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Paper FOR Consideration by TSMAD

Reducing Data Volume - The Use of Text and Picture files within S-57 Exchange Sets.

Submitted By:	IC-ENC
Executive Summary:	This paper identifies ways that S-57 Exchange Set data volume can be reduced. It provides basic guidelines which can be followed by data producers.
Related Documents:	1. S57
Related Projects:	1. S101

Introduction / Background

1. The data volume of an S57 Exchange set is a factor which can prohibit remote updating and impact on ECDIS load times. One of the benefits of ECDIS should be the ability to update chart holdings (ENCs) at sea for both updates and new editions but a high volume of ancillary files (text and picture files) linked to the data has a negative impact. This paper sets out guidelines which would assist in reducing ENC Exchange Set data volume.

Analysis / Discussion

2. Due to the file size of images, picture files and text files considerably add to the Exchange Set volume and to the content of the catalogue file, the following principles would ensure that this additional overhead is kept to a minimum.

- Only picture and text files that are useful to the mariner should be included. Repeating information already available within the data itself or included in Tidal publications and sailing directions should be avoided.
- Where possible tables should be included as formatted text and not as images.
- Images should be trimmed to remove excessive white space.
- Where images need to be included they should follow the guidelines laid out below.

Guidelines for picture files	
Recommended Resolution	96 DPI
Minimum Size x,y	200.200
Maximum Size x,y	800,800
Bit Depth	8 Bit Indexed Colour
Compression	LZW
Format	Tiff 6.0

Conclusion

3. These guidelines would be easily implemented for new data by data producers and should be issued as an Encoding Bulletin and added to S-57 S-57 APPENDIX B.1 Annex A - Use of the Object Catalogue for ENC at the earliest opportunity.

Action Required of TSMAD

- Discuss the guidelines laid out in this paper