

Agenda Item 06.1G

RHC

Report to IRCC14

Denpasar - Bali, Indonesia + VTC (Hybrid Meeting)

6 – 8 June 2022

By Rear Admiral Mário José Simões Marques
EAtHC Chair (Portugal)



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IRCC14-06.1G

The EAtHC

Chair	Rear Admiral Carlos Ventura Soares (Portugal), until 28 January 2022 Rear Admiral Mário José Simões Marques (Portugal), from 28 January 2022
Vice-Chair	Rear Admiral Laurent Kerléguer (France)
Member States	Cameroon, Democratic Republic of the Congo, France, Ghana, Morocco, Nigeria, Portugal, Spain

**26 Coastal States
Only 8 effective members**

- **26 EAtHC Coastal States but only 8 EAtHC Members**
- Last Conference: EAtHC 16 plenary, 29 September to 01 October 2021 (*Hybrid*) @ IHPT (Lisbon)



Participants:

- 13 States
- 30 (in-person)
- 28 (through VTC)



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Key Achievements

- During the EAtHC16:
 - Democratic Republic of Congo signed the Statutes of the Commission and thereby became the 8th Member of the EAtHC
 - Statutes amendments IAW with IHO Resolution 2/1997 were approved
 - United Kingdom became an Associate Member in January, 2022.
 - IRCC recommendations, actions and activities were assigned to EAtHC Actions List
 - A disaster response framework for the region was approved in the EAtHC16
- EAtHC CB coordination activities have been carried out by France (SHOM):
 - CBWP2021 actions completed (Technical Visits):
 - Cote d'Ivoire, led by SHOM from May 31st to June 4th
 - Congo, led by SHOM from November 14th to 24th
 - CBWP2022 action completed (Technical Visits):
 - Benin, led by SHOM from January 31st to February 4th, 2022
 - Senegal, led by SHOM from April 11st to 15th, 2022
 - Actions planned for 2022:
 - Morocco (foreseen to be carried out in June 2022)
 - Sierra Leone
 - Guinea Bissau

**Hydrographic capacity
development in the EAtHC region
remains a real challenge**

**The current CB activities has
allowed only limited progress**



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Key Achievements

- The International Charting Coordination (ICC) activities are being coordinated by France (SHOM), as the Region G Charting Coordinator, and are still ongoing.
 - ICC-WG ToRS & RoPs, prepared by SHOM, were approved during EAtHC16
- The 1st EAtHC Marine Spatial Data Infrastructure (MSDI) Working Group (WG) meeting took place, through VTC, on February 17th, 2022.
 - 7 EAtHC coastal States have participated (France, Gambia, Ghana, Morocco, Portugal, Spain and United Kingdom)
 - ToRS & RoPs of the MSDI WG were approved
 - CDR Geraldes Dias (Portugal) was appointed as MSDI WG chair and EAtHC Crowdsourced Bathymetry & Seabed 2030 representative
 - EAtHC MSDI WG will prepare the EAtHC contributions to the IHO Strategic Plan



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Important Findings (RHC top 3 challenges)

- Recruitment of new IHO Member States
- Awareness on the importance of Hydrography is increasing
 - Lack of communication still exists
- Implementation of MSDI Regional initiatives
 - Lack of capabilities/resources
- Limited capacity and resources to meet the requirements of the S-100 implementation plan



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Lessons Learned

- Keep and strengthen the cooperation and collaboration in the region
- Efforts must therefore be continued with greater involvement of the Coastal States primarily concerned by the development of their hydrographic services in order to meet their SOLAS obligations
- Capacity-building funds do not seem to be sufficient for the needs of the region
- Technical visits/Seminars do not seem to be enough for the CB needed
- Member States should share their education and training programs focus on on-job training (ex: onboard hydrographic survey training, in-office chart production training, etc.)
- Member states should articulate the IHO CB initiatives with national initiatives IOT have coastal state on-job training and add real value to the coastal states

For example, Portugal is currently working in a different approach, with technical personal embedded in local teams for local training and accomplish a real capacity for that country to evolve



