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3. Discussion
Harmonised Re-survey Scheme - Background

The HELCOM 2001 Copenhagen Ministerial Declaration asked for Re-surveying of major shipping routes and ports by requesting the Governments of the Contracting Parties

“to develop a scheme for systematic re-surveying of major shipping routes and ports in order to ensure that safety of navigation is not endangered by inadequate source information.

The survey shall be carried out to a standard not inferior to the latest edition of IHO S-44.

The scheme shall be elaborated jointly by the hydrographic services responsible for the areas in question not later than by the end of 2002 with the aim to begin implementation by 2003”

Background - Harmonised Re-survey Scheme

2001: Copenhagen Declaration


2008: BSHC decided on a major revision of the harmonised re-survey scheme.

2009: BSHC approved the new Vision for the re-surveys.

2010: Moscow Declaration extended the re-surveys to cover all areas used for navigation.
Harmonised Baltic Sea Re-survey Scheme

Meta database developed by Sweden.
Browser interface, Open access to all.
http://helcomresurvey.sjofartsverket.se/helcomresurveysite/

Harmonised Re-survey Scheme

Restricted interface for updating the database.
Access granted only to National Database Operators
Needs to revise the re-survey scheme:

- Existing scheme developed more than 7 years ago
- High priority areas outside original HELCOM Routes
- New Traffic Separation Schemes approved and planned
- More accurate data on routes and areas actually used by ships (AIS data)
- Other uses of hydrographic information
- National re-survey schemes to be included
- Re-survey Metadata base to be revised
Shipping is using almost the whole Baltic Sea area.

Re-survey Scheme V.2 Vision:
[Approved by the BSHC 14th Conference, September 2009]

The whole Baltic Sea area should be covered by a harmonised re-survey scheme.

The harmonised re-survey scheme will be based on national re-survey schemes (and generalised if needed).

The re-survey areas should be specified in three Categories:

- **Cat I** current Scheme, re-surveys specified by the HELCOM Copenhagen Declaration 2001, for safety of navigation.
- **Cat II** extended routes and areas according to national re-survey schemes as specified for safety of navigation.
- **Cat III** extensions for other purposes than above (e.g. for environmental protection).
Vision for revised re-survey scheme
Approved by the BSHC 14th Conference, 2009.

HELCOM re-survey areas
Draft by 19 March 2010
- CAT I
- CAT II
- CAT III
- SSE
- Main ports

HELCOM Moscow Ministerial 2010 Declaration

“We the Ministers of the Baltic Coastal Countries and the Commissioners of the Environment

“AGREE

to extend the scope of the 2001 HELCOM Copenhagen Declaration to cover all routes and other areas used for navigation according to the revised Baltic re-survey scheme to be developed based on the 2009 Baltic Sea Hydrographic Commission Vision for the resurvey as contained in Annex 2;

to present their national re-survey plans preferably by 2013, but not later than 2015, including time schedule estimations;

to undertake necessary measures to ensure that sufficient funding, including external funding, will be available for re-surveys;

to undertake measures to improve mariners’ abilities to assess and interpret hydrographic content in nautical charts and publications either in printed or digital form, especially in the Electronic Chart Display and Information System;
Transition from the current scheme to the extended Scheme

To present national schemes by 2013 (at the latest by 2015) including time schedules for CAT I and II.

Funding estimations

Database operational

Action Plan of the EU Strategy for the Baltic Sea Region

The part dealing with hydrographic surveys in this Declaration is in accordance of the Action Plan of the EU Strategy for the Baltic Sea Region.

This includes a flagship project: “Speed up re-surveying for major shipping and ports”, as agreed in HELCOM, in order to ensure that safety of navigation is not endangered by inadequate source information.

