

**8th CSPCWG Meeting  
Turku, Finland, 29 November – 2 December 2011**

**Paper for Consideration by CSPCWG  
Report from HSSC3 – Notes by CSPCWG Chairman**

<b>Submitted by:</b>	Chairman
<b>Executive Summary:</b>	A brief report on IHO meeting HSSC3, November 2011, for matters of interest to CSPCWG
<b>Related Documents:</b>	CSPCWG8-04.1A CSPCWG Report to HSSC3 HSSC3 Report (draft in preparation by IHB)
<b>Related Projects:</b>	CSPCWG Work Plan

**Introduction / Background.**

1. These notes provide a brief summary report of the 3rd meeting of the Hydrographic Standards and Services Committee (HSSC3), hosted by IHB Monaco, 07-11 November 2011. It is for information only and limited to those issues that are most closely related to CSPCWG's activities; it is not intended to summarise all matters, nor to replace the official meeting Record and Actions List that will be distributed to Member States (MS) by IHO Circular Letter.
2. Where possible, technical WG Chairmen represent their respective WGs at HSSC, whilst attending as part of their national delegations. For HSSC3, a number of WG chairmen delivered their reports remotely by telephone.
3. Chairman CSPCWG presented the WG's report (CSPCWG8-04.1A).
4. An additional paper (HSSC3-05.5B) was presented to gain endorsement of CSPCWG's statements regarding purpose and content of the chart (CSPCWG8 Agenda item 9.6 refers).
5. HSSC3 was attended by 23 IHO MS including some national hydrographers. Further participants came from industry and international affiliated bodies.

**Analysis / Discussion.**

6. Summary outcomes and decisions (IHB's draft) are at Annex (CSPCWG's work is reported under agenda item 5.5 in this Annex - highlighted).
- 6.1 Progress of the Work Plan was reported (reviewed in detail at CSPCWG7, November 2010, and updated to August 2011). Its revision and updating will be discussed at agenda item 13.
- 6.2 Of note is Work Plan item B3, originally derived from CHRIS Action 20/24:  
*CSPCWG to develop guidelines for preparation & maintenance of small / medium scale ENC schemes.*

Still, little substantive progress has been made on this work item. It was requested that this be actively progressed in 2012. Chairman will approach all RCG / ICCWG Coordinators shortly.

7. Chairman / Secretary provided input into HSSC's summary report to IH Conference XVIII (April 2012) of CSPCWG's activity in the period 2007-2012. Also, the principal tasks of CSPCWG planned for the period 2012-2017. These had already been circulated around the CSPCWG members.
8. TSMAD, DIPWG and HDWG will be reported under agenda items 4.2-4.4. DQWG is the subject of INF2.
9. TSMAD received HSSC's authority to treat S-100 differently in respect of the approval procedures under IHO Resolution 2/2007. (S-4 revision is subject to the terms of B-160 relating to the ongoing refresh being conducted; thereafter it will be subject to Resolution 2/2007 – in 2013?).
10. DIPWG acknowledge explicitly in their Work Plan:
  - the close liaison with CSPCWG (their J.1)
  - enhancing the appearance of existing traditional paper chart symbols used in ECDIS by modifying their size, shape and colour (L.1) (taking advantage of modern ECDIS display capabilities).
11. EUWG (ENC Updating WG) will be stood down once the proposed new edition of S-65 and S-52 Appendix 1 have been completed. IHB intend to survey MS again in 2013 regarding the application to ENC new editions of Temporary and Preliminary updates, arising from EUWG's recommendations.
12. In discussions on ENC/ECDIS standards, it was commented that IHO standards do not guarantee 'quality'. Also, whilst standards are 'recommended' unexpected behaviour continue to occur in ECDIS. As a consequence there is some discussion about whether chart products should be 'accredited' and how to reduce the burden on the user (eg principle of a 'minimum validation standard' to enhance quality and the user's experience?).
13. HDWG (Hydrographic Dictionary WG) reported many new or amended definitions. These were not subject to review by HSSC but will be circulated to MS for comment and approval.
14. IHB Director Ward reported on liaison between IHO and IMO.
  - IMO's e-Navigation strategy is extended to 2014 and he believes IHO is 'ahead of the curve' on this.
  - Japan leads a Correspondence Group (CG) on AIS, including virtual-AIS Aid to Navigation. (IALA intend to convene another workshop on this topic in 2013.)
  - The portrayal of certain objects in ECDIS is still a cause for concern. IHB is collating responses from OEMs to a check dataset, and will report to IMO MSC90. (Examples of early responses include: 50% do not portray 'new object'; 50% incorrectly display some aspects of dangerous wrecks / obstructions; 50% do not portray complex lights correctly.) Another workshop is planned 25-26 Jan 2012, Monaco. Work is recognized to be very closely attached to the reputation of the IHO.
15. The need for a review of S-44 (Standards for Hydrographic Surveys, 2008) was

