

MESOAMERICAN AND CARIBBEAN SEA HYDROGRAPHIC  
COMMISSION (MACHC)

13th Assembly, Antigua Guatemala, 19 to 22 November 2012

**NATIONAL REPORT – VENEZUELA**

<p>1. Hydrographic/ Service:</p>	<p>Servicio de Hidrografía y Navegación (DHN) (Armada Bolivariana) Hydrography and Navigation Service (Venezuelan Bolivarian Navy)</p>
<p>2. Surveys:</p>	<p><b><u>Coverage of new surveys:</u></b> during 2012 the different units under responsibility of DHN conducted the following surveys:</p> <p><b><u>DHN: Hydrography and Navigation Service</u></b></p> <ul style="list-style-type: none"> <li>• Hydro-Oceanographic Survey for the elaboration of the Nautical Chart "JUAN ANDRÉS-CUYAGUA" (DHN-325), chart "URICAO-AROA" (DHN-326), chart "CHORONI" (DHN-327), chart "VALLE SECO-CHUAO" (DHN-328) and chart "CEPE" (DHN-329).</li> </ul> <p><b><u>EHPC: Puerto Cabello Hydrographic Station and Hydrographic Ship "LELY" (LH-12):</u></b></p> <ul style="list-style-type: none"> <li>• Hydrographic Survey in the Aves Archipelago "AVE DE BARLOVENTO ISLAND" (DHN-324).</li> </ul> <p><b><u>EHPAM: Pampatar Hydrographic Station:</u></b></p> <ul style="list-style-type: none"> <li>• Update Nautical Chart "APROXIMACIÓN PUERTO LA CRUZ" (DHN-408).</li> </ul> <p><b><u>EHPO: Puerto Ordaz Hydrographic Station and Hydrographic Ship "GABRIELA" (LH-11):</u></b></p> <ul style="list-style-type: none"> <li>• Hydrographic Survey, for the elaboration of the chart "PIEDRA DEL ROSARIO", Ciudad Bolívar. (DHN-9312A).</li> <li>• Hydrographic Survey for the edition of the nautical Chart "APROXIMACIÓN MATANZAS" (DHN-960A).</li> </ul> <p><b><u>BO-11: Oceanographic Ship "PUNTA BRAVA" (BO-11=):</u></b></p> <ul style="list-style-type: none"> <li>• Hydrographic survey of Dragon Camp (north of Peninsula of Paria), for the Petroleum National Company (PDVSA).</li> </ul>
<p>3. New charts &amp; updates:</p>	<p>3.1) <b>There were published the following new paper charts:</b></p> <ul style="list-style-type: none"> <li>• DHN-108 "Monjes del Sur".</li> <li>• DHN-515 "Punta de Piedras".</li> <li>• DHN-608 "Aproximación a Pedernales".</li> <li>• DHN-1601 "Portulano de la Ceiba".</li> <li>• DHN-9603A "Bauxilum".</li> </ul>

**3.2) There were updated the following paper charts:**

- DHN-303 "Aproximación a Puerto Cabello" (4<sup>th</sup> Edition).
- DHN-304 "Punta Morón a Ensenada de Cata (2<sup>nd</sup> Edition).
- DHN-404 "Puerto de Guanta" (2<sup>nd</sup> Edition).
- DHN-405 "Bahía de Pozuelo" (2<sup>nd</sup> Edition).
- DHN-406 "Bahía de Bergantín" (2<sup>nd</sup> Edition).
- DHN-407 "Bahía de Pertigalete" (2<sup>nd</sup> Edition).
- DHN-508 "Golfo de Cariaco" (3<sup>rd</sup> Edition).
- DHN-1002 "Canal de Maracaibo Boya EM-Isla Zapara" (3<sup>rd</sup> Edition).
- DHN-1003 "Canal Isla Zapara-Maracaibo" (3<sup>rd</sup> Edition).

