

**8th CSPCWG Meeting  
Turku, Finland, 29 November – 2 December 2011**

**Paper for Consideration by CSPCWG**

**Update on outcomes from using ENC data from other nations to update paper charts**

<b>Submitted by:</b>	SWEDEN
<b>Executive Summary:</b>	This paper reports on the outcomes from a method used within the Nordic Hydrographic Commission, using each other's ENC data to update paper charts covering the neighbouring country. The method had now been used in practice since early 2010.
<b>Related Documents:</b>	CSPCWG 5 – 09.4A
<b>Related Projects:</b>	

**Introduction / Background**

During 2007 a working group was established within the Nordic Hydrographic Commission (NHC) in order to harmonize the Nordic Paper Charts regarding structure (e.g. scales), appearance (cartography) and updating. In the final report from this working group the most alarming issue identified was that charts covering neighbouring country's areas were not properly updated.

The working group from 2007 concluded that there was a need to improve the data exchange between the Nordic countries. It was also suggested that using ENC would improve the data exchange. At the 52nd Meeting, 2008, the NHC decided that the Improved Data Exchange Working Group (IDEWG) should be established. This new working group was chaired by Sweden and had representatives from Denmark, Finland, Iceland and Norway. It became active in September 2008 and presented the final report to the 53rd NHC Meeting in April 2009 (NHC/53/6.2B). All recommendations made by the working group were approved by NHC. A presentation was also given by Sweden at the 6th CSPCWG meeting 2009 in Monaco, see CSPCWG6-09.4A.

Since early 2010 the countries within the NHC have worked in accordance with the agreements made which in more general terms states that paper charts, produced by a NHC member state, covering a neighbouring country's area should be based on the that country's ENCs. Also the relevant updates made in the paper chart, should be made by using ERs and ENs issued by the neighbouring country. Two contact persons in each country, have been appointed in order to establish an efficient communication channel. The contact persons also have the responsibility to produce the ENC Update Report containing information about all ENC updates between a selectable start date and end date, since it is essential to get information regarding if the ENC update would have any influence on the paper chart. Temporary and preliminary ENC updates should almost never have any effect on the paper chart and this distinction is made available in the ENC Update Report.

At CSPCWG6 it was decided that Sweden would provide the working group with an update in order to report the outcomes from using ENC data from other nations to update charts. This update is now given in this paper.

**Analysis / Discussion**

In May 2011 a review of the method was made via a questionnaire to the participating countries.

The outcome of the questionnaire showed that all countries were of the opinion that the recommendations have led to improved data quality in the paper charts covering a neighbouring country's area.

Denmark and Sweden were of the opinion that the recommendations have lead to more efficient updating, while Finland found it too early to say, since they still are in a transition phase and the updating procedure is still seeking its final form. Norway was unsure if it has lead to more efficient updating, but has very few boundary areas to Sweden and Denmark.

The administrative routines, with the ENC Update Report, have not really become in force in all countries, but good communication channels have been established through the contact persons in each country.

The questionnaire also showed that there are some challenges regarding consistency between paper charts and ENCs. Although the overall experience from all countries is that the quality in the paper charts, regarding accuracy and completeness, has improved by the method and all countries are positive to continuing working according to the recommendations and also seeking for improvements in the future.

Most of the paper charts within the Nordic countries, larger than scale 1:150 000 covering a neighbour country's area, are now produced using ENCs with relevant updates as the source for the charts. Paper charts at 1:150 000 – 1:400 000 should be based on the neighbouring countries ENCs 1<sup>st</sup> Jan 2013 according to the recommendations.

Using this method is also a guarantee for a printer nation, such as UKHO or BSH, that the paper chart, which in that case is adopted, always includes the latest source information available even if the paper chart covers two countries geographical areas.

### **Justification and Impacts**

The method of using ENC data from other nations to update paper charts is now in use within the NHC. During 2011 the recommendation has also been presented within the Baltic Sea Hydrographic Commission (BSHC) and an open invitation was given to the member states within the BSHC to participate.

### **Action required of CSPCWG**

The CSPCWG is invited to note and discuss this Information Paper and consider if these principals could be used elsewhere and if these principals should have any impact on the new section B-600, Chart Maintenance, in S-4.