discussed but rejected by HSSC.

16. No new changes to Terms of Reference of CSPCWG are required.
17. A proposal to restructure the organization and scope of a number of technical WGs (TSMAD, DPSWG, DIPWG, DQWG) was rejected. However, the timing of HSSC was reviewed to free more of the year for WGs to schedule their meetings.
18. Work reported by Tony Pharaoh IHB at CSPWG7, on developing an improved portrayal of the INT Chart Catalogue (S-11B) and the potential to combine it with the regional ENC catalogues, is being progressed by IHB (CSPCWG7 Action 24 refers). Some work has been done to develop this idea further in respect of the following Chart Regions: Southern Africa & Islands, Baltic, Antarctica.
19. Turkey (TU) has requested to join our WG, with effect from 1 January 2012.

#### **Justification and Impacts.**

20. CSPCWG Chairman to continue representing the WG at HSSC:
  - by providing a report of the WG's activities;
  - seeking endorsement of the WG's Work Plan, including new work items and relative priorities;
  - raising issues of wider interest for the Committee's attention, as required.

#### **Action required of CSPCWG.**

CSPCWG is invited to note this report.

#### **ANNEX**

# OUTCOMES - draft

HSSC3-03C	<i>Status Report of the Correspondence Group on Definition and Length of Coastline (France)</i>
Action required:	
<ul style="list-style-type: none"> <li>• Endorse the report and its main findings and conclusions</li> <li>• Endorse the draft Resolution</li> <li>• Instruct the IHB to submit draft Resolution to MS for adoption</li> </ul>	
<b>Conclusion / Decision</b>	
<b>HSSC-3:</b>	
<p><b>Endorsed the report and the main findings of the CG and the conclusions made so far, as amended by France at the meeting</b></p> <p><b>Invited France to continue leading the CG in refining the proposal further for consideration by HSSC-4</b></p>	

5.1	<b>Transfer Standard Maintenance and Application Development (TSMAD)</b>
HSSC3-05.1A	<i>Report and Recommendations of TSMAD (TSMAD Chair)</i>
Action required:	
<ul style="list-style-type: none"> <li>• note the TSMAD report</li> <li>• approve the continuation of the WG under the proposed revised Terms of Reference</li> <li>• approve the proposed TSMAD Work Plan</li> <li>• approve the final draft of S-102 and instruct IHB to submit to Member States for their endorsement.</li> <li>• consider either <b>approving</b> !!! the new version of S-64 for immediate publication, or tasking TSMAD to investigate expanding the standard to improve its usefulness for both OEMs and type approval authorities.</li> </ul>	
<b>Conclusion / Decision</b>	
<b>HSSC-3:</b>	
<p><b>noted the TSMAD report</b></p> <p><b>approved the continuation of the WG under the proposed revised Terms of Reference</b></p> <p><b>approved the proposed TSMAD Work Plan</b></p> <p><b>endorsed the final draft of S-102 and instruct IHB to submit to Member States for adoption.</b></p> <p><b>include a brief description of the utility of S-102 in the HSSC report to IHC</b></p> <p><b>endorsed the new version of S-64 for immediate publication and invite IHB to seek its adoption by MS</b></p> <p><b>tasked TSMAD to investigate expanding the standard to improve its usefulness for both OEMs and type approval authorities.</b></p>	

HSSC3-INF10	<i>Background to UK submissions to HSSC-3 and IHC-18 (UK)</i>
Action required:	
<i>Take this paper into consideration</i>	

