## Disposition of Comments on ISO/IEC FCD 18023-1:200x

## **Table of Contents**

RecommendationJapanUnited KingdomUnited StatesSEDRISEditing Meeting

## **Recommendation**

The editing meeting recognizes that there are a large number of comments. The vast majority of these comments are directed at clarifying the text and not change the functionality of the technology. Therefore, the five national bodies at the editing meeting recommend unanimously that ISO/IEC 18023-1 progress to FDIS.

## <u>Japan</u>

#### Japan revised comments on FCD 18023-1 (SEDRIS Part 1)

2004-12-27, edited by Koreaki Fujimura

The national body of Japan disapproves FCD 18023-1 (SEDRIS Part 1) for reasons as below. Acceptance of these reasons and appropriate changes in the text will change our vote to approval.

#### Japan\_T001:

#### (SRF related classes)

**Problem:** Though it is stated in 4.6.2 "The fields of these DRM objects can be set to specify valid SRF parameters such as datums, reference object models, offsets, and others", the current specifications in the related classes, which use a datatype "SRF\_Info", do not reflect the statement. "SRF\_Info" defined in 11.8.5 of SRM FCD as

SRF_Info ::= {	vos_code VOS_Cod	e;
srf_parameters_	info SRF_Paramet	ers_Info;
angular_unit	EDCS_Unit_Cod	e;
linear_unit	EDCS_Unit_Cod	e;
linear_scale	EDCS_Scale_Co	ode;
}		
where SRF_Parameters_Info is of	defined 11.8.4 of SRM	FCD as
SRF_Paramet	ers_Info ::= (	<pre>srf_params_info_code</pre>
	SRF_Parameter	rs_Info_Code )
{		
[	TEMPLATE:	SRFT_Code
	SRFT_Code_Par	rameters;
	SET:	SRFS_Code
	SRFS_Code_Int	Eo;

] } INSTANCE: SRF\_Code; srf\_instance

does not specify which member of SRFS (SRF set) is to be considered and how a concrete SRF is derived from an SRFT (SRF template).

Note: SRF\_Info in 11.8.5 of SRM FCD should not have contained VOS\_Code as if a VOS (Vertical offset surface) is a part of an SRF.

```
RESPONSE: 4.6.2 will be clarified to indicate that the parameters listed are in the SRF_Parameters_Info data type (specifically, the SRFT_Code parameters. A direct reference to the SRM standard will be made to show how SRFS is considered and how a concrete SRF is derived.
```

It will be suggested to the SRM editors that the name "SRF\_Info" be changed to "SRF\_Context\_Info" since this is more indicative of the type of information in the data type. If that change is made, the name "SRF\_Info" throughout SEDRIS will be changed to that used by the SRM.

#### Japan\_T002:

**4.5.5, Table 4.3 and Tables 6.3 to 6.303 in Clause 6 Problem:** The format of the tables in Clause 6 is not consistent with its definition in 4.5.5, Table 4.3. **Action:** They should be made consistent.

**RESPONSE:** Accept. The DRM class tables will be updated to have the same sequence as the template table in 4.5.5 by moving the Clarifications to immediately precede the Examples.

-- Here begin late comments prepared by SC24-Japan but not authorized by the upper bodies. --

#### Japan T003:

2, [19592] Problem: This document is not used. Action: Remove this entry.

Note: If not accepted, change "9293-1" to "9592-1".

#### **RESPONSE:** Accept.

#### Japan\_T004:

2, [I10641] Problem: This document is not used. Action: Remove this entry.

#### **RESPONSE:** Accept.

#### Japan\_T005:

4.4.3

**Problem:** The first sentence "The spatial concepts used within SEDRIS are specified in ISO/IEC 18026" is not adequate. Some spatial concepts in Clause 4, e.g., "4.7.7 Perimeters", are not specified in ISO/IEC 18026.

Action: The sentence should be changed to "The spatial concepts relating to coordinate systems within SEDRIS are specified in ISO/IEC 18026".

#### **RESPONSE:** Accept.

Japan T006:

#### 4.5

**Problem:** In the disposition meeting for FCD 12083-3, SEDRIS binary encoding, Japan have found that there are two implicit and important rules about DRM syntax.

