

**Paper for Consideration by WEND-WG  
Additional material to support Germany ENC scheming case study**

<b>Submitted by:</b>	IC-ENC
<b>Executive Summary:</b>	For information. Extract from IC-ENC Technical Conference Report regarding Germany ENC scheme case study
<b>Related Documents:</b>	WENDWG13-07.1Aa
<b>Related Projects:</b>	N/A

**Introduction / Background**

IC-ENC's Technical Conference 04 (2019) discussed the experiences of Germany in their ENC rescheming in the North Sea. Annex A provides the WENDWG with the relevant extract from the TC04 Report.

**Analysis/Discussion**

Annex A illustrates the nature of the discussion amongst HO technical leads when considering the practical implications of transferring from a traditional paper chart based ENC scheme to a defined grid structure.

The purpose of this paper is to provide additional material for WENDWG consideration in support of paper WENDWG13-07-1Aa which provides an up to date description of the experiences of Germany.

**Conclusions**

N/A.

**Recommendations**

N/A

**Justification and Impacts**

N/A

**Action Required of WEND-WG**

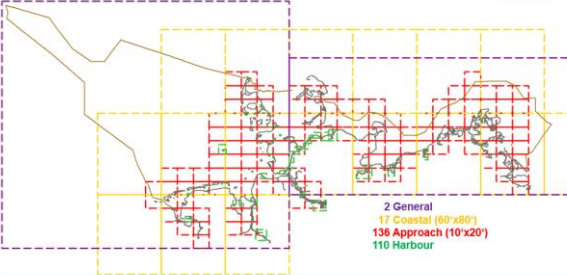
The WEND Committee is invited to:

- a. note this report.

## 2.1 Updates from Members

### 2.1.1 ENC Rescheming in the North Sea – DE

DE presented their recent experience with ENC rescheming within the North Sea. The presentation noted DEs experience of moving from a chart-based scheme onto a gridded scheme. DE stated the importance of using the grid system to allow easy integration with new products, such as S-102 and S-104. DE stated that early planning was required and liaison with IC-ENC to ensure the transition to the new coverage was achieved in a single batch to ensure no gaps or overlaps were introduced into the coverage. DE restated the need to validate the ENCs within the database to resolve S-58 test errors before the ENCs were exported for IC-ENC, DE stated this was to reduce the impact on IC-ENC with the large scheme. With the completion of the Approaches Usage band within the North Sea, DE will now progress with the remaining usage bands in the North Sea.

<p><b>ENC-rescheming</b></p> <p><b>1. Why?</b></p> <ul style="list-style-type: none"><li>- Trigger: Conversion of the paper chart plant to A0/A1</li><li>- Removal of paper card-based ENC cuts</li><li>- Launch of production of bENCs/ABL with a uniform grid</li><li>- Creation of a basic and more flexible system for the ENCs (advantages for our bathymetric database and S100)</li><li>- Better handling in the production process</li></ul> <p>14.11.2018 IC-ENC 4th Technical Conference – Stefan Grammann 3</p>	<p><b>ENC-rescheming</b></p>  <p>2 General 17 Coastal (60'x80') 136 Approach (10'x20') 110 Harbour</p> <p>14.11.2018 IC-ENC 4th Technical Conference – Stefan Grammann 8</p>
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The Chair thanked DE for the presentation and noted the importance of early communication for large re-schemes. Chair queried the choice to move to a gridded scheme, as it is a regularly occurring consideration amongst IC-ENC members. DE reiterated that the gridded scheme is good for the integration of other products with the ENC, additionally, the use of the grid makes ENC maintenance easier, AU confirmed that its experience shows that a gridded scheme is easier to maintain.

NZ and UY queried the usage bands and the compilation scales used within the rescheme. DE confirmed that the rescheme will extend to 6 usage bands and each usage band will have a single compilation scale except for the approach usage band which will have 2 compilation scales, this is to ensure consistency throughout each usage band.

NG queried if it is possible to base paper charts on the gridded ENC scheme and if the grid can be used with their first ENCs, DE confirmed that the database is used to produce ENCs and paper charts. Chair suggest delegates would agree starting with a grid-based system is positive and it is technically possible. AU confirmed that their ENCs have always been on a gridded scheme.

DE confirmed that the grid was selected based on the requirements of DE waters, however consideration was given on the interaction with adjoining members data. The conference discussed the need/benefit/possibility for a standardised grid for all members to use.