

Paper for Consideration by Data Quality Working Group

How NL allocates CATZOC values

Submitted by:	NL
Executive Summary:	Description how NLHO allocates CATZOC values to their ENC portfolio.
Related Documents:	S-57
Related Projects:	Guidance on data quality aspects for HO's.

Introduction / Background

Since 2005 NLHO has entered values for CATZOC in their published ENCs. In the southern North Sea there are seabed dynamics with significant changes.

Analysis/Discussion

Historically the area was surveyed using singlebeam echosounder. From 2004 onwards multibeam surveys were performed in combination with side scan sonar for object detection. This resulted in surveyed areas with complete seabed coverage and high object recognition detail thus classifying surveyed areas into CATZOC = A1. Due to moving seabed areas (temporal variation), some areas in the southern North Sea are resurveyed every two to four years. Further north the seabed dynamics is less, this has been determined by scientific research. The resurvey frequency for these areas are 10-25 years.

The coastal zone (0-10m LAT), shipping lanes and port areas are acquired by another government party. The coastal zone is surveyed using single beam. These areas are allocated CATZOC value = B. The shipping lanes to ports and ports areas have a guaranteed depth. These areas are therefor classified as A1. The underlying surveys are complete coverage highly accurate multibeam surveys.

If due to unseen events, the survey programme is delayed, areas which are out of date will be degraded from A1 to A2. The excess time is an indication for the level of degradation. Internal checks are performed to verify the forecasted seabed movement and compared with the actual change within an area between two consecutive surveys.

Conclusions

There is a direct link between the programmed resurvey scheme and allocated CATZOC value. In case the re-survey frequency is not reached, the CATZOC value is downgraded based on a combination of user experience and scientific modelling. Areas acquired by other parties resulting in a guaranteed depth are qualified as CATZOC = A1.

Recommendations

The temporal variation issue has been resolved in the S-101 DCEG model, thus warning the user if re-survey frequency cannot keep up with initial produced quality of bathymetric data and creating a hazard to safe navigation.

Justification and Impacts

No impact at this time.

Action Required of Data Quality Working Group

The DQWG is invited to:

- a. note this report;
- b. discuss this report at meeting 13;
- c. draw generic guidelines from this report.