

MESOAMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION
 10th Meeting, Bridgetown, Barbados, 03-06 November 2009
 NATIONAL REPORT – VENEZUELA

1. Hydrographic Office /Service:	Hydrography and Navigation Service (DHN).
2. Surveys:	<p><u>Coverage of new surveys:</u> during the last year the following hydrographic activities were conducted by DHN and related units:</p> <p><u>DHN: Hydrography and Navigation Service</u></p> <ul style="list-style-type: none"> • Second Expedition to Antarctic Continent. Hydrographic Survey of the Admiralty Bay. • Bathymetry and geomorphologic survey with side scan sonar of La Orchila Island Bay. <p><u>EHPF: Punto Fijo Hydrographic Station</u></p> <ul style="list-style-type: none"> • Topographic survey to update the coastline of the BNFA (Naval Base “Juan Crisóstomo Falcón”). • Bathymetry and topographic survey around the Guaranao international port (update chart information). <p><u>EHPC: Puerto Cabello Hydrographic Station</u></p> <ul style="list-style-type: none"> • Hydrographic survey of “Morrocoy” National Park (New nautical chart). • Topographic survey to update the coastline NW of Puerto Cabello. • Revisory survey on Pier E Puerto Cabello Naval Base. <p><u>EHPAM: Pampatar Hydrographic Station</u></p> <ul style="list-style-type: none"> • Revisory survey of Pampatar bay. • Hydrographic survey of Cumaná, Edo. Sucre. • Hydrographic survey of Porlamar Bay, Edo. Nueva Esparta (update chart information). <p><u>BO-11: Ship R/V “PUNTA BRAVA”</u></p> <ul style="list-style-type: none"> • Hydrographic survey of Cumaná, Edo. Sucre (update chart information). • Revisory survey of Carenero. <p><u>LH-12: Ship “LELY”</u></p> <ul style="list-style-type: none"> • Hydrographic survey between buoys 27 to 94 of the Maracaibo lake channel. • Hydrographic survey of “Morrocoy” National Park (new nautical chart). • Bathymetry and geomorphologic survey with side scan sonar on La Orchila Island Bay. <p><u>LH-11: Ship “GABRIELA”</u></p> <ul style="list-style-type: none"> • Hydrographic survey of San Félix, Edo. Bolívar (new nautical chart).

3. New charts & updates:

3.1) There were the new paper charts edited:

DHN-321 Chichiriviche.
DHN-601 Puerto Hierro.
DHN-508 Golfo de Cariaco.

3.2) ENC cells produced:

VE300100 Golfo de Venezuela.
VE300200 Punta Cardón a Tucacas.
VE300300 Punta San Juan a Cabo Codera.
VE300400 Cabo Codera a Cumana.
VE300500 Cumaná a Cabo Tres Puntas.
VE300600 Cabo Tres Puntas a Golfo de Paria.
VE301000 Lago de Maracaibo.
VE400102 Aproximación a Bahía de Las Piedras.
VE400304 Punta Morón a Ensenada De Cata.
VE400402 Robledal.
VE400408 Aproximación a Puerto la Cruz.
VE400410 Aproximación al Criogénico de Jose.
VE401002 EM to Isla Zapara.
VE401003 Isla Zapara to Maracaibo.
VE401004 Maracaibo to La Salina.
VE500104 Portulano de Amuay.
VE500105 Portulano de las Piedras.
VE500106 Portulano de Punta Cardón.
VE500202 Portulano de Muaco.
VE500302 Isla de Aves.
VE500308 Puerto de La Guaira.
VE500405 Bahía de Pozuelos.
VE500406 Bahía de Bergantín.
VE500407 Bahía Pertigalete.
VE500411 Portulano de Jose.
VE500502 Bahía de Porlamar.
VE500504 Portulano de Guamache.
VE500603 Portulano Güiría.
VE501301 Maracaibo.
VE501302 Puerto Miranda.
VE501401 Bajo Grande.
VE501402 La Salina.
VE500321 Chichiriviche.
VE500601 Puerto Hierro.
VE400508 Golfo de Cariaco.