<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <p><i>Noted the paper</i></p> <p><i>Indicated general support for IHC Pro3 – “IHO to take a leading role in the resolution of ECDIS issues”</i></p> <p><i>Indicated general support for further discussion at IHC on Pro 2 – ensuring sufficient technical resource at the IHB</i></p>
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HSSC3-05.1B	Review of S-58 Recommended ENC Validation Checks (UK)
HSSC3-INF8	Comments by Finland to proposed Review of S-58 (HSSC3-05.1B)

<p>Action required:</p> <ul style="list-style-type: none"> <li>• Approve a review of S-58 by TSMAD, taking into account: <ul style="list-style-type: none"> <li>▪ the goals identified in paper HSSC3-05.1B,</li> <li>▪ the need for any required changes made to S-64 to be supported by adequate test regimes for new systems, and</li> <li>▪ the impact on Member States of the requirement of all ENCs to conform to a minimum quality standard to be adopted from the current S-58 standard.</li> </ul> </li> </ul>
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<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>In principle, accepted that a minimum validation check standard for ENC should be established using the “error” category in S-58</i></li> <li>• <i>Agreed to restructure the S-58 standard into</i> <ul style="list-style-type: none"> <li>▪ <i>errors which must be corrected in all ENCs</i></li> <li>▪ <i>“warnings” that require cartographic interpretation for a satisfactory solution</i></li> <li>▪ <i>tests to be performed prior to data import in ECDIS,</i></li> </ul> </li> <li>• <i>Agreed that TSMAD investigate and propose how a minimum validation check standard can be achieved across all ENC providers, including the development of a use-case dataset.</i></li> <li>• <i>Agreed that TSMAD develop, in consultation with stakeholders, a migration path and guidance for the establishment consistent tools for establishing a minimum validation check standard</i></li> </ul>
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HSSC3-05.1C	Maintenance of S-100 (TSMAD)
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<p>Action required:</p> <ul style="list-style-type: none"> <li>• Agree that Resolution 2/2007 be amended to indicate that while S-100 is an IHO standard as defined in Resolution 2/2007, it should be subject to a different maintenance routine, in particular, that TSMAD may approve <i>revisions</i> and <i>clarifications</i> to S-100 when considered to be necessary.</li> <li>• Instruct the IHB to invite MS to adopt the changes described in paper HSSC3-05.1C.</li> </ul>
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<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>Agreed that Resolution 2/2007 be amended to indicate that while S-100 is an IHO standard as defined in Resolution 2/2007, it should be subject to a different maintenance routine, in particular, that TSMAD may approve revisions and clarifications to S-100 when considered to be necessary.</i></li> <li>• <i>Instructed the IHB to invite MS to adopt the changes described in paper HSSC3-05.1C (as amended during the meeting).</i></li> </ul>
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HSSC3-INF4	Impact Study of S-101 (France)
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<p>Action required:</p> <ul style="list-style-type: none"> <li>• Agree that Resolution 2/2007 applies to the S-101 standard</li> <li>• Instruct TSMAD to include an impact study on s-101 in conformance with the requirements of Resolution 2/2007</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>Confirmed that Resolution 2/2007 applies to the S-101 standard</b></li> <li>• <b>Instructed TSMAD to conduct a formal impact study on S-101 in conformance with the requirements of Resolution 2/2007 taking into account paper HSSC3-INF4 and report to HSSC-4</b></li> </ul>

<p>HSSC3-INF9</p> <p style="text-align: center;"><i>Feasibility Study into Using S-100 for Non Hydrographic Marine Applications (Norway)</i></p>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>noted the report</b></li> </ul>

