



**17<sup>th</sup> MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE**  
**IHO-CBSC17**  
**Genoa, Italy, 29 - 31 May 2019**

**Paper for the Consideration by CBSC17**

**South West Atlantic Hydrographic Commission (SWAtHC) Report**

<b>Submitted by:</b>	SWAtHC CB Coordinator
<b>Executive Summary:</b>	This document provides a summary report of the CB activities at SWAtHC.
<b>Related Documents:</b>	SWAtHC CB Work Plan 3 years 2019-2021.
<b>Related Projects:</b>	xxx

## 1. Introduction / Background

On 16<sup>th</sup> November 2006, Argentina, Brazil and Uruguay signed the cooperation agreement that resulted in the South West Atlantic Hydrographic Commission (SWAtHC). The main achievements have been the development of a regional Cartographic Plan, establishment of a Planning Commission to coordinate INT Charts and ENC production and the acceptance of Paraguay and Bolivia as Associate Members and Observer, respectively. The high level of harmonisation between all members results in a region without overlaps in ENCs, nor unassessed CATZOCs and gaps being addressed.

Bolivia is in the process of becoming an associate member.

The new CB Work Plan (2019-2021) is based on the assessment of the phase of development of each of the coastal State within the SWAtHC region in accordance with the IHO CB Strategy and arranging training activity to build the necessary capability to meet SOLAS Convention obligations and IHO Standards and Resolutions.

## 2. Assessment of Capacity Building Phase Stage of Coastal States


Members	NHC or NHCC	CB Phase 1	CB Phase 2	CB Phase 3	Last TV
Argentina	0	4	4	4	N/A
Brazil	0	4	4	4	N/A
Uruguay	0	4	4	4	N/A
Paraguay (Associate)	0	2	2	1	2014
Bolivia (Observer)	0	2	2	1	*

\* : SWAtCH is proposing to the CBSC to carry out a Technical Visit to Bolivia in 2020.

### KEY

1. The numerical grid below describes the status of the National Hydrographic Committee (NHC)/National Hydrographic Coordination Committee (NHCC):

Value	Assessment
-1	No information available.



0	The country does not have a NHC/NHCC.
1	The country is in the process of establishing a NHC/NHCC.
2	The country has established a NHC/NHCC.

2. The numerical grid below applies to the Phases:

Value	Assessment
-1	No information available.
0	The country is unaware of its national obligations 1.
1	The county is aware of its national obligations but does not have the means to do it.
2	The country has the ability to fulfill national obligations.
3	The country fulfills its national obligations through a third party.
4	The country fulfills its national obligations in a sustainable manner.

**Note:** the assessment represented by 3 is an alternative to 4 as explained in the IHO's Capacity Building Strategy.

3. Those coastal states with a mature hydrographic service and consequently don't require a technical visit are marked as N/R (not required).

Technical Visit reference: [https://www.iho.int/mtg\\_docs/CB/Assessment\\_Reports.htm](https://www.iho.int/mtg_docs/CB/Assessment_Reports.htm)

### 3. Completed Activities since CBSC16

In 2018, the following events were funded by the CBSC and carried out in CHAtSO:

- Maritime Safety Information (MSI) Training Course, from 16 to 18 October 2018. The Course was performed at DHN-Brazil and it was conducted by instructors from USA National Geospatial-Intelligence Agency (NGA) with the participation of 18 representatives from Brazil (6), Argentina (2), Uruguay, Paraguay, Bolivia, Colombia, El Salvador, Guyana, Venezuela, Ecuador, Peru and Liberia.
- Port and Shallow Waters Survey Course, from 24 to 28 September 2018, at SHN-Argentina. The workshop was performed by specialized personnel from Teledyne CARIS and was attended by 31 representatives from Argentina, Brazil, Uruguay and Venezuela.

The MSDI and Data Management Workshop, which would be performed at SOHMA-Uruguay, was not funded by the CBSC and therefore did not happen.

In 2018, SWAtHC members were invited to participate:

- in the SEPRHC's Workshop on LIDAR technology and methodology for shallow waters and coastline hydrographic surveys which was led by INOCAR, at Guayaquil – Ecuador, from 22 to 26 October 2018.
- in the MACHC's MBES Processing Workshop, at Cartagena – Colombia, from 10 to 14 December 2018.

The SWAtHC acknowledges the MACHC and the SEPRHC efforts to coordinate jointly CB activities across the three regions.



From 28 to 31 January, 2019, DHN – Brazil performed the 1<sup>st</sup> Workshop on MBES Processing in Caris Hips & Sips, conducted by the hydrographic officers who attended this same training at Argentina in 2018. The Workshop was directed to the other hydrographers of the DHN's vessels in order to promote the dissemination of the knowledge received in the event sponsored by the CBSC-IHO.

