

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

Paper for Consideration by CHRIS

ENC harmonisation on the Baltic Sea

[22 September 2008]

Submitted by:	Denmark and Finland
Executive summary:	This paper informs on the ENC harmonisation activities within the Baltic Sea Hydrographic Commission.
Related documents:	<i>WEND11-INF2</i>
Related projects:	None

Introduction

The Baltic Sea Hydrographic Commission (BSHC) has recognized the need for ENC harmonisation at its 12th Conference in June 2007. The BSHC established a Baltic Sea ENC Harmonisation Working Group (BSEHWG) with TORs to review inconsistencies between ENCs and to propose actions to resolve them. The BSEHWG reported to the BSHC 13th Conference in August 2008. At the BSHC 13th Conference the report and its recommendations were approved.

Discussion

The BSEHWG has evaluated the current situation, identified reasons for inconsistencies and agreed altogether 17 recommendations to improve the ENC consistency on the Baltic Sea. Some of these recommendations are aimed to the ENC producers and some for other bodies. The list of recommendations is in [Annex 1](#).

The full BSEHWG Report and its Annexes can be downloaded from the IHO Web pages under BSHC → BSHC13th meeting documents.

Some comments:

- IHO recommendations and guidelines on ENC consistency have been found feasible, except some deviations on compilation scale and the use of SCAMIN.
- many of the recommendations can be implemented soon without further studies.
- further studies are needed for solving some inconsistency issues, e.g. on conveying and presentation of depths. These are highly related to the production and database specifications and it is estimated that major work is needed to overcome these.

The BSHC 13th Conference decided that its members should implement these recommendations and that the BSHC will monitor the implementations on its annual meetings.

The WEND 11th meeting regarded the BSEHWG work and the regional approach important, proposed other RHCs to consider similar actions and forwarded the recommendations to CHRIS for further actions.

Recommendations

The BSEHWG proposes similar harmonisation actions to be initiated by other RHCs for adopting regional implementations of IHO recommendations.

Justifications and Impacts

The BSHC regards very important the improving ENC consistency on the Baltic Sea and thus fostering wider use of ECDIS and ENCs and thus increasing safety of navigation. The BSHC also regards the ENC consistency issues to be very important and necessary tasks to all IHO members.

Actions required by CHRIS

The CHRIS 20th meeting is invited to take note on this information and to agree on appropriate actions, which may include:

1. to consider any technical implications of the BSEHWG recommendations;
2. to consider if a generic version of the BSEHWG recommendations should be included as an Annex to S-65 – *ENC Production Guidance*;
3. to invite RHCs to adopt similar regional consistency policies and guidelines for ENC consistency as the BSHC for their regions.

