

Information Paper for Consideration by IHO Council 6

Establishment of a National S-100 Committee

Submitted by:	Republic of Korea (KHOA), Canada (CHS)
Executive Summary:	ROK and Canada have both been running National S-100 Committees to enable coherent national S-100 implementations.
Related Documents:	Roadmap for the S-100 Implementation Decade (2020–2030) Principles and procedures for developing IHO standards and conducting changes (IHO Resolution 2/2007 as amended) HSSC13-05.1H INF, ROK-US S-100 testbed framework on advancement of S-98 Interoperability Catalogue, S-164TDS, C5-07.6A INF
Related Projects:	TSM, S-100WG

Introduction / Background

1. As the mission of the IHO is to create a global environment in which States provide adequate, standardized and timely hydrographic data, products and services and ensure their widest possible use, it is necessary to create an environment where many stakeholders such as maritime administrations, industry and other professional organizations can be involved and cooperate to facilitate widest possible implementation of S-100.
2. KHOA and CHS have been actively participating in the development of S-100 standards by running several testbeds and have been servicing numerous S-100 layers to numerous types of users. However, the implementation of S-100 is still limited. S-2xx, S-4xx and other standards are handled by other domestic organizations that are not Hydrographic Offices.
3. The IHO has released an operational version of S-100 5.0.0 and is expediting its development. At IMO's NCSR9 it agreed to the proposed revisions to the ECDIS Performance Standard regarding the inclusion of S-100, S-101 and S-98. So KHOA and CHS have realized the need to share information among domestic organizations to widely respond to such revisions from various fields.

Analysis/Discussion

Composition and work of the National S-100 Committee

4. The National S-100 Committee is composed of various national stakeholders that are involved in the development of S-100 standards such as maritime administrations, research institutes and industry in the fields of nautical publications, aids to navigation, e-Navigation and marine weather to allow varied participation. Regular meetings, ad hoc meetings (if considered necessary) and seminars are held.

5. Work

(Canada) The objective is to develop national S-128 catalogue of services, share knowledge and build momentum within the country to meet S-100 roadmap targets.

(ROK) We share the status of the development of S-100 standards, actions nationally executed by domestic organizations, product distribution connections between organizations and other S-100 related topics from international meetings.

Conclusion

6. By running the National S-100 Committees, KHOA and CHS have been actively exchanging with experts and industry and has shared detailed plans and progress for each product specification within the Committees.
7. Through the National S-100 Committees, we were able to understand the progress on the development of different standards and create an opportunity to encourage discussion and cooperation. By connecting each other, a plan for cooperation among different fields in the development of standards was set up.
8. If there are other IHO Member States who run similar committees, we believe it would be useful to share such activities so that many Member States can make practical preparations for the implementation of S-100 with regard to the Roadmap.

Action Required of Council

- a. The IHO Council is invited to note the activities of ROK (KHOA) and Canada (CHS).
- b. The Council is invited to encourage Member States to share the activities of similar national committees if such exists.

Annex 1

Example Agenda items of National S-100 Committee

(ROK 2nd meeting of the National S-100 Committee held on :2021-11-11)

- 1) Introduction and update to the IHO GI Registry, development tools and S-100 testbed
 - Summary: The 3rd generation of the IHO GI Registry has been built and is being used as an official registry. The S-100 testbed system of KHOA and its progress were shared – releasing the KHOA S-100 Viewer on GitHub; and running of S-57 & S-100 ECDIS linked with a full mission bridge (FMB) ship simulator.
- 2) Update to the development of S-10x standards
 - Summary: KHOA presented the update to the development of S-10x standards including S-101, S-102, S-104, S-111, S-124, and S-128 by the IHO and KHOA, and the workshop identified the need to develop a domestic tool for developing ENC's.
- 3) Update to the development of S-129
 - Summary: The Korea Maritime and Ocean University presented the difficulties faced in developing S-129 – difficulty in implementing S-100; difficulty in developing the product specification due to the difference in the Viewer; confusing display due to the difference in the domestic and foreign Viewer; delay in the implementation by industry. The workshop gathered opinions on the display of S-129 on ECDIS.
- 4) Update to the development of S-20x standards
 - Summary: The background to the development of S-201, S-125, and positioning, navigation and timing (PNT), their progress and the plan for future involvement were shared.
- 5) Update to the development of S-421
 - Summary: The work plan of S-421 by the IEC TC80 WG was introduced.
- 6) Update to the development of ECS for e-Navigation
 - Summary: The Korean e-Navigation service was introduced and its functionality includes automatic update of ENC's, provision of sea routes / information on nearby ships / warnings for ships in danger & aground ships & bridges & navigation prohibited areas, weather service, UC service, and accident information.

Example Agenda items of National S-100 Committee

(Canada monthly meeting held on: 2022-05-05)

- 1) Updates to Canada S-100 Catalogue
- 2) Data Dissemination
 - Waterway Zone Concept
 - Authoritative Data
 - Maritime Connectivity Platform (MCP)
- 3) Visualization of AIS AtoN and ASM on shipborne navigation displays NCSR9
- 4) Upcoming Events