

**9TH MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE
(6-10 November 2017, Ottawa, Canada)**

Paper for Consideration by HSSC

**ISO/TC211 Activities Affecting
HSSC**

Submitted by:	IHO Secretariat
Executive Summary:	This paper reports on the activities of the ISO Technical Committee 211 (ISO/TC211) that are relevant to the work of the HSSC.
Related Documents:	S-100 and all dependent product specifications.
Related Projects:	S-100WG, NIPWG, TWCWG, MSDIWG, DQWG and subordinate Project Teams.

Introduction / Background

The IHO is a class A liaison member of the ISO Technical Committee 211 (ISO/TC211) and has contributed towards the development of the 19100 series of standards and technical specifications. These ISO standards have been used for the development of the S-100 Universal Data Model, the IHO Geospatial Information (GI) Registry and various S-10X product specifications currently under development. Since the 8th Hydrographic Services and Standards Committee (HSSC8) meeting (14-18 November 2016), the IHO participated in the 43rd and 44th ISO/TC211 plenary and working group meetings which took place in Redlands, USA (28 November to 2 December 2016) and Stockholm Norway (29 May - 2 June 2017) respectively.

Analysis / Discussion

The membership of ISO/TC211 continues to grow. Since the last report, the meeting agreed to the establishment of an internal liaison with ISO/TC 307 dealing with blockchain and electronic distributed ledger technologies. Blockchain is a digital platform that records and verifies transactions in a public and secure manner. It provides a decentralised, cryptography-based solution for sharing information. The TC211 also agreed to establish a class A liaison agreement with the European Umbrella Organisation for Geographic Information (EUROGI).

The 44th plenary meeting agreed a resolution to produce a new edition of the ISO 19152 standard (Land administration domain model). This was in response to a proposal by the International Federation of Surveyors (FIG) (class A liaison) following discussions that took place at the 6th workshop of the Land Administration Domain (LADM) that was held in Delft, Netherlands in March 2017. Relevant liaison and stakeholder organizations such as FIG, IHO, the Open Geospatial Consortium (OGC), the United Nations (UN) Committee of Experts on Global Geo-Information Management (UN-GGIM), the UN Expert Group on Land Administration and Management (UN EG—LAM), ISO/TC 307, the International Society for Photogrammetry and Remote Sensing (ISPRS), the World Bank, UN Habitat, the UN Human Settlements Programme, the UN Division for Ocean Affairs and the Law of the Sea (UNDOALOS), and the UN Food and Agriculture Organization (FAO) were invited to participate in the drafting of the new edition. The 19152 standard has been used for the development of the S-121 (Maritime Limits and Boundaries) Product Specification.

Status of Document Revision

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 as still being relevant, need to be revised / amended, need to be converted to another form of deliverable or should be withdrawn. The maximum elapsed time before a systematic review is required for a standard is 5 years and for a technical specification it is 3 years. The following table lists ISO/TC211 documents under review.

ISO/TC 211 programme of work - Target Dates

Bold = Delivered documents

Project no	WG	CD	DIS	FDIS	IS
19101-2 (Rev.)	6		2016-12		2017-12
19107 (Rev.)	9		2017-05		2018-05
19111-1 (Rev.)	9	2017-05	2018-05		2019-05
19112 (Rev.)	1	2017-02	2018-01		2019-01
19115-1 Amd 1	7		2017-01		2018-12
19115-2 (Rev.)	6		2016-07		2017-07
19116 (Rev)	4	2017-09	2018-06		2019-06
19123-1 (Rev)	6		2018-01		2019-01
19123-2	6		2016-12		2017-12
19126 (Rev)	7		2017-06		2018-06
19127 (Rev)	9		2016-10		2017-06
19130-1 (Rev)	6		2016-12		2017-12
19131 (Rev)	9	2017-06	2018-06		2019-06
19133 (Rev)	10		2018-01		2019-01
19139-1 (Rev)	7	2017-07			TS 2018-06
19142 (Rev)	4	2017-10	2018-06		2019-06
19143 (Rev)	4	2017-10	2018-06		2019-06
19146 (Rev)	1	2017-02	2018-06		2019-08
19150-4	7		2018-11		2019-11
19155-2	10		2016-05		2017-02
19157 Amd. 1	9		2017-05		2018-05
19159-3	6	2016-08			TS 2018-12
19160	7	Stage 0			
19160-2	7	2017-09	2018-06		2019-06
19160-3	7	2017-09	2018-07		2019-07
19160-4	7		2016-04		2017-04
19160-5	7	Stage 0	Review summary 2016-06		
19161-1	4	2017-12	2018-04		2019-04
19165	7		2016-11		2017-11
19166	10	2017-03	2018-03		2019-03

Cooperation with the Open Geospatial Consortium

Both the IHO and the Open Geospatial Consortium (OGC) are liaison members of the ISO/TS211. The OGC have established a Marine Domain Working Group (DWG) to address interoperability challenges with marine geospatial data. This group will focus on 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.

Conclusions

The IHO Secretariat will continue to monitor and participate in the ISO/TC211 standards development work and report on relevant activities to IHO working groups and committees. IHO Member States are encouraged to liaise with their national standardization bodies to ensure that the IHO standards activities are taken into account as appropriate at the national level.

Recommendations

This paper is for information only.

Action Required of HSSC

The HSSC is invited to:

- a. note the paper,
- b. take any other actions considered necessary.