

MSI Self Assessment NAVAREA XV - Chile

Submitted by Chile

SUMMARY

Executive Summary: Overview of activities undertaken within NAVAREA XV since WWNWS 10

Action to be taken: See Paragraph 12

- Broadcasting of cancellation messages and serialization of in-Force Bulletin Notices Validate.
- Upgrade GMDSS Master Plan (Annex 8).
- Upgrade Publication OHI C-55 Annex A.

Related documents: None

1. Background:

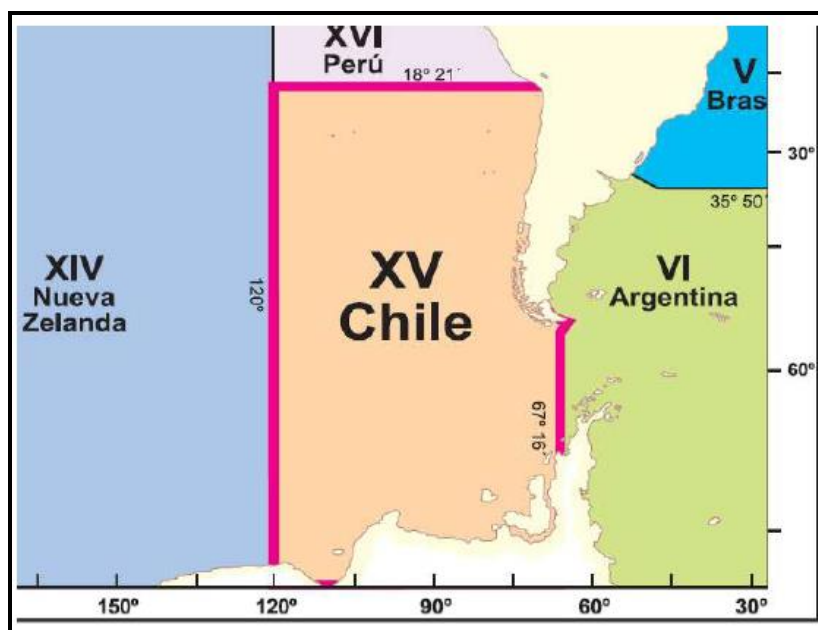
The NAVAREA XV limits are:

By the North: Parallel 18° 21' S.

By the South: The Antarctic Continent Coasts.

By the East: Chilean coast and the meridian 67° 16' W.

By the West: Meridian 120° 00' W.



The Hydrographic and Oceanographic Service of the Chilean Navy (SHOA), is the NAVAREA XV Coordinator and National Radio Navigational Warning System Coordinator, assuming the responsibilities assigned by the Joint IHO / IMO / WMO Manual on MSI, there being no other Authority in Chile in charge of these issues.

The Meteorological Service of the Chilean Navy is constituted as the Coordinator of METAREA XV.

The Maritime Territory and Merchant Marine General Directorate (DIRECTEMAR) is the only Chilean authority authorized to participate as an information provider in the International SafetyNET service, which delegates this role to the Maritime Radio Station of Valparaíso Playa Ancha, Radio / CBV / MMSI 007251860, which concentrates and processes all the Information on Maritime Safety (MSI) and SAR, for its broadcasting through the SafetyNET system. Valparaíso Playa Ancha Radio also fulfills the role of NAVTEX Coordinator.

The schedule broadcasts per day are:

No	Type of information.	GMDSS Service Provider	UTC Time
1	NAVAREA Warnings	SafetyNET	02:10 14:10
2	Coastal Warnings Whenever it becomes necessary to use the SafetyNET service to replace a decommissioned NAVTEX station.	SafetyNET	04:00 12:00 20:00
3	Meteorological Information (forecasts information)	SafetyNET Navtex	01:00 03:45 13:30 14:50 18:45
4	Meteorological Warnings, SAR Information, Tsunamis and other natural phenomena.	SafetyNET Navtex	If there are.

NAVTEX ENGLISH LANGUAGE 518 KHZ.:

COASTAL STATION	TIME BROADCAST (UTC)
ANTOFAGASTA RADIO	00:00; 04:00; 08:00; 12:00; 16:00; 20:00
VALPARAÍSO RADIO	00:10; 04:10; 08:10; 12:10; 16:10; 20:10
TALCAHUANO RADIO	00:20; 04:20; 08:20; 12:20; 16:20; 20:20
PUERTO MONTT RADIO	00:30; 04:30; 08:30; 12:30; 16:30; 20:30
MAGALLANES RADIO	00:40; 04:40; 08:40; 12:40; 16:40; 20:40
ISLA DE PASCUA RADIO	00:50; 04:50; 08:50; 12:50; 16:50; 20:50

From 1st January 2016, 490 Khz NAVTEX is being operated in Spanish Language.

