SC 24/WG 8 Convenor's Report

for the

WG 8 and SC 24 Plenary Meetings,
Held as a series of Web Meetings
11 July – 4 August 2022

The progress of SC 24/WG 8 during 2021-22, in co-operation with the SEDRIS Organization, is summarized in this report.

WG 8 is responsible for standards relating to the representation and interchange of environmental data. The WG 8 Standards published and in development are as shown in the following table.

Standard	Current Status
ISO/IEC 9973 Procedures for registration of items	Ed. 3 published July 2013.
ISO/IEC 18023-1: SEDRIS Functional Specification (DRM and API)	Ed. 1 Amd.1. Published June 2012.
ISO/IEC 18023-2: SEDRIS Abstract Transmittal Format	Ed. 1. Published July 2006.
ISO/IEC 18023-3: SEDRIS Transmittal Format Binary Encoding	Ed. 1 Amd.1. Published June 2012.
ISO/IEC 18024-4: SEDRIS Language Binding to C	Ed. 1 Amd.1. Published June 2012
ISO/IEC 18025: Environmental Data Coding Specification (EDCS)	Ed. 2. Published February 2014.
ISO/IEC 18041-4: EDCS Language Binding to C	Ed. 3. Published May 2016.
ISO/IEC 18041-5: EDCS Language Binding to C++	In development at post-DIS level
ISO/IEC 18026: Spatial Reference Model (SRM)	Ed. 2. Published July 2009.
ISO/IEC 18042-4: SRM Language Binding to C	Ed. 1 Amd.1. Published June 2011.
ISO/IEC 18042-5: SRM Language Binding to C++	In development at CD level

Korean National Body initiated work on the following projects:

> ➢ 18041-5: EDCS language bindings to C++
> ➢ 18042-5: SRM language bindings to C++

In February 2022, the ISO/IEC 18041-5 EDCS language bindings – Part 5 C++ was released for Draft International Standard (DIS) ballot, with ballot closing on 6 May 2022. The DIS ballot results included 18 comments, for which the Editors produced draft comment resolutions and held a successful Editing Meeting on 7 July 2022. The Editors will process the comment resolutions and will provide the updated document to SC 24 Committee Manager to forward for publication.

In August 2021, the ISO/IEC 18042-5 SRM language bindings – Part 5 C++ was registered as a New Work item. Work is progressing on Committee Draft (CD) of the document and a CD is anticipated soon.

Possible additional new projects have been discussed. These include:

- o 18024-5: SEDRIS language bindings to C++
- o An XML encoding of SEDRIS transmittals, and
- o STF to X3D Conversion

Since the last two items involve more complex and non-trivial tasks, further discussions will be required before proceeding on these potential projects.

WG 8 still anticipates work on ISO/IEC 18026 Spatial Reference Model (SRM) to complete the revision to Edition 3. SEDRIS Organization has reported that work on Edition 3 of ISO/IEC 18026 began in October 2021 and a New Work Item, along with CD text, is anticipated later in 2022.

WG 8 also remains involved with other developments that leverage either the use of SEDRIS standards or the use of SC 24 Registration Procedures (ISO/IEC 9973). WG 8 members remain involved in the Reuse and Interoperation of Environmental Data and Processes (RIEDP), which is a SISO initiative that started in 2010 and provides two products that leverage the SEDRIS standards. The first, the RIEDP Data Model Foundations, is a SISO Guidance product formally published by SISO in 2018. The second, the RIEDP Detailed Features Description, is a SISO Standard product that is still in development. Both Products use and reference the SEDRIS standards – in particular the DRM (18023-1), the SRM (18026), and the EDCS (18025) standards. Internal to SC 24, SEDRIS standards are also being utilized in the on-going work of other SC 24 Working Groups.

Since April 2021, there have been no additional informal meetings with ISO TC 211 members regarding TC 211 plans for revising ISO 19135-1 – Procedures for Item Registration. ISO 19135-1 specifies procedures for establishing, maintaining, and publishing registers of unique, unambiguous, and permanent identifiers and meanings that are assigned to items of geographic information. SC 24's ISO/IEC 9973 references the earlier (2005) Edition of ISO 19135. In early 2021, TC 211 members had expressed interest in exploring the relations between ISO 19135 and ISO/IEC 9973 (for example, creating a mapping between the two, or possibly a single more general standard that the two committees could then implement, as long as any new version does not break any existing implementations). Work on a new Edition of ISO 19135 has begun, and in a recent contact with one TC 211 member the possibility of follow up to the April 2021 meeting was discussed.

Further information on these activities – potential new work items, the status of the C++ language bindings, the status of Edition 3 of the SRM, and next steps on Registration Procedure standards – will be given during the on-line WG 8 Working and Plenary Sessions on 18 and 25 July 2022.

There have been no face-to-face WG 8 meetings since the online 2021 Plenary meeting. Work has continued, however, via web meetings and e-mail.

Respectfully submitted,

Farid Mamaghani, Convenor
ISO/IEC JTC 1/SC 24/WG 8: Environmental Data Representation
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