



PORTUGAL

NATIONAL REPORT

13TH SOUTHERN AFRICA AND ISLANDS HYDROGRAPHIC COMMISSION MEETING

Cape Town, South Africa
29th – 31st August 2016

INSTITUTO HIDROGRÁFICO

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IHPT | Head of the Hydrography Division
2016-8-30

- **THE HYDROGRAPHIC OFFICE**
- **SURVEYS, CHARTS AND NAUTICAL PUBLICATIONS**
- **MARITIME SAFETY INFORMATION**
- **CAPACITY BUILDING**
- **OCEANOGRAPHIC ACTIVITIES**
- **COLLABORATION WITH OTHER COUNTRIES**
- **OTHER ACTIVITIES**

Part of the Navy | Hydrographic Office | State Laboratory

Ensuring activities related to science and techniques of the sea, with a view to their military application. Contribute to the country's development (science and protection of the marine environment).



Areas of hydrographic surveying, nautical cartography, safety of navigation, operational oceanography, geology and chemistry of the marine environment.

SURVEYS | no surveys were executed by IHPT on the SAIHC Region, since the last meeting.

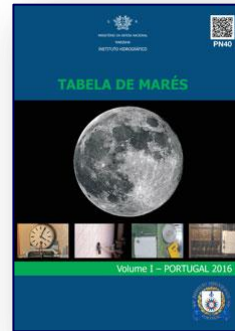
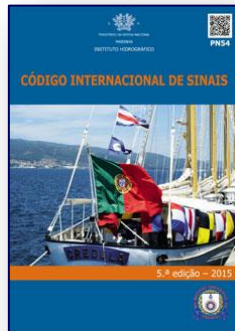
CHARTS | continued the implementation of CARIS HPD as the unique cartographic production system.

Paper Chart | IHPT is involved in the production and co-production of the following INT Charts:

- INT 7631 (Approaches to Porto da Beira) | GB,MZ,PT
- INT 7645 (Porto da Topuito) | MZ,PT
- INT 7661 (Approaches to Nacala) and Plan A (Porto de Nacala) | MZ,PT
- INT 7581, 7590, 7610, 7650, 7660, 7670 | GB,MZ,PT

ENC | since the last meeting IHPT did not produce any ENC of the region.

NAUTICAL PUBLICATIONS | third edition of the publication 10Z01 INT1 “Symbols, Abbreviations and Terms used in Charts” was published in November 2015; fifth edition of International Signals Code was published in June 2016 | IHPT also publishes annually the Tide Tables to the African Portuguese Speaking Countries.



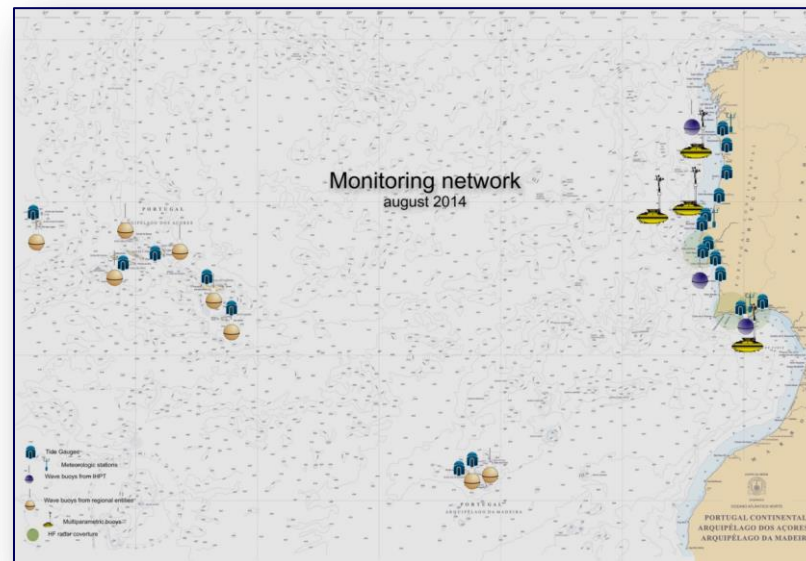
- IHPT, as the **national coordinator for the Maritime Safety Information**, provides a 24h service of Navigational Warnings, in cooperation with the NAVAREA II coordinator.
- **NAVTEX** (English and Portuguese) | transmitted from Penalva Station (near Lisbon), São Miguel Island (Azores Archipelago) and from Porto Santo Island (Madeira Archipelago).
- **Group of Notices to Mariners** | it's monthly published and covers all navigation charts and publications of Portugal, Angola, Cape Verde, Guinea-Bissau and São Tomé e Príncipe, and is also available on the IHPT web site.
- **ANAVNET** | IHPT on-line application at <http://www.anavnet.hidrografico.pt> provides either entire NtM publications or single NtM affecting individual documents, allowing in any case consultation and printing; Also allows consultation of warnings broadcasted by any of the Portuguese NAVTEX stations (coastal and local warnings).
- **GMDSS** | coverage not completed.
- **DGPS broadcast stations** and **AIS coastal stations** | coverage completed in Continental Portugal and in Azores and Madeira Archipelagos.

