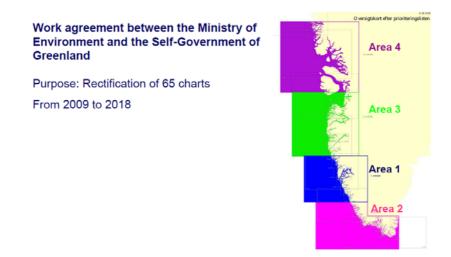
55th NHC Conference Stavanger Norway 4-6 April 2011 Agenda item 11. Explanatory Note Denmark

New production system for production of Greenlandic charts.

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 Greenland. The implementation of the production system will be finalised 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.



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 are allocated to the task.

As a consequence of this, the Agreement with the Self-Government of Greenland states, that in 2010 KMS was expected to define and choose a new production environment and that this should be implemented during 2011, thereby enabling 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 combined with the overall goal in KMS to use commercial systems appropriately and at the same time limit the development of internal systems in KMS as much as possible for this specific production environment.

Another guideline used was to focus on existing platforms in KMS in order to increase the use of existing internal knowhow. In particular, the following requirements were to be 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 systems Application Programming Interface.
- (c) A system for workflow management.

In accordance with this, KMS scanned the market for commercial systems for producing charts, and eventually focused on 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 ENC when considered from a functionality viewpoint. This conclusion was further confirmed by visits to users of the two production systems.

Regarding the need to find a workable system by the beginning of 2012, the final decision to choose the ESRI-system was based on the fact, that there is a widespread profound knowledge of ESRI systems in the organisation.

KMS is not just a Hydrographic Office but also includes knowledge centres of topographic, military and cadastral mapping etc., and therefore uses a lot of different production systems and different highly skilled knowledge environments. By choosing Nautical Solution from ESRI, it will be possible to utilise some of the existing knowledge and licences of ESRI-systems in various parts of the organisation to help in the process of implementing an entirely new production environment. And it turned out too, that only a few further licences for the overlying Nautical Solution were in need to be purchased.

The Conference is invited to take note of the information.