<p>5.2 Data Protection Scheme (DPSWG)</p> <p>HSSC3-05.2A <i>Report and Recommendations of DPSWG (DPSWG Chair)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• note the report</li> <li>• approve the continuation of the WG under its current Terms of Reference</li> <li>• approve the proposed work programme for the DPSWG, including: <ul style="list-style-type: none"> <li>▪ seeking information on the adoption of S-63 edition 1.1.1 by OEMs and Data Servers and providing information to stakeholders on migration issues.</li> <li>▪ continuing the work of supporting S-63 edition 1.* users</li> <li>▪ commencing definition of S-63 edition 2.0.0</li> </ul> </li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>noted the report</b></li> <li>• <b>approved the continuation of the WG under its current Terms of Reference</b></li> <li>• <b>approved the proposed work programme for the DPSWG, including:</b> <ul style="list-style-type: none"> <li>▪ <b>seeking information on the adoption of S-63 edition 1.1.1 by OEMs and Data Servers and providing information to stakeholders on migration issues.</b></li> <li>▪ <b>continuing the work of supporting S-63 edition 1.* users</b></li> <li>▪ <b>commencing definition of S-63 edition 2.0.0</b></li> </ul> </li> </ul>

<p>5.6 Data Quality (DQWG)</p> <p>HSSC3-05.6A <i>Report and Recommendations of DQWG (DQWG Chair)</i></p>
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Action required:

- note the report
- approve the continuation of the WG under its current Terms of Reference
- approve the DQWG proposed work program
- invite relevant WGs to identify items that have a quality element and, determine whether these should be researched by the DQWG for inclusion within S-100.

**Conclusion / Decision**

**HSSC-3:**

- ***noted the report***
- ***approved the continuation of the WG under its current Terms of Reference***
- ***approved the DQWG proposed work program***
- ***invited relevant WGs to identify items that have a quality element and, determine whether these should be researched by the DQWG for inclusion within S-100.***
- ***directed DQWG to provide IHB with a summary report on the outcome of the DQ survey for subsequent distribution to MS by CL***

5.4 Standardization of Nautical Publications (SNPWG)

HSSC3-05.4A

*Report and Recommendations of SNPWG (SNPWG Chair)*

Action required:

- note the report
- approve the continuation of the WG under its current Terms of Reference
- approve the SNPWG proposed work programme

**Conclusion / Decision**

Action required:

**HSSC-3:**

- ***noted the report***
- ***approved the continuation of the WG under its current Terms of Reference***
- ***approved the SNPWG proposed work programme***

**4. HSSC Administration**

HSSC3-04A

*The Restructure of HSSC WGs (Chairs of TSMAD, DPSWG, DQWG)*

HSSC3-INF7

*Comments by Finland to the Restructure of HSSC WGs (HSSC3-04A)*

Action required:

- Agree to amalgamate TSMADWG and DIPWG as the Digital Chart Data Working Group (DCDWG) under new Terms of Reference as set out in Annex A.
- Establish a Digital Data Technical Support Working Group (DDTSWG), under the Terms of Reference set out in Annex B.
- Agree to transfer the role of the Data Protection Scheme WG to the S-100 Support WG (DDTSWG).
- Agree the concept of an HSSC Technical Working Week comprising concurrent meetings of certain Working Groups under the coordination of a Digital Data Coordination Sub Committee
- Establish a Digital Data Coordination Sub Committee (DDCSC) under the terms of Reference and Rules of Procedure as set out in Annex C.
- Agree that the new arrangements take effect on completion of the XVIII<sup>th</sup> International Hydrographic Conference.

#### Conclusion / Decision

HSSC-3:

- ***Did not agree to amalgamate TSMADWG and DIPWG as the Digital Chart Data Working Group (DCDWG) under new Terms of Reference as set out in Annex A.***
- ***Did not agree to Establish a Digital Data Technical Support Working Group (DDTSWG), under the Terms of Reference set out in Annex B.***
- ***Did not agree to transfer the role of the Data Protection Scheme WG to the S-100 Support WG (DDTSWG).***
- ***Did not agree the concept of an HSSC Technical Working Week comprising concurrent meetings of certain Working Groups under the coordination of a Digital Data Coordination Sub Committee***
- ***Did not agree to establish a Digital Data Coordination Sub Committee (DDCSC) under the terms of Reference and Rules of Procedure as set out in Annex C.***
- ***Did not agree that the new arrangements take effect on completion of the XVIII<sup>th</sup> International Hydrographic Conference.***

#### 5.3 Digital Information Portrayal (DIPWG)

HSSC3-05.3A

*Report and Recommendations of DIPWG (DIPWG Chair)*

HSSC3-05.3B

*Proposed Revision of S-52 Presentation Library (UK)*

[HSSC3-INF10

*Background Information Relating to Certain UK Proposals to HSSC-3 and to the XVIII<sup>th</sup> IHC (UK)]*