The first rule is that any DRM class instance does not have more than one links to the instances of one DRM class. This rule is used for omitting distinctions about the information about link types such as "associated to", "associated with", "composed of" etc., in FCD 12083-3. Moreover this rule works as the justification for omitting link names and role names, which are basic in UML usage, in this part.

The second rule is all the field elements are designed as "context-free". This rule is used for omitting the information corresponding to the field element labels in FCD 12083-3. **Action:** These two rules should be explicitly stated in 4.5.

#### **RESPONSE:** Accept in principle. The following text replaces the last paragraph of 4.5.3:

"A link is a relationship between two class instances and must be unique between the class instances. Multiple links are allowed between two class instances provided they are differentiated through one of the optional UML mechanisms of role names, relationship names, or association classes. In this part of ISO/IEC 18023, no DRM class instance will have multiple links to another class instance without using an association class. An association class is a class that specifies the semantics of a relationship between classes. Such classes are termed *link classes*. Instances of link classes are termed *link objects*. Link objects specify information that applies to the specific relationship between the two class instances. In the DRM, some association and component relationships have a link class associated with the relationship. The notation for link class is shown in the Figure 4-x where the box containing "Class C" represents the link class:





Move the current 4<sup>th</sup> paragraph of 4.5.3 before the current 3<sup>rd</sup> paragraph.

Insert the following text before the 5<sup>th</sup> paragraph of 4.5.3:

"DRM classes contain all field elements defined within their class definition as well as all inherited from their abstract classes. As a result, all instances of the same class have the same set of field elements and the field elements of a class are specified to reside within the concrete classes regardless of whether the field element was inherited or not."

#### Japan T007:

#### 4.5.3, para. 4 (beginning with "UML defines")

**Problem:** Some tutorials and references (excuse me, I've not chcked the DIS [I190051]) including OMG Unified Modeling Language Specification Version 1.4, do not mention to directionality as is

described here.

Action: Review the paragraph clarifying what is explicitly said in UML and what is derived from UML in this draft.

## **RESPONSE:** Comment actually applies to the 5<sup>th</sup> paragraph. The following text will be used:

'UML defines an association as a semantic relationship between two or more classes. In UML each end of the association has an IsNavigable Boolean attribute that determines if a class has access to the another class as specified in 2.5.2.3 of ISO/IEC 19501-1. UML navigability is specified within this part of ISO/IEC 18023 by defining either one-way or two-way directionality. One way association means that only one class is aware of the association relationship (as indicated by one end of the association having the UML attribute IsNavigable set to FALSE). If there is a one way association of A and B, and A is aware of the association, it is said that A is *associated to* B and B is *associated by* A. In two way association having the UML IsNavigable attribute set to TRUE. Hence, if A and B have a two way association, A is *associated to* B and A is *associated by* B, as well as B is *associated to* A and B is *associated by* A. All of these relationships are conveyed by the statement "A is *associated with* B".'

#### Japan\_T008:

#### 4.5.4.4, item a)

**Problem:** The expression "the alternate representation" is incomprehensible at least for non-English people. Is it used as "able to be used or chosen instead of …" or as "happening one after another"? Action: Clarification needed.

#### **RESPONSE:** Accept in principle. The following text replaces the list:

- "
- a. In association relationships between two different environmental objects, the meaning of the association is specified using an instance of <DRM Base Association Data>.
- b. In association relationships between non-topology DRM class instances and topology DRM class instances, the association indicates that an instance's topology is represented by the associated object.
- c. In association relationships between two topology DRM class instances, the meaning of the association is specified in <u>4.12 Topology</u>.
- d. In all other cases, the meaning of the association is that the associated DRM objects are each distinct representations of the same environmental object."

#### Japan\_T009:

#### 4.6.2, para.2

**Problem:** The two concepts SRF and SRFT are mixed up here. The science and mathematics for defining SRFT may be too difficult but deriving a specific SRF from some SRFT is not so complex. **Action:** Review this paragaraph and provide a facility (as a new DRM class etc.,) for deriving a specific SRF from some SRFT.

