



**INTERNATIONAL HYDROGRAPHIC ORGANIZATION
SOUTH WEST HYDROGRAPHIC COMMISSION**



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**FOURTH MEETING OF THE IHO INTER REGIONAL COORDINATION COMMITTEE
IHO – IRCC5**

WOLONGONG - AUSTRALIA, 3-4 JUNE 2013

REPORT FROM THE SOUTH WEST ATLANTIC HYDROGRAPHIC COMMISSION

1. Chair: RA (RET) Lic. Andrés Roque Di Vincenzo
Vice Chair: VA Marcos Nunes de Miranda
2. Membership:
Full Members: Argentine, Brazil, Uruguay.
Associate Members: Paraguay.
3. Last Meeting: Buenos Aires, Argentina, 18 – 19 March 2013
4. Main items under consideration:

4.1. INT Chart Scheme

SWAtHC INT Chart scheme has a total of 50 charts. From these, 27 charts 54% have already been published.

The following charts are/was planned to be published in 2013:

- 2004 scale 1:1.000.000, “De Fortaleza à Natal”, producer BR.
- 2106 scale 1:300.000, “Do Cabo Norte ao Cabo Maguari”, producer BR.
- 2116 scale 1:300.000. “ Maceió à Aracaju”, producer BR
- 2121 scale 1:300.000, “Do Arquipelágo dos Abrolhos a Vitória” producer BR.
- 2010 scale 1:1.000.000, “Acceso al Río de la Plata”, producers UY & AR.

4.2. ENC Scheme.

SWAtHC ENC scheme has a total of 222 cells. From these, 155 cells 70% have already been released. The following Cells were planned to be published in 2013.

- AR100010, Acceso al Río de la Plata.
- AR100020, El Rincón. Golfos San Matías y Nuevo.
- AR100030, Golfo San Jorge.
- AR201160, Río de la Plata Medio e Interior.
- AR202150, De Punta Cantor a Faro San José.
- AR4PI297, Río Paraná Inferior de Km 296,6 a Km 359,9. Puertos en Ramallo y San Nicolás.
- AR4PI360, Río Paraná Inferior de Km 359,9 a km 403,5. Puertos en Villa Constitución y Arroyo Seco.
- AR4PI404, Río Paraná Inferior de Km 403,5 a Km 460,2. Puertos en Rosario, San Lorenzo y San Martín.
- AR4PI461, Río Paraná Inferior de Km 460,2 a Km 480. Río Paraná Medio de Km 480 a Km 539,7 Diamante.
- AR4PM540, Río Paraná Medio de Km 539,7 a Km 604,9. Puertos de Senta Fé y Paraná.
- AR420060, Canal de Acceso a Puerto de Buenos Aires de Km 14 a Km 37
- AR420070, Canal Emilio Mitre de Km 20 a Km 41.

- AR420080, Río de la Plata Intermedio. Canal de la Magdalena.
- AR420090, Río de la Plata Intermedio. Quebrada del Banco Ortiz.
- BR321300, Do Rio Araguari à Ilha das Flechas.
- BR321400, Do Machadinho à Ponta Quatipuru.
- BR322300, Da ponta do Prego à Aracaju.
- BR501105, Porto Madre de Deus.
- UY200001, Acceso al Río de la Plata.
- UY300060, Desde Puerto de Colonia del Sacramento hasta Puerto de Nueva Palmira.
- UY50060A, Río San Juan.
- UY500052, Puerto de Colonia del Sacramento desde Punta del Riachuelo hasta Islas de Hornos.
- UY400701, Desde Isla Juncalito hasta Km 17.
- UY50701A, Puerto de Nueva Palmira y Dársena Higuieritas.
- UY400702, Desde Km 18 hasta Km 41.
- UY400703, Desde Puerto Aldao hasta Punta del Amarillo.
- UY400704, Desde Punta Penco hasta Punta Las Rosas y Acceso a Villa Soriano.
- UY50704A, Riacho Yaguarí.
- UY40705A, Paso Barrizal.
- UY400706, Desde Balneario Las Cañas hasta Puerto de Fray Bentos.
- UY50706A, Puerto de Fray Bentos.
- UY500019, Puerto La Paloma.

Regarding inconsistencies, the main problem is to adjust overlaps, what is in process to be finalized.

SWAtHC ENC Production and Coverage Status – Including Inland Waters

Country	Cells produced and delivered	Cells produced not yet available	Cells to be produced	Total Cells
Argentine	49	12	02	63
Brazil	90	0	23	113
Uruguay	15	4	27	46
Total	150	23	49	222

4.3. Capacity Building.

On the basis of IHO CBSC strategy, SWAtHC has been developed its capacity building:

- MSDI 2012: It was held from November 26th to 30th 2012, at the “DHN” in Niteroy, Brazil. Officers from Argentine, Brazil, and Uruguay Hydrographic Offices attended the Course.
- The Argentinean “Nautical Cartographer” of the Argentinean Navy “Escuela de Ciencias del Mar” (ESCM) was reclassified and recognized by the FIG/IHO Advisory Board at Category A.

5. General aspects:

- 5.1 With regard to the approval of the amendments to the IHO Convention, RA (RET) Lic. Roque Di Vincenzo informed this Commission that so far SHN had not received news on this matter from its Ministry of Foreign Affairs.
- 5.2. Experience in dealing with marine disasters, so far there has not been serious maritime disaster in the region requiring the need of coordinating the National Hydrographic Services action.
- 5.3. Continuous processing and incorporation of new bathymetric data from the southwestern Atlantic in order to update the oceanic bathymetric model of the Argentine Hydrographic Service.

6. Other considerations:

Starting with the operations in 2007, ASAPI - Airborne System Acquisition and Post-Processing Images – is the first digital aerial survey system designed and approved in Brazil. Developed by Engemap company, in partnership with the Department of Cartography UNESP-Universidade Estadual Paulista, Presidente Prudente campus, and with support from FAPESP – Foundation for Research Support of the State of São Paulo, the system is able to produce aerial photographs High spatial resolution for mapping applications with pixel 8 to 80cm.

Seeking to take advantage of the qualities of the system presented, including the cost-benefit ratio, the mobility and high-resolution images, the Navy of Brazil, through the CHM – Navy Hydrographic Center, acquired the license to use the system. After a series of studies and tests conducted to customize the equipment for use in nautical cartography successfully. This resulted in the SEA-The SAAPI, an adaptation of SAAPI for marine use. Approved by the Ministry of Defense for use in aerial surveys Class A, has great advantage as compared to analog systems Photogrammetry, the ability to obtain the exterior orientation parameters (position of the perspective center of each picture and attitude angles of the camera at the instant the outlet of each image).

An initial prototype of the system was first introduced to the CHM in March 2008, being used operationally in aerial surveys since 2011.

Currently, the system has functioned as an important data source for updating the contours of Brazilian nautical charts and achieved excellent results with a good cost-benefit ratio.

Among the charts updated using data obtained with the system, we can mention the charts 1701 – Port of Santos, and 1621 – Ilha Grande Bay – Eastern Part.

6. Conclusions.

SWAtHC is committed to carrying forward hydrographic, cartographic and capacity building Activities in a strict alignment with IHO objectives and goals.

7. Venue and date of the next meeting.

Niteroi, Brazil, March 2014.