Action required:

- note the report
- approve the continuation of the WG under its current Terms of Reference
- approve the DIPWG proposed work programme, including a revision of the S-52 PresLib including in relation to aspects of S-64

#### Conclusion / Decision

HSSC-3:

- ***noted the report***
- ***approved the continuation of the WG under its current Terms of Reference***
- ***approved the DIPWG proposed work programme, including a revision of the S-52 PresLib including in relation to aspects of S-64, taking into account the comments contained in paper HSSC3-05.3B***



5.7	Marine Spatial Data Infrastructure (MSDIWG)
Docs:	HSSC3-05.7A <i>Report and Recommendations of MSDIWG (MSDIWG Chair)</i>
	HSSC3-INF6 <i>Information about MSDI future challenges and MSDI initiatives in the Baltic (BSHC)</i>
	HSSC3-INF3 <i>World Forum on Global Geospatial Information Management (IHB)</i>
	HSSC3-INF3 Add 1 <i>IHO Participation in the UN Committee of Experts on Global Geospatial Information Management and Relationships with Geospatial Organizations and Corporations</i>

Action required:  
note the report

- approve the continuation of the WG under its current Terms of Reference
- approve the MSDIWG proposed work programme

**Conclusion / Decision**  
**HSSC-3:**

- *noted the report*
- *approved the continuation of the WG under its current Terms of Reference*
- *approved the MSDIWG proposed work programme which should also take into account the topics in paper HSSC3-INF6*

5.5	Chart Specifications and Paper Charts (CSPCWG)
Docs:	HSSC3-05.5A <i>Report and Recommendations of CSPCWG (CSPCWG Chair)</i>
	HSSC3-05.5B <i>CSPCWG Proposed addition to S-4</i>

Action required:

- note the report
- approve the continuation of the WG under its current Terms of Reference
- agree that a definition of the purpose and content of a chart should be included in S-4
- decide whether such a definition should be treated as a *clarification* or a *revision* (iaw Res 2/2007)
- approve the CSPCWG proposed work programme, including developing a definition of the purpose and content of a chart for inclusion in S-4.

**Conclusion / Decision**  
**HSSC-3:**

- *noted the report*
- *approved the continuation of the WG under its current Terms of Reference*
- *agreed that a definition of the purpose and content of a chart should be included in S-4*
- *decided that inclusion of such a definition be treated as a clarification (iaw Res 2/2007)*
- *approved the CSPCWG proposed work programme.*

5.10	ENC Updating (EUWG)
HSSC3-05.10A	<i>Report and Recommendations of EUWG (EUWG Chair)</i>
Draft S-52 App.1 e4.0.0	<i>Guidance on Updating the ENC</i>
Draft S-65 e2.0.0	<i>ENC Production, Maintenance and Distribution Guidance</i>

Action required:

- Note the report
- Endorse the draft new edition of S-65
- Endorse the draft new edition of S52, Appendix 1
- Instruct the IHB to seek the adoption by MS of the revised editions of S-65 and S-52 App 1
- Consider inviting the IHB to survey Member States again in 2013 regarding the application of the recently approved Guidelines for Encoding T&P ENC Updates
- To decide of the future of the EUWG

**Conclusion / Decision**

**HSSC-3:**

- *noted the report*
- *endorsed the draft revised edition of S-65*
- *endorsed the draft revised edition of S52, Appendix 1*
- *instructed the IHB to inform IEC of the proposed revised edition of S52, Appendix 1 and invite comments*
- *instructed the IHB to seek the adoption by MS of the revised editions of S-65 and S-52 App 1, subject to no adverse comments from IEC*
- *instructed the IHB to survey Member States again in 2013 regarding their progress in implementing the recently approved Guidelines for Encoding T&P ENC Updates and to communicate the results to MS*
- *decided that the EUWG be disbanded once its work has been adopted by MS*

5.9 Hydrographic Dictionary (HDWG)

HSSC3-05.9A

*Report and Recommendations of HDWG (HDWG Chair)*

Action required:

