ISO/IEC JTC 1/SC 24
Working Group 8
27th WG 8 Plenary Meeting

Rapid City, South Dakota
25 August 2011

These minutes document the activities of Working Group 8 at its twenty-seventh plenary meeting held at the Alex Johnson Hotel, Rapid City, South Dakota, 25 August 2011. These minutes record principally the 27th WG 8 Plenary meeting, but with additional items from other WG 8 meetings held during the week, where appropriate.

Sections 1 – 13: Minutes of the Meeting

Appendix A: Agendas and Meeting Plan for the WG 8 meetings

Appendix B: List of Attendees

Appendix C: Action items

Appendix D: Presentation of the WG8 Convenor's Report

Appendix E: Presentation on the ISO Geodetic Registry Network

Appendix F: SRM Editor's Report

1.   Introduction

This document records the minutes of the WG 8 Plenary meeting held on Thursday 25 August. Prior to the Plenary, other WG 8 meetings were held (see Appendix A for their agendas):

- EDCS PDAM editing meeting

- SRM DIS editing meeting

- Registry of Items editing meeting (no agenda provided)

- A general work session

The results of all these meetings were reported to the Plenary Meeting; hence these minutes include the significant points from all WG 8 meetings held during the week.

1.1 Welcome from Convenor

Mr. Tim Gifford, WG 8 Secretary acting on behalf of Mr. Jack Cogman, WG 8 Convenor, opened the 27th WG 8 Plenary meeting at 0900 hours on 25 August and welcomed those present. Mr. Cogman was unable to attend in person but was able to participate via web conferencing made available at the meeting.

The purpose of the WG 8 Plenary meeting was to receive reports from NBs, Liaisons, Editors and Registry Rapporteurs and to finalize the Recommendations to SC 24.

1.2 Adoption of agenda

The agendas adopted for the work session and plenary meetings are as shown in Appendix A. (Note, to accommodate the participation by Mr. Youngsoo Kwon, Republic of Korea, who participated via web conference where it was 2400 hours his time, his items were moved to the early part of the agenda.)

2. Attendance at the meetings

The following National Bodies were represented at the meetings. Further details are given in the attendance list in Appendix B.

Australia:	Mr. Chris Body
China	Dr. Tangli Liu
Japan	Mr. Masaki Aono
Korea:	Mr. Ha-Jine Kimn, SC 24 Chair
	Mr. Youngsoo Kwon, Document Editor (via web conference)
United Kingdom:	Mr. David Hyde, SC 24 Secretariat
	Dr. Jack Cogman, WG 8 Convenor (via web conference)
United States:	Dr. Louis Hembree, Document Editor
	Ms Laura Moore
	Mr. Bill Protzman
	Dr. Richard. Puk, Document Editor
	Mr. Craig Rollins

The following represented the category C liaison SEDRIS Organization:

> Mr. Farid Mamaghani, Document Editor, Register Rapporteur
> Dr. Paul Berner, Document Editor
> Mr. Tim Gifford, WG 8 Secretary

Mr. Don Brutzman represented the Web3D Consortium.

3. Approval of meeting #26 Meeting minutes

The minutes of the 26th WG 8 Plenary meeting (WG8 N0516) held at Busan, South Korea were approved, as presented.

4. Convenor's report

Jack Cogman reported that the 2011 WG 8 Convenor's Report had already been published (WG8 N 0543). He then gave a presentation of the Convenor's Report, which included the main points in the report, plus some additional items.

5. National body reports

There were no formally submitted reports from National Bodies to WG8.

The Australian NB reported it had nothing to note other than being re-instated into SC24.

The Japan NB reported that Koreaki Fujimura has contributed to review of documents and other activities.

Professor Kimn reported that Korean Ministry of Defence is still having issues with SEDRIS. He observed the Template project will be very helpful.

The UK NB reported Jack Cogman and Dick Puk have been actively participating in working sessions with the EDCS and SRM editors, via web conferencing. Mr Cogman has also participated in the UK Mirror Group for Sensor Networks (JTC1/WG7), in the hope that it would identify opportunities for promoting the use of SEDRIS standards. No such opportunities have been found so far, however.

The US NB reported that members have been participating in reviews of the EDCS amendment drafts.

6.   Liaison organization reports

6.1 TC 211
Mr. Chris Body stated that he had distributed various documents for review and forwarded the comments to SC24.

Laura Moore presented a brief prepared for SC24, *ISO Geodetic Registry Network*. She suggested that SC 24 apply for inclusion on the ISO Geodetic Registry Network. It was observed that ISO 19127 is an instantiation of 19135. Paul Berner recommended that WG8 accept in principle the desire to participate. (Note: This was included in the WG8 Recommendations to SC24. Ms. Moore accepted an action to find out how WG8 may participate. She also indicated her interest in working to facilitate the understanding of the standards between the groups. There was a consensus to accept the report on ISO Geodetic Registry Network and interest in hearing about updates, and in understanding the compliance situation between the SRM and ISO 19111.