**3.3) ENC cells (in validation process / ready for distribution March13):**

VE300200 Punta Cardón a Tucacas.  
VE300300 Punta San Juan a Cabo Codera.  
VE300400 Cabo Codera a Cumana.  
VE300500 Cumaná a Cabo Tres Puntas.  
VE301000 Lago de Maracaibo.  
VE400102 Aproximación a Bahía de Las Piedras.  
VE400408 Punta Morón a Ensenada De Cata.  
VE400410 Aproximación al Criogénico de José.  
VE401002 Canal de Maracaibo Boya EM-Isla Zapara.  
VE401003 Canal Isla Zapara-Maracaibo.  
VE401004 Canal de Maracaibo Tramo Interior Maracaibo-La Salina.  
VE500104 Portulano Bahía de Amuay.  
VE500105 Portulano de las Piedras.  
VE500106 Portulano de Punta Cardón.  
VE500405 Bahía de Pozuelo.  
VE500406 Bahía de Bergantín.  
VE500407 Bahía de Pertigalete.  
VE500411 Portulano Criogénico de José.  
VE501302 Portulano de Puerto Miranda.  
VE501401 Portulano de Bajo Grande.  
VE501402 Portulano de la Salina.

**3.4) ENC cells (in validation process / ready for distribution January13):**

VE300100 Golfo de Venezuela (defined M\_COVR between Venezuela and Colombia on October 2012).  
VE300600 Cabo Tres Puntas a Golfo de Paria.  
VE400201 Aproximación al Muaco.  
VE400304 Punta Morón a Ensenada de Cata.  
VE400305 Aproximación al Puerto de La Guaira.  
VE400402 Robledal.  
VE400505 Canal de Margarita.  
VE500202 Portulano de Muaco.  
VE500302 Isla de Aves.  
VE500308 Puerto de la Guaira.  
VE500315 Portulano de Catia la Mar.  
VE500501 Pampatar.  
VE500502 Bahía de Porlamar.  
VE500504 Portulano del Guamache.  
VE500511 Portulano de Juan Griego.  
VE500601 Portulano de Macuro.  
VE500603 Portulano de Guiria.  
VE501301 Maracaibo.

	<p>3.5) Recently DHN hired services of QUADRANT-ENC to work in 20 ENC in order to accelerate updating and validation process. These ENC are listed to be ready for distribution on March 13.</p> <p>3.6) On November 26<sup>th</sup>, DHN cartography personnel will travel UKHO to validate ENC listed to be ready for distribution on January 13.</p>																																																												
4. New publications & updates:	<p>4.1) <b>New Publications:</b> - 2013 Nautical Almanac.</p> <p>4.2) <b>Updated Publications:</b> - Nautical Charts Catalog (2<sup>nd</sup> Edition – January 2012).</p> <p>4.3) <b>Publications in revision for updating:</b> - List of Light and Buoys (2<sup>nd</sup> Edition – February 2013). - Venezuela Sailing Directions (2<sup>nd</sup> Edition – July 2013).</p>																																																												
5. MSI	<p>DHN provides the information for NAVAREA IV, in coordination with the Global Network Navigation Service of the IMO / IHO.</p> <table border="1" data-bbox="467 940 1323 1140"> <thead> <tr> <th>SERVICE</th> <th>Yes</th> <th>No</th> <th>Partial</th> <th>NOTES</th> </tr> </thead> <tbody> <tr> <td>LOCAL WARNINGS</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>COASTAL WARNINGS</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>NAVAREA WARNINGS</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>INFORMATION ON PORTS AND HARBOURS</td> <td></td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table> <p>GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook)</p> <table border="1" data-bbox="529 1262 1278 1497"> <thead> <tr> <th>SERVICE</th> <th>Yes</th> <th>No</th> <th>Partial</th> <th>NOTES</th> </tr> </thead> <tbody> <tr> <td>Master Plan</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>A1 Area</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>A2 Area</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>A3 Area</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>NAVTEX</td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>SafetyNET</td> <td></td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table> <p>Venezuela National Aquatic Spaces Institute (INEA) is working in project to implement GMDSS stations along coast.</p>	SERVICE	Yes	No	Partial	NOTES	LOCAL WARNINGS		X			COASTAL WARNINGS		X			NAVAREA WARNINGS		X			INFORMATION ON PORTS AND HARBOURS		X			SERVICE	Yes	No	Partial	NOTES	Master Plan		X			A1 Area		X			A2 Area		X			A3 Area		X			NAVTEX		X			SafetyNET		X		
SERVICE	Yes	No	Partial	NOTES																																																									
LOCAL WARNINGS		X																																																											
COASTAL WARNINGS		X																																																											
NAVAREA WARNINGS		X																																																											
INFORMATION ON PORTS AND HARBOURS		X																																																											
SERVICE	Yes	No	Partial	NOTES																																																									
Master Plan		X																																																											
A1 Area		X																																																											
A2 Area		X																																																											
A3 Area		X																																																											
NAVTEX		X																																																											
SafetyNET		X																																																											
6. C-55	<p>1. HYDROGRAPHIC SURVEYING</p> <p>6.1 Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ: Coverage of the hydrographic surveys, 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.</p>																																																												