(Lead: HELCOM in cooperation with the International Hydrographic Organisation; Deadline for progress review: 2013).
External funding for re-surveys:

EU TEN-T Project Proposal "MonaLisa"

Led by Sweden, Denmark and Finland partners. Expected decision on the grants by February 2011. The project proposal is composed of four main Activities:

Activity 1 – Dynamic & Proactive route planning
Activity 2 – Electronic verification of officer’s certificates
Activity 3 – Ensuring the Quality of Hydrographic Data on Shipping Routes and Areas
Activity 4 – Global Sharing of Maritime Data

Activity 3: Ensuring the Quality of Hydrographic Data on Shipping Routes and Areas

Subactivity 3.1: Speed up re-surveys
Subactivity 3.2: Development of Baltic Sea Depth Model
Subactivity 3.3: Pilot implementation of harmonized vertical reference

Leader: Hydrographic Office of the Finnish Transport Agency
**Subactivity 3.1: Speed up re-surveys**

Re-surveys of HELCOM I and II routes and areas.

Finland about 14,000 km², (2011: ~6,700 km²)

Sweden about 17,000 km², (2011: ~6,100 km²)

Time-span 2011 – 2013

- 2011 one year contract on Bothnian Sea.
  - Restricted EU procurement
  - Deadline 12 November 2010

- 2012-2013 two year contract on remaining areas.

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**Subactivity 3.2: Development of Baltic Sea Depth Model**

In co-operation with the BSHC Working Group

To develop a system for exchange of high density depth data

- To develop depth models, harmonized data sets, virtual database
- To test the data model in small scale
- To visit Baltic Sea HOs for problem solving
Subactivity 3.3: Pilot implementation of harmonized vertical reference

In co-operation with the BSHC Working Group and the IHO Tidal and Water Level WG

• To develop a small scale pilot implementation of a harmonized vertical reference and to study and analyze the implications of implementation

• To develop examples and recommendations to BSHC members for their transition to a harmonized vertical reference

2. Examples of other BSHC joint hydrographic co-operation actions

• Baltic Sea ENC Coverage
• Harmonisation of Baltic Sea ENCs
• Harmonisation of Baltic Sea INT Chart Scheme
• Mariners’ Routeing Guide Baltic Sea
• ECDIS Training
Baltic Sea ENC Coverage 2010

IMO Mandatory ECDIS-carriage requirements by 2012 – 2018.
IHO Member States committed to publish adequate ENC coverage by 2010.
The Baltic Sea has already fairly good ENC coverage.
The Baltic Sea Hydrographic Offices have plans to complete adequate coverage by end 2010.

Baltic Sea ENC harmonisation

- Jointly agreed actions to harmonise national ENCs
- Especially on border areas
- Main emphasis to eliminate obvious visible inconsistencies
- 17 BSHC Recommendations
- Examples of inconsistencies
Example cases:

Co-ordination of Baltic Sea INT Chart Scheme:

Changes in production nations,
Updating detailed chart information and printing schedules
New INT numbers
INT status to *Mariners’ Routeing Guide Baltic Sea*

Online version of *Mariners’ Routeing Guide Baltic Sea*  INT status to *Mariners’ Routeing Guide Baltic Sea* (INT 1200)

ECDIS training

*The Moscow 2010 Ministerial Declaration requests Member states to undertake measures to improve mariners’ abilities to assess and interpret hydrographic content in nautical charts and publications either in printed or digital form, especially in the Electronic Chart Display and Information System.*

- Mariners need to understand how to operate the ECDIS
- Emphasis to the quality and main issues of the ENC data used in ECDIS
- IMO STWC is under review, uniform implementation for Baltic Sea is appreciated
- To be done together with Maritime Administrations, Hydrographic Offices and navigation schools and training centres, ship owners, etc
3. Discussion

- All the Baltic Sea countries are actively participating to these co-operation actions.
- The co-operation has been friendly and fruitful.
- The IHO community has recognised the BSHC co-operation and these Baltic Sea harmonisation actions very valuable for increasing the safety of navigation on the Baltic Sea.
- IHO is recommending this kind of co-operation and similar actions as a model also for other Regional Hydrographic Commissions.
- These co-operation actions are in line with the EU Baltic Sea Action Plan.
- The HELCOM supports these co-operation activities.
- These co-operations are supporting Marine Spatial Data Infrastructure actions on the Baltic Sea

Thank you!

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