# SEDRIS Organization Report

## to

## ISO/IEC JTC 1/SC 24 and WG 8

## SC 24 and WG 8 Plenary Meetings

## BSI, London, UK

## 24 - 28 August 2015

Despite continued budget and resource limitations, over the last year the SEDRIS Organization has been able to progress and/or contribute to work in several areas. A summary of these is provided in this report.

The SEDRIS Organization was pleased to assist the US National Body in hosting the 2014 ISO/IEC JTC 1/SC 24 meetings in Seattle, Washington, USA, and to contribute in the role of local organizer to the successful execution of the week-long meetings.

Working closely with SC 24/WG 8, the Editing Team for the Edition 3 of ISO/IEC 18041-4 (EDCS language bindings) completed the standard's DIS text in March 2015 and released the document to be processed for DIS ballot. The document has been registered for DIS, and the ballot is anticipated to commence in August 2015.

The SEDRIS Organization has continued its communications and its long-standing involvement with the Standards Interoperability Standards Organization (SISO), especially in informing SISO of the importance of its relationship with SC 24. The SISO Standards Activity Committee (SAC) has expressed great interest in renewing and reigniting SISO's relationship with SC 24 and in working with SC 24 in areas of mutual interest. A presentation on the state of SISO and the status of its on-going standards efforts has been scheduled for the SC 24 meetings at BSI.

The work of the SEDRIS Organization with key geodesy experts at the US National Geospatial-Intelligence Agency (NGA) has successfully continued on projects and efforts of mutual interest. In particular, the SEDRIS Organization has contributed to the development and review of new NGA algorithms and techniques in replacing the so-called Web-Mercator coordinate reference frame. Web-Mercator is used broadly in many web-based settings, in part because it is assumed to be efficient. However, despite this widespread use in web and mobile applications, it carries errors and inaccuracies that can be significant and very problematic in critical coordinate computation applications. In addition, Web-Mercator is non-conformal, which may adversely impact navigational applications. NGA experts have developed new techniques that provide the use of well-known and proven Mercator transformation accuracies, while performing as efficiently as existing web/mobile implementations. The new techniques have been tested and vetted, and are formally promoted and endorsed by NGA for use in all web/mobile-based Mercator-related applications. An NGA presentation that highlights the key concepts and innovations introduced by NGA is scheduled for the WG 8 sessions in London. In addition, SEDRIS Organization experts have worked on additional innovative techniques that further improve the computational efficiencies.

During the last year, the SEDRIS Organization has also continued its efforts and support for the work of WG 9 standards on Mixed and Augmented Reality (MAR). It has contributed to the progression of the upcoming new work items related to Sensor Representation and Live Actor and Entity Representation in MAR. It has also contributed to the review of the Committee Draft text of ISO/IEC 18039 (MAR Reference Model), and has actively participated in WG 9 meetings. The MAR is an area that is highly relevant to modeling and simulation applications in which live and virtual environments are combined. Therefore, the standards developed and maintained in WG 8 are also relevant to the work of WG 9 and the underlying data models, architectures, and corresponding standards.

The progression of Edition 3 of ISO/IEC 18026 (SRM) remains on hold. In addition, the preparation of ballot packages for previously submitted EDCS Registry items is on hold as well, since these items will require a review against Edition 2 of ISO/IEC 18025 before they can be finalized. These delays are the results of continuing resource limitations. Because of the same resource constraints, the plans for start of the new work item proposals for Edition 2 of SRM Language binding (ISO/IEC 18042-4), Edition 2 of SEDRIS Part 1 (ISO/IEC 18023-1), Edition 2 of SEDRIS Part 3 (ISO/IEC 18023-3), and Edition 2 of SEDRIS Language binding (ISO/IEC 18024-4) continue to be delayed. The progress in all these areas has been significantly impacted and slower than expected.

The SEDRIS Organization looks forward to continued productive work with SC 24 and its working groups in developing, progressing, and promoting the SC 24 standards.

Respectfully submitted,

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14 August 2015