



INTERNATIONAL HYDROGRAPHIC ORGANIZATION

NATIONAL REPORTS FROM EL SALVADOR TO THE MACHC17 MEETING

Reference: IHO Resolution 2/1997 as amended

Executive summary

1. Hydrographic Office / Service:
 - a) Description: **Entidad Oficial encargada de realizar y actualizar informacion Geografica, Cartografica, Catastral, Fotogrametrica, Geodesica e Hidrografica**
 - b) Name of the institution: **Instituto Geografico Nacional - CNR**
 - c) Submitted by: **Carlos Enrique Figueroa**; cfigueroa@cnr.gob.sv
figueroa.ce@hotmail.com

Detailed information for the IHO Publication P-5 (*Yearbook*) is submitted in Annex A.

2. Surveys:

[*Describe the developments in surveys related to the items below*]

 - a) Coverage of new surveys: **N/A**
 - b) New technologies and /or equipment **N/A**
 - c) New ships **N/A**
 - d) Problems encountered

Detailed information about surveys for the IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively.

3. New charts & updates:

[*Describe the developments in charting related to the items below*]

 - a) ENCs **N/A**
 - b) ENC Distribution method **N/A**
 - c) RNCs **N/A**
 - d) INT charts **N/A**
 - e) National paper charts **N/A**
 - f) Other charts, e.g. for pleasure craft **N/A**
 - g) Problems encountered

Detailed information about charting for the IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively.

4. New publications & updates:

[*Describe the developments in nautical publications related to the items below*]

 - a) New Publications **Almanaque anual de mareas 2016**

- b) Updated publications
- c) Means of delivery, e.g. paper, digital **Papel**
- d) Problems encountered

Detailed information for the IHO Publication P-5 (*Yearbook*) is submitted in Annex A.

5. MSI

[Describe the status of Maritime Safety Information (MSI) related to the items below]

- a) Existing infrastructure for transmission **N/D**
- b) New infrastructure in accordance with GMDSS Master Plan
- c) Problems encountered

Detailed information about MSI for the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annex B. The national self-assessment of MSI is submitted in Annex C.

6. C-55

The table with the updated information for the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is provided in Annex B.

7. Capacity Building Offer of and/or demand for Capacity Building

- a) Training received, needed, offered

Training needed:

- Hydrograph Cat. B
- Nautical Cartography Cat. B
- Electronic Charting Training
- Hydrographic Surveys

Training received: FOCHIMECA PROJECT

- Introduction at processing of bathimetric data
- Marine space data infrastructure (MSDI)
- Diffusion of information of marine security (MSI)

- b) Status of national, bilateral, multilateral or regional development projects with hydrographic component. (In progress, planned, under evaluation or study) **NGA, UKHO Agreements.**

- c) Definition of bids to IHO/CBSC

8. Oceanographic activities

- a) General **N/D**
- b) GEBCO/IBC's activities
- c) Tide gauge network **3 Tide gauge installed in La Union, La Libertad y Acajutla Harbor**
- d) New equipment
- e) Problems encountered

9. Other activities

- a) Participation in IHO Working Groups
- b) Meteorological data collection
- c) Geospatial studies
- d) Disaster prevention

- e) Environmental protection
- f) Astronomical observations
- g) Magnetic/Gravity surveys **LAND GRAVITY SURVEYS**
- h) MSDI Progress
- i) International
- j) Etc.

10. Conclusions

MACHC-17-05 SV

MESOAMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION

17th Meeting, 12-17 December 2016 (Belem, Brasil)

NATIONAL REPORT – EL SALVADOR

1. Hydrographic Office/Service:	Instituto Geográfico Nacional, Centro Nacional de Registros
2. Surveys	Coatepeque Lake
3. New Charts and updates	-
4. New Publication and updates	-
5. MSI	-
6. S-55	-
7. Capacity Building	7.1 Training needed: <ul style="list-style-type: none"> - Hydrograph Cat. B - Nautical Cartography Cat. B - Electronic Charting Training - Hydrographic Surveys
	7.2 Received trainings: <ul style="list-style-type: none"> - Introduction at processing of bathimetric data - Marine space data infrastructure (MSDI) - Diffusion of information of marine security (MSI) <p>FOCHIMECA PROJECT</p>

8. Oceanographic activities:	Not applicable
9. Other:	<p>9.1 It was received a Technical visit of Mrs Chris Thorne Thorne and Jeff Bryant from UKHO with the purpose to strengthen relationships and to support in the development of the hydrographic capacity in El Salvador.</p> <p>9.2 Very important negotiation have been made for the conformation of the National Hydrographic Commission, which is expected that is working next year, and at this time it is in consideration of the presidency of the republic for the approval of their creation.</p>
10. Conclusions:	<p>The conformation of the National Hydrographic Commission is an excellent step for the recovery of the capacity of to make hydrography and to upgrade our own nautical charts, the contribution that the OHI, the MACHC and FOCAHIMECA can give to prepare our personnel is indispensable for this recovery.</p>

Carlos Enrique Figueroa

Input to the IHO Publication P-5 (*Yearbook*)Country: EL SALVADOROrganization: INSTITUTO GEOGRAFICO NACIONAL - CNR

