

11th CHRIS MEETING
IHB, Monaco, 16-18 November 1999

DGIWG LIAISON REPORT to ISO TC 211
September 1999

ORGANIZATION: Digital Geographic Information Working Group (DGIWG)

RESUME OF ORGANIZATION:

The DGIWG was established in 1983 to address common Digital Geographic Information standardization among nations. Current membership is primarily composed of NATO member nations, but membership is open to any nation willing to contribute to the work of DGIWG.

SCOPE:

The focus of DGIWG is the development of a comprehensive suite of Digital Geographic Information (DGI) standards to facilitate interoperability among nations. Other activities include data specification development and harmonization of standards. The scope of DGIWG extends beyond traditional DGI exchange standards to include imagery standardization, data access, metadata, data quality, and software services.

OBJECTIVES:

Develop DGI standards to support interoperability, data exchange, data access, and burden sharing among nations.

DGIWG GOALS IN ISO TC 211:

The DGIWG developed the Digital Geographic Information Exchange Standard (DIGEST). DIGEST edition 2.0 was published in June 1997. The DGIWG is aware of the advantages of future editions of DIGEST being ISO-compliant. The membership also recognizes that DIGEST in the future must continue to support the interoperability requirements of the military community.

As the individual parts of the ISO 15046 base standard stabilize, the corresponding components of DIGEST are being redefined based on the ISO work. In the near term DGIWG is in the process of registering, wherever possible, parts of DIGEST as profiles. Future versions of DIGEST will incorporate ISO developments and concepts such as XML encoding, conformance and testing, and portrayal of geographic information.

The DGIWG recognizes the limitations of current standards (such as DIGEST) in satisfying the DGIWG and NATO emerging requirements such as 3-D topology and temporal information. The ISO TC 211 developments potentially provide the basis to add functionality to the user community.

CURRENT ACTIVITIES AND ISSUES:

- It is anticipated that the next major revision to DIGEST (edition 3.0) will be a component standard aligned to the ISO TC 211 work. DIGEST 3.0 is not anticipated before the year 2003. To address near-term requirements, the DGIWG is considering issuing a minor revision to DIGEST in the next year.
- The DGIWG Quality Working Party is continuing the evaluation of the ISO TC 211 Quality work items in the context of the DGIWG community requirements. In particular, the ISO TC 211 terminology related to quality is being reviewed. As a result of this review, changes to DIGEST terminology are anticipated. The DGIWG will also provide suggestions to enhance the ISO TC 211 Quality and Terminology work items. As requested by the ISO TC 211 Quality editing committee, the DGIWG will reformat previously provided examples of products to the methodologies now reflected in the Quality principles and Quality Evaluation procedure documents. The intent is to include these DGIWG provided examples in the ISO TC 211 Quality documents.
- The DGIWG Metadata Working Party (MWP) is utilizing the ISO TC 211 Metadata to develop profiles to support DGIWG and NATO requirements. The MWP is developing both a Catalog Metadata for Geographic Information (CMGI) profile and a Transfer metadata profile. The CMGI profile will be the basis of a NATO Cataloguing Metadata STANAG and the Transfer profile will be the basis for the metadata component of DIGEST 3.0.
- It is anticipated that the DGIWG will provide significant input on various ISO TC 211 work items over the next 6 months. Of particular interest is the Imagery and Gridded data components WI. As this work evolves, the DGIWG stresses the need for coordination with the Basic Image Interchange Format (BIIF) development in ISO/IEC JTC1 SC24.
- The DGIWG stresses the vital role that WG5 now plays in coordinating Class A Liaisons and the criticality of its continued role in addressing implementations and profiles, new work items proposals, and cooperative agreements.
- The DGIWG continues to emphasize the importance of the Profile WI. There are still many unanswered questions in ISO TC 211 relating to profiling and the registration process. This is a mutual concern of DGIWG and other organizations that are attempting to implement the ISO work. To facilitate resolution on a number of profiling issues, the DGIWG has volunteered in Kyoto to lead a profiling workshop in WG5.
- The DGIWG continues to support cooperation between ISO TC 211 and OGC. Implementations of the ISO TC 211 standard by OGC would benefit the entire Geospatial community. The DGIWG supports the new work items proposals by OGC.

SPECIFIC DGIWG PROPOSALS TO ISO TC 211:

- The DGIWG has recently proposed a “Technical Amendment” to the Function Standards Report be considered as a new work item. The suggested timeframe for this amendment is three years. The amendment would account for Imagery and Gridded data components, Coverage geometry and functions, and other new work items accepted by ISO TC 211. The report could also reflect revisions to the original ISO TC 211 work items and to the functional standards.
- Another new work item recently proposed by DGIWG is the FACC Data Dictionary. This is a profile based on the ISO 15046-10 Feature Cataloging Methodology. The FACC Data Dictionary includes the definition of Features and Attributes that are currently used by DGIWG member nations. FACC may also be of use to the wider International Community.
- The DGIWG is providing a valuable contribution to the ISO TC 211 Spatial Schema. At the editing committee meeting of Spatial Schema it was agreed to include in the document predefined models corresponding to some of the functional standards. The DGIWG will be providing the DIGEST Abstract Data Model in TC 211 terms along with a DIGEST implementation level model at the Kyoto Spatial Schema editing committee meeting.
- The DGIWG is anxious to advance the new work item on the development of a Technical Specification (TS) for Geodetic Codes and parameters. The ISO TC 211 endorsed the new work item at the 7th Plenary (Resolution 81). Before the 8th plenary meeting, the DGIWG issued a draft document consistent to the guidelines as defined in Spatial Referencing by Coordinates. The scope of the TS was agreed in WG3 in Vienna. It appears that progress is pending formal ballot on the work item.
- As a follow-on action to resolution 98 from the 8th Plenary, the DGIWG has considered the need for a Cooperative agreement with ISO TC 211. Once formal DGIWG ratification is achieved, the intent is to officially present a proposed agreement to ISO TC 211 by the next Plenary. The cooperative agreement should help support the goals of DGIWG and ISO TC 211, in particular implementation of the ISO TC 211 standards and progression of new work items.