NAVTEX SPANISH LANGUAGE 490 KHZ.:

COASTAL STATION	TIME BROADCAST (UTC)
ANTOFAGASTA RADIO	01:00; 05:00; 09:00; 13:00; 17:00; 21:00
VALPARAÍSO RADIO	01:10; 05:10; 09:10; 13:10; 17:10; 21:10
TALCAHUANO RADIO	01:20; 05:20; 09:20; 13:20; 17:20; 21:20
PUERTO MONTT RADIO	01:30; 05:30; 09:30; 13:30; 17:30; 21:30
MAGALLANES RADIO	01:40; 05:40; 09:40; 13:40 ; 17:40; 21:40
ISLA DE PASCUA RADIO	01:50; 05:50; 09:50; 13:50; 17:50; 21:50

Operational Points of Contact for National Coordinators within the NAVAREA

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
Chile- Valparaíso	SHOA	+56 32 2266541	+56 32 2266542	navareaxv@shoa.cl
Chile- Valparaíso	SHOA	+56 32 2266622	+56 32 2266542	navareaxv@shoa.cl

2. Comments :

GMDSS Master Plan, Annex 8, was updated in the web page, on 28th February 2019 <https://gis.imo.org/Public/GMDSS/Data.aspx?Form=Annex8>.

Moreover, a cross-check between the GMDSS Master Plan and IHO Publication C-55 was conducted. Observations pertinent to IHO Publication C-55 dated 26 March 2018 are provided in Annex A. (Pages 95 to 102 of C-55 publication containing information from Chile were reviewed).

Specifics equipment and software version with date up-dated:

Equipment Type	Software Version	Date of Up-date
NAVTEX	Sender v 2008	Original
SafetyNET	Marlink	2016

Information and Data Received

2017				2018				2019			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
77	No data	No data	553	05	No data	No data	589	16	No data	No data	290

(Up to Jul 26, 2019)

NAVAREA Warnings Promulgated

NAVAREA XV	2015	2016	2017	2018	2019
SafetyNET	342	257	291	179	102
NAVTEX	582	454	339	415	204

(Up to Jul 26, 2019).

The MSI provision flow for NAVAREA XV is as follow:

- NAVAREA XV receives MSI from the maritime community via e-mail or via messages or text documents either from Navy ships or from the National Maritime Authority (DGTM).
- MSI information is reviewed with the support of relevant nautical charts and publications, before a radio warning message is issued.
- NAVAREA XV prepares the text of the radio warning message following the format provided by the IMO-IHO-OMM Manual on Maritime Safety Information-IHO Publication 53.
- The text of the radio warning message is sent by SHOA to Playa Ancha Radio Station National Coordinator for issuing MSI information).
- MSI information is transmitted by NAVTEX and SafetyNET systems, as appropriate.

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

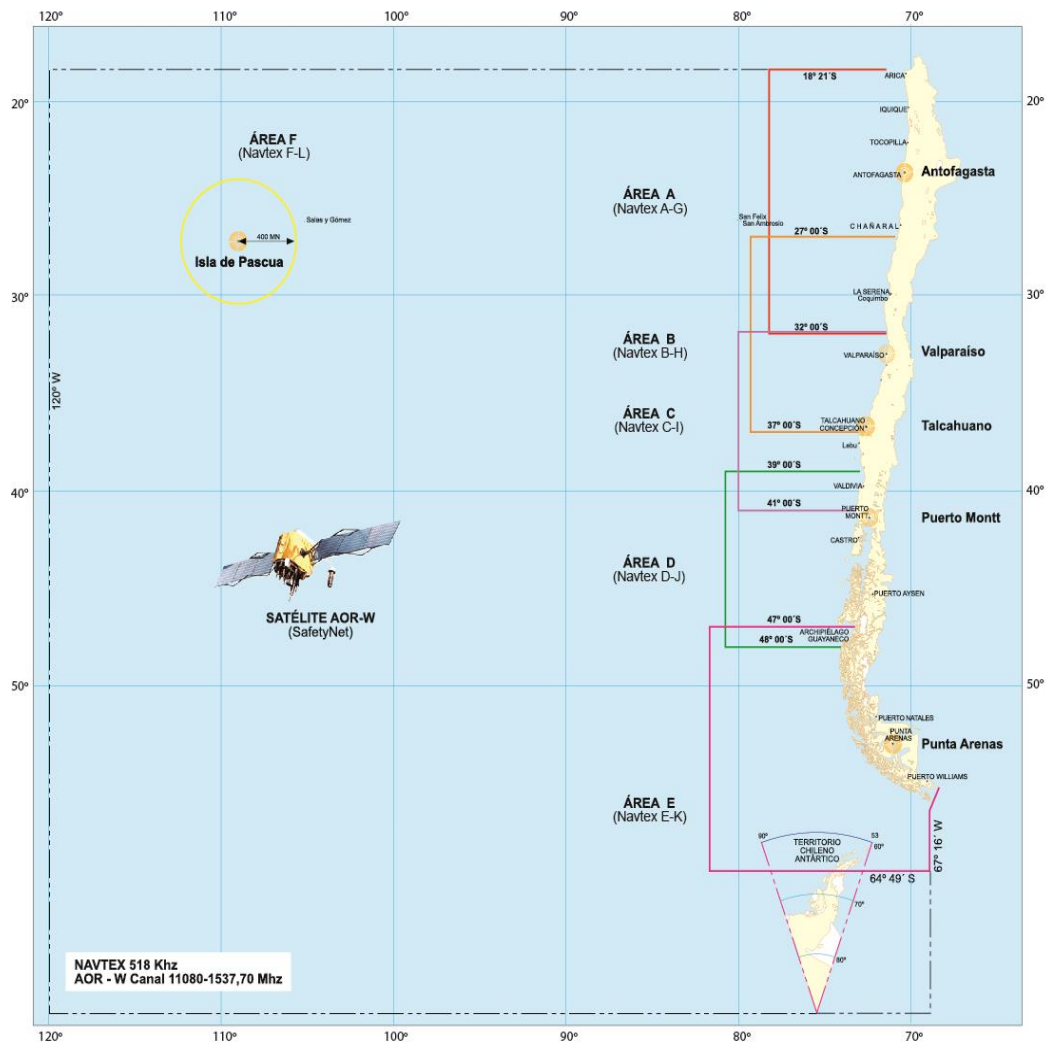
2017		2018		2019	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
3	28 minutes	No data	Did not track	No data	Did not track