#### **RESPONSE:** The following text will be used: "The DRM relies on the concepts specified in <u>ISO/IEC 18026</u> to represent location data. Similarly, the SEDRIS API relies on the SRM API to perform conversions and transformation operations on coordinate values."

#### Japan\_T010:

#### 4.7.2.2, Table 4.4

**Problem:** The table is so much unstructured that readers cannot understand its relation to Table 8.3 of FCD 18026 which does not mix up 2D, 3D, map projection and surface ones.

Action: Modify (or split) the table to be more similar to Table 8.3 of FCD 18026.

RESPONSE:	<b>Replace table 4.4 with the following layout:</b>
-----------	---

Туре	SRFT label	DRM Class
	CELESTIOCENTRIC	<drm 3d="" cc="" location=""></drm>
	LOCAL_SPACE_RECTANGULAR_3D	<drm 3d="" location="" lsr=""></drm>
	CELESTIODETIC	<drm 3d="" cd="" location=""></drm>
	PLANETODETIC	None
	LOCAL_TANGENT_SPACE_EUCLIDEAN	<drm 3d="" location="" ltse=""></drm>
	LOCAL_TANGENT_SPACE_AZIMUTHAL_SPHERICAL	<drm 3d="" location="" ltsas=""></drm>
	LOCAL_TANGENT_SPACE_CYLINDRICAL	<drm 3d="" location="" ltsc=""></drm>
30	CELESTIOMAGNETIC	<drm 3d="" cm="" location=""></drm>
50	EQUATORIAL_INERTIAL	<drm 3d="" ei="" location=""></drm>
	SOLAR_ECLIPTIC	<drm 3d="" location="" sec=""></drm>
	SOLAR_EQUATORIAL	<drm 3d="" location="" seq=""></drm>
	SOLAR_MAGNETIC_ECLIPTIC	<drm 3d="" location="" sm=""></drm>
	SOLAR_MAGNETIC_DIPOLE	<drm 3d="" location="" sms=""></drm>
	HELIOSPHERIC_ARIES_ECLIPTIC	<drm 3d="" haec="" location=""></drm>
	HELIOSPHERIC_EARTH_ECLIPTIC	<drm 3d="" heec="" location=""></drm>
	HELIOSPHERIC_EARTH_EQUATORIAL	<drm 3d="" heeq="" location=""></drm>
	MERCATOR	<drm 3d="" augmented="" location="" m=""></drm>
	OBLIQUE_MERCATOR_SPHERICAL	<drm 3d<br="" augmented="" om="">Location&gt;</drm>
3D	TRANSVERSE_MERCATOR	<drm 3d<br="" augmented="" tm="">Location&gt;</drm>
map projection)	LAMBERT_CONFORMAL_CONIC	<drm 3d<br="" augmented="" lcc="">Location&gt;</drm>
	POLAR_STEREOGRAPHIC	<drm 3d<br="" augmented="" ps="">Location&gt;</drm>
	EQUIDISTANT_CYLINDRICAL	<drm 3d<br="" augmented="" ec="">Location&gt;</drm>
	MERCATOR	<drm location="" m="" surface=""></drm>
	OBLIQUE_MERCATOR_SPHERICAL	<drm location="" om="" surface=""></drm>
Surface	TRANSVERSE_MERCATOR	<drm location="" surface="" tm=""></drm>
projection)	LAMBERT_CONFORMAL_CONIC	<drm lcc="" location="" surface=""></drm>
	POLAR_STEREOGRAPHIC	<drm location="" ps="" surface=""></drm>
	EQUIDISTANT_CYLINDRICAL	<drm ec="" location="" surface=""></drm>
Surface	CELESTIODETIC	<drm cd="" location="" surface=""></drm>
	PLANETODETIC	None
	LOCAL_TANGENT_SPACE_EUCLIDEAN	<drm location="" ltse="" surface=""></drm>

