



Agenda Item 4

HSSC

Report to IRCC15

Tokyo, Japan
12 – 14 June 2023

By Nathalie Leidinger (HSSC vice chair)
On behalf of Magnus Wallhagen (HSSC Chair)



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15th HSSC 15 Meeting

Helsinki, Finland 5 - 9 June 2023

30 Member States and 82 attendees

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IRCC15

Tokyo, Japan, 12 – 14 June 2023



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S-100 Developments

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- Editions endorsed by HSSC
 - S-100 Edition 5.1.0
- Edition 1.0.0 approved by HSSC (initial implementation, testing & evaluation)
 - S-164 Test data sets
 - S-131 Marine Harbour Infrastructure
 - S-124 Navigational Warnings (mandate given to HSSC by IRCC chair to approve this PS under WWNWS Sub-Committee)
 - S-130 Polygonal Demarcations of Global Sea Areas PS and dataset
- HSSC noted the following incremental revisions
 - S-101 ENC Ed 1.1.0
 - S-102 Bathymetry Ed 2.2.0
 - S-104 Water Level Ed 1.1.0
 - S-111 Surface Currents Ed 1.2.0



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S-100 Implementation under a tense calendar

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- HSSC will update the S-100 Timeline for C-7 and take into account of the critical path between IHO Standards and the revision of the 61174 ECDIS Test Standard
- Approval dates for IHO MS by circular letter October / November 2024 for Phase 1 – Route monitoring Product Specifications
- IHO will report to IMO NCSR the progress of Product Specifications against the S-100 implementation roadmap, **as well as expected coverage of S-100 products once they start to become available.** (To be noted by IRCC)

Navigational Route Monitoring Mode

S-101 ENC
S-102 Bathymetry
S-104 Water Level
S-111 Surface Currents
S-124 Navigational Warnings
S-129 UKC Management

Critical Framework

IHO Geospatial Information Registry
S-98 Interoperability Specification
S-100 Universal Hydrographic Data Model
S-128 Catalogue of Nautical Products
S-164 Test Data Set for S-100 and ECDIS
Type Approval



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Others standards development

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- HSSC endorsed the principle of **S-66 Edition 2.0.0 Facts about Electronic Charts and Carriage Requirements** (S-66 and S-67 merged, S-67 withdrawal from standards in force)
- HSSC endorsed the strategy and the need for a **new edition 4.0.0 of S-64**:
 - HSSC tasked ENCWG to conduct an impact study
 - Proposal to concurrently list both edition on the IHO website until 1st January 2029 and update the Notes page of the ENC & ECDIS webpage accordingly
- HSSC approved Ed 1.0.0 of **S-68 Guidelines and recommendations for hydrographic offices for the allocation of CATZOC/QOBD (Quality of Bathymetry Data) values from survey data** for initial implementation, testing and evaluation
 - Guidance to CSBWG will be a subset of Guidelines from Survey to CATZOC (in preparation)
- HSSC approved **B-13 Guidance to Satellite Derived Bathymetry Ed 1.0.0**



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Highlights HSSC 15 – S-11 Part A

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- HSSC tasked **NCWG** to work on S-11 Part A, Section 200 (to incorporate *S-101 Scheming Guidelines*).
- In relation to the recommendation from the **WENDWG** to the **IRCC** (Decision WENDWG13/11 and /12 refer), **HSSC** noted the proposal to consider a new Section 300 to S-11 Part A for other S-100 Products – Phase 1/Route Monitoring (*Guidelines for the Coordination and Management of the Development of S-100 Data Services in RHCs*).



