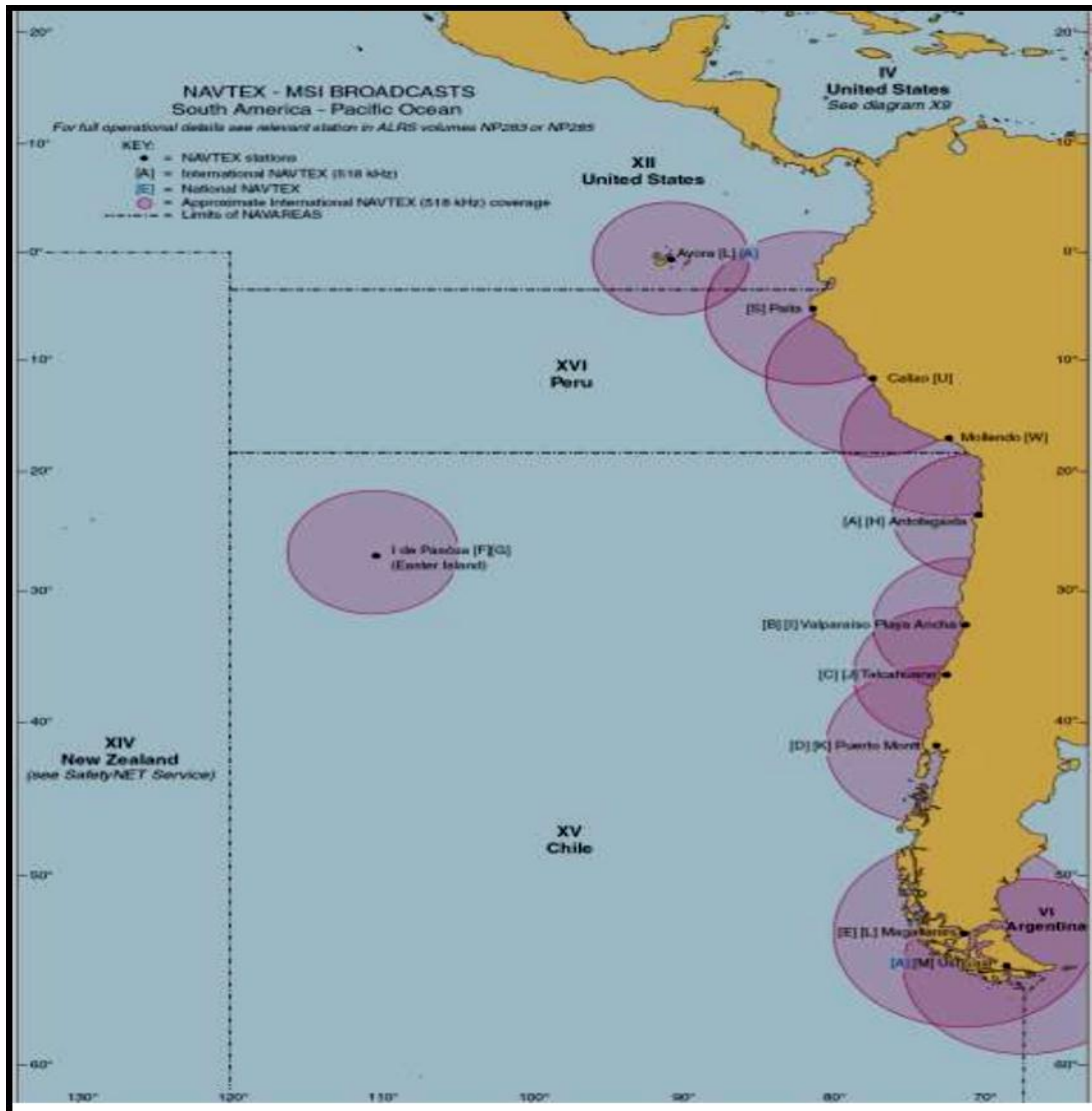
| 2013 | | 2014 | | 2015 | |
|-------------|----------------------|-------------|----------------------|-------------|----------------------|
| Total | Average elapsed time | Total | Average elapsed time | Total | Average elapsed time |
| 23 | 29.6 minutes | 34 | 19.8 minutes | 79 | 22.6 minutes |