6.2 Digital Geographic Information Working Group (DGIWG)

No one was in attendance from the Digital Geographic Information Working Group and no report was submitted. It was noted that the copyright issue is unresolved but that Rob Cox is still working to assist in achieving closure.

6.3 OGC (Open Geospatial Consortium)

No one was in attendance from the Open Geospatial Consortium and no report was submitted

6.4 SEDRIS Organization
Farid Mamaghani listed some statistics on how much effort has been spent working this past year on the various projects of WG 8. He reported that funding discontinuity has been a serious issue but the outlook is good for the next two years.

6.5 Web3D Consortium (Liaison to SC 24)
The Web3D Consortium continues to analyze SEDRIS technology with a view to using parts of it to support X3D.

7.   Editors' reports

7.1 ISO/IEC 18025: EDCS
While he had no formal report, Dr. Louis Hembree summarized the status of the EDCS amendment and the results of the EDCS PDAM editing meeting held on 22 August. The recommendation was made that, since the changes to 18025 are more extensive than

originally envisaged, the amendment should be made into a revision. It was pointed out that an amendment would not be easy to use, hence a new edition should be published.

7.2 ISO/IEC 18026: SRM

Dr. Paul Berner presented the editors' report for the SRM (see SRM_Editors_Report), in which he described the progress that has been made during the last year.

7.3 ISO/IEC 18042-4: SRM Language Binding

Dr. Dick Puk noted there will need to be a New Work Item to make the SRM Language Binding compatible with the revised Edition 3 of SRM.

7.4 ISO/IEC 18023: SEDRIS and ISO/IEC 18024-4 SEDRIS Language Binding:C

Dr. Puk reported that the dispositions of comments for the PDAM documents were currently being prepared. He reported on SEDRIS and LB amendment activities. He stated that he had completed FPDAMs suggested that they be approved and moved to discuss disposition of comments and requested their approval as well. There was no objection to approving.

7.5 ISO/IEC TR 24788: Templates for the SEDRIS DRM

Mr. Youngsoo Kwon reported Working Draft 2 will be ready soon and that he will be able meet the deadlines defined for the project.

7.6 ISO/IEC 9973: Procedures for registration of items

Mr Farid Mamaghani reported that, as a result of revision work on ISO/IEC 18025 (EDCS) and 18026 (SRM), some discrepancies and required clarifications had been indentified in ISO/IEC 9973. In agreement with WG7, the current editors for 9973, WG8 has agreed to prepare an NWIP and a draft CD document to address these discrepancies. WG 8 needs to make a recommendation to SC 24 to issue a ballot for the NWIP and CD.
It was assumed that the assignment of the editorial work for this Work Item will be decided on successful completion of the NWIP ballot.

8. Registry rapporteur reports

8.1 EDCS

Mr. F. Mamaghani reported that significant work had been done this past year. There had been a backlog of items to process which added new work and affected the EV part of EDCS amendment, thus impacting its release for ballot. He reported that it would be ready for ballot in about 4 weeks. In addition, he reported a new batch of proposed items had been received. H e said all but two items had been completed. He said he may release others and then work two remaining items if they will be delayed much further.

8.2 SRM

There have been no submissions to the SRM registry, hence there was no report. However, Dr. Berner noted there may be some items to register in the future as now the SRM has the capability to add items not included before. There may be reference transformations (RTs) or maybe object reference models (ORMs) to register. There also may be projections from GeoTrans.

8.3 SEDRIS

There have been no submissions to the SEDRIS registry, hence there was no report.

9. Appointment of rapporteurs for registries

9.1 EDCS

Mr. F. Mamaghani was re-appointed as the EDCS registry rapporteur.

9.2 SRM

Mr. P. Berner was re-appointed as the SRM registry rapporteur.

9.3 SEDRIS

Mr. Y. Kwon was re-appointed as the SEDRIS registry rapporteur.

10. Recommendations to SC 24

A draft copy of the WG 8 recommendations, prepared before the meeting, was updated with respect to the programme of work, liaisons and administration.

10.1 Programme of Work

The agreed programme of work was transposed to the table in the Recommendations document and the corresponding recommendations for progression to the next stage for each document were updated accordingly.

10.2 Liaisons

The liaisons were reviewed and included in the recommendations. The existing liaisons agreed to continue in that capacity.

10.3 Administration and Future Meetings

No changes were made to the Document Editors.

