S100WG4-9.1

Paper for Consideration by S100WG

Report on ISOTC211 Activities

Submitted by: Executive Summary:	IHO Secretariat The ISO/TC211 19100 series of standards and specifications have been used for the development of the IHO S-100 Universal Hydrographic Data Model. This paper reports on the ISO/TC211 activities of relevance to the S-100WG and ENCWG.
Related Documents: Related Projects:	activities of relevance to the 3 100WG and ENEWG.

Introduction / Background

The International Organization for Standardization (ISO) - Technical Committee 211 (ISO TC211) deals with the development of standards and specifications for the geospatial domain. The International Hydrographic Organization (IHO) is a Class A liaison member of ISO/TC211 and participates in its standards development and maintenance Working Groups. The ISO/TC211 19100 series of standards and specifications have been used for the development of the IHO S-100 Universal Hydrographic Data Model. Since the last meeting, ISO/TC 211 has established internal liaison agreements with ISO/IEC JTC 1/SC 42 Artificial Intelligence and ISO/TC 190 Soil quality.

Analysis/Discussion

ISO requires that all standards, specifications or other deliverables published by ISO or jointly with IEC should be subject to systematic review in order to determine whether they should be confirmed, revised/amended, converted to another form of deliverable, or withdrawn. The maximum elapsed time before a systematic review for standards is 5 years and technical specifications is 3 years.

Revision of ISO/TC211 Publications

The following publications are to undergo systematic reviews (due date 5 July 2019):

- ISO/TS 19163-1:2016 Content components and encoding rules for imagery and gridded data --Part 1: Content model;
- ISO/TS 19153:2014 Geospatial Digital Rights Management Reference Model (GeoDRMRM);
- ISO 19115-1:2014 Metadata Part 1: Fundamentals.

ISO 19126 Feature concept dictionaries and registers. The target date for the submission of a final DIS was December 2018. It was not produced in time and proposed revision was cancelled.

A joint ISO/TC 211-OGC document –"Discrete global grid systems" to be registered as Draft International Standard (DIS) as ISO 19170

ISO/TC211 Harmonised UML Model

The ISO/TC211 harmonised models and other resources can be downloaded from the ISO resource web site at, https://www.isotc211.org/. ISO/TC 211 have developed a "UML best practices" WIKI to assist users of the model. (See https://github.com/ISO-TC211/UML-Best-Practices). A summary table which includes namespaces used in the XML implementation of ISO TC211 Standards is available at https://standards.iso.org/iso/19115/resources/namespaceSummary.html.

Cooperation with the Open Geospatial Consortium

Both the IHO and the Open Geospatial Consortium (OGC) are liaison members of the ISO/TC211. The OGC have established a Marine Domain Working Group (DWG) to address interoperability challenges with marine geospatial data. This group will facilitate discussion on the requirements related to exchange methods and formats to ensure that data used for navigation can also be used within the broader realm of MSDI for non-navigational purposes.

The OGC have initiated a Standards Working Groups (SWG) to explore and propose terms for a standard to enable interoperability through the use of Discrete Global Grid Systems (DGGS). A Joint ISO/TC 211-OGC document –"Discrete global grid systems" is to be registered as Draft International Standard (DIS) as ISO 19170

A NWIP has been agreed to produce a Gap analysis for the *Geographic Data Files (GDF)* and ISO/TC211 conceptual models to improve harmonization. Goal is to produce a Technical Report that describes the differences between GDF (ISO14825) and the ISO 19100 conceptual models, and suggest ways harmonize and resolve conflicting issues.

The 48th Plenary meeting will take place in Maribor, Slovenia from 3 to 7 June 2019.

Actions Requested

The S-100WG is invited to note the paper and take any actions it deems necessary.