(Up to Jul 26, 2019).

In 2017 three radio warning messages were transmitted reporting on tsunami occurrence (identified as immediate priority) which were transmitted via ADR-W satellite (SafetyNET).

3. NAVTEX Coverage:

Diagram of NAVTEX stations and service areas within NAVAREA XV



Contact details for NAVTEX Stations

ANTOFAGASTA ZONAL RADIO (Area A)

TEF : +56 55 2630072 – +56 55 2630000

FAX : +56 55 2224464

E-mail: cbaradio@directemar.cl

VALPARAÍSO PLAYA ANCHA RADIO (Area B)

TEF: +56 32 2208974 – +56 32 2208961

FAX: +56 32 2281099

E-mail: cbvradio@directemar.cl

ISLA DE PASCUA RADIO (Area F)

(TEMPORARILY OFF AIR)

TEF: +56 32 2100222

FAX: none

E-mail: cbyradio@directemar.cl

Off air, Playa Ancha Radio/CBV MMSI 007251860, assumes diffusions NAVTEX System

TALCAHUANO ZONAL RADIO (Area C)

TEF: +56 41 2541645 – +56 41 2541100.

FAX: +56 41 2541634.

E-mail: cbtradio@directemar.cl

PUERTO MONTT ZONAL RADIO (Area D)

TEF: +56 65 256828.

FAX: +56 65 256827.

E-mail: cbpradio@directemar.cl

MAGALLANES ZONAL RADIO (Area E)

TEF: +56 61 2201170 – +56 61 2201100.

FAX: +56 61 2201196.

E-mail: cbmradio@directemar.cl

4. Operational Issues:

Details of MSI information received from coastal states within the NAVAREA XV (Year 2019).

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Antofagasta Radio (Chile)	19	Weapons Drill
	02	Radio Equipment
	01	Lighthouse
	01	Cable Laying
	01	Lighted Beacon
	01	Sunk Vessel

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Valparaíso Radio (Chile)	18	Weapons Drill
	03	Radio Equipment
	01	Lighthouse
	07	Buoy
	01	Anchored Buoy
	01	Towing

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Talcahuano Radio (Chile)	16	Weapons Drill
	03	Radio Equipment
	02	Lighthouse
	03	Buoy
	01	Anchored Buoy
	01	Towing
	01	Lighted Beacon
	01	Modificación Buoy
	01	New AIS-AToN

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Puerto Montt Radio (Chile)	02	Weapons Drill
	02	Radio Equipment
	04	Lighthouse
	02	Current meter Installed
	01	Lighted Beacon
	05	Pile
	01	Half Sunk
	08	Lighted Beacon
	07	Wreckage Adrift
	04	Cable Laying
	01	Racon
	01	Dangerous Rock
	02	Anchored Buoy
	01	Sunk Vessel

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Magallanes Radio (Chile)	06	Cable Laying
	03	Radio Equipment
	01	Vessel Adrift
	26	Lighted Beacon
	02	Modificación Beacon
	03	Lighthouse
	11	Buoy
	03	AIS-AToN Inoperative
	05	Ice Adrift
	02	Buoy Re-established

4.1 In force warnings bulletins

NAVAREA XV warnings are posted in the website www.shoa.mil.cl in both, English and Spanish language. Bulletins are updated twice a day and can be requested by e-mail to navareaxv@shoa.cl.

4.2 Notices to mariners

In the Notice to Mariners, section II, a compilation of the long lasting in-force notices is provided in the bulletins posted in the website www.shoa.mil.cl (Products/Bulletins).

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
NAVAREA XV	YES	YES	YES	YES	YES	YES	YES

Signal Transmission Monitoring in near real time:

- In relation to the Monitoring of the signals, coastal stations conduct verification of their transmission and analyze the quality of the signals using JVCOM Software.
- Signal Transmission Monitoring Method:
 - NAVTEX transmissions use JVCOMM32 software and JRC mod. NCR- 333 for reception.
 - SAFETYNET transmissions use DOS NERA MINIC software with Satellite INMARSAT MINIC receiver.
- NAVTEX and SAFETYNET transmission equipment have a 100% efficiency.