ANGOLA | IHPT has contacts with the Angolan Hydrographic Office, related to the future collaboration between IHPT and IHSMA, that may include formation in hydrography and cartography.

MOZAMBIQUE | the bilateral cooperation agreement between IHPT and INAHINA is being reviewed; It's planned to November 2016, the IHPT support the INAHINA in the operationalization of the multibeam system.



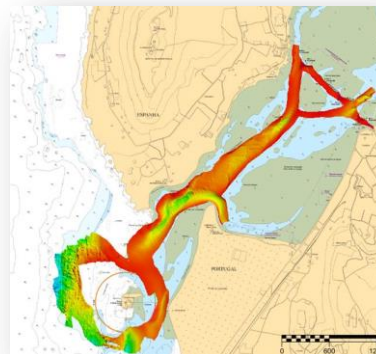
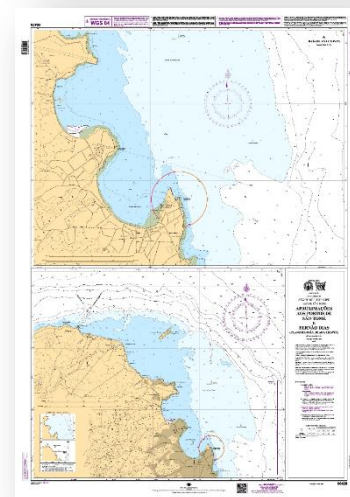
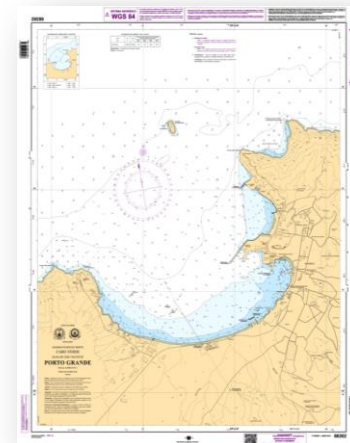
- IHPT has regular and robust activity in respect to physical, geological and chemical oceanography, participating in national and European Union research projects in those fields.
- IHPT is running, presently, a comprehensive network of tide gauges (17), wave and multi-parametric buoys (7), and coastal weather stations (3) and HF radar systems (5 - superficial currents and waves) in the Portuguese EEZ.



CAPE VERDE | IHPT executed hydrographic and topographic surveys in São Vicente and Santiago islands. New editions of NC PT66301 and PT66302 were published.

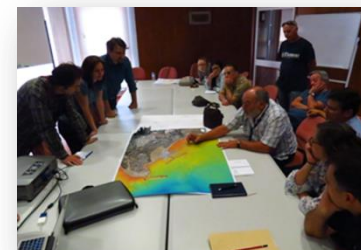
SÃO TOMÉ E PRÍNCIPE | new ENC were published PT466420 “Approaches to São Tomé and Fernão Dias Harbours” and PT568520 “Ana Chaves Bay”. This were produced based on the new NC PT66420, that replaced the older one published in 1958.

SPAIN | a collaborative survey was carried out involving survey teams of IHPT and IHM at the Minho River’s Mouth. During the survey the difference between the Chart Datum (PT-SP) was determined.