Туре	SRFT label	DRM Class
	LOCAL_TANGENT_SPACE_AZIMUTHAL_SPHERICAL	<drm location="" ltsas="" surface=""></drm>
	LOCAL_TANGENT_SPACE_CYLINDRICAL	<drm location="" ltsc="" surface=""></drm>
	LOCAL_SPACE_RECTANGULAR_2D	<drm 2d="" location="" lsr=""></drm>
2D	LOCAL_SPACE_AZIMUTHAL	<drm 2d="" az="" location=""></drm>
	LOCAL_SPACE_POLAR	<drm 2d="" location="" polar=""></drm>

#### **RESPONSE:** Accept.

#### Japan T011:

#### 4.7.3 and Table 6.215 (DRM\_Reference\_Surface)

**Problem:** The current specifications allow only the reference surface specified by <DRM Property Grid>. But there may exists a strong user requirement to use predefined vertical offset surfaces which have the standardized codes in SRM, Clause 9 or to be registered.

Action: Discussion needed.

#### RESPONSE:

The relationship between SRF and vertical offset surface as used by the DRM will be described. Also, the relationship of "SRFs and vertical offset surfaces" with respect to an instance of <DRM Reference Surface> will be described.

#### Japan T012:

#### 4.7.4

**Problem:** The orientation facility introduced here neglects the direction facility specified in FCD 18026.

Action: Instead of specifying orientation facility, introduce the direction facility specified in FCD 18026.

## **RESPONSE:** The terminology will be changed to use that of the SRM (i.e., "direction"). The subclause will be rewritten to show how the SEDRIS functionality uses the SRM direction facility.

#### Japan\_T013:

#### 4.8.1.1, pata.3 (beginning with "In the <DRM Property Case>...")

**Problem:** The contents here do not reflect the current use of Element\_Type which is used only in <DRM Table Property Description>. Other DRM classes, such as <DRM Property>, use Property\_Code instead.

Action: Review the whole paragraph.

#### **RESPONSE:** See response to SEDRIS\_T104.

#### Japan T014:

#### 4.16.7, para.1

**Problem: The sentence** "ISO/IEC 18026 specifies only the LSR SRF as being local." does not reflect the contents of FCD 18026.

Action: This subclause should be rewritten after the review of the specification of <DRM Control Link> .

# **RESPONSE:** Accept. The subclause will be rewritten to allow for dynamic control of non-rectangular local SRFs. Specifically, this will require adding control link subclasses for the additional local SRFs now specified in the SRM.

#### Japan\_T015:

4, (missing material)

**Problem:** Every DRM class should be introduced in Clause 4. Now the following classes have not been introduced.

<DRM Absolute Time Interval> <DRM Attachment Point> <DRM Base Summary Item> <DRM Base Time Data> <DRM Blend Directional Light> <DRM Bounding Volume> <DRM Collision Volume> <DRM Colour Shininess> <DRM Cone Directional Light> <DRM Conformal Behaviour> <DRM Contact Point> <DRM Cross Reference> <DRM Directional Light Behaviour> <DRM Face Direction> <DRM Feature Volume Shell> <DRM Geometric Centre> <DRM Geometry Volume> <DRM Grid Overlap> <DRM Icon> <DRM Image Lookup> <DRM LSR Transformation Step> <DRM Model Instance Template Index> <DRM Moving Light Behaviour> <DRM Overload Priority Index> <DRM Perimeter Related Feature Topology> <DRM Perimeter Related Geometry Topology> <DRM Polygon Control Link> <DRM Pyramid Directional Light> <DRM Relative Time Interval> <DRM Relative Time> <DRM Rotating Light Behaviour> <DRM Rotation Control Link> <DRM Rotation> <DRM Scale Control Link> <DRM Scale> <DRM Season> <DRM SEDRIS Abstract Base> <DRM Separating Plane Related Geometry> <DRM Separating Plane Relations> <DRM Separating Plane> <DRM Strobing Light Behaviour> <DRM Surface Geometry> <DRM Time Of Day> <DRM Time Point> <DRM Translation Control Link> <DRM Translation> <DRM Twinkling Light Behaviour> <DRM Union Of Geometry Topology> <DRM Volumetric Feature> <DRM World 3x3>

**RESPONSE:** Accept per below.

Most of the cases were because the unmentioned DRM classes were subclasses of DRM classes found in the paragraph belows. Have taken the action and found the paragraphs to be added into and if no such paragraph, where to add a new subclause.