Broadcasting Times MSI NAVAREA XV specifications are in line with the Global Performance Report submitted by SHOA to the Ministry of Defense in Annex 4 - Performance Indicators 2015-2018, which can be consulted in <http://www.shoa.cl/php/balance.php?idioma=es>.

6. Contingency Planning

The WNWWS SC encouraged all NAVAREAS to coordinate a Contingency Plan. Last year, at the WWNWS-10 meeting, NAVAREA XV (Chile) submitted a Contingency Plan which considers collaboration with NAVAREA XVI (Perú).

The Contingency Plan considers the occurrence of failure at any Radio Station from the respective areas of jurisdictional responsibility belonging to the adjacent NAVAREAS XV and XVI. There is no record of any comment or observation received from NAVAREA XVI.

There have been no exercises related to the Contingency Plan.

7. Capacity Building:

Last year the Dirección General Marítima de Colombia (DIMAR) requested SHOA the provision of a short course on MSI. SHOA conducted such course based on an IHO program. The course was conducted from 29 to 31 August and very well received by 7 people from DIMAR. Colombia has demonstrated great interest in joining this Sub-Committee and has participated as observer in previous meetings.

8. Other Activities:

UNESCO/IOC Tsunami Program - Tsunami Service Provider Messages for the Maritime Community

At the WWNWS-10 a standard message to issue a tsunami warning was considered as part of the MSI. Tsunami Service Provider Messages for the Maritime Community is a document that provides details of an initial proposal for the format, content, and dissemination of messages with tsunami guidance specifically for ships on the high seas from the Tsunami Service Providers (TSPs) of the four Tsunami Warning Systems operated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

Comments to the document: The message assumes a homogeneous area and therefore is not applicable to the NAVAREA XV in the event of distant tsunami genic events being not in line with

PTWC products which provide a differentiated degree of threat for the 8 blocks in which Chile is divided for these purposes.

For short distance tsunami genic events is not proper to adopt a unique risk value for all NAVAREA XV a matter that is well covered under the analysis conducted by Integrated Tsunami Warning and Prediction System (SIPAT).

Following these comments, the message format is not adequate as they offer a homogeneous level of threat for NAVAREA XV nevertheless strongly suggest to request information from local authorities. In the Chilean case, authorities will be in a position to provide sectorial information based on PTWC and SIPAT evaluation procedures.

Iridium SafetyCastSM GMDSS service

Iridium is currently developing Iridium SafetyCastSM GMDSS service and is targeting the launch of that service for early 2020. Iridium SafetyCastSM service is an Enhanced Group Call (EGC) service used to broadcast Maritime Safety Information (MSI) as part of Iridium GMDSS—the first such service to offer truly global reach for critical MSI. Iridium is currently working with your organization to coordinate MSI information for testing purposes.

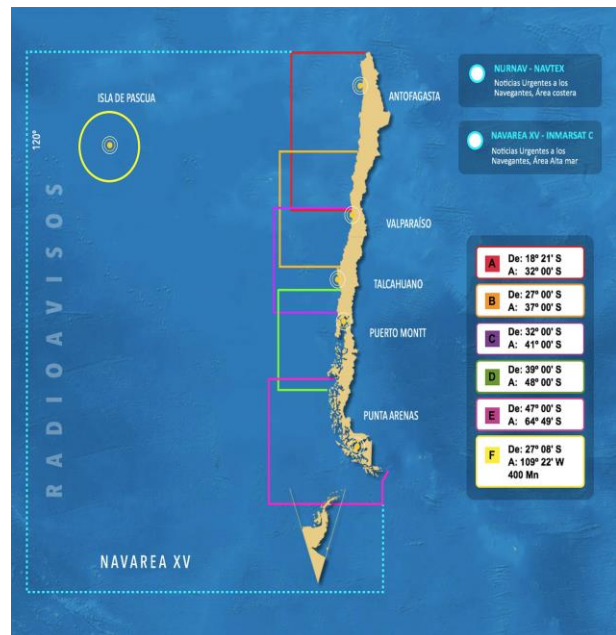
In April of this year, Iridium requested all information providers to send via email the ISM notices to Iridium, as part of the development and testing process of its systems.

9. NAVAREA Website:

NAVAREA XV publishes Notices to Mariners on the web site www.shoa.mil.cl, in the link “radioavisos”. The website is compatible with all Android and Apple mobile elements, and is updated daily.



SHOA Website



NAVAREA Website

10. NAVAREA XV Contact Information:

NAVAREA XV

Hydrographic and Oceanographic
Service of the Chilean Navy

Address: Errazuriz 254, Playa Ancha, Valparaíso (Chile)
Tel: +56 32 2266666
Fax: +56 32 2266542
E-mail: navareaxv@shoa.cl
P.O. 237-0168
Web site: <http://www.shoa.mil.cl>.

