

3rd HSSC MEETING
IHB, Monaco, 8-10 November 2011

Paper for Consideration by HSSC

**Background Information Relating to Certain UK Proposals to HSSC-3
and to the XVIIIth IHC**

- Submitted by:** UK
- Executive Summary:** The UK has submitted two papers to HSSC-3 recommending the inclusion of new work items in the HSSC working group programme related to ECDIS standards and has put forward two proposals to IHC in relation to the work of the IHB on technical matters. This information paper provides background information on these that may be of assistance to HSSC-3 in their discussions.
- Related Documents:** HSSC2-INF8, HSSC3-05.1B, HSSC3-05.3B, HSSC3-07.1B and XVIIIth IHC proposals PRO2 and PRO 3
- Related Projects:** New generation standards S-100 and S-101

Introduction / Background

At HSSC-2, the UK introduced a paper describing the anomalous behaviour of some ECDIS in the display of ENC data. This behaviour had been discovered by chance during 2010 and resulted in the issue of three NAVAREA warnings. As a result of discussions at HSSC-2 the IHB organised a meeting of ECDIS stakeholders in Monaco in February 2011 to discuss the matter further. This meeting recognised the seriousness of the issues; highlighted the need for some clarification of Standards and proposed the issue of an end user test data set to alert mariners to the need to maintain ECDIS software and of any display issues that their ECDIS might exhibit.

The UK submitted a paper (co-sponsored by the Administrations of Japan and Norway) to the 88th meeting of the IMO Maritime Safety Committee (MSC88) in November 2011 to alert the maritime community to the issues discovered. There was support for the paper and the actions outlined such that MSC88 issued MSC Circ1391 requesting feedback from ECDIS users, via Administrations, on any anomalies encountered. As a result, both the IHO and the UK submitted papers to MSC89 in May 2011; the IHO paper setting out the results of the ECDIS stakeholders workshop and the UK paper (co-sponsored by the Administrations of Australia, Canada, Chile, Japan and Norway) recommended more work to be done and proposed the setting up of a small expert working group. MSC89 requested NAV57 (meeting the following month) to give preliminary consideration to the matter.

NAV57 could only deal with the item as 'any other business' and whilst there was support for further work to be done the sub-Committee felt that it did not have the authority to set up a working group. Recognising that this could mean a significant delay in making progress to resolve issues the UK decided to host a meeting of ENC and ECDIS experts in London. This was held in September 2011 and is reported by the IHB in paper HSSC3-07.1B.

As a result of the workshop in London and the previous work on ENC and ECDIS issues the UK, on behalf of all participants at the meetings, has submitted two papers to HSSC-3 recommending the inclusion of new work items in the HSSC technical working group programme and the submission of two proposals to XVIIIth IHC in relation to the work of the Bureau on technical matters.

Analysis / Discussion

The workshop meeting of experts held in London was unanimous in recommending that the IHO instigates revisions to S-52 to clarify definitions and requirements to minimise inconsistency between ECDIS implementations and to S-58 to promote consistency and quality of the WEND database. In addition it was agreed that there is a need to revise and extend S-64 to ensure that Type Approval authorities had sufficient data and information to better be able to identify ECDIS systems that suffered from the identified operating anomalies. The workshop participants noted the close linkage between all the ECDIS standards and were keen that the IHO technical working groups should work closely together to ensure that the interdependencies are recognised so that synchronicity is maintained.

The UK considers that there is much to learn from the problems identified in regard to the clarity of standards that needs to be applied to future IHO work. The task of revising standards outlined in the UK papers is not only considered necessary to address current issues but is a pre-requisite for second generation ECDIS standards and system implementations; indeed some of the tasks envisaged are already included in S-101 work plans. The UK therefore considers that this revision work should be included in the HSSC work programme as a high priority and where possible in tandem with S-100 / S-101 tasks.

The UK has submitted two proposals to the XVIIIth International Hydrographic Conference. PRO3 encourages the IHO to "*continue to take a leading role within the ECDIS stakeholder community to ensure that issues identified in regard to the anomalous operation of ECDIS are collated, analysed, communicated and resolved as speedily as possible to maintain the safety of navigation and to assist the smooth transition from paper to digital navigation.*" Whilst recognising that many of the issues (especially those related to the maintenance of ECDIS software) lie outside the responsibility of the IHO, the UK believes that the IHO is probably best placed to facilitate ECDIS stakeholders in resolving many of them. Equally, ENC's will in due course become the primary output of hydrographic offices and it is essential that they, as well as mariners, can be confident that the ENC's will be displayed and function operationally in ECDIS as intended. For these reasons, the UK wishes to see the IHO playing a central role in ongoing work to communicate issues to the mariner and to facilitate resolution of identified issues. The provision of the ENC check data set and the intention to host a further workshop meeting in Monaco in January 2012 are seen as evidence of the IHO commitment to the task.

IHC PRO2 "*requests the International Hydrographic Bureau, in consultation with HSSC, to develop proposals to ensure that there is appropriate technical capacity within the Bureau to support the Organization through a period of significant change resulting from the transition to digital navigation....*" The explanatory note accompanying the proposal highlights the growth of existing and new tasks related to e-Navigation, S-100, S-63 and the growing use of ENC's and ECDIS. The UK considers that it is essential that the IHB has sufficient technical resources to be able to support the working groups and the Member States in this increasingly complex and fast moving technical domain.

There is of course a valid discussion to be had as to what level of technical capacity the Bureau as a Secretariat should maintain - should it rely completely on its working groups or should it have the capability to provide assistance, guide and perhaps even monitor them? Clearly there is a balance to be struck here, and this is a legitimate discussion topic for the HSSC. The intention of the IHC Proposal is to encourage the IHB, in association with the HSSC, to build sufficient technical resource to cope with the increasing workload. Where this can be achieved within existing financial constraints, the IHB should feel empowered to do so. The UK believes that it is essential that the IHB has the capacity to progress the work items set out in the explanatory note to PRO2 and would, if necessary, support a modest increase in Member State subscriptions to ensure that this is the case.

Action Required of HSSC

The HSSC is invited to:

- a. **Note** this information paper and its contents in relation to any discussion of the new work item proposals and as background to any discussion of the HSSC's position on proposals to the XVIIIth IHC.
- b. **Take any actions** considered necessary.