**ISO/IEC JTC 1/SC 24
Working Group 8
Twenty-Fourth Meeting
Monterey, California
24-26 June 2008**

ISO/IEC 18026 (SRM) Editors' Report

Actions following the 23nd meeting in Tokyo

Amendment 1

FPDAM 1

The following documents were issued 9 Oct 2007:
ISO/IEC 18026 (SRM) Defect Report 2 (WG 8 N0468),
ISO/IEC 18026 (SRM) Final Proposed Draft Amendment (FPDAM) 1 (WG 8 N0469), and
Explanatory Report for ISO/IEC 18026 (SRM) FPDAM1 (WG 8 N0470)

Ballot results

The FPDAM 1 was confirmed by ballot. The FPDAM 1 ballot results are published in document WG 8 N0473. Seven votes were cast for approval. Two NBs abstained. No votes were cast against approval.

The United States NB vote for approval was accompanied by a comment. The comment is not on an item covered by the draft amendment. As such, it does not affect the progression of the amendment. The US NB comment is addressed separately in this report.

FDAM 1

The editors have prepared the Final Draft Amendment FDAM 1 and have submitted it to SC 24 to prepare for balloting.

Corrigendum 1

At the Tokyo meeting, the two comments accompanying the Japan NB vote were resolved. The editors made the appropriate adjustments, and the Technical Corrigendum 1 was published 7 April 2008 as:
ISO/IEC 18026 (SRM) Technical Corrigendum 1 (WG 8 N0471)

US NB Comment in the FPDAM 1 Ballot vote

A comment in the United States NB vote on the FPDAM 1 Ballot noted an incorrect mathematical formulation for geodesic distance in sub-clause 10.7.2 (the formulation used is incorrect in the reference cited). As this sub-clause is not covered in the amendment, it does not affect the progression of FDAM 1. The editors have been working with the US National Geospatial-Intelligence Agency (NGA) to produce a technical correction. The results of this effort are two fold.

- Defect Report 3 and Technical Corrigendum 2
  - The incorrect formula is replaced by text that cites a correct treatment.
  - This action satisfies the concern expressed in the US NB comment that was provided by NGA. The change has been coordinated with Mr. Craig Rollins of NGA, who identified this defect in the original comment.
- Future effort
  - The geodesic concept, like many other concepts in the SRM, has been studied in a range of disciplines resulting in related but inconsistent definitions and terminology. The editors and NGA concur that the geodesic concept could and should have an expanded and unified treatment in keeping with the mission of the SRM to provide clear and unambiguous definitions and formulations within the SRM scope. It was also agreed that after the correction of the existing defect in Corrigendum 2, a more comprehensive treatment of the geodesic topic is best left to a future amendment.

Continuing efforts

Reference Transformation Templates (Similarity transformations)
At the Tokyo WG 8 meeting the editors gave a presentation on an idea initially proposed by Mr. Craig Rollins (NGA) concerning similarity transformations (WG 8 N0646).

The idea is to generalize the current SRM method of specifying an ORM Reference Transformation (RT). Additional specification methods would be formalized as a new SRM concept: Reference Transformation Templates (RTT). In addition to other benefits, this change would provide sufficient flexibility in the specification of an RT to allow referenced parameter values to be used directly even if the referenced source does not employ the seven-parameter transformation used in the SRM. The editors recommend that this idea should be developed under a NWIP.

Orientation and rotation
The SRM is unique in its explicit treatment of the concept of direction with respect to a spatial reference frame (SRF). Building on this foundation, the SEDRIS Organization has been developing software and documentation to extend the direction concept to a treatment of orientation, and the vectors associated with rotational kinematics.

A draft of the technical concepts paper developed by the SEDRIS Organization was posted to the WG 8 Document Register as WG 8 N0462.
An updated version of this document is available now as WG 8 N0485. Based on these concepts, a software interface has been developed, the algorithms implemented, and the results tested. This software has been verified against independently-developed test data, and has been tested internally and by several users.

When an appropriate level of maturity is achieved, the results of this effort may be candidates for future inclusion in the SRM.

Respectfully,

ISO/IEC 18026 Editors
Paul Berner
Ralph Toms
Kevin Trott

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