- note the report
- approve the continuation of the WG under its current Terms of Reference
- endorse the draft definitions as proposed by the HDWG and instruct the IHB to circulate these to Member States for adoption
- approve the HDWG proposed work programme

**Conclusion / Decision**

**HSSC-3:**

- *noted the report*
- *approved the continuation of the WG under its current Terms of Reference*
- *endorsed the draft definitions as proposed by the HDWG and instructed the IHB to circulate these to Member States for adoption*
- *approved the HDWG proposed work programme*
- *endorsed the draft "business rules" for S-32 as amended by the Committee and invited the IHB to seek their adoption by MS*

<p><b>6. Inter-Organizational Bodies</b></p> <p>6.1 Inland ENC Harmonization Group (IEHG)</p> <p>HSSC3-06.1A <i>Status Report on Inland ENC Development and Standardization (IEHG)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• note the report</li> <li>• consider assigning an S-100 series number to the IEHG Inland ENC Product Specification</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>noted the report</i></li> <li>• <i>agreed that iaw S-99, there was no requirement to assign an S-100 series number to the IEHG Inland ENC Product Specification</i></li> </ul>

<p>6.2 IHO-IAG Advisory Board on the Law Of the Sea (ABLOS)</p> <p>HSSC3-06.2A <i>Status Report on ABLOS activities (ABLOS Chair)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• note the report</li> <li>• endorse the continuation of ABLOS under its existing Terms of reference</li> <li>• endorse the proposed ABLOS Work Programme</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>noted the report</i></li> <li>• <i>endorsed the continuation of ABLOS under its existing Terms of reference</i></li> <li>• <i>endorsed the proposed ABLOS Work Programme</i></li> </ul>

<p>5.8 Tidal and Water Level (TWLWG)</p> <p>HSSC3-05.8A <i>Report and Recommendations of TWLWG (TWLWG Chair)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• note the report</li> <li>• re-appoint the TWLWG to continue its work under its current Terms of Reference</li> <li>• endorse the draft Work Plan at Annex B</li> <li>• endorse the revised draft text of IHO resolution 6/1932, as amended, and instruct the IHB to circulate it to Member States for adoption</li> </ul>

**Conclusion / Decision**

**HSSC-3:**

- *noted the report*
- *re-appointed the TWLWG to continue its work under its current Terms of Reference*
- *endorsed the draft Work Plan of the TWLWG*
- *endorsed the revised draft text of IHO resolution 6/1932, as amended, and instruct the IHB to circulate it to Member States for adoption*
- *welcomed the offer of IEHG to provide TWLWG with the IEHG xml-based format for the transfer of inland water levels for consideration*

**7. Decisions of other bodies affecting HSSC**

7.1 IMO

HSSC3-07.1A *Report on IMO activities affecting HSSC (IHB)*

HSSC3-07.1B *Progress Report on Action Taken Concerning Unexpected Behaviour of Some ECDIS (IHB)*

[HSSC3-INF10 *Background Information Relating to Certain UK Proposals to HSSC-3 and to the XVIII<sup>th</sup> IHC (UK)*]

Action required:

- **note** the report
- **note** that a number of IHO standards related to the performance of ENC data in ECDIS will need amending
- **endorse** the XVIIIth IHC PRO3 from the UK that confirms that the IHO should 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
- **consider** what other practical measures might be taken by the IHO to ensure better coordination among the ECDIS stakeholder community and information to the mariner

**Conclusion / Decision**

**HSSC-3:**

- *noted the report*
- *noted that a number of IHO standards related to the performance of ENC data in ECDIS will need amending*
- *reaffirmed its support of the XVIIIth IHC PRO3 from the UK that confirms that the IHO should 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*

7.2 IEC

HSSC3-07.2A *Revision of IEC 61174 (IHB)*

Action required:

- note the report

<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>noted the report</i></li> <li>• <i>agreed that IHO MS should assist the CIRM ECDIS WG to raise an initial revised draft of IEC61174 for consideration by IEC TC80 in 2012</i></li> </ul>
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<p><b>8. Liaison with External Stakeholders</b></p>
<p>HSSC3-08A      <i>IHO Stakeholders' Forum (IRCC)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• <b>Agree</b> a joint IRCC/HSSC submission to the XVIII<sup>th</sup> IHC that will put in place procedures for developing and holding biennial IHO Stakeholders' forum Meetings</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>Agreed to support a joint IRCC/HSSC submission to the XVIII<sup>th</sup> IHC that will put in place procedures for developing and holding biennial IHO Stakeholders' forum meetings</b></li> </ul>