It is planned to continue holding future editing meetings as web conferences.

The next SC 24 plenary is planned to be held in Europe.

10.4 Final Recommendations

The WG 8 Recommendations to SC 24 Plenary are attached to these minutes and were subsequently published as WG8 N0544 (SC 24 N 3291).

The SC 24 Resolutions, which incorporate the WG 8 Recommendations submitted to the SC 24 Plenary, have been published as SC24 N3296.

11.   WG 8 Content for the SC 24 Business Plan for 2011-2012

It was agreed that the only changes needed by WG 8 to the SC 24 Business Plan is that it should be updated in accordance with the WG 8 programme of work and the WG 8 Recommendations to SC 24. This to be completed by the end of the following week (2011-09-02)

12.   Review of action items

The group reviewed the action items from previous meetings and assigned two new items. The revised list of action items is shown in Appendix C.

(For reference, action items beginning with 01- are from meeting #1, those beginning with 02- are from meeting #2, and so forth. Items shaded in grey were closed either during the year or at this meeting. Items missing from the list were closed at previous meetings).

13.   Close

Mr. T. Gifford adjourned the meeting at 1200 hours.

Respectfully submitted,

Tim Gifford
Secretary
ISO/IEC JTC 1/SC 24/WG 8
Environmental Data Representation

Appendix A

Agendas for the WG 8 Meetings

A.1. WG 8 Meetings

The following WG 8 meetings were held during the week;

EDCS PDAM Editing Meeting	22 August
EDCS Registry	No meeting, as all assessments completed
WG 8 Work Session	0830-1200, Wednesday 24 August
WG 8 Plenary	0900-1230, Thursday 25 August

The SC 24 Plenary meeting was held at 0930 on Friday 26 August.

The plan for the WG 8 meetings, together with those sessions for which web conferencing was used, is shown in section 6 below.

A.2. EDCS PDAM Editing Meeting
Monday, 22 August 0930 – 1230 and 1330 - 1800
   a. Overview of types of changes to EDCS
   b. Overview of the revised concept of EV
   c. Review of comments submitted by National Bodies and Liaison Organizations
   d. Disposition of comments
   e. Decision on whether to progress to FPDAM

A.3. SRM CD Editing Meeting
Tuesday, 23 August 0800 – 1230 and 1330 -1600
   a. Overview of types of changes to SRM
   b. Overview of the concept of orientation, and any other SRM concepts, and the resulting changes to SRM because of them
   c. Review of comments submitted by National Bodies and Liaison Organizations
   d. Disposition of comments
   e. Decision on whether to progress to DIS

A.4. WG 8 Work Session
Wednesday, 24 August 0830-1200
   a. Results of ballots held since the 2010 Plenary in Busan
   b. Status of the DRM Templates Project TR 24788
   c. Issues related to the EDCS amendment
   d. Issues related to the SRM revision
   e. EDCS Registry work load
   f. ISO target date planner and its relationship to the WG 8 work programme
   g. Draft recommendations to be forwarded to the WG 8 Plenary meeting
   h. Preparation activities for WG 8 Plenary

A.5. WG 8 27th Plenary Meeting

ISO/IEC JTC 1/SC 24
27th Working Group 8
Plenary Meeting
Thursday 25 August 0900 - 1230

1. *Welcome*

2. *Roll call and introductions*

3. *Corrections to, and approval of, the minutes of the 26th meeting*

4. *DRM Templates Editor's Report*

5. *SEDRIS Register Rapporteur Report*

6. *Convenor's report*

7. *National body reports*

8. *Liaison reports*

   - *DGIWG*

   - *SEDRIS*

   - *TC 211*

   - *Other*

9. *Editor reports*

   - *EDCS*

   - *SRM*

   - *SRM LB*

   - *SEDRIS*

   - *SEDRIS LB*

10. *Disposition of comments on SEDRIS standards amendments*

    - *ISO/IEC 18023-1 FPDAM*

    - *ISO/IEC 18023-3 FPDAM*

    - *ISO/IEC 18024-4 FPDAM*

11. *Report from the register rapporteurs*

    - *EDCS*

    - *SRM*

12. *Appointment of registry rapporteurs*

    - *EDCS*

    - *SRM*

    - *SEDRIS*

13. *Future Work – VR/AR/MR*

14. *Summary of WG 8 content in the draft SC 24 Business Plan for 2011-2012*

15. *Discussion and approval of recommendations to SC 24*

16. Review action items

17. Adjourn

A.6. Meeting Plan

**Meeting Schedule for the SC 24 and Working Group meetings
At the Hotel Alex Johnson, Rapid City, SD
on 21-26 August 2011**