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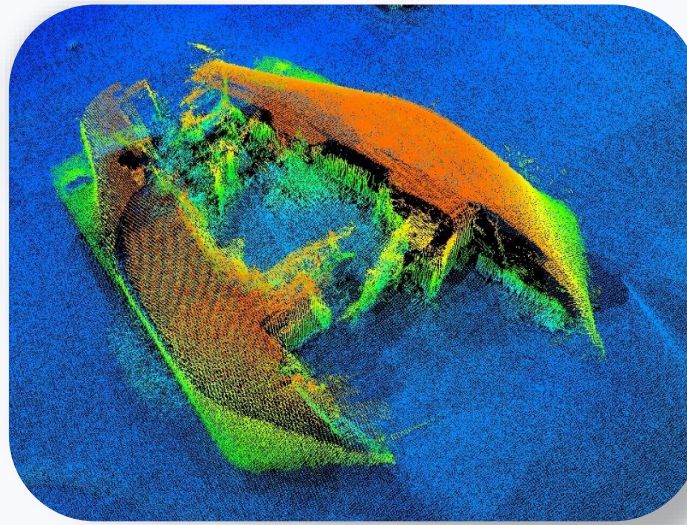
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Lessons Learned

- During the hydrographic surveys carried out in Luanda harbor in November and December 2021, the IHPT operationalized the KONGSBERG EM 2040C MBES, belonging to the Angolan authorities, which is installed on the vessel Kilamba
- During this period, training was provided to three technicians from the Instituto Hidrográfico e de Sinalização Marítima de Angola (IHSMA) and to two Angolan Navy officers with the category B hydrography course taken at the IHPT's Hydrography and Oceanography School
- With this new data, IHPT will be published (July) the new chart INT2551 “Porto de Luanda”



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S-100 Implementation

In the EAtHC Region there are several concerns present:

- Member States provide the necessary coverage of S-100 products or agree with other States to provide on their behalf?
- S-101:
 - Transition from S-57 to S-101
 - S-101 ENC Scheme
 - Production/publication of S-101 ENC
 - Coordination; cooperation between HOs
 - **PCA role**
 - **ICC role**
 - **RENCs involvement** /participation (ex: seminars; training etc.)
- Other applicable S-100 products:
 - Other national authorities were HOs are not the data owners



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Strategic Plan and Gap Analysis

- EAtHC sent comments on this subject to IRCC
- Some EAtHC members were present at the workshops IOT promote the discussion
- Concerns about SPI 1.2.2:
 - the clear/global definition of “navigationally significant areas”
 - if the purpose was to assess the percentage of those areas adequately surveyed or the percentage of those areas that had a hydrographic quality indicator (e.g., CATZOC)
- Possible solutions should be:
 - to use ENC defined objects (charted traffic separation schemes, anchorages, channels, etc.) as stated in the SPI definition
 - or to compute traffic density and under keel clearance (based on AIS data) and seafloor complexity and define the “navigationally significant areas” based on specific thresholds
- The use of CATZOC as a quality indicator will require a globally accepted decay coefficient formula, in order to define resurvey rates



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Strategic Plan and Gap Analysis

- Concerns about SPI 2.1.1
 - the clear/global definition of “adequately surveyed areas”
 - what criteria should be used to assess it (CATZOC, survey order, C55?)
 - which areas should be analyzed (include depth > 200m?)
 - all waters or national waters
- C-55 was originally created for safe navigation purposes and it has several consistency problems. So it does not appear adequate to use it for this SPI
- This SPI could stand as complementary of SPI 1.2.2 for all marine areas (and not only for “navigationally significant areas”)
- Taking Goal 2 into consideration, Portugal proposed to use the SEAMAP 2030 project coverage (%) as the measure of this SPI, as it is easier, based on uniform and known criteria, and represents the bathymetric coverage known to society in general