<DRM Absolute Time Interval> add to 4.13.12, last paragraph. CDRM Attachment Point> add to 4.14.2.1, 2<sup>nd</sup> paragraph. <DRM Base Summary Item> add to 4.17.3.1 2<sup>nd</sup> paragraph. <DRM Base Time Data> add to 4.13.12, last paragraph. <DRM Blend Directional Light> add to 4.15.3.5, 4<sup>th</sup> paragraph. Correction of the second se <DRM Cone Directional Light> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Conformal Behaviour> add to 4.7.3, last paragraph. <DRM Contact Point> add to 4.14.2.1, 2<sup>nd</sup> paragraph. <DRM Cross Reference> removed; see SEDRIS T352. <DRM Directional Light Behaviour> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Face Direction> add to 4.12.2.3.1, 3<sup>rd</sup> paragraph. <DRM Feature Volume Shell> see SEDRIS T148. <DRM Geometric Centre> add to 4.10.3.1, 1<sup>st</sup> paragraph. <DRM Geometry Volume> see SEDRIS\_T149. <DRM Grid Overlap> add to 4.9.2, 3<sup>rd</sup> paragraph. <DRM Icon> add to 4.15.7.1, 1<sup>st</sup> paragraph. <DRM Image Lookup> add to 4.14.5.3.4, 1<sup>st</sup> paragraph. <DRM LSR Transformation Step> add to 4.7.5, 3<sup>rd</sup> paragraph. <DRM Model Instance Template Index> add to 4.16.2.2, 5<sup>th</sup> paragraph. <DRM Moving Light Behaviour> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Overload Priority Index> add to 4.14.2.1, 2<sup>nd</sup> paragraph. <DRM Perimeter Related Feature Topology> add to 4.13.7, 1<sup>st</sup> paragraph. <DRM Perimeter Related Geometry Topology> add to 4.13.7, 1<sup>st</sup> paragraph. <DRM Polygon Control Link> add as 4.16.9. <DRM Pyramid Directional Light> add to 4.15.3.5. <DRM Relative Time Interval> add to 4.13.12, last paragraph. <DRM Relative Time> add to 4.13.12, last paragraph. <DRM Rotating Light Behaviour> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Rotation Control Link> add as 4.16.10. <DRM Rotation> add to 4.7.5, 3<sup>rd</sup> paragraph. <DRM Scale Control Link> add as 4.16.11. <DRM Scale> add to 4.7.5, 3<sup>rd</sup> paragraph. <DRM Season> add to 4.12.12, last paragragh. <DRM SEDRIS Abstract Base> add to 4.6.1, first paragraph. <DRM Separating Plane Related Geometry> add to 4.13.9, 1<sup>st</sup> paragraph. <DRM Separating Plane Relations> see US\_E083. <DRM Separating Plane> see SEDRIS\_E098. <DRM Strobing Light Behaviour> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Surface Geometry> add to 4.10.3.4.1, 1<sup>st</sup> paragraph. <DRM Time Of Day> add to 4.13.12, last paragraph. <DRM Time Point> add to 4.13.12, last paragraph. <DRM Translation Control Link> add as 4.16.12. <DRM Translation> add to 4.7.5, 3<sup>rd</sup> paragraph. <DRM Twinkling Light Behaviour> add to 4.15.3.5, 4<sup>th</sup> paragraph. <DRM Union Of Geometry Topology> add to 4.12.3, 1<sup>st</sup> paragraph. <DRM Volumetric Feature> see SEDRIS\_T136. <DRM World 3x3> add to 4.7.5, 3<sup>rd</sup> paragraph.