<p>HSSC3-08B      <i>S-44 – IHO Standards for Hydrographic Surveys – Consideration for Revision (IHB)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• note the report</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <i>noted the report</i></li> <li>• <b>agreed that no action is required</b></li> </ul>

<p><b>9. Review and Endorsement of HSSC Work Plan</b></p>
<p>HSSC3-09A      <i>Consolidated HSSC Work Plan (IHB)</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• <b>Agree</b> the consolidated HSSC work plan</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>Agreed the consolidated HSSC work plan (as amended by the meeting)</b></li> </ul>

<p><b>10. Review of HSSC Report to IHC-18</b></p>
<p>HSSC3-10A      <i>Report to IHC-18 on the work of HSSC and its WGs for the period 2007-2012</i></p>
<p>Action required:</p> <ul style="list-style-type: none"> <li>• <b>Endorse</b> the Chairman's draft report to the XVIII<sup>th</sup> IHC</li> </ul>
<p><b>Conclusion / Decision</b></p> <p><b>HSSC-3:</b></p> <ul style="list-style-type: none"> <li>• <b>Endorsed the Chairman's draft report to the XVIII<sup>th</sup> IHC</b></li> </ul>

HSSC3-INF5	<i>Draft IHO Five-Year Work Programme 2013 – 2017, with HSSC input</i>
Action required:	
<ul style="list-style-type: none"> <li>• <b>Endorse</b> the HSSC input to the IHO Five-Year Work Programme 2013 – 2017</li> </ul>	
Conclusion / Decision	
HSSC-3:	
<ul style="list-style-type: none"> <li>• <b>Endorsed the HSSC input to the IHB for inclusion in the IHO Five-Year Work Programme 2013 – 2017, including an appropriate entry for the ongoing work on a standardised method for calculating the length of a State coastline</b></li> </ul>	

<b>Final review of the TORs for HSSC and related Working Groups</b>	
Action required:	
<ul style="list-style-type: none"> <li>• <b>Agree</b> the Terms of Reference of the WG's – as amended by the meeting</li> </ul>	
Conclusion / Decision	
HSSC-3:	
<ul style="list-style-type: none"> <li>• <b>Agreed the Terms of Reference of the WG's – as amended by the meeting</b></li> </ul>	

<b>11. Review of other Information Papers</b>	
Docs:	<i>HSSC3-INF1 Status Report on IHO Publications on Standards and Specifications (IHB)</i>
Action required:	
<ul style="list-style-type: none"> <li>• <b>Note</b> the paper</li> <li>• <b>Agree</b> those standards that are subject to the terms of Resolution 2/2007</li> </ul>	
Conclusion / Decision	
HSSC-3:	
<ul style="list-style-type: none"> <li>• <b>Noted the paper</b></li> <li>• <b>Agreed a list of IHO technical standards that should be subject to the terms of Resolution 2/2007</b></li> <li>• <b>Recommended that MS adopt the agreed list as an Appendix to Res 2/2007 and instructed the IHB to circulate a proposed amendment to Res 2/2007 to Member States for adoption</b></li> </ul>	
HSSC3-INF2	<i>Digital Nautical Chart (DNC®) INF Report (USA (NGA))</i>
Action required:	
<ul style="list-style-type: none"> <li>• <b>Note</b> the paper</li> </ul>	
Conclusion / Decision	
HSSC-3:	
<ul style="list-style-type: none"> <li>• <b>Noted the paper</b></li> </ul>	

<b>12. Date &amp; Location of 2012 Meeting, and Date of 2013 Meeting</b>	
<ul style="list-style-type: none"> <li>• <b>2012: 2-4 October, IHB, Monaco</b> (unless an alternative venue is offered by a State before March 2012)</li> <li>• <b>2013: late September or early October, venue tbd</b></li> </ul>	