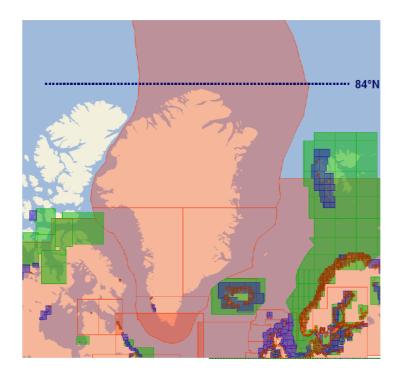
ENC and ECDIS in northern Greenland

Some remarks on the current situation

KMS has been informed that some ECDIS have problems displaying ENC north of $84\,^{\circ}N$

Vendors who have systems that can display both the gnomonic and the polar stereographic projection show our cell DK1GNORT in a correct manner. Their ECDIS is prepared for navigation in the northern area. Vendors, who have ECDIS with out the ability of using these gnomonic and the polar stereographic projection, can't be sure that their ECDIS will present the ENC as expected.

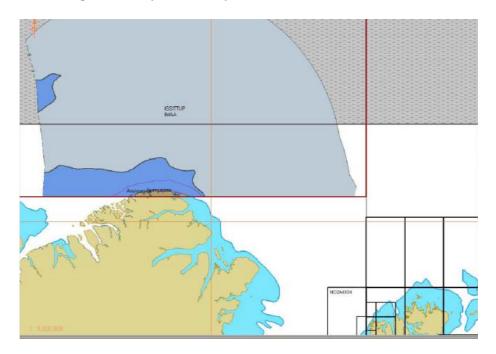


As a consequence KMS has divided our northern ENC in 2 new ENC, 1 north of 83,5°N. (DK1NORN) and 1 south of 83,5°N. (DK1NORT).

To solve the problem we have initiated an inquiry together with PRIMAR and the ECDIS suppliers, Transas, Adveto and Furuno. At the moment we await feedback from PRIMAR and the suppliers about the results of the inquiry. We intend to inform IHO on the issue at its next TSMAD meeting.

It is possible to load ENC for the area north of 84 $^{\circ}$ N into an ECDIS system, but for some systems there are limitations and as a consequence data can not be used optimally.

The screen dump shown below shows our cell in an ECDIS. Using a system like this, it will not be possible/safe to travel farther north than $84 \, ^{\circ}$ N.



Displaying ENC in area north of 84 $^{\circ}$ N will require a different type of projection, for example a polar stereographic projection. The challenge is that these are not defined by the current IMO ECDIS performance standards.

Information from some of the suppliers confirms that their systems can't use data covering the polar area, if the data can't be displayed in a Mercator projection.

A way to solve the problem for the northern area could be that ECDIS have the ability to switch over to for example a polar stereographic projection. To secure that these projections will be supported by the ECDIS suppliers the IMO ECDIS performance standard has to be updated in order to include these different types of projections.

Until a solution is found, and in order to enhance safety, we find it important to inform the mariners, suppliers and other with an interest in navigating in the Arctic area.

Actions required from the NHC 55th Conference:

The Conference is invited to take note of the information and if deemed necessary to take appropriate actions.