	Sunday 21 August	Monday 22 August	Tuesday 23 August	Wednesday 24 August	Thursday 25 August	Friday 26 August
0800		Welcome and Registration	**WG6** Work Session	**WG6** TBD	**WG6** TBD	
0930		**WG6** - **WG7** Work Session 0900-1130 Drafting Com. 1130-1230 **WG8** EDCS PDAM Editing Meeting	**WG7** TBD **WG8** SRM CD Editing Meeting	**WG7** TBD **WG8** Work Session	**WG7** TBD **WG8** **Plenary** **0900-1230**	**SC 24 Plenary** **0930 – 1330**
1000	Augmented Reality Study Group					
1230 -1330	Lunch	Lunch	Lunch	Lunch	Lunch	
	Mobile Study Group	**WG6** TBD **WG7** Drafting Com. 1330-1500 **Plenary** **1500-1730**	**WG6** Work Session **WG7** TBD **WG8** SRM CD	**WG6** **Plenary** **WG7** TBD **WG8** EDCS Registry	Drafting Committee	

		WG8 EDCS PDAM Editing Meeting	Editing Meeting			
1600			Social Event			
1800		HOD/C and Liaison meeting			HOD/C Drafting Committee for Plenary	

Appendix B

List of Attendees

Name	Organization	E-Mail Address
Australia;		
Chris Body	HOD, ISO/TC 211 Liaison	Chris.body@osdm.gov.au
China;		
Tangli Liu	CESI HoD	liutangli@gmail.com
Japan		
Masaki Aono	HoD	aono@tut.jp
Korea;		
Ha-Jine Kimn,	SC 24 Chair	hjkimn@ajou.ac.kr hjkimn@hallym.ac.kr
Youngsoo Kwon (web conferencing)	Document Editor, CoDic Communications Ltd.	kwonsoo@gmail.com ykwon@codic.co.kr
United Kingdom;		
David Hyde	SC 24 Secretary, BSI	david.hyde@bsigroup.com
Jack Cogman (web conferencing)	WG 8 Convenor	jack.cogman@datasim.net
United States;		
Louis Hembree	Document Editor, Naval Research Labs., US Navy	louis.hembree@nrlmry.navy.mil
Laura Moore	National Geospatial-intelligence Agency	Laura.a.moore@nga.mil
Bill Protzman	HoD	wprotzman@dcscorp.com
Dick Puk	Document Editor, Intelligraphics Incorporated	puk@igraphics.com
Craig Rollins	National Geospatial-intelligence Agency	Craig.m.rollins@nga.mil
SEDRIS Organization;		

Paul Berner	Document Editor, SRM Rapporteur	Berner@Consultant.com
Tim Gifford	WG 8 Secretary	tgifford@cfl.rr.com
Farid Mamaghani	HoD, Document Editor, EDCS Rapporteur Organization	farid@halcyon.com
Web3D Consortium		
Don Brutzman	HoD	brutzman@nps.edu

Appendix C

Action Items
ISO/IEC JTC 1/SC 24/WG 8
Meeting #27, Rapid City, South Dakota, 25 Aug 2011

No.	Action Item	Assigned to	Due	Done	Comment
24-01	Investigate possible copyright issues by the Common Data Base project use of SRM and any other potential copyright issues. Report on specific instances, the scope of the problem, and recommend to WG 8 the action to be taken.	R. Cox, T. Gifford	31-Dec-08	25-Aug-11	9-Jul-09: No further action until the EDCS/DFDD issue with DGIWG has been resolved. 1-Jul-10: Put on hold until the copyright issue with the DGIWG DFDD has been resolved. 25 Aug 2011 Closed as it is now considered moot.
26-01	Enquire whether SISO reports have been received by SC 24 from Mr. Chris Rouget	J.Cogman	6-Aug-10	25-Aug-11	25- Aug-11 No contact from Chris Rouget
27-01	Contact the ISO Geodetic Registry Network to determine membership for liaising requirements.	L. Moore	30-Nov-11		
27-02	Continue investigation of all possible copyright issues with DGIWG DFDD.	R. Cox	31-Dec-11		

Appendix D: Presentation of the Convenor's Report

27th WG 8 Plenary, Rapid City, SD, USA

WG 8 Plenary, 25th August 2011

Rapid City, SD, USA

Convenor's Presentation

Jack Cogman

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Agenda

- **Current Status of Projects**
  - ➤ **Summarized in the Convenor's Report**
  - ➤ **SC24 N3268 & WG8 N0543**

- **Timescales needed to complete projects on schedule**

- **Future work on New Projects**

- **Future work to Promote Existing WG8 Standards**

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Current Status of Projects

During the year, development has taken place on the following projects;