#### Japan\_T016:

5.2.6.7 etc.,

**Problem:** The references to the subclauses of EDCS are wrong. **Action:** They should be made consistent as follows:.

Place	Old		New
5.2.6.7	9.2.3		5.2.3
5.2.6.8	9.2.3		5.2.3
5.2.7.9	9.4.3		5.3.2
5.2.7.109.4.2		5.3.4	
5.2.7.119.4.8		5.3.10	
5.2.7.129.4.6		5.3.8	
5.2.7.139.4.4		5.3.3	
5.3.3.709.2.5.	6	5.2.5.5	
5.3.3.719.2.5.	5	5.2.5.5	
5.3.3.729.2.5.	5	5.2.5.5	
5.3.3.739.2.5.	4	5.2.5.5	

#### **RESPONSE:** Withdrawn.

#### Japan\_T017:

#### 5.2.6.21 (and 5.2.6.18)

**Problem:** The terms "front, back, upper, lower (upper, lower)" are used without explicit explanations. **Action:** Change the expression "... in Figure 5.4 with the naming convention ..." to "... in Fig.5.4, where 'left' to 'right' is the orientation of the first coordinate axis and 'front' to 'back' is the orientation of the second coordinate axis (and 'lower' to 'upper' is the orientation of the third coordinate axis), with the naming convention ...".

Note: The same kind of change may be necessary in 5.2.7.32, DIAGONALIZATION.

#### **RESPONSE:** Accept including for 5.2.7.32.

#### Japan\_T018:

#### 5.2.6.22, Table 5.17, CLOSEST\_TO\_VERTICAL\_OFFSET

**Problem:** The term "datume(misspell of datum)" is not appropriate because there may exist many vertical datums at a specified position.

#### Action: Change "datume" to "ORM reference surface".

#### **RESPONSE:** See response to SEDRIS\_T221.

#### Japan\_T019:

#### 5.2.6.22, Table 5.17, HIGHEST

**Problem:** The meaning of the word "highest" is not clear.

Action: Change the description to "The intersection element to use is the one farthest to the object reference model centre.

## **RESPONSE:** The following text will be used: "The intersection element to use is the one farthest from the object reference model centre."

#### Japan\_T020:

**5.2.6.22, Figure 5.5 Problem:** The role of "vertical offset surfaces" is not explained in the text. **Action:** The text and the figure should be made consistent.

#### **RESPONSE:** Moot by SEDRIS\_T221.

#### Japan\_T021:

#### 5.2.6.28 etc.,

**Problem:** The references to the subclauses of SRM should be more precise in the same way as to those in ISO 19115 and EDCS.

Action: They should be made consistent as follows:

1) In 5.2.6.28, 5.2.6.29 and 5.2.6.30, add "In 11.2.4".

2) In the subcluases 5.2.7.53 to 5.2.7.61, add "In 11.2.6".

3) In the subclauses 5.3.3.274 to 5.3.2.284, add "In 11.2.7.2".

#### **RESPONSE:** Accept.

#### Japan\_T022:

#### 5.3.3.33 (and 5.3.3.164)

**Problem:** The data type defined in ISO/IEC 19115 includes "optional" items and is not adequate to be imported without some explanation.

#### Action:

The sentence

This data type is defined in A.3.2(A.2.3) of ISO/IEC 19115.

should be changed to

This data type uses the definition in A.3.2(A.2.3) of ISO/IEC 19115 with the change of the meaning of "optional" from "omittable" to "null value allowed".

# **RESPONSE:** Text will be added to specify that the non-string optional fields defined by ISO 19115 are required by SEDRIS and shall have a specified default value in lieu of omitting the field.

## Also change all occurrences of "ISO/IEC 19115" to "ISO 19115" throughout the document.

#### Japan\_T023:

#### 5.3.3.33 (and 5.3.3.164)

**Problem:** The referenced subclause does not include the full definition explicitly. Action: The sentence This data type is defined in A = 2(A = 2) of

This data type is defined in A.3.2(A.2.3) of ...

should be changed to

This data type is introduced in A.3.2(A.2.3) and defined in B.3.2.5(B.2.3) of ...

#### **RESPONSE:** Accept.

#### Japan\_T024:

#### 6.2.37 and Table 6.248

**Problem:** The naming of octants using "northeast" etc., is not consistent with 5.2.6.18, 6.2.47 etc., using "left-right", "back-front".