#### **4. Planned Activities for 2019 and 2020**

SWAtCH has proposed the following events for 2019 with their respective priorities within the Capacity Building Work Plan:

- Multibeam data processing and bathymetry database Workshop (SHN–Argentina) – P-19;
- Tide Training (DHN–Brazil) – P-21; and
- Multibeam Systems Total Uncertainty Workshop (SOHMA–Uruguay) – P-24.

At the moment, only the SHN workshop was approved for CBSC financial support.

For 2020, SWAtHC submitted to CBSC the following events:

- Bolivia Technical Visit (4 days) – Brazil (Priority 1);
- Seminar on Raising Awareness of Hydrography (2 days) – Brazil (Priority 2);
- MSI Course (3 days) – Argentina (Priority 3);
- Seabed Classification Workshop (5 days) – Brazil (Priority 4); and
- ENC Production and QA (5 days) – Uruguay (Priority 5).

During the 13<sup>th</sup> SWAtHC meeting, at Buenos Aires, the Director of the Bolivian National Hydrographic Service (*Servicio Nacional de Hidrografía Naval* – SNHN) requested a Technical Visit to the SNHN in order to be advised on hydrographic and safety of navigation aspects.

#### **5. Challenges faced in the region**

One of the major challenges to be faced in the region is to encourage Paraguay and Bolivia to join the SWAtHC as full members following their accession to the IHO. During SWAtHC last meeting (April, 2019), the full members approved the request from the SNHN Director, and initiated the accession process of Bolivia as an Associate Member of SWAtHC. SNHN shall address the approved request to its national authorities. The implementation of the S-100 is another challenge that must be addressed.

#### **6. Achievements and lessons learned**

All activities conducted in recent years improve the practical and theoretical skills developed by Latin America hydrographers and nautical cartographers in performing hydrographic activities.

The Maritime Safety Information (MSI) Training Course, performed at DHN-Brazil, provided the opportunity for representatives of Regional Hydrographic Communities to gain insight into the importance of the MSI and how to act to report certain events preventing a significant impact on the safety of navigation in coastal region. The training course provided a practical guidance for drafting navigational warnings, explaining and demonstrating how the SafetyNET and NAVTEX services work together in order to increase the availability of MSI in the South West Atlantic Hydrographic Commission, as well as in the others Latin

American hydrographic commissions areas. Also, in order to publicize the importance of the subject as well as to disseminate the Capacity Building training program available to IHO members, it was possible to register representatives of MACHC, SEPRHC and Liberia. All the objectives were met and the overall assessment of the course, made by the analysis of the participants' feedback, recorded the score of 100% of answers was rated at Very Good or Excellent.

In regarding the Port and Shallow Waters Survey Course, performed at SHN-Argentina, some changes from the initial program had to be made due to the fact that the multibeam equipment that the Kongsberg company would bring to the practice did not arrive in time. Therefore, the program was modified with training onboard software and acquisition of Kongsberg system in cabinet. Despite these changes, it was possible to take full advantage of the workshop and training the participants in the management of multibeam data acquisition and processing. The exchange of knowledge and experiences among the participants from different countries of the SWAtHC was quite successful. All SWAtHC full members attended to the training. Both MACHC and SEPRHC were invited to send a representative but only the last (Venezuela) participated. According to the participants, there was an 80% positive evaluation.

Training of Foreign Countries Personnel:

- at DHN (Brazilian financing), in 2018, one Bolivian Officer concluded the Advanced Training Course in Hydrography for Officers (CAHO), course recognized by IHO as Cat "A"; and

- at DHN (Brazilian financing), in 2019, there is another Bolivian officer performing the CAHO.

## 7. Conclusions

SWAtHC is committed to carrying out hydrographic, cartographic and capacity building activities in a tight alignment with IHO objectives and goals.

The two training sessions carried out within SWAtHC, as well as those which we were invited to send representatives to other HCs, proved to be very important in improving our people's technical knowledge, increasing the awareness of our national hydrographic obligations.

## 8. Action Required of CBSC17

The CBSC is invited to:

- a. Note this report.
- b. The SWAtHC is proposing five events to be performed in 2020 and requires approval.