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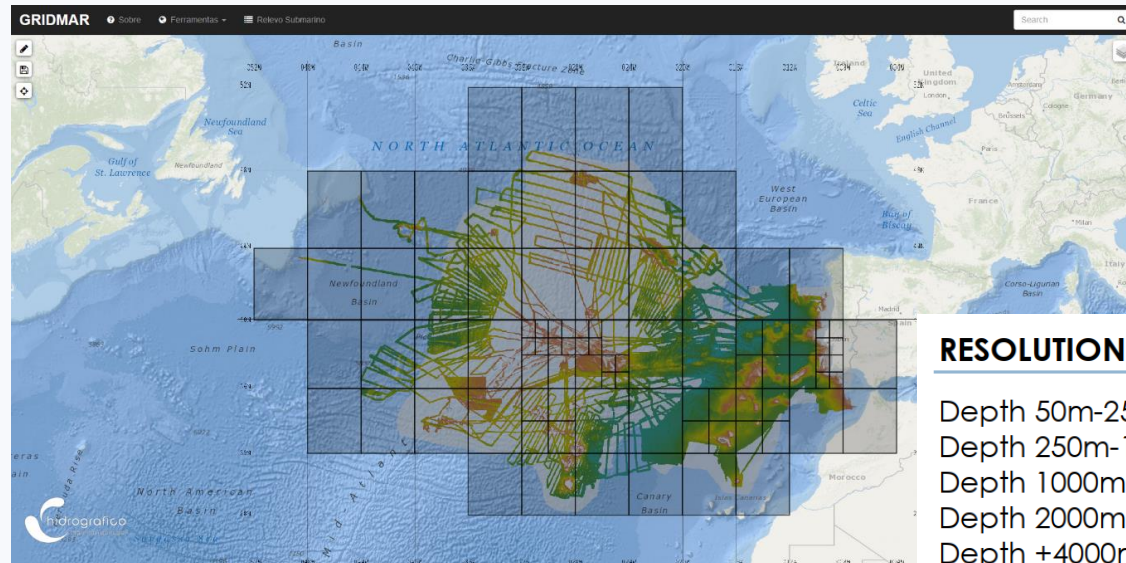
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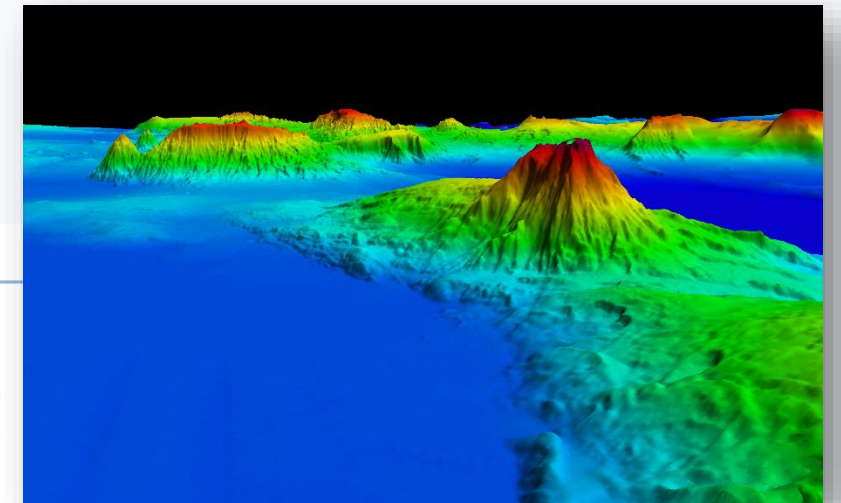
Data sharing: SEAMAP 2030: High-resolution Mapping of the Portuguese Sea

- Portugal SEAMAP 2030 program in line with SEABED 2030
- Webpage: <https://www.hidrografico.pt/iprojeto/16>
- Map Story: <https://storymaps.arcgis.com/stories/334290c8d2b345c78ac7c3f5e0fcb5e2>
- **Download data:** <https://gridmar.hidrografico.pt>
- Presently MBES high-resolution coverage: 55%



RESOLUTION(S)

Depth 50m-250m – Res. 32m
Depth 250m-1000m – Res. 64m
Depth 1000m-2000m – Res. 128m
Depth 2000m-4000m – Res. 256m
Depth +4000m – Res. 512m



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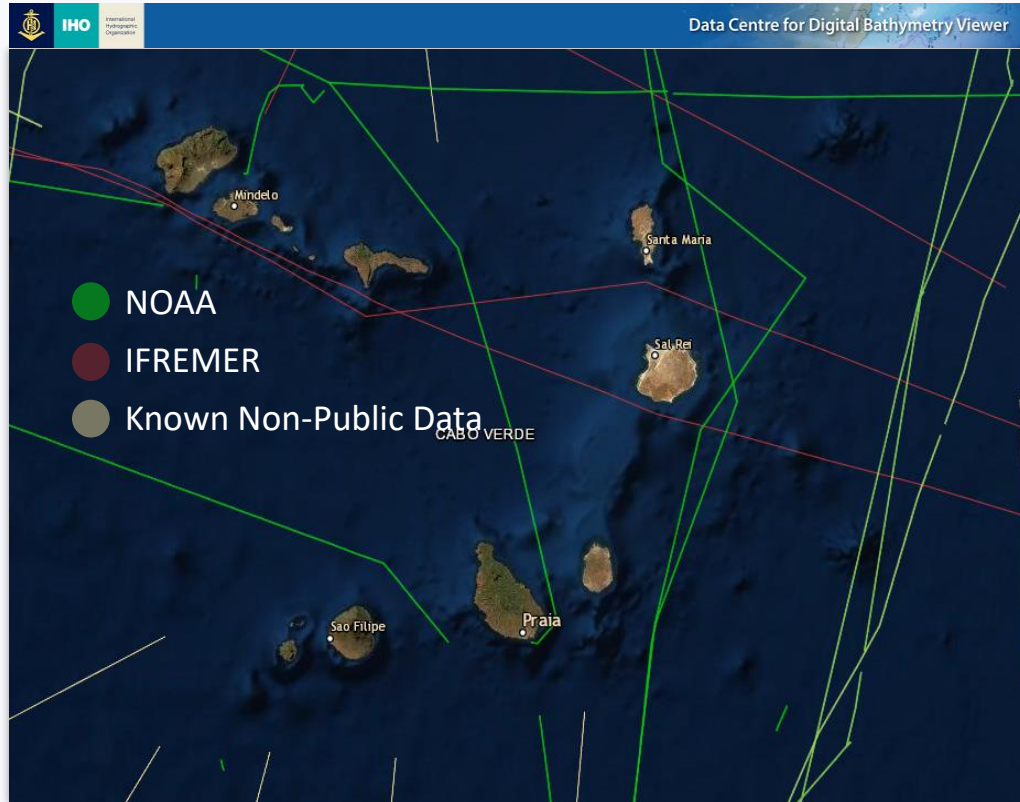
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Data sharing / harvesting: The Cape Verde Case