Contact information/ Informations de contact / Información de contacto	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	Post: Gerente de Geodesia Name: Carlos E. Figueroa Postal address: 43 Av. Nte. 2310 San Salvador Tel: +503 25935501 Fax: +503 25935087 Email: cfigueroa@cnr.gob.sv figueroa.ce@hotmail.com
-Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée ci-dessus) -Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente)	Post: Name: Postal address: Tel: Fax: Email:
-Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Sonia Ivett Sanchez Cuellar Directora del IGCN – CNR sonia.sanchez@cnr.gob.sv
-Web site -site web -sitio web	www.cnr.gob.sv
Country information / Informations sur le pays/ Información sobre el país	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: N/A Date:
-National day -Fête nationale -Fiesta nacional	Agosto 01 - 06
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale pertinente -Fecha de constitución y legislación nacional pertinente	Constitucion de la Republica de 1983

-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	N/A
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	N/A
-Remarks on membership -Remarques sur l'adhésion -Comentarios sobre la adhesión	N/A
Agency information/ Information sur l'agence/ Información sobre la agencia	
-Top level parent organisation -Organisme mère -Organización asociada de nivel superior	Centro Nacional de Registros
-Principal functions of the organisation or the department -Attribution principales de l'organisme ou du département -Principales funciones de la Organización o departamento	Geodesia, Gravimetria, Cartografia, Hidrografia, Fotogrametria, Catastro, prediccion de mareas, levantamientos catastrales, levantamientos hidrograficos, publicacion de tablas de mareas
-Annual operating budget -Budget annuel -presupuesto anual	N/D
-Total number of staff employed -Effectifs totaux -Número total de personal empleado	200 (Hidrographic activities 5)
-Number of INT charts published -Nombres de cartes INT publiées -Número de cartas INT publicadas	N/D
-Total number of paper charts published-Nombre total de cartes papier publiées-Número total de cartas de papel publicadas	7 : Sal CH 100 1989 Rio Paz – La Libertad Sal CH 2 1969 La Libertad Sal CH 3 1971 Acajutla Sal CH 4 1975 El Triunfo Sal CH 5 1985 La Union Sal CH 6 1985 La Union Sal CH 7 1987 Acajutla

-Number of ENC cells published -Nombres de cellules ENC publiées -Número de células ENC publicadas				
-Number of Other charts -Nombre d'Autres cartes -Número de Otras cartas	<ul style="list-style-type: none"> • Lago de Coatepeque y Lagunas El Llano y Chanmico Sal LL-2 1982 • Lago de Ilopango Sal LI-1 1981 			
-Type of publications produced -Type d'ouvrages produits -Tipo de publicaciones producidas				
-Detail of surveying vessels/ aircraft -Détail des bâtiments hydrographiques / aéronefs -Detalle de los buques hidrográficos / aeronaves	-Name -Nom -Nombre N/D	-Displacement -Déplacement -Desplazamiento N/D	-Date Launched -Date de mise en service -Fecha de botado	-Number of crew -Nombre de l'équipage -Tripulación
-Other information of interest -Autres informations utiles -Otra información de interés				

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)

Country: El Salvador

C-55 Summary for:				Comments on Charts:
Country:	El Salvador			
Country Iso Code:	SLV			
Country SubCode:				
INT Region:	B			
Country/Depend:				
Last updated:	09/09/2005			
Provided by:	Carlos E. Figueroa IGCN -CNR			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: Only 2 harbours and 2 approaches have been surveyed Acajutla and La Union
INT	10	5		
RNC	-	-		
ENC	-	-		
Status of Paper Charts				
Paper charts with depths in meters (%)				
Paper charts referenced to a satellite datum (%)				
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	10	90	0	
> 200m	5	95	0	

MSI	Y/N	Comments on MSI:
Local warning	Y	
Coastal warning	Y	
Nav warning	N/D	
Port warning	Y	
GMDSS	Y/N	Comments on GMDSS:
Master Plan	Y	
Area A1	Y	
Area A2	Y	
Area A3	N	
NAVTEX	N	
SafetyNet	N	

National MSI Self-Assessment

Country: EL SALVADOR
 Organization: **AUTORIDAD MARITIMO PORTUARIA (AMP)**

Maritime area

[Describe maritime area including details of the geographic boundaries]

1. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
AMP	+503 25919028	+ 503 25919019	N/D

2. GMDSS Master Plan

[Report on the status of the GMDSS Master Plan: Is it up to date? When was the last update?]

[Specifics of equipment used and software version with date up-dated]

Equipment Type for Ports and Local Area	Software Version	Date of Up-date
- N/D	N/D	

[Detail the number of warnings identified as immediate priority (requiring transmission within 30 minutes) and the average elapsed time for passing to NAVAREA coordinator, as reported to the last RHC meeting]:

Year Y-2		Year Y-1		Year Y	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
xx	xx.x Mins	xx	xx.x Mins	xx	xx.x Mins

3. NAVTEX Coverage:

N/D

4. Operational Issues:

N/D

5. Contingency Planning

N/D

6. Capacity Building

N/D

7. Other Activities

N/D

8. National Maritime Website

<http://www.amp.gob.sv>

9. Recommendations

[If any]

10. Summary

[Please provide a short summary of this paper which will be included in the final report of the meeting.]