- **SEDRIS part 1 - Amendment 1**
- **SEDRIS part 3 - Amendment 1**
- **SEDRIS Language Binding - Amendment 1**
- **EDCS - Amendment 1**
- **SRM Language Binding - Amendment 1**
  (Final stages, as now waiting to be published)
- **SRM Edition 2 - Revision**
- **TR 24788 Templates for the SEDRIS DRM**

Current Status of Projects

- **The areas that have been particularly active during the year have been;**
  - ➢ **EDCS Amendment**
  - ➢ **SRM Edition 2 revision**
  - ➢ **EDCS Registry**

- **As a result of the work of the EDCS Register Rapporteur Group and EDCS Amendment editing team, new work areas were identified for;**
  - ➢ **The EV Dictionary of the EDCS**
  - ➢ **ISO/IEC 9973 – Procedure for the registration of items**

- **Document revisions and ballots have been issued and approved for;**
  - ➢ **FDAM SRM LB**
  - ➢ **FPDAM SEDRIS parts 1, 3 and LB**
  - ➢ **PDAM EDCS**
  - ➢ **CD SRM Rev 2**

Development Stages of Current Projects

Standard	NWIP	CD PDAM PDTR	DIS (FCD) FPDAM	FDIS FDAM DTR	IS/TR
SEDRIS Pt 1 (18023-1) Amendment 1	Approved Sep 09	PDAM Sep 09	FPDAM Approved 16 Jun 11	FDAM	Amd 1
SEDRIS Pt 3 (18023-3) Amendment 1	Approved Sep 09	PDAM Sep 09	FPDAM Approved 16 Jun 11	FDAM	Amd 1
SEDRIS LB (18024-4) Amendment 1	Approved Sep 09	PDAM Sep 09	FPDAM Approved 16 Jun 11	FDAM	Amd 1
EDCS (18025) Amendment 1 * Currently an amendment, but assumed to be converted to a revision	Approved Oct 08	PDAM Approved Aug 11	DIS *	FDIS *	Ed 2 *
SRM (18026) Edition 2 Revision	Approved Feb 09	CD Approved and comment resol. Aug 11	DIS	FDIS	Ed 3
SRM LB (18042-4) Amendment 1		PDAM Mar 08	FPDAM Approved Jan 10	FDAM Approved May 11	Amd 1
Templates for SEDRIS DRM (TR 24788) (Assumed ISO start date: February 2009)	WD2	PDTR		DTR	TR

▮ = Completed.

ISO target date planner

This target date planner shows you the three main development tracks for project managing the development of an ISO standard. It will help you choose the track and then set the target dates you need to meet for your standards to be delivered to the market on time. The times shown are the maximum for each stage and can be shortened whenever possible.

Approval

Approval at DIS and FDIS stages requires two thirds of P members of the TC to vote yes and not more than a quarter of all votes cast to be negative.

100% approval at DIS can mean straight to publication if the committee agrees.

2 years (Accelerated)

Month	Stage
	Straight to CD / DIS / Comments resolution / FDIS

3 years (Default)

Month	Stage
	WD / CD / DIS / Comments resolution / FDIS

4 years (Extended)

Month	Stage
	WD / CD / DIS / Comments resolution / FDIS

Explanation

ISO Technical Committee time: Document being developed in the relevant committee.

ISO Central Secretariat time: Document being processed (e.g. evaluation, editing and proofreading).

ISO Member body time: Document circulated to ISO member bodies for DIS/FDIS vote.

! Months marked with this are the key **limit dates**. Missing them means action is needed to avoid eventual cancellation of the project

WD = Working Draft   CD = Committee Draft   DIS = Draft International Standard   FDIS = Final Draft International Standard

D-3

Timescales needed to complete Projects on Schedule

- These target dates indicate that;

  - ➢ SEDRIS parts 1, 3 and LB are on schedule and should not be a problem

  - ➢ EDCS and SRM are behind schedule, since both their DIS target dates have been passed, yet neither has reached the DIS stage

  - ➢ Templates TR is behind schedule, but since a DIS stage is not required, the schedule could still be recovered

- The time required for ISO processing for DIS is fixed at 6 months
  - ➢ Hence the interval between DIS and FDIS must be at least 6 months

- The scope for getting EDCS and SRM back on schedule is therefore;

  1. To reduce time for comment resolution following the DIS ballot

  2. Obtain 100% approval for DIS, allowing FDIS to be omitted

- Schedules to complete these projects on time are shown on the next slide

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Timescales needed to complete Projects on Schedule