  
Captain (Ret.) LUIZ CLAUDIO Monteiro da Fonseca  
SWAtHC Capacity Building Coordinator

International Hydrographic Organization  
Assessment of Capacity Building Phase Stage of Coastal States

N.	Coastal State/Territory	NHC/NHCC	Phase 1	Phase 2	Phase 3	Last TV
1	Afghanistan					
2	Albania					
3	Algeria					
4	Andorra					
5	Angola					
6	Antigua and Barbuda					
7	Argentina	0	4	4	4	N/A
8	Armenia					
9	Australia					
10	Austria					
11	Azerbaijan					
12	Bahamas					
13	Bahrain					
14	Bangladesh					
15	Barbados					
16	Belarus					
17	Belgium					
18	Belize					
19	Benin					
20	Bhutan					
21	Bolivia (Plurinational State of)	0	2	2	1	
22	Bosnia and Herzegovina					
23	Botswana					
24	Brazil	0	4	4	4	N/A
25	Brunei Darussalam					
26	Bulgaria					
27	Burkina Faso					
28	Burundi					
29	Cabo Verde					
30	Cambodia					
31	Cameroon					
32	Canada					
33	Central African Republic					
34	Chad					
35	Chile					
36	China					
37	Colombia					
38	Comoros					
39	Congo					
40	Cook Islands					
41	Costa Rica					
42	Côte d'Ivoire					
43	Croatia					
44	Cuba					
45	Cyprus					
46	Czech Republic					

47	Democratic People's Rep. of Korea					
48	Democratic Republic of the Congo					
49	Denmark					
50	Djibouti					
51	Dominica					
52	Dominican Republic					
53	Ecuador					
54	Egypt					
55	El Salvador					
56	Equatorial Guinea					
57	Eritrea					
58	Estonia					
59	Ethiopia					
60	Fiji					
61	Finland					
62	France					
63	Gabon					
64	Gambia					
65	Georgia					
66	Germany					
67	Ghana					
68	Greece					
69	Grenada					
70	Guatemala					
71	Guinea					
72	Guinea-Bissau					
73	Guyana					
74	Haiti					
75	Holy See					
76	Honduras					
77	Hungary					
78	Iceland					
79	India					
80	Indonesia					
81	Iran (Islamic Republic of)					
82	Iraq					
83	Ireland					
84	Israel					
85	Italy					
86	Jamaica					
87	Japan					
88	Jordan					
89	Kazakhstan					
90	Kenya					
91	Kiribati					
92	Kuwait					
93	Kyrgyzstan					
94	Lao People's Democratic Republic					
95	Latvia					
96	Lebanon					

97	Lesotho					
98	Liberia					
99	Libya					
100	Liechtenstein					
101	Lithuania					
102	Luxembourg					
103	Madagascar					
104	Malawi					
105	Malaysia					
106	Maldives					
107	Mali					
108	Malta					
109	Marshall Islands					
110	Mauritania					
111	Mauritius					
112	Mexico					
113	Micronesia (Federated States of)					
114	Monaco					
115	Mongolia					
116	Montenegro					
117	Morocco					
118	Mozambique					
119	Myanmar					
120	Namibia					
121	Nauru					
122	Nepal					
123	Netherlands					
124	New Zealand					
125	Nicaragua					
126	Niger					
127	Nigeria					
128	Niue					
129	Norway					
130	Oman					
131	Pakistan					
132	Palau					
133	Panama					
134	Papua New Guinea					
135	Paraguay	0	2	2	1	2014
136	Peru					
137	Philippines					
138	Poland					
139	Portugal					
140	Qatar					
141	Republic of Korea					
142	Republic of Moldova					
143	Romania					
144	Russian Federation					
145	Rwanda					
146	Saint Kitts and Nevis					

147	Saint Lucia					
148	Saint Vincent and the Grenadines					
149	Samoa					
150	San Marino					
151	Sao Tome and Principe					
152	Saudi Arabia					
153	Senegal					
154	Serbia					
155	Seychelles					
156	Sierra Leone					
157	Singapore					
158	Slovakia					
159	Slovenia					
160	Solomon Islands					
161	Somalia					
162	South Africa					
163	South Sudan					
164	Spain					
165	Sri Lanka					
166	State of Palestine					
167	Sudan					
168	Suriname					
169	Swaziland					
170	Sweden					
171	Switzerland					
172	Syrian Arab Republic					
173	Tajikistan					
174	Thailand					
175	The former Yugoslav R. of Macedonia					
176	Timor-Leste					
177	Togo					
178	Tonga					
179	Trinidad and Tobago					
180	Tunisia					
181	Turkey					
182	Turkmenistan					
183	Tuvalu					
184	Uganda					
185	Ukraine					
186	United Arab Emirates					
187	United Kingdom					
188	United Republic of Tanzania					
189	United States of America					
190	Uruguay	0	4	4	4	N/A
191	Uzbekistan					
192	Vanuatu					
193	Venezuela (Bolivarian Republic of)					
194	Viet Nam					
195	Yemen					
196	Zambia					



197	Zimbabwe					
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