#### **RESPONSE:** Accept.

#### Japan T025:

Table 6.17 etc., DefinitionProblem: The sentence

An instance of this DRM class specifies a coordinate within the Azimuthal spherical (Az) 2D SRF.

is not correct because "Azimuthal spherical (Az) 2D" is not a name of a SRF. It may be a name of a SRFT (though the exact name does not exist in FCD 18026).. Action: Change the sentence to

An instance of this DRM class specifies a coordinate within a SRF derived from the Azimuthal spherical (Az) 2D SRFT.

Note: The same kind of changes should be done in all DRM classes referring to SRFs in this way with the check of exact name matching.

#### **RESPONSE:** The following text will be used for all *<DRM Location>* classes:

"An instance of this DRM class specifies a coordinate for an SRF based on the XXX SRFT.

See ISO/IEC 18026 for a complete definition.

The coordinate field specifies the set of coordinate component values."

#### Japan\_T026:

#### Table 6.215, DRM\_Reference\_Surface

**Problem:** It is meaningless for this DRM class to have a field elements "multiplicity\_rule / Reference\_Surface\_Elevation\_Select " because the role of Reference\_Surface\_Elevation\_Select is to specify the rule for selecting exactly one elevation value when **multiple** <DRM Reference Surface> instances are provided in a transmittal.

Action: Move this field element from here to some DRM classes using this DRM class.

**RESPONSE:** There is a conflict between 5.2.6.22 and Table 6.215. The 1<sup>st</sup> paragraph of 5.2.6.22 will be replaced by the following text: "Table 5.17 defines the Reference\_Surface\_Elevation\_Select data type that specifies the rule for selecting exactly one elevation value when the <DRM Reference Surface> instance is penetrated more than once by a ray cast from the ORM centre to the 2D or surface location in question. This situation can occur with a transmittal when the <DRM Reference Surface> is specified using a polygonal or gridded representation."

A new figure will be developed to illustrate this case.

In addition, the existing text and figure in 5.2.6.22 will be moved to 4.7.3 and revised appropriately. Also see Japan\_T011.

In Table 6.215, the text in the 1<sup>st</sup> and 3rd paragraphs following the list in the Definition will be changed to use the new wording of 5.2.6.22 concerning rays.

-- End of the technical comments --

--- Here begin minor editorial comments. ----

#### Japan E001:

#### 4, throughout

There are some remaining underscores in the Data Representation Model (DRM) class names enclosed in angle brackets. They should be replaced by spaces.

Table 4.4, <DRM LTSAS\_3D\_Location> 4.7.3 <DRM SMS 3D\_Location> 4.13.3 all class names in the second paragraph 4.13.9 <DRM\_Separated\_Plane\_Relations> 4.14.2.1 <DRM\_Feature\_Model>, <DRM\_Geometry\_Model> 4.14.2.2 <DRM\_Model\_Library> and six others 4.14.2.3 many 4.14.3.2, 4.14.3.3, 4.14.3.4, 4.12.3.5 4.1.4.4 4.14.5.3.1 4.15.3.2

#### **RESPONSE:** Accept.

Japan\_E002:

**4.5.5, the last sentence** Change "may be found" to "are given".

#### **RESPONSE:** Accept.

#### Japan E003:

**4.13.5** Change <DRM Base Level of Detail Data> to <DRM Base LOD Data>

#### **RESPONSE:** Accept.

Japan\_E004: 4.14.3.2 Change <DRM Property Set Table Groups> to <DRM Property Set Table Group>

**RESPONSE:** Accept.

#### Japan\_E005:

**4.14.5.3.6, the title** Remove a space between "<" and "D".

#### **RESPONSE:** Accept.

Japan\_E006: 4.15.4.2 Add "See" at the top of the second sentence.

**RESPONSE:** Accept.

#### Japan\_E007:

5.2.7.40, the first line after Table 5.52 Add "::=".

#### **RESPONSE:** Accept.

Japan\_E008:

#### 5.2.7.71, the first two lines after Table 5.73

"(" in the second line should be moved to the end of the first line as to be consistent with other definitions.

#### **RESPONSE:** Accept.

#### Japan\_E009:

#### 5.2.7.73, the first two lines after Table 5.75

"(" in the second line should be moved to the end of the first line as to be consistent with other definitions.