Standard	Start Date	Dev. Track	Actual/ Target	CD PDAM PDTR	DIS FPDAM	FDIS FDAM DTR	Publish
SEDRIS Pt 1,3,LB	9 Sep 09	3 year	Actual	6/09	2/11	11/11	
			ISO Target		3/11	3/12	9/12
EDCS 18025	10 Oct 08	4 year	Actual	5/11	10/11	4/12	
			ISO Target		10/10	4/12	10/12
SRM 18026	2 Feb 09	4 year	Actual	6/11	2/12	8/12	
			ISO Target		2/11	8/12	2/13
Templates TR 24788	Feb 09	4 year		2/12		8/12	
			ISO Target			8/12	2/13

ISO Target dates indicate the date the document is <u>submitted to ISO as ready for ballot</u>

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Timescales needed to complete Projects on Schedule

- These schedules are challenging since;

  - For the EDCS, it means that a DIS needs to be ready to submit to ISO in 2 months from TODAY

  - For the SRM, 6 months are allowed before the DIS is required to be ready, but this will still mean minimizing the time for checking the draft document

  - For both the EDCS and the SRM, the interval between DIS and FDIS has been reduced to 6 months. This means zero time for resolution of comments!

- The schedule for the Templates TR is also challenging, since the available resources are known to be limited

  - A possible option would be to reduce the scope of the project

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Future Work on New Projects

- At the SC 24 Plenary, an NWIP will be proposed for ISO/IEC 9973 – Procedures for registration of items

- The need for changes to 9973 is the result of work on current projects, in particular the EDCS and SRM revisions

- The changes to 9973 are considered essential in order to complete the EDCS and SRM revisions

- 9973 is the responsibility of WG 7

- Discussions have begun between WG 7 and WG 8 and a draft NWIP and WD have been produced

- The plan is to ballot the NWIP and a WD/CD at the same time

- Due to the dependency of other projects, an accelerated time track (2 years) will be recommended

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Future Work on New Projects

- Another topic for future work is the application of WG8 standards to Virtual Reality (VR), Applied Reality (AR) and Mixed reality (MR)

- AR and MR have been actively discussed by WG 6 at Rapid City

- Whereas WG 6 can contribute to the computer graphics aspects of AR/MR, WG 8 can contribute to the data representation aspects

- A re-organization of SC 24 to emphasize VR/AR/MR will be proposed at the SC 24 Plenary
  - Refer to SC24 N 3280 for details

- We will discuss the implications of VR/AR/MR for WG 8 at this WG 8 Plenary meeting

Future Work to promote Existing WG8 Standards

- Current work is focused on existing customers of the SEDRIS related standards produced by WG 8

- While this is absolutely right, we also need to reach out and market to those who are not, at present, SEDRIS users.

- The reasons why SEDRIS standards are not more widely adopted are mostly outside the scope of SC 24, but need to be considered;

  - Some are non-users because they know very little about SEDRIS technology

  - Some are non-users because they consider alternative formats or initiatives (e.g. OpenFlight, CDB, US Navy PSI) to be more attractive

  - SEDRIS is perceived to be poorly supported by commercial tools

  - For optimum interchange of environmental data, both supplier and consumer need to be using the latest SEDRIS software. This is not always easy to achieve between two different companies

Future Work to promote Existing WG8 Standards

- To address potential new users, it would be difficult to compete directly with commercial products, since WG 8 and the SEDRIS Organization do not have the sales and marketing resources needed

- A better approach might be to restart SEDRIS Technology Conferences, in which ideas and first hand experience of SEDRIS users could be exchanged and promoted
    - ➤ An equivalent situation is Microsoft Windows v. Linux
    - ➤ Linux software is free of charge and is promoted through User Groups

- Alternatively, we could concentrate on those who are using SEDRIS, but only for limited applications;
    - ➤ A perceived advantage of alternative formats/initiatives over SEDRIS is that they are typically supported by a set of tools for generating environmental databases
    - ➤ This could be addressed by providing improved interfaces between SEDRIS and commercial database toolsets
    - ➤ In particular, an OpenFlight import to SEDRIS would be seen as a significant asset

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- **If you have any ideas or suggestion on ways to improve the adoption of WG 8 SEDRIS standards, please send them to me at** jack.cogman@datasim.net

- **Thank you for your attention**

    Jack Cogman

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Appendix E: ISO Geodetic Registry Network

Information Brief to JTC1/ SC24, Aug 24, 2011

ISO Geodetic Registry Network

Laura Moore / US NGA
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ISO Geodetic Registry Network

- What is it
- What is its management structure
- Proposal for SC24 engagement

ISO Geodetic Registry Network
What is it

- ISO TS 19127 Geographic information – Geodetic codes and parameters
  - Describes the ISO geodetic registry network as:
    a) The ISO register of geodetic registers. This principal register holds a set of items that describe the subregisters of:
    b) The ISO register of geodetic codes and parameters to contain coordinate reference system data and coordinate transformation data that conform to ISO 19111 and are international in geographic extent of application, widely used, and well defined;
    c) External subregisters of geodetic codes and parameters. These subregisters shall contain coordinate reference system data and coordinate transformation data that conform to ISO 19111.

