Paper for Consideration by HSSC 15

Development of S-64 new edition 4.0.0

Submitted by:	ENCWG
Executive Summary:	HSSC 14 approved the creation of an S-64 NE to add new tests for SOE objects and reformat the document to support ECDIS type approval
Related Documents:	S-64 IHO Test Data Sets for ECDIS
Related Projects:	HSSC14/38

Introduction / Background

The ENCWG, after conducting testing with OEMs and ECDIS at sea, found that several OEMs ECDIS systems had issues with the display of point features when SOE objects were modified by ENC update.

To mitigate the navigational safety risk to users HOs have been modifying their ENC data to remove the possibility of ECDIS display issues. The ENCWG have provided guidance to MS in the Encoding Bulletin EB64 UOC Clause 2.6 Updating

The ENCWG are liaising with the affected OEMs to ensure software patches are issues to all affected ECDIS.

To mitigate the risk of new ECDIS having the same issues HSSC 14 approved the creation of an S-64 NE adding a set of new tests for SOE features and approving the reformatting of the standard to simplify ECDIS type approval.

S-64 is listed on the IHO webpage Standards in Force, IMO require in service ECDIS to be kept up to date with the latest IHO standards listed here.

S-64 is an undated reference in IEC61174 edition 4.0 and becomes effective immediately on publication by the IHO.

Analysis/Discussion

Due to lack of resources the ENCWG during meeting 7 dropped reformatting S-64 to simplify ECDIS type approval from the NE.

The draft NE has been limited to the addition of a new section introducing SOE tests. The draft was created by the Chairman during the ENCWG 7 meeting where it was agreed to circulate to ECDIS OEMs for comment.

The ENCWG agreed to the provision of all the .png files showing the ECDIS test plots which are also included in the printed standard alongside the test datasets.

The S-64 NE 4.0.0 was hosted on the IHO github repository for open access and comment by OEMs in Jan 2023. The IHO secretariate requested OEMs registered within the IHO S-63 security scheme review and comment on the NE changes by end Feb 2023. Communications were also sent to the CIRM WG and UKHO OEM technical partners asking for their feedback on the changes.

Only four manufacturers have fed back comments to the ENCWG.

Conclusions

Of the feedback received from the OEM stakeholders there was no major issues identified that would impact the introduction of the NE

Recommendations

It is recommended HSSC endorse the S-64 NE 4.0.0 and if approved by MS publish the new standard and list on the IHO webpage 'Standards in Force'.

It is recommended that the current edition of S-64 is superseded but is still valid and runs in parallel with the NE 4.0.0. It is recommended the old edition be retained on the IHO webpage 'Standards in Force', with a retirement date set for 1st Jan 2029. The impact of the introduction of this NE is then limited to only new ECDIS systems going through the type approval process and would not affect current ECDIS in use at sea.

Justification and Impacts

The justification for the long transitional period will limit the impact on existing ECDIS at sea and consequently not impact the development and introduction of S-100 ECDIS.

Action Required of HSSC 15
The HSSC is invited to:
        a.   endorse S-64 IHO Test Data Sets for ECDIS edition 4.0.0
        b.   agree to the transitional period to limit impact on exiting ECDIS