3.3) Arrangements are being made with FRANCE, COLOMBIA, UK and NETHERLANDS to Coordinate coverage and compilation in the scale necessary for INT Charts and ENC : 4022, 4023, 4070, 4102 and 4108. (Currently in production).

4. New publications & updates:	4.1) New Publication - DHN/2010, "Nautical Almanac". 4.2) Updated publications: - List of Lights DH2 (currently in production 2010). - Tide Table Venezuelan coast 2009 and 2010.
5. MSI	N/A

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS		X		
COASTAL WARNINGS		X		
NAVAREA WARNINGS		X		
INFORMATION ON PORTS AND HARBOURS		X		

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook)

SERVICE	Yes	No	Partial	NOTES
Master Plan		X		
A1 Area		X		
A2 Area		X		
A3 Area		X		
NAVTEX		X		
SafetyNET		X		

6. Publication S-55:

1. HYDROGRAPHIC SURVEYING

1.1 Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ:

Survey coverage, where:

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed

	A	B	C
Depths < 200m	35	55	10
Depths > 200m	20	80	0

2. NAUTICAL CHARTING

If you do have a nautical charting capability, complete the details below:

2.1 Status of nautical charting within the limits of the EEZ

Coverage of charts published by your organization, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61.

C = percentage covered by ENC's meeting the standards in S-57.

Purpose/Scale	A		B		C
	INT	National series	INT	National series	
Offshore passage/Small	100	100	N/A	N/A	100
Landfall and Coastal passage/Medium	80	80	N/A	N/A	80
Approaches and Ports/Large	-	90	N/A	N/A	40

7. Capacity Building

- a) Training needed:
- Multibeam Workshop.
 - Hydrographic Surveys on Rivers.
 - ENC's production.

We want to coordinate personal to do the training in Venezuela.

- b) Training and courses offered:

COURSE	DESCRIPTION	DURATION	REQUIREMENTS
Course Survey Hydrography	To qualify the student to be a technician in Hydrography and Physical Oceanography. Contents: Cartography, Geodesy, Tides, Hydrographic Surveys and processing, and Basic Oceanography. Practical Survey. Following the MACHC CBC training program.	2 weeks	Technical in Navigation or related areas
Masters in Hydrography	To increase the capacity of the student to be a technician in Hydrography and Navigation. Contents: Hydrographic Surveys and processing, Oceanography, Marine Cartography, Topography, Meteorology, Navigation, Cartography, Geodesy, Tides, Topography and Practical Hydrography.	24 months	Bachelor in Navigation or related areas

c) Projects under development:

In January 2008 started the Fifth Masters in Hydrography for Officer and it is expected to finish on December 2009. In this course are participating one officer from Bolivia and one officer from Uruguay.

d) Others:

For the MACHC capacity building program the following courses were conducted:

In Venezuela:

1) Workshop on Hydrographic Surveys and Basics Elements of Nautical Charting, with participants of Belize, Costa Rica, Guatemala, Haiti, Jamaica, Nicaragua and Venezuela.

For the DHN staff capacity building program the following courses were conducted:

In Venezuela:

1) Masters in Hydrography.
 2) Course in Hydrometeorology.
 3) Course in Paper and Electronic Nautical Charts with CARIS HPD software.

Overseas:

1) ENC training offered by the UKHO.
 2) Satellite Image Interpretation.
 3) Hydrography and Oceanography Courses in Italy and Chile.

8. Oceanographic activities	<p>1. Oceanographic survey of Admiralty Bay, King George Island/ Isla 25 de Mayo, during the Second Venezuelan Scientific Expedition to Antarctica. Physical and chemical characteristics of the water column were studied.</p> <p>2. Environmental monitoring campaigns in La Orchila Island. Working on a time series of the area according with the COI guidelines.</p> <p>3. Environmental monitoring campaigns in Isla de Aves. Working on a time series of the area according with the COI guidelines.</p> <p>4. Installation of doppler current meters to study current patterns every two meters in the water column near La Orchila Island.</p> <p>5. Installation of the first Venezuelan oceanographic and meteorological buoy, in the framework of the incorporation of Venezuela to the GOOS project.</p>
9. Other activities	N/A
10. Conclusions	Venezuela continues to participate and cooperate in the field of hydrography with other Members of the Meso American and Caribbean Sea Hydrographic Commission.