Annex 1: List of BSEHWG Recommendations

Annex 1: Summary of BSEHWG Recommendations

#	Issue	Recommendation	Responsibility	Implementation Schedule								
				Country	Start date	End date						
1	Navigational purpose <i>Overview</i>	1a) <i>Overview</i> navigational purpose should be in harmony with other navigational purposes within the producers' portfolios.	All	Denmark Germany	2008 2008	2008 2008						
		1b) The <i>Overview</i> cell should be harmonised with adjacent cells in the North Sea.	Germany	Germany	2008							
2	Navigational purpose <i>Harbour and Berthing</i>	The <i>Harbour and Berthing</i> navigational purposes should be in harmony with other navigational purposes within the producers' portfolios.	All	Denmark Estonia Finland Germany Latvia Lithuania Poland Russia Sweden	2008 2008 2008 2008 2008 2008 2008 2008	2012 2015 2011 2009 2011 2008						
3	Use of Compilation Scale	On the Baltic Sea, the following values for the compilation scales should be used: <table border="1" data-bbox="533 954 919 1048"> <tr> <td>180,000</td> <td>(General)</td> </tr> <tr> <td>90,000</td> <td>(Coastal)</td> </tr> <tr> <td>22,000</td> <td>(Approach)</td> </tr> </table>	180,000	(General)	90,000	(Coastal)	22,000	(Approach)	All	Denmark Estonia Finland Germany Latvia Lithuania Poland Russia Sweden	2008 2008 2008 2008 2008 2008 2008 2008	2010 2015 2011 2009 2011 2009
180,000	(General)											
90,000	(Coastal)											
22,000	(Approach)											
4	Exceptions in the use of Compilation Scale	If a Hydrographic Office (HO) wants to use a compilation scale other than those recommended above, it may do so if all the following conditions are met: i) the value used is in line with the intention of the IHO CL 47/2004 ii) use of it is agreed bilaterally with neighbouring HO(s) concerned, in order to avoid inconsistencies at the border, and iii) every effort is made to minimise possible inconsistencies due to deviations from the recommended compilation scale.	All	When adopted								
5	Use of SCAMIN	BSHC should adopt the guidelines as stated in the Annex J .	All	Denmark Estonia Finland Germany Latvia Lithuania Poland Russia Sweden	2008 2008 2008 2008 2008 2008 2008 2008	2009 2015 2011 2010 2011 2009						
6	Contour intervals	6a) The BSEHWG proposes that the BSHC establishes a Working Group to study possibilities for Harmonisation of the Conveying and Presentation of Depth Information for both ENCs and paper charts.	BSHC	When adopted								
		6b) Meanwhile, if the IHO	All	When adopted								

		recommended contour intervals are not applicable, or if additional intervals are needed, implementation should be agreed bilaterally/multilaterally so that possible inconsistencies to the mariners could be avoided.				
7	Harmonisation of features continuing/extending over national borders	All BSHC countries should ensure that bilateral agreements are in place with their neighbouring countries concerning harmonisation of features continuing/extending over national borders.	All	When adopted		
8	Checking harmonisation before launching new ENC	All BSHC countries should check and carry out harmonisation before launching updates or new editions of ENCs.	All	When adopted		
9	Buffer zones along the national borders	All BSHC countries should check that there are no gaps between cells at national borders by establishing a buffer zone of up to 5 metres, if necessary.	All	Denmark	2008	2008
				Estonia		
				Finland	2008	2008
				Germany	2008	2008
				Latvia	2008	2008
				Lithuania		
				Poland	2008	2008
				Russia		
				Sweden	2008	2008
10	Adoption of new versions of ENC related standards	The BSHC should agree on joint plans and time schedules for the adoption of new versions of ENC related standards (e.g. S-57 Ed. 3.1.1 or S-101).	BSHC	When adopted		
11	Adoption of new object classes	The BSHC should agree on joint plans and a time schedule for the adoption of new object classes on their products.	BSHC	When adopted		
12	The use of objects to ensure consistency	12a) BSHC should encourage all countries to make further studies of the use of objects in the Baltic Sea ENCs and report to the following BSHC meeting. 12b) BSHC should decide on proper actions to ensure ENC consistency as far as possible.	BSHC	All:	2008	2009
13	Special circumstances	If found necessary it is possible to deviate from the recommendations. When doing so, the relevant HO should make every effort to minimise the effect of any inconsistencies that may occur. This should be done through bilateral/multilateral agreements and through harmonisation of data in order to ensure that no serious disharmony is introduced to the ENCs.	All	Ongoing		
14	Promotion of regional approaches	BSHC should ask the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS) to consider appropriate actions to recommend other Regional Hydrographic Commissions (RHCs) to adopt regional implementations to IHO consistency recommendations within their sea areas.	BSHC	When adopted		
15	Training and education	All relevant bodies are encouraged to continue the education of mariners regarding 'ECDIS', 'ECS', 'ENC' and 'Electronic chart'.	All	Ongoing		
16	Follow-up of	All BSHC countries should follow the time	All	Ongoing		

	implementati on	schedule for the implementation of all relevant recommendations as stated in Annex L.		
17	Reporting of the implementation of the recommendations	BSHC members should report annually to BSHC Conferences on the implementation of these recommendations.	BSHC	2009