

Paper for Consideration by S100WG

Report on ISOTC211 Activities

Submitted by:	IHB
Executive Summary:	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:	<i>HSSC7 paper HSSC7-07.7B INF7</i>
Related Projects:	

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.

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in order to determine whether they should be confirmed, revised/amended, converted to another form of deliverable, or withdrawn.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. The following table lists ISO/TC211 documents under review and their work programme target dates.

Bold = Delivered documents

Project no	WG	CD	DIS	FDIS	IS/TS
19103 (Rev.)	4	2011-07 2012-08	2013-08		Under publication
19104 (Rev.)	1	2014-01	2015-08		2016-05
19107 (Rev.)	9	2015-02 CD.2 2016-02	2017-05		2018-05
19110 (Rev.)	7	2012-01	2013-06	2016-03	2016-09
19115-2 (Rev)	6	2016-03	2016-07		2017-07
19115-3	7	2014-02			TS 2016-06
19119 (Rev)	4	2012-08 2014-01	2015-03		Under publication
19127	9	2015-06	2016-06		2017-06
19130-1	6	2015-12	2016-12		2017-12
19139-1	7	2015-12	2016-06		2017-06
19142	4		2016-03		2017-03
19143	4		2016-03		2017-03
19155-2	10	2014-08	2016-02		2017-02
19157-2	9	2014-09			2016-05
19159-2	6	2014-08			TS 2016-01
19159-3	6	2016-12			TS 2018-12
19160	7	Stage 0			
19160-1	7	2013-07	2014-07		Under publication
19160-4	7	2014-12	2016-01		2017-01
19160-5	7	Stage 0	Review summary 2016-06		
19161	4	Stage 0			

19163-1	6	2014-08 CD.2 2015-03			Under publication
19165	7	2016-02	2016-11		2017-11

At the IHO's 7th Hydrographic Services and Standards Committee (HSSC) Meeting, 9-13 November 2015, a proposal (paper 7.7B INF) was submitted expressing concern that only the latest versions of 19100 standards were not available for purchase from the ISO web site. As many of these older versions are still referenced in IHO documents (and possibly those of other organizations), it was proposed that older version of 19100 documents should be made available for purchase and download from the ISO document web site. During the 41st TC211 meeting, the TC211 secretariat confirmed that older versions of the 19100 documents are available for purchase from the ISO web site.

The HSSC7 proposal also recommended that, where possible, a crosswalk referencing changes to previous 19100 editions should be maintained. The crosswalk could be included as annexes to the revised standards. This would facilitate the implementation and maintenance of functional standards that reference the 19100 series of standards and specifications.

The IHO expressed these concern in its liaison paper to the 41st ISO plenary meeting. The issue was discussed at several of the working group sessions and following a presentation to the Plenary meeting, resolution (744) was unanimously approved. The resolution confirms that; *"ISO/TC 211 strongly recommends that revisions of standards and technical specifications include an informative annex which describes how backward compatibility is addressed. This annex may include crosswalks, mappings or similar mechanisms, which evidence the degree of compatibility"*.

In response to an invitation from the Technical Committee on Geographic Information of the European Committee for Standardization (CEN/TC287) the plenary meeting, agreed to investigate how the documents listed below can be adopted as TC211 documents. These documents may be relevant to the IHO MSDI Working Group;

- CEN/TR 15449-1, Spatial data infrastructures – Part 1: Reference model
- CEN/TR 15449-2, Spatial data infrastructures – Part 2: Best practices
- CEN/TR 15449-3, Spatial data infrastructures – Part 3: Data centric view
- CEN/TR 15449-4, Spatial data infrastructures – Part 4: Service centric view
- CEN/TR 15449-5, Spatial data infrastructures – Part 5: Validation and testing

Recommendations

It is recommended that, the WG should discuss how it will handle references to dependent ISO standards, noting that the proposed crosswalk mappings will only be included in documents when they go through their next maintenance cycle. Furthermore, the WG are invited to consider whether it wishes to establish a mechanism to update the S-100 models to keep abreast of changes to the ISO models, or whether this will only be considered whenever a new (full) edition of S-100 is produced.

It is proposed that DGIWG and (other standards organizations) will have to consider the same issues, and the WG should discuss a harmonized solution to maintaining compatibility with the 19100 base standards.

5 Actions Requested

The S-100WG is invited to discuss the issue of maintaining backward compatibility with relevant ISO 19100 standards (taking account of the ISO/TC211 resolution 744, and report its conclusion to the next HSSC meeting for consideration.