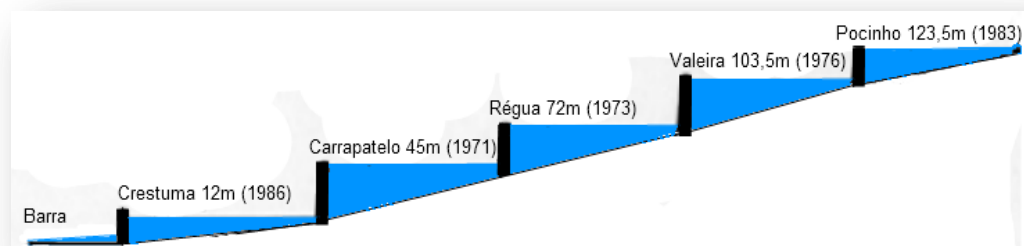
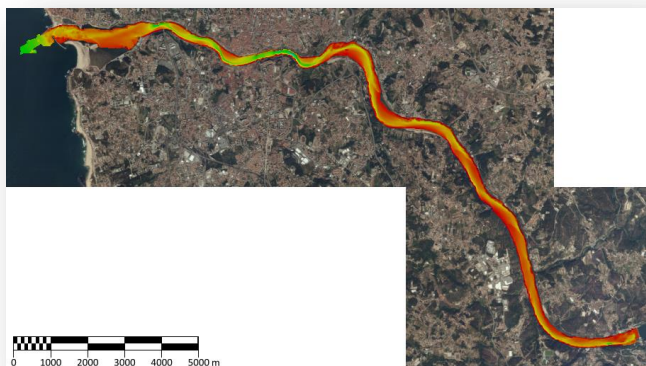


**Understanding the sea
for the benefit of all**

- **Courses in Hydrography** | IHPT School of Hydrography and Oceanography provides Specialization Courses in Hydrography (FIG/IHO Category A and B).
 - 2015/2016 – Course CAT. A, 4 militaries of the Portuguese Navy and 6 civilians (one Brazilian).
 - IHPT received a delegation of 8 military students from the Angola Navy Academy, for training in safety of navigation and introduction to hydrography and nautical chart production.

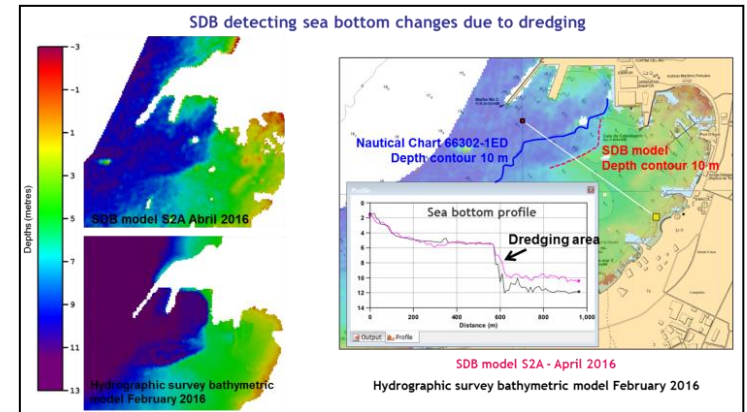
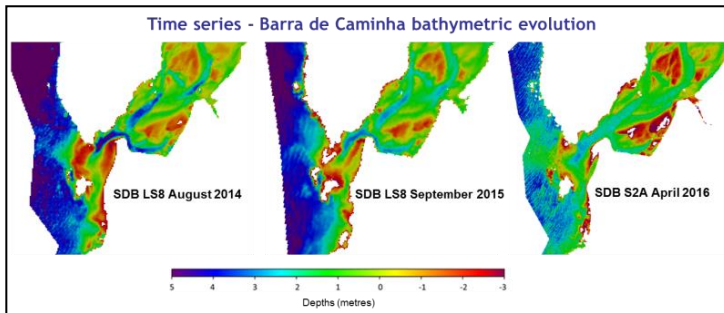


- **Projects** | production of the hydrographic cartography of the Douro river waterway.
 - IHPT started last year a challenging project related with the hydrographic survey and the production of NC and ENC of the Portuguese section of the Douro River (210 Km, five locks, very intense tourist navigation).



Understanding the sea
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Satellite Derived Bathymetry | IHPT has been performing some studies in SDB, from multispectral satellite images for shallow-waters, using LANDSAT 8 and SENTINEL-2A images. The goal of assess bathymetry through SDB methodologies is not to directly produce nautical charts, but rather to evaluate the amount of changes since the last survey.



Thank you for your attention!