List of in-force navigations warnings

| 2015 | | 2016 (July) | | 2017 | |
|-------------|--------|--------------------|--------|-------------|--------|
| Total | E-mail | Total | E-mail | Total | E-mail |
| 760 | 760 | 504 | 504 | - | - |

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)

3.3 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 | Not 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 |
|---|------------------------|-----------------------------|
| INDIA | 01 | Military Exercises |
| There was a good information exchange between NAVAREA XVI and NAVAREA VIII. | | |

- 4.1 All coastal stations 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 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 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 NAVARAREA XVI Coordination Centre receives the Tsunami warning, he/she will broadcast immediately the radio navigational warning through MARLINK website.

If it's 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 drive) 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), but they stated: *"To implement a system involving NAVAREA XV and NAVAREA XVI does not constitutes a priority for Chile at this time."*

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.
- c. With regard to multilateral development, NAVAREA XVI has successfully issued maritime safety information messages along with the NAVAREA VIII-INDIA coordinator.

8. Other Activities:

METAREA XVI trial phase started on August 22nd and is expected to finish by September 22nd. After this, different evaluations and tests are needed to verify if Perú will be directly on charge of METAREA XVI.

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. At the top, there is a navigation menu with links: INICIO, NOSOTROS, SERVICIOS Y PRODUCTOS, BOLETINES, FENÓMENO DEL NIÑO, GALERÍA DE FOTOS, and CONTACTENOS. The main content area is divided into several sections:

- NAVAREA XVI**: A section featuring a satellite image and the text "Servicio Radio Avisos Náuticos NAVAREA - XVI". It includes a link to www.dhn.mil.pe/index.php?secc=radioavisos.
- SHNA**: A section featuring a riverboat image and the text "Servicio Hidrografía y Navegación de la Amazonía". It includes a link to index.php/shna.
- Radioavisos Vigentes Navarea XVI**: A section with a satellite icon and a link to www.dhn.mil.pe/radioavisos.
- Radioavisos Navarea XVI - Warnings**: A section with a satellite icon and a link to www.dhn.mil.pe/radioavisos_warnings.
- Boletín de Avisos de los Navegantes Fluviales**: A section with a riverboat icon and a link to [Boletín de Avisos de los Navegantes Fluviales](#).
- Histograma de los Niveles del río Amazonas en Iquitos**: A section with a riverboat icon and a link to [Histograma de los Niveles del río Amazonas en Iquitos](#).
- AVISO ESPECIAL Nro. 37** and **AVISO ESPECIAL Nro. 36**: Sections for special warnings from the Centro Nacional de Pronósticos Marítimos de la Mar.
- TABLA DE MAREAS**: A section for tide tables, showing a calendar for July 2015. The date 22 is highlighted in blue.
- ORTOS Y OCASOS**: A section for sunrise and sunset times.

On the right side, there are social media links for Facebook and Correo, and a search icon at the top right.

10. NAVAREA Contact Information:

| National Coordinator: Directorate of Hydrography and Navigation (DHN) | | | | |
|---|-------------------------------------|---|-----------------|--|
| Responsible | Contact | Telephone | Fax | E-mail |
| Director | Rodolfo SABLICH Luna Victoria | 00-51-1-2078160 Extension 6400-6401 | 00-51-1-4658312 | rsablich@dhn.mil.pe |
| Head of the Navigation Department | Christopher SERVÁN Durán | 00-51-1-2078160 Extension 6480 | 00-51-1-6136759 | cservan@dhn.mil.pe |
| Operators of the NAVAREA XVI | ---- | 00-51-1-2078160 Extension: 6463, 6482 | 00-51-1-4533273 | navareaxvi@dhn.mil.pe jbruno@dhn.mil.pe vquispe@dhn.mil.pe |

11. Recommendations:

Contingency Plan workshops to learn more about other procedures established.

12. Actions requested:

The Sub-Committee is invited to note this report.

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 Centers 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.