**RESPONSE:** Accept.

Japan\_E010: 5.3.3.68, line 3 "(" should be changed to "{".

**RESPONSE:** Accept.

#### Japan\_E011:

**Table 6. 140, Definition**Change "this this DRM class" to "this DRM class".

## **United Kingdom**

# UK National Body Comments on SEDRIS Part 1: Functional specification Final Committee Draft ISO/IEC 18023-1 (ISO/IEC JTC 1/SC 24 N2583) (ISO/IEC JTC 1/SC 24 WG 8 N0363)

The UK votes to APPROVE FCD 18023-1, subject to the following comments being satisfied.

## General

#### UK\_G001:

#### **Entire document**

All hyperlinks should be checked to ensure not only that they work, but also that they go to the cited location.

A specific example of this comment is given by the hyperlink at the foot of each HTML page. The label for this link refers to 18023-1, whereas the cited location relates to 18023-2.

#### **RESPONSE:** Accept.

#### **UK G002**:

#### **Entire document**

It should be verified that all functionality in the standard has been implemented prior to publication of FDIS text.

**RESPONSE:** It is currently believed that all functionality specified in this part of ISO/IEC 18023 has been implemented in the current SEDRIS organization implementation release. It is intended further that all SRFs specified in the SRM will also have been implemented and will be accessible from SEDRIS applications.

#### UK\_G003:

#### **Entire document**

The copyright frames that are now required should be added to the document.

#### **RESPONSE:** Accept.

#### **UK G004**:

#### **Entire document**

A number of UK comments that were made with respect to 18023-1 CD2 related not only to a specific sub-clause, but there was agreement to bring the rest of the document into alignment with that change and to make similar, consistent changes throughout the document. The Disposition of Comments on ISO/IEC CD2 18023-1 (WG 8 N0345) identifies changes to the specific sub-clauses and it is confirmed that these have been correctly applied. The editing meeting is asked to verify that any similar changes have also been applied throughout the document.

The SEDRIS part 1 CD2 comments referred to are, in particular, UK G006, UK G013, UK T054, UK T055, UK T064, UK T072, UK T075 and UK T090. The comment in UK G006 is summarised as;

1. Basic fundamental data types should be implementation-independent types only. Examples are Integer and Real. Examples of inappropriate data types are having both Short\_Integer and Integer at this level of abstraction or worrying about squeezing out an extra bit by having both signed and unsigned versions of some types.

2. Structured fundamental data types should be abstractly defined without restricting how an API or an encoding might implement them.

3. The API should specialize both basic and structured fundamental data types as needed for binding to most programming languages. An example of such an appropriate restriction in the abstract types that should be in SEDRIS Part 1 (other than their specializations in the API) is that some types "are intended to correspond to signed and unsigned integer data types in programming languages."

4. Each encoding can map both basic and structured fundamental data types to data types that can be efficiently encoded. Particular attention should be paid to permitting very compact encodings by allowing encodings to designate the coding precision used for many types, such as Integer and Real, as well as the representation technique, such as fixed or floating point.

The other general comments relate to sections of text that are;

- Loosely written
- loosely written and provides rationale instead of simply stating what the standard provides
- The title does not reflect the functionality described
- too informal
- grammatically incorrect and too wordy
- poorly written and has ungrammatical constructs

**RESPONSE:** The editing meeting confirms that the referenced comments were applied throughout the document. Detailed review of the FCD has found some areas that were missed and has corrected these through comments submitted by the editors against the FCD text as part of the SEDRIS comments.

The response to UK\_G006 comment on CD2 is reaffirmed:

**1.** The CD2 disposition of comments document indicates that this item was rejected. This response is reaffirmed.

2. The editing meeting believes that the current specifications are appropriate and reflect the intent of the comment.

3. As discussed during the CD2 editing meeting, ranges have been attached where appropriate to the numeric data types. The quoted text cited in the comment is not needed since it is implied by the ranges being specified.

4. The portion of the comment related to User\_Data has been applied. It has been confirmed that there are no restrictions keeping