	A	B	C
Depths < 200m	65	25	10
Depths > 200m	100	0	0

## 2. NAUTICAL CHARTING

### 6.2 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	80
Landfall and Coastal passage / Medium	100	100	N/A	N/A	60
Approaches and Ports / Large	0	80	N/A	N/A	45

## 7. Capacity Building

### a) Training needed:

- Multibeam Workshop.
- Hydrographic Surveys on Rivers.
- ENC's production.

### b) Training and courses offered:

- Master Degree on Hydrography (2 years - Venezuelan Navy Postgraduate School).
- Hydrographic Survey Course (2 weeks – DHN – increasing understanding and operation of hydrographic equipment).
- Hydrometeorology Course (2 months – DHN – training program for assistance personnel employed in hydrographic, meteorological, oceanographic or signaling operation / 3 levels (basic / medium / advanced).

### c) Others:

- Course in Paper and Electronic Nautical Charts with CARIS HPD software and CARIS COMPOSER to train new personnel in cartography.

## 8. Oceanographic activities

8.1 Biological Base Line Survey on four ports (Puerto Cabello, Amuay, Criogenico de José and Ferrominera – Orinoco River) for Ballast Water National Program (Venezuela Globallast) conducted by INEA.

8.2 Fifth Research Campaign on Aves Island (Isla de Aves) with participation several research and educational institutes of Venezuela (IVIC, UCV, UMC, USB, INTEVEP, Environment Minister, Foreign Affairs Minister).

	<p>8.3 Installation of 4 METOC Buoys in Los Testigos, La Tortuga, Los Monjes and north of Peninsula of Paria.</p> <p>8.4 Development of database for the National Oceanographic Data Center (CENDOC).</p>
<p>9. Other activities</p>	<p>9.1 DHN has 7 meteorological stations under responsibility along coast and islands, in the following locations: Punto Fijo, Los Monjes, Puerto Cabello, Isla de Aves, La Guaira, Carupano and Caracas. In 2009 was created National Metrology and Meteorology Institute (INAMEH) responsible for handle all the meteorological information. They have network of almost 150 meteorological stations distributed across our country.</p> <p>9.2 Geospatial studies are conducted by National Aerospace Agency (ABAE) that control 2 satellites launched for Venezuela (Simon Bolivar 2010 – Communications and Francisco de Miranda 2012 – Environmental Studies).</p> <p>9.3 Disaster prevention is under responsibility of National Civil Protection and Disaster Management Direction (Dirección Nacional de Protección Civil y Administración de Desastres) and Tsunamis – Earthquake Network is under responsibility of the Venezuelan Foundation for Seismological Research (FUNVISIS).</p> <p>9.4 Tide network is operated by Venezuelan Geographic Institute “Simon Bolivar” (IVGSB) who is responsible to produce prediction tide tables.</p>
<p>10. Conclusions</p>	<p>Venezuela continues to participate and cooperate in the field of hydrography with other Members of the Meso American and Caribbean Sea Hydrographic Commission (MACHC). In 2008 was organized a Regional Course about Hydrographic Surveys with the support of MACHC and we will like to host a similar course in 2013.</p>