11. Recommendations:

Nil

12. Actions requested:

Broadcasting of cancellation messages and serialization of In-Force Bulletin Notices

The cancellation of notices and serialization of the current notices is carried out in accordance with the provisions of the International Maritime Organization (IMO) of Nov. 21, 2014.

As a general rule, the current notices are transmitted once a week on Tuesdays at a regular time (14:00 UTC), during a period of six weeks if these are in force, and are part of the numbered series of radio navigational warnings and are transmitted as a numbered individual message while these remain in effect during the week.

All current notices, including those that are more than six weeks old, are published on the website www.shoa.mil.cl/php/radioavisos.php, for the information of navigators. This web page is updated daily.

The format and content of in force and cancellation messages follow the guidance given in the Manual on Maritime Safety Information – IHO Publication 53.

Summary of Current Radio Notices transmitted by Navtex System (Year 2019).

AREA A: (LAT 182100 S - LAT 320000 S)

- 1.- Messages in Force Year 2019: 0148.
- 2.- Messages in Force Year 2018: 0186 - 0187 - 0188.
- 3.- Messages in Force Year 2012: 0002.
- 4.- Messages Reissued as Notices to Mariners: NONE.
- 5.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
- 6.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.

AREA B: (LAT 270000 S - LAT 370000 S)

- 1.- Messages in Force Year 2019: 0116 - 0133 - 0148 - 0177 – 0190 - 0205 - 0206.
- 2.- Messages Reissued as Notices to Mariners: NONE.
- 3.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
- 4.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.

AREA C: (LAT 320000 S - LAT 410000 S)

- 1.- Messages in Force Year 2019: 0116 - 0133 - 0190 - 0195 - 0203 - 0204 - 0205 - 0206.
- 2.- Messages in Force Year 2018: 0039 - 0040 - 0269 - 0284.

- 3.- Messages in Force Year 2014: 0400.
- 4.- Messages Reissued as Notices to Mariners: NONE.
- 5.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
- 6.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.

AREA D: (LAT 390000 S - LAT 480000 S)

- 1.- Messages in Force Year 2019: 0050 - 0090 - 0146 - 0156 - 0157 - 0162 - 0163 - 0183 - 0192 - 0193.
- 2.- Messages in Force Year 2018: 0124 - 0126 - 0183 - 0269 - 0292 - 0296 - 0326 - 0388.
- 3.- Messages in Force Year 2017: 0282 - 0419.
- 4.- Messages in Force Year 2016: 0275 - 0448.
- 5.- Messages in Force Year 2015: 0493.
- 6.- Messages Reissued as Notices to Mariners: NONE.
- 7.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
- 8.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.

AREA E: (LAT 470000 S, TO ANTARCTIC TERRITORY)

- 1.- Messages in Force Year 2019: 0019 - 0024 - 0102 - 0133 - 0152 - 0199 - 0201 - 0202 - 0207 - 0208.
- 2.- Messages in Force Year: 0106 - 0118 - 0296 - 0325 - 0326 - 0334 - 0389 - 0390 - 0400.
- 3.- Messages in Force Year 2016: 0300 - 0302 - 0323 - 0324.
- 4.- Messages Reissued as Notices to Mariners: NONE.
- 5.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
- 6.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.

AREA F: (LAT 270800 S - LONG 1092200 W)

Easter Island.

Circular Cover Area 400 miles.

- 1.- Messages in Force Year 2019: 0177.
 - 2.- Messages Reissued as Notices to Mariners: NONE.
 - 3.- Messages Issued this Week (JUL 30 TO AUG 06): NONE.
 - 4.- Messages Cancelled this Week (JUL 30 TO AUG 06): NONE.
- (Up to Jul 31, 2019).

Available on the Web Site: www.shoa.cl/radiowarnings).

Summary of Current Radio Notices transmitted by SafetyNET System (Year 2019).

A.- Messages in Force:

Year 2019: 0062 - 0074 - 0083 - 0090 - 0097 - 0102 - 0103 - 0104 - 0105 - 0106 - 0107.

Year 2018: 0113 - 0172 - 0173 - 0177.

Year 2017: 0174.

B.- Messages Reissued as Notices to Mariners:

NONE.

C.- Messages Issued this Week:

NONE.

D.- Messages Cancelled this Week:

0101/19 - 0106/19.

(Up to Jul 31, 2019).

Available on the Web Site: www.shoa.cl/radiowarnings).

13. Summary:

SHOA, besides the Notice to Mariners, published monthly, on a daily basis informs on urgent and important notices affecting safety of navigation, such as alterations or errors in the maritime signs, report of new rocks or dangers or any other information that need to be known immediately to the vessels at sea, only if that information hasn't been announced earlier on any other written media (Notice to Mariners, new edition of charts, etc.)

This service is integrated to the "World Wide Navigational Warning Service", of which Chile is responsible.

Notice to Mariners and Coastal Warnings for NAVAREA XV are prepared by SHOA and broadcasted daily through maritime radio station Valparaiso Playa Ancha Radio, at different times of scheduled broadcasting.