Unknown Seabed

VS

Unknown Seabed Data



**We need a portal for scientific cruise authorization's registration and data access policy...
something to work @ GEBCO / United Nations Level**



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Next EAtHC Conference

- 2022: EAtHC 17 plenary conference, 28 to 30 September 2022 (*Hybrid*) in Mindelo:
 - Will be hosted by the Instituto Marítimo e Portuário de Cabo Verde (IMP-CV)
 - Will be preceded by a IHO Funded 2-day Seminar on “Working with NAVAREA II and your Primary Charting Authority (Data exchange)”



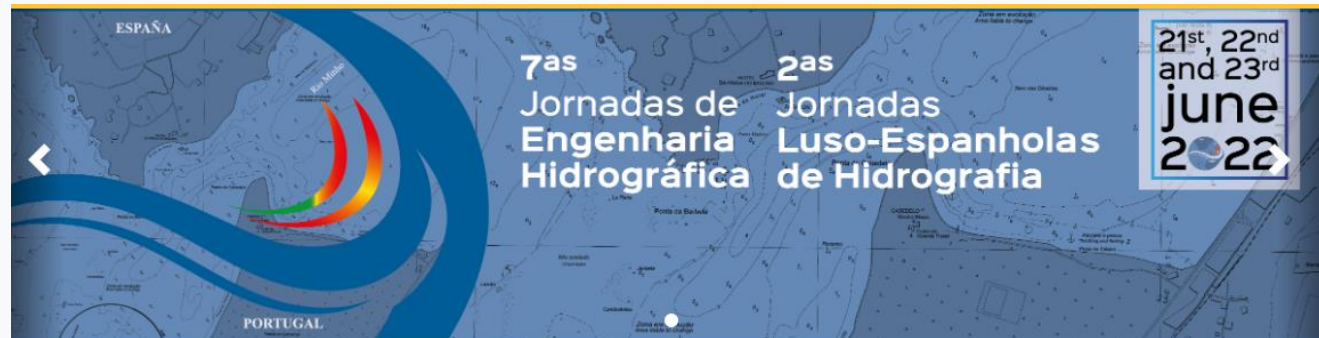
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Next relevant events (Portugal)



HYDROGRAPHIC ENGINEERING CONFERENCE

7^{AS} JORNADAS DE ENGENHARIA HIDROGRÁFICA / 2^{AS} JORNADAS LUSO-ESPAÑHOLAS DE HIDROGRAFIA

Registration starts on April 27th and ends on June 9th

<https://jornadas.hidrografico.pt/>



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Proposals

- Take note of the EAtHC Report
- SPI way to forward (consider Portugal/France proposals/comments)
- Taking into consideration scarce resources and the regions' asymmetries, it is necessary to promote S-100 inter-regional capacity building/training/formation
- PCA is a usual designation but is not defined on documentation:
 - PCA role clarification/definition IOT extend, IAW bilateral arrangements, to S-1xx, sharing data, etc.
- Capacity Building: consider efforts made by states in the IHO CB Working Plan. IHPT ex.:
 - Cooperation between Portugal and Portuguese Speaking African Countries in hydrographic surveys and chart production
 - Support to Angolan institutions in training, the survey in Luanda harbor and the consequent new chart
- Portal for scientific cruise authorization's registration and data access policy. Something to work @ GEBCO/United Nations Level



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