

12th CHRIS MEETING
Valparaiso, Chile, 23-25 October 2000

REPORT ON THE ACTIVITIES OF ISO/TC211 IN RELATION TO CHRIS
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1. Background

The **International Organization for Standards (ISO)** is a non-governmental international standards organization comprising a world wide federation of national standards bodies from approximately 130 countries.

In response to a growing demand for Geographic Information and a need for standards in this area; the ISO established in April 1994 the Technical Committee 211 (ISO/TC211). The standards developed by ISO/TC211 are encompassed in the ISO 1900 series of documents which comprises a family of publications that can be divided into the following groups:

- Framework and Reference Model
- Profiles and Functional Standards
- Data Models and Operators
- Data Administration
- Geographic Information Services

2. Progress Report

The work of the ISO/TC211 has progressed over the past year, and many of the standards and technical reports have reached the editorial (**Committee Draft**) stage. Target dates for those TC 211 documents that have progressed to the working draft stage are as follows:

Bold = Delivered documents

Project no.	CD	2. CD	3. CD	DIS	FDIS	IS
19101 Reference Models	98-01	1998-12		2000-09	2001-03	2001-06
19102 Overview	98-07	1999-04		2001-09	2002-05	2002-07
19103 Conceptual schema language	1999-07	2000-				2001-09
19104 Terminology	1999-05	1999-11		2000-11	2001-05	2001-07
19105 Conformance and testing	98-04	1998-10		1999-08	2000-08	2000-11
19106 Profiles	1999-11	2000-11		2001-06	2001-11	2002-01
19107 Spatial Schema	99-01	1999-11	2000-05	2000-11	2001-04	2001-06
19108 Temporal schema	98-11	1999-11		2000-09	2001-02	2001-04
19109 Rules for application schema	98-12	2000-05	2000-11	2001-07	2001-09	2001-11
19110 Feature cataloguing methodology	98-04	1998-11		2000-11	2001-04	2001-06
19111 Spatial referencing by	98-11	1999-11		2000-09	2001-02	2001-04

coordinates						
19112 Spatial referencing by geographic identifiers	98-05	1999-12		2000-11	2001-04	2001-06
19113 Quality principals	98-04	1998-11	1999-11	2000-09	2001-02	2001-04
19114 Quality evaluation models	99-01	1999-11	2000-06	2000-12	2001-05	2001-07
19115 Metadata	98-07	1999-11	2000-06	2000-11	2001-05	2001-07
19116 positioning services	1999-11	2000-09		2001-04	2001-10	2001-12
19117 Portrayal	98-05	1999-06	1999-11	2000-09	2001-03	2001-05
19118 Encoding	99-03	2000-05		2000-11	2001-05	2001-07
19119 Services	2000-05	2000-11		2001-05	2001-11	2002-01
19120 Functional standards	PDTR 98-07	1999-04				TR 2000-09
19121 Imagery and gridded data	PDTR 98-11	1999-06				TR 2000-09
19122 Qualifications and certification of personnel	PDTR 2001-06	2001-09				TR 2001-12
19123 Schema for coverage geometry and functions	2000-11	2001-05		2001-11	2002-05	2002-07
19124 Imagery and gridded data						
19125-1 Geographic information - Simple feature access - Part 1: Common architecture	1999-11			2000-09	2001-03	2001-05
19125-2 Geographic information - Simple feature access - Part 2: SQL option				2000-09	2001-03	2001-05
19126 Geographic information - Profile - FACC Data Dictionary	2001-06			2001-12	2002-06	2002-08
19127 Geographic information - Geodetic codes and parameters	2001-04			2001-10	2002-04	2002-06

CD: Committee draft

DIS: Draft International Standard

FDIS: Final Draft International Standard

IS: International Standard

2. Other ISO/TC211 initiatives that should be considered by CHRIS

There are a number of the ISO/TC211 initiatives that may be of interest to the CHRIS committee and its working groups. Some of these include:

a. Invitation to form a co-operative agreement with ISO

Resolution 98 of the 8th plenary meeting of ISO/TC 211 (Vienna, Austria, 1999) states:

"ISO/TC 211 invites the Digital Geographic Information Working Group (DGIWG) and the International Hydrographic Bureau (IHB) (should be IHO) to consider the requirements for a co-operative agreement with ISO/TC 211, and to develop new work item proposals as appropriate.

