INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

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CIRCULAR LETTER 90/2008 13 November 2008

FRENCH STUDY GROUP ON THE STANDARDISATION OF THE LENGTH OF COASTLINES

Reference: Minutes of CHRIS/20 - Action Item 20/5

Dear Hydrographer,

- 1. France submitted a paper (CHRIS20-04.6A) on behalf of the North Sea Hydrographic Commission (NSHC), following a request made to the members of the North Sea Hydrographic Commission by the head of the European Commission Task Group on EU Maritime Integrated Policy regarding whether the IHO can provide the official length of the European Union coastline and whether there is any standardised methodology.
- 2. The Committee on Hydrographic Requirements for Information Systems (CHRIS) at its 20th meeting in November 2008 accepted France's offer to undertake further study into the matter and to report its findings and recommendations to the Hydrographic Services and Standards Committee (HSSC) at its inaugural meeting in 2009.
- 3. Member States wishing to contribute to the work being undertaken by France should contact the coordinator of the study Ing en chef Jean-Luc Déniel (jean-luc.deniel@shom.fr).
- 4. A copy of CHRIS paper CHRIS20-04.6A (in English only) is included at Annex A for reference.

On behalf of the Directing Committee Yours sincerely,

Captain Robert WARD Director

Annex A: Document CHRIS20-04.6A

CHRIS20-04.6A

20th CHRIS MEETING Niterói, RJ, Brazil, 3-7 November 2008

Paper for Consideration by CHRIS Outcome of NSHC 28: definition and length of coastline

Submitted by: France

Executive Summary: There is a number of repetitive requests made by government authorities to

HOs on the right definition and official length of national or regional coastline. Even in IHO, it was impossible to use this parameter as a robust criteria for hydrographic interest. IHO, as a technical and consultative recognised body, should be able to provide a standard and clear position on this complex issue and the way to implement the proper metric based on marine spatial data and/or official nautical charts. The main deliverable might be an official publication giving the length for each coastal states (and appropriate level of confidence and recommendations to use it). It is proposed to conduct a preliminary study on this issue under the aegis of the

CHRIS committee.

Related Documents: NSHC 28 final report.

Related Projects:

Introduction / Background

At the meeting hosted by the European Commission on the 25th January 2008, the aim of which was to show that HOs are "solutions providers" in the development of the EU Maritime Integrated Policy, the head of the European Commission Task Group insisted on a specific issue and asked the following questions: can IHO provide the official length of the European Union coastline? Is there any definition robust enough which can be used publicly? Can IHO handle a study to sort it out and make the results publicly available?

This request was reported at the 28th meeting of the North Sea and Hydrographic Commission. The decision was made to refer this issue to the next CHRIS meeting.

Specific studies have already been made on the coastline metrics and methodologies have been published by scientists. They take into account data derived from official charts and maps, satellite imagery, fractal theory considerations, etc. Reports have been made at the ICA conference meetings.

Analysis/Discussion

France believes that the subject is clearly in the scope of IHO and can benefit from new tools available in the GIS industry. It is recommended first of all to undertake a comprehensive review of potential customers' requirements,

including legal and economic issues if any. Then, it would be necessary to collect the existing studies and assess their pros and cons versus the different requirements. It is likely that it would be necessary to list the limits and barriers that IHO can be faced with: data availability, recognition of boundaries, scales, dynamic evolution of coastline, etc. Finally, it would be recommended to provide the list of official sources of information to be used – or that have been used – (official nautical charts?) and the recommended metric.

Recommendations

If needed, France would be happy to conduct a preliminary study in SHOM's school, and report to the relevant CHRIS/HSSC WG. This preliminary study might assess the opportunity to include national coastline lengths in the S-55 database as the IHO repository.

Justification and Impacts

When the final methodology/metric is defined and the list of source of information to be used is established within IHO, it will be probably necessary to outsource (IHO 2010 budget impact) the task to run the tools to get the final results for each coastal state.

Action Required of CHRIS

The CHRIS members are invited to:

 evaluate this proposal in accordance with the guidelines for the evaluation of proposed new work items and if agreed, to task the appropriate CHRIS/HSSC subordinate body or ad hoc WG.