    The TS 19127 then includes tables to describe the requirements for entries. Tables B.1, B.2 and B.3

ISO Geodetic Registry Network
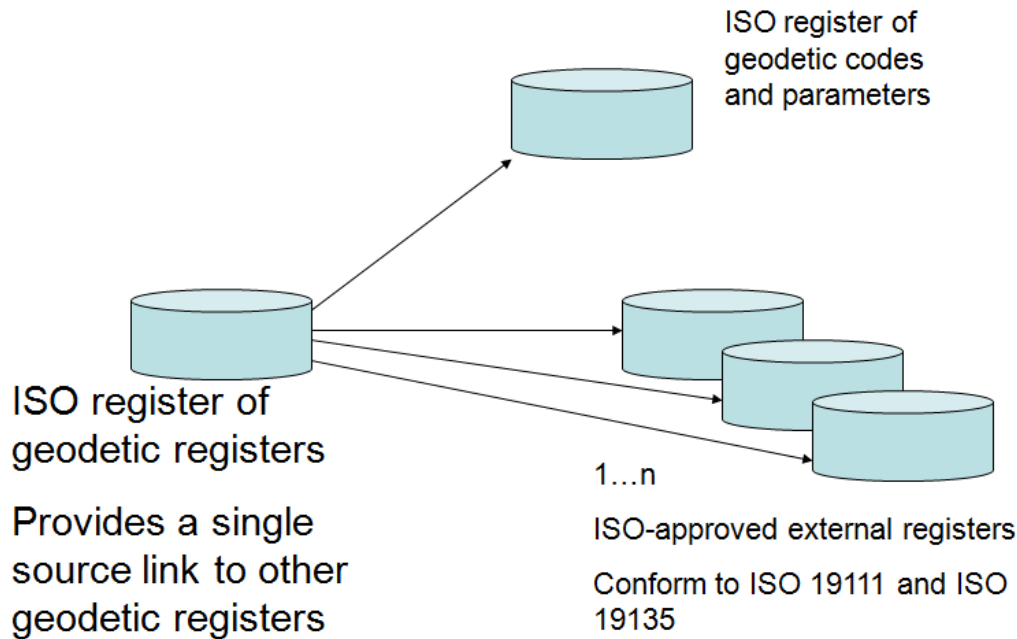# What is it

- ISO TS 19127 Geographic information – Geodetic codes and parameters
  - Describes application of ISO 19135 to registers of elements applicable to spatial referencing by coordinates in compliance with ISO 19111

  Composed of:
  - ISO register of geodetic registers
  - ISO register of geodetic codes and parameters
  - ISO approved external registers of geodetic codes and parameters

ISO Geodetic Registry Network
What is it

ISO register of
geodetic codes
and parameters

ISO register of
geodetic registers

Provides a single
source link to other
geodetic registers

1...n

ISO-approved external registers

Conform to ISO 19111 and ISO
19135

The registry consists of

- An information system available on the
  internet
    - i.e. database with a user interface and associated
      web services for access
    - A registration authority
        - i.e. An organization hosting register and daily
          operations
    - A Control Body
        - International committee repsonsible for authorizing
          the content of the ISO register of geodetic registry
          network

ISO TS 19127 Content of a register of geodetic codes and parameters

- Conformance to ISO 19111
- Additionally –
  - Information on scope of coordinate reference system and coordinate operation and their elements
  - Information on valid area of application
  - Use of geographic identifiers to describe valid area comply with ISO 19112 and cite source
  - The geographic area where use of the coordinate reference system is accepted shall be logically consistent with the geographic area where use of the datum is accepted and , if applicable, the geographic area where use of the map projection is accepted
  - Description of valid area for a coordinate operation shall be logically consistent with the valid areas for the source coordinate reference system and the target coordinate reference system
  - Information on datum type is mandatory for registration validation process

Paper copy of ISO TS 19127 is available with Laura Moore

ISO TS 19127 Content of a register of geodetic codes and parameters

- Annex C addresses Best practices for geodetic codes and parameters

Management structure for ISO geodetic registry network

- Reference: ISO/TC 211 N3153 Terms of Reference for the Control body for the ISO geodetic registry network
- ISO/TC 211 is responsible to establish an international registry of geodetic codes and parameters according to ISO/TS 19127
- The Control Body consists of geodetic experts nominated by ISO TC211 P-members
  - One nomination and alternate per P-member
  - Invited geodetic experts from liaison members
  - Chair and Co-chair are nominated by the International Association of Geodesy

