Agenda Item for Consideration by ARHC

ARHC2-02Da

2nd Arctic Regional Hydrographic Commission Meeting
Copenhagen, Denmark, September 28-29, 2011

New production system for production of Greenlandic charts.

Submitted by:	*Denmark*
Executive Summary:	*The purpose of this paper is inform about a new production system for production of Greenlandic charts*
Related Documents:	*None*
Related Projects:	*None*

Introduction / Background

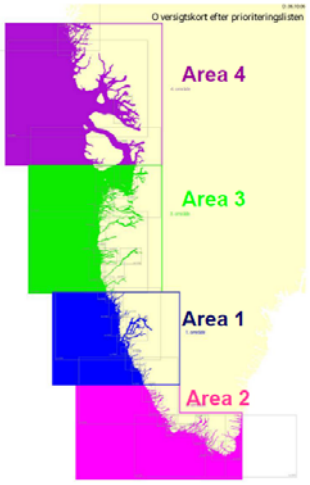
The National Survey and Cadastre of Denmark (KMS) under the Danish Ministry of the Environment have chosen Nautical Solution from ESRI to be the primary production system for producing nautical charts of Greenlandic waters. The implementation of the new production system will be completed by the end of 2011.

The system was chosen for the production of nautical charts for Greenland only, as a consequence of a very tight production plan requiring the production of 65 charts of the Southwest Sea of Greenland. An agreement between the Minister of Environment and the Greenland Authorities from October 2009 states, that these charts are to be rectified, produced and published by the end of 2018, including paper charts and ENC.

Work agreement between the Ministry of Environment and the Self-Government of Greenland

Purpose: Rectification of 65 charts

From 2009 to 2018



Experience from earlier KMS projects has shown that the existing production environment for the production of charts of Greenland in KMS are not sufficiently efficient to handle a production on this scale, unless a considerable amount of extra manpower and resources were allocated to the task. As a consequence, KMS agreed with the Self-Government of Greenland in 2010 that KMS would define and identify a new production environment that would be implemented during 2011. This would enable a new workflow and production line to be operational from the start of 2012.

The choice of a new production environment for producing charts of Greenland was based on the general IT-strategy in KMS and the overall goal in KMS to use commercial systems appropriately while limiting the development of internal systems in KMS.

The selection process examined existing platforms in KMS in order to increase the use of existing internal knowledge. In particular, the following requirements were considered:

(a) Openness in database structure in order to establish one single database for both maritime information and topographic Greenlandic data.
(b) Development potential with the new system's Application Programming Interface.
(c) A system for workflow management.

In accordance, KMS identified potential commercial systems for producing charts; the options were narrowed down to the HPD solution from Caris and the Nautical Solution from ESRI as subjects for further investigation. Internal tests in KMS showed that both of these systems were capable of producing both paper charts and ENCs when considered from a functionality viewpoint. This conclusion was further confirmed by visits to users of the two production systems.

The final decision to choose the ESRI system was based on the fact that there is a widespread existing knowledge of ESRI systems within KMS, paired with the need for a workable system by the beginning of 2012..

In addition to the Hydrographic Office, KMS includes knowledge centres of topographic, military and cadastral mapping etc., and therefore uses multiple production systems and knowledge environments. By implementing Nautical Solution from ESRI, KMS can utilise existing knowledge and licences to facilitate the implementation of the new hydrographic production environment.

Actions required from the 2nd ARHC Conference:
The Conference is invited to take note of the information.