ISO/TC 211 also invites other liaison organization to consider this issue".

The IHO have not responded to this invitation, however DGIWG have made significant progress in this regard. They have submitted a proposed agreement, and it is expected that a revised co-operative agreement will be issued for ballot in early 2001.

DGIWG have also submitted their FACC Data Dictionary to be proposed as an ISO/TC 211 profile. It is their intention that the FACC will retain its DIGEST status and that the profile will be maintained by DGIWG. It should be noted that IHO and DGIWG have worked closely on aligning the FACC and S-57 Object Catalogue. A direct relationship between the two catalogues has been defined at the feature and attribute levels.

Other Class A liaison organizations active within TC/211, to take out co-operative agreements with ISO include the Open GIS Consortium (OGC)

The following is a list of all ISO/TC211 Class A liaison members:

- CEOS Committee on Earth Observation Satellites
- DGIWG Digital Geographic Information Working Group
- EPSG European Petroleum Survey Group
- FIG International Federation of Surveyors
- IAG International Association of Geodesy
- ICA International Cartographic Association
- IHB International Hydrographic Bureau
- ISCGM The International Steering Committee for Global Mapping
- OGC Open GIS Consortium

- PCGIAP Permanent Committee on GIS Infrastructure for Asia and the Pacific
- UN/ECE United Nations Economic Commission for Europe

b. The use of a Registries

At the 10h plenary meeting of ISO/TC 211 (South Africa, 2000), the following resolutions were accepted

(Resolution 133) Study of the use of registry for elements

ISO/TC 211 requests that WG convenors, and project leaders examine the requirements for registries of elements within the ISO/TC 211 standards in preparation for a workshop to be held in connection with the next plenary meeting, which will address the manner by which registration of elements such as metadata elements can be handled.

The issue of code lists and multi-lingual free text shall also be addressed in the workshop.

ISO/TC 211 maintenance agency and registration authority (Resolution 134)

ISO/TC 211 requests that the secretariat consults with the ISO Central Secretariat and provide recommendations for establishing a maintenance agency and registration authority.

In response to the workshop which took place during the 11th ISO/TC211 meeting and to which the IHB made a short presentation, **Resolution 151** was prepared, and was later accepted by the plenary meeting.

Resolution 151 Proposal for a registry (11th plenary meeting of ISO/TC 211
Reston, Virginia, USA, 2000-09)

In response to resolutions 133 and 134 at the Cape Town plenary, a successful workshop on registry was held in Reston on Wednesday, September 6. The workshop had many good contributions from other organizations with practical advice and experience for how to proceed for ISO/TC 211.

ISO/TC 211 establishes an Advisory Group for Registry to work until the next plenary. Based upon the results of the workshop, the group shall prepare a concrete proposal on the establishment and use of a registry for the requirements of ISO/TC 211. The proposal shall include the practical arrangement and procedures for the registry, and - as far as a possible - a practical pilot demonstration of an internet based tool for the registry. The proposal shall be circulated at least one month before the next plenary in Lisbon, and shall be presented at the plenary.

Registries will provide the IHO with a mechanism to add additional requirements such as raster and matrix components that already exist within the ISO/TC211 suite of standards and would also enable the IHO to register existing S-57 components (Object Catalogue) with ISO. In order that the IHO remains as the custodial authority for the Object Catalogue however, it will need to enter into a co-operative agreement with ISO.

3. Conclusion

Although S-57 Edition 3.1 will be released in November 2000 and will be frozen for a period of at least two years, it is recommended that the CHRIS committee should consider the future development of S-57 now. Some issues that may need consideration include:

- Assessment of additional requirements for hydrographic data exchange (e.g. Extensions to handle temporal components, raster and matrix data or additional product specifications).
- The extent to which the ISO and its 1900 series of standards should be considered for future development of S-57? What will be the mechanism for cooperation between ISO and IHO?
- How will components standards be registered, and how will additional profiles be developed ?
- What roles will the existing CHRIS working groups play ? Their Terms of Reference need revision ?