Geodetic Registry Network Management and Approval Process

- Control Body responsible to approve content
- Advise managers of its decision on approval
- Control Body approves addition of external registers to the ISO register of geodetic registers
- Control Body decisions made by consensus or 2/3 voting majority of members with minimum of 3 votes required
- Control Body provides annual reports to TC 211 or as appropriate

Current Membership

- Chair – Dr. Mike Craymer (IAG, Canada)
- ViceChair – Mr. Larry Hothem (IAG, USA)
- Lassi Lehto, Finland/FGI
- Bruno Garayt, France
- Wolfgang Schwegmann, Germany/BKG
- Piergiorgio Cipriano, Italy
- Matsusaka Shigeru, Japan
- Mohammed Dalbouh, Saudi Arabi
- Richard Wonnacott, South Africa
- Roger Lott, UK and Liaison Member OGP
- Scott Spaunhorst, USA
- Stefan Strobel DGIWG
- Jennifer Hum CB Liaison DGIWG Alternate

Recommendation to SC24 WG8

- Assess ISO/IEC 18026 SRM compliance with ISO 19111
- Apply for inclusion on ISO Geodetic Registry Network, as compliance allows

- Rationale:
  - Aligns SRM with the geodetic codes and parameters community
  - Provides access to the valuable transformations developed in SRM

Reference Documents

- ISO 6709 Standard representation of latitude, longitude and altitude for geographic point locations
- ISO 19111 Geographic information – Spatial referencing by coordinates
- ISO TS 19127 Geographic information – Geodetic codes and parameters
- ISO 19135 Geographic information – Procedures for registration of geographical information items
- ISO/TC 211 N3153 Terms of Reference for the Control body for the ISO geodetic registry network

Appendix F: SRM Editor's Report

SRM NWIP Revision Tasks

✓ NWIP 1) Comprehensive and improved treatment of geodesics
— Subclause 10.7 *Geodesic distance operations* is completely rewritten.

✓ NWIP 2) Similarity transformation templates (STT)
— The STT concept has been introduced in subclause 4.3 *Position-space and normal embeddings*.
— Subclauses 7.3.2 *Similarity transformations* and 7.3.3 *Similarity transformation template* define these concepts in detail.
— Rotations used in STTs reference the *Orientation* clause (NWIP 5)
— The STT concept is now used as a replacement for the "seven-parameter transformation" in the specification of an RT for an ORM, in Clause 10 *Operations*, and in Clause 11 *Application program interface*.
— ORM specifications in Annex E now use STTs, and Annex H has been updated accordingly.

✓ NWIP 3) Revision of informative Annex I.6 to cover all cases of positional error measurement
— Subclause I.6 *Error metrics for SRF operations* is completely revised.

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SRM NWIP Revision Tasks (cont.)

✓ NWIP 4) Improve Accuracy domains in the Default profile (Clause 12)
— Table 12.2 — Default profile specification has been revised to provide testable accuracy domains for all table entries.

✓ NWIP 5) Extend the SRM treatment of Direction to the concepts of vector, orientation, and rotation, and include corresponding API functions
— The new concepts are introduced in subclause 4.9 *Orientation*.
— Clause 6 *Orientation* defines these concepts in detail.
— Clause 6 *Orientation* replaces (former) Clause 6 *Temporal coordinate systems*.
— Temporal coordinate system concepts required for the SRM (previously in Clause 6) have been moved to subclause 4.6.2 *Temporal coordinate systems*.
— Operations to support the concepts in Clause 6 were added to Clause 10 *Operations*, and Clause 11 *Application program interface*.

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SRM NWIP Revision Tasks (cont.)

✓ NWIP 6) Other improvements to the standard that were identified during the development of this work item
— Clause 10 *Operations* was made more clear and consistent.
— Registration requirements (Clause 13) now more consistent with the corresponding specification tables.
— Relationships between profiles, conformance, and accuracy have been clarified (Clauses 12 and 14).
— Rules for change and deprecation were significantly improved (Annex G).
— The editors have also made numerous other editorial and self-consistency improvements, and have corrected a number of defects that were found during the preparation of the CD.

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CD Comments Overview

• Japan
 – 4 technical comments
 – A draft response was coordinated with the Japan NB representative and has been accepted
• TC211
 – 3 technical comments
 – A draft response has been forwarded to TC211 representatives
• SEDRIS Organization
 – 4 general comments
 • Address clarity and consistency in the use of terms, etc.
 – 35 editorial comments
 – 117 technical comments
 • No significant changes to concepts.
 • Improvements for clarity and consistency in normative text.
 • Resolving technical inconsistencies
 – Example: Registration requirement should match specification requirement

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