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Effects of amended paper chart production practice

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HSSC15-05.4C / IRCC15-09.1

The HSSC was invited to:

- a. note and discuss this paper,
 - b. invite HOs to provide paper chart corrections in the IHO commonly agreed NtM XML format online,
 - c. Consider the necessary steps to address the need of a full ECDIS carriage requirement to IMO
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- Similar paper was discussed at IMO MSC 107 (ref 107/15/2)
 - HSSC concentrates on technical issues about standards development
 - Task the NCWG to make an impact study and develop a standard for NtM (XML) if appropriate - medium priority



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Establishment of new PTs

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- HSSC approved ToRs for the establishment of **S-100 Infrastructure Centre Establishment Project Team (ICE PT)** under HSSC (following Decision A3/14)
- HSSC gives the mandate to ENCWG to set up the **Electronic Chart System (ECS) PT** under ENCWG with following objectives :
 - a. to identify and prioritize ECS navigation requirements;
 - b. to analyse their impacts on current IHO hydrographic standards; and
 - c. to develop a set of recommendations/issues to be addressed by existing IHO bodies, external organisations, and member states.
- HSSC approved the establishment of a new **PT S-100 Security Scheme** under HSSC to review the procedures for the appointment, operation, and termination process of participants in the new S-100 security scheme



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Application of ISO 9001 Principles (1/2)

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- **ISO 9001 Cell was set up after HSSC13** : comprised of S-101 Vice Chair (acting as S-101 Project Control Officer (PCO)), DQWG Chair, HSSC vice chair (acting as HSSC PCO of the activities related to the application of ISO 9001 principles) with the mandate to experiment the application of ISO 9001 principles in the development of S-101 PS
- What do we do ?
 - Maintain GANTT diagram of S-101 PS development,
 - Risk assessment: identify critical path and propose actions to control and mitigate risks (through Risk and Opportunity analysis)
- **What are the benefits ?**
 - A methodology to monitor a process closely
 - An help to prioritise efforts
 - A place to develop cross-disciplinary analysis : important in a complex environment where interdependencies need to be taken into account



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Application of ISO 9001 Principles (2/2)

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The IRCC is invited to :

consider mirroring such an ISO Cell on S-101 with the following scope:
RHC S-101 production/coordination/distribution in the near future.

Aim : being in a position to report on an annual basis to IMO NCSR the predicted coverage (of S-101 ENC as a 1st step, then other S-1xx Phase 1/Route Monitoring products).



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Highlights HSSC 15 – MASS PT

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- MASS PT deliver their final report : assessment analysis, identifying regional situation with regard to MASS Issues and Requirements, and S-100 Gap Analysis, available on the IHO website (HSSC 15)
- MASS PT will continue as a PT and submit proposed ToR to become a WG to HSSC 16



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Highlights HSSC 15 – WG & PT

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Champions of hydrography :

- HSSC endorsed the proposal from the UK for the IHO to consider the creation of a new award, more inclusive than the Medal of Prince Albert 1st , recognising once a year a champion of hydrography across HSSC and IRCC (WGs, SCs and PTs).
- HSSC chair will report to Council
- If endorsed at C-7, HSSC chair will liaise with IRCC chair to prepare a proposed IHO resolution to be submitted by IHO Sec (CL) to MS for approval (Target March 2024)



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Stakeholders forum – Some challenges raised

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Sperrymarine



ChartWorld
Group

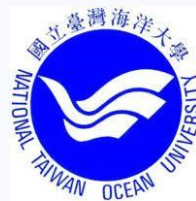


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- S-101 alone does not offer much benefits for end users
- Managing the impact of change
- New validation challenges (growing number of data, new formats, cross-product validation, ...) requires new system with inclusion of automated validation process
- Simplify planning & reporting obligations : extract relevant information to create route plan, automatically fulfil report
- Develop S-100 multi-fuel services for dissemination (catalogue, packaging, dissemination analysis, ...)



IRCC is invited to :

- **Note** this report
- **Note** the decision to task NCWG to make an impact study and develop a standard for NtM (XML) if appropriate - medium priority (**HSSC15-05.4C / IRCC15-09.1**)
- **Consider** mirroring the HSSC ISO Cell on S-101 with the following scope: RHC S-101 production/coordination/distribution in the near future.
- **Note** the endorsement of the proposal to create a new award recognizing annually a champion of hydrography across HSSC and IRCC