**ANNEX A
UPGRADE PUBLICATION OHI C-55**

Chile (C2)

Hydrographic surveying / Levés hydrographiques / Levantamientos hidrográficos

Survey coverage Couverture hydrographique Cobertura hidrográfica	Depth < 200m Profondeur < 200m Profundidad < 200m			Depth > 200m Profondeur > 200m Profundidad > 200m		
	<p>Adequately surveyed █ Correctement hydrographié Adecuadamente levantado</p> <p>Re-survey required █ Nécessitant de nouveaux levés Requiere nuevo levantamiento</p> <p>Never systematically surveyed █ Jamais hydrographié systématiquement Nunca levantado sistemáticamente</p>	27	18	55	10	10
Notes Notes Notas						

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

GMDSS implementation Mise en œuvre du SMDSM Implementación SMSSM	Status Status Estado	Notes Notes Notas
Master plan Plan cadre Plan principal	YES	
A1 area Zone A1 Zona A1	YES	
A2 area Zone A2 Zona A2	YES	
A3 area Zone A3 Zona A3	YES	
NAVTEX NAVTEX NAVTEX	YES	
Safety NET Safety NET Safety NET	YES	

Chile (C2)

Nautical charting / Cartographie marine / Cartografía náutica

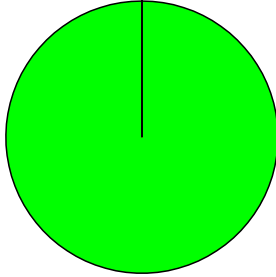
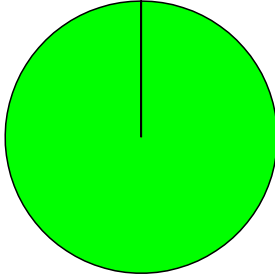
Coverage of charts published Couverture des cartes publiées Cobertura de cartas publicadas		Offshore passage Navigation au large Pasaje offshore			Landfall and Coastal passage Atterrissage et navigation côtière Recalada y Pasaje costero			Approaches and Ports Approches et ports Aproches y puertos		
<p>% Covered by INT or other paper charts meeting S-4 Couvert par des cartes papier INT ou autres conformes S-4 Cubiertas por cartas de papel INT o otras cumpliendo S-4</p> <p>% Covered by RNC meeting S-61 Couvert par des RNC conformes S-61 Cubiertas por RNC cumpliendo S-61</p> <p>% Covered by ENC meeting S-57 Couvert par des ENC conformes S-57 Cubiertas por ENC cumpliendo S-57</p>	8	8	16	18	0	42	74	0	42	
<p>Paper charts showing depth in meters Cartes papier avec les profondeurs en mètres Cartas de papel con profundidades en metros</p>		<p>Paper charts referenced to a satellite datum Cartes papier rapportées à un système géodésique satellitaire Cartas de papel referidas a un datum satelital</p>				<p>Data source Source des données Origen de los datos</p>				
<p>Notes Notes Notas</p>	<p>Main deficiencies in coverage arise from lack of source data to update old charts.</p>									

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

Navigation information Informations nautiques Información náutica	Status Status Estado	Notes Notes Notas
<p>Local warnings Avertissements locaux Avisos locales</p>	YES	
<p>Coastal warnings Avertissements côtiers Avisos costeros</p>	YES	
<p>NAVAREA warnings Avertissements NAVAREA Avisos NAVAREA</p>	YES	
<p>Information on ports and harbours Information sur les ports et rades Información sobre puertos</p>	YES	

Chile - Easter I & Sala y-Gomez (C2)

Hydrographic surveying / Levés hydrographiques / Levantamientos hidrográficos

Survey coverage Couverture hydrographique Cobertura hidrográfica		Depth < 200m Profondeur < 200m Profundidad < 200m			Depth > 200m Profondeur > 200m Profundidad > 200m		
<p>Adequately surveyed % Correctement hydrographié Adecuadamente levantado</p> <p>Re-survey required % Nécessitant de nouveaux levés Requiere nuevo levantamiento</p> <p>Never systematically surveyed % Jamais hydrographié systématiquement Nunca levantado sistemáticamente</p>	100	0	0	100	0	0	
							
	<p>Notes Notes Notas</p>						

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

GMDSS implementation Mise en œuvre du SMDSM Implementación SMSSM	Status Status Estado	Notes Notes Notas
Master plan Plan cadre Plan principal	YES	
A1 area Zone A1 Zona A1	NO	
A2 area Zone A2 Zona A2	NO	
A3 area Zone A3 Zona A3	YES	
NAVTEX NAVTEX NAVTEX	YES	
Safety NET Safety NET Safety NET	NO	

Chile - Easter I & Salay-Gomez (C2)

Nautical charting / Cartographie marine / Cartografía náutica

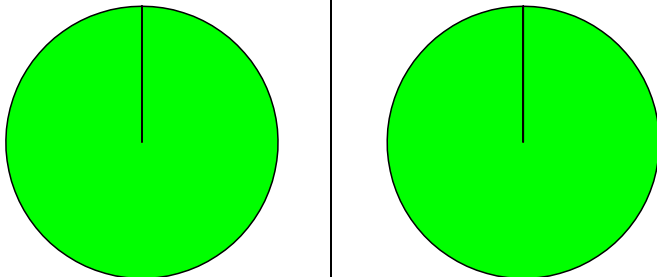
Coverage of charts published Couverture des cartes publiées Cobertura de cartas publicadas		Offshore passage Navigation au large Pasaje offshore			Landfall and Coastal passage Atterrissage et navigation côtière Recalada y Pasaje costero			Approaches and Ports Approches et ports Aproches y puertos		
<p>% Covered by INT or other paper charts meeting S-4 Couvert par des cartes papier INT ou autres conformes S-4 Cubiertas por cartas de papel INT o otras cumpliendo S-4</p> <p>% Covered by RNC meeting S-61 Couvert par des RNC conformes S-61 Cubiertas por RNC cumpliendo S-61</p> <p>% Covered by ENC meeting S-57 Couvert par des ENC conformes S-57 Cubiertas por ENC cumpliendo S-57</p>	0	0	0	1	0	0	5	0	0	
	INT	RNC	ENC	INT	RNC	ENC	INT	RNC	ENC	
Paper charts showing depth in meters Cartes papier avec les profondeurs en mètres Cartas de papel con profundidades en metros		Paper charts referenced to a satellite datum Cartes papier rapportées à un système géodésique satellitaire Cartas de papel referidas a un datum satelital				Data source Source des données Origen de los datos				
Notes Notes Notas										

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

Navigational information Informations nautiques Información náutica	Status Status Estado	Notes Notes Notas
Local warnings Avertissements locaux Avisos locales	NO	(Modified).
Coastal warnings Avertissements côtiers Avisos costeros	YES	Coastal Station Valparaíso Radio (Modified).
NAVAREA warnings Avertissements NAVAREA Avisos NAVAREA	YES	Coastal Station Valparaíso Radio (Modified).
Information on ports and harbours Information sur les ports et rades Información sobre puertos	NO	

Chile - Islas Juan Fernandez (C2)

Hydrographic surveying / Levés hydrographiques / Levantamientos hidrográficos

Survey coverage Couverture hydrographique Cobertura hidrográfica		Depth < 200m Profondeur < 200m Profundidad < 200m			Depth > 200m Profondeur > 200m Profundidad > 200m		
<p>Adequately surveyed █ Correctement hydrographié Adecuadamente levantado</p> <p>Re-survey required █ Nécessitant de nouveaux levés Requiere nuevo levantamiento</p> <p>Never systematically surveyed █ Jamais hydrographié systématiquement Nunca levantado sistemáticamente</p>	100	0	0	100	0	0	
							
Notes Notes Notas							

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

GMDSS implementation Mise en œuvre du SMDSM Implementación SMSSM	Status Status Estado	Notes Notes Notas
Master plan Plan cadre Plan principal	YES	
A1 area Zone A1 Zona A1	YES	
A2 area Zone A2 Zona A2	YES	
A3 area Zone A3 Zona A3	YES	Coastal Station Valparaíso Radio (Modified).
NAVTEX NAVTEX NAVTEX	YES	Coastal Station Valparaíso Radio (Modified).
Safety NET Safety NET Safety NET	NO	

Chile - Islas Juan Fernandez (C2)

Nautical charting / Cartographie marine / Cartografía náutica

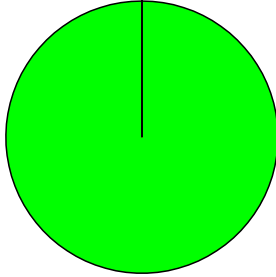
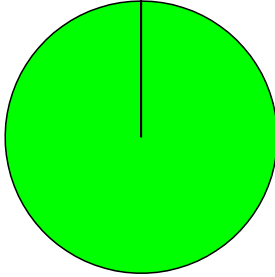
Coverage of charts published Couverture des cartes publiées Cobertura de cartas publicadas		Offshore passage Navigation au large Pasaje offshore			Landfall and Coastal passage Atterrissage et navigation côtière Recalada y Pasaje costero			Approaches and Ports Approches et ports Aproches y puertos		
<p>% Covered by INT or other paper charts meeting S-4 Couvert par des cartes papier INT ou autres conformes S-4 Cubiertas por cartas de papel INT o otras cumpliendo S-4</p> <p>% Covered by RNC meeting S-61 Couvert par des RNC conformes S-61 Cubiertas por RNC cumpliendo S-61</p> <p>% Covered by ENC meeting S-57 Couvert par des ENC conformes S-57 Cubiertas por ENC cumpliendo S-57</p>	0	0	0	0	0	0	4	0	4	
	<p>INT RNC ENC</p>			<p>INT RNC ENC</p>			<p>INT RNC ENC</p>			
	<p>Paper charts showing depth in meters Cartes papier avec les profondeurs en mètres Cartas de papel con profundidades en metros</p>		<p>Paper charts referenced to a satellite datum Cartes papier rapportées à un système géodésique satellitaire Cartas de papel referidas a un datum satelital</p>		<p>Data source Source des données Origen de los datos</p>					
<p>Notes Notes Notas</p>										

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

Navigational information Informations nautiques Información náutica	Status Status Estado	Notes Notes Notas
<p>Local warnings Avertissements locaux Avisos locales</p>	YES	
<p>Coastal warnings Avertissements côtiers Avisos costeros</p>	YES	Coastal Station Valparaíso Radio (Modified).
<p>NAVAREA warnings Avertissements NAVAREA Avisos NAVAREA</p>	YES	Coastal Station Valparaíso Radio (Modified).
<p>Information on ports and harbours Information sur les ports et rades Información sobre puertos</p>	YES	

Chile - Islas San Ambrosio & San Felix (C2)

Hydrographic surveying / Levés hydrographiques / Levantamientos hidrográficos

Survey coverage Couverture hydrographique Cobertura hidrográfica		Depth < 200m Profondeur < 200m Profundidad < 200m			Depth > 200m Profondeur > 200m Profundidad > 200m		
<p>Adequately surveyed % Correctement hydrographié Adecuadamente levantado</p> <p>Re-survey required % Nécessitant de nouveaux levés Requiere nuevo levantamiento</p> <p>Never systematically surveyed % Jamais hydrographié systématiquement Nunca levantado sistemáticamente</p>	100	0	0	100	0	0	
							
	<p>Notes Notes Notas</p>						

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

GMDSS implementation Mise en œuvre du SMDSM Implementación SMSSM	Status Status Estado	Notes Notes Notas
Master plan Plan cadre Plan principal	NO	
A1 area Zone A1 Zona A1	NO	
A2 area Zone A2 Zona A2	YES	Coastal Station Valparaíso Radio (Modified).
A3 area Zone A3 Zona A3	YES	Coastal Station Valparaíso Radio (Modified).
NAVTEX NAVTEX NAVTEX	NO	
Safety NET Safety NET Safety NET	NO	

Chile - Islas San Ambrosio & San Felix (C2)

Nautical charting / Cartographie marine / Cartografía náutica

Coverage of charts published Couverture des cartes publiées Cobertura de cartas publicadas		Offshore passage Navigation au large Pasaje offshore			Landfall and Coastal passage Atterrissage et navigation côtière Recalada y Pasaje costero			Approaches and Ports Approches et ports Aproches y puertos		
<p>% Covered by INT or other paper charts meeting S-4 Couvert par des cartes papier INT ou autres conformes S-4 Cubiertas por cartas de papel INT o otras cumpliendo S-4</p> <p>% Covered by RNC meeting S-61 Couvert par des RNC conformes S-61 Cubiertas por RNC cumpliendo S-61</p> <p>% Covered by ENC meeting S-57 Couvert par des ENC conformes S-57 Cubiertas por ENC cumpliendo S-57</p>	0	0	0	0	0	0	2	0	0	
	<p>INT RNC ENC</p>			<p>INT RNC ENC</p>			<p>INT RNC ENC</p>			
	<p>Paper charts showing depth in meters Cartes papier avec les profondeurs en mètres Cartas de papel con profundidades en metros</p>		<p>Paper charts referenced to a satellite datum Cartes papier rapportées à un système géodésique satellitaire Cartas de papel referidas a un datum satelital</p>			<p>Data source Source des données Origen de los datos</p>				
<p>Notes Notes Notas</p>										

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

Navigation information Informations nautiques Información náutica	Status Status Estado	Notes Notes Notas
<p>Local warnings Avertissements locaux Avisos locales</p>	NO	
<p>Coastal warnings Avertissements côtiers Avisos costeros</p>	YES	Coastal Station Valparaíso Radio (Modified).
<p>NAVAREA warnings Avertissements NAVAREA Avisos NAVAREA</p>	YES	Coastal Station Valparaíso Radio (Modified).
<p>Information on ports and harbours Information sur les ports et rades Información sobre puertos</p>	NO	

ANNEX 8
THE INTERNATIONAL SAFETYNET SERVICE

1. - Provide a diagram showing limits of Coastal Warning Areas, including B1 Codes.

NAV = navigational warnings.

MET = meteorological information.

SAR = search and rescue alerts.

* = NAVAREA coordinator responsible for the area.

** = The issuing service nominated by WMO for METAREA services, responsible for the area.

NAV/MET Area	Type of information	Country	LES/LESO	Ocean Region/LES ID	MSI Coastal Warning Area ⁽¹⁾ (if applicable)	Broadcast schedule (UTC)	Status of implementation	Other Information
XV	NAV	Chile	Southbury	AORW		0210, 1410.	Operacional	NAVAREA COORDINADOR RESPONSIBLE FOR THE AREA
	MET	Chile	Southbury	AORW		0100, 1330, 1440, 0345,1845.	Operacional	THE ISSUING SERVICE NOMINATED BY WMO FOR METAREA SERVICES, RESPONSIBLE FOR THE AREA.
	SAR	Chile	Southbury	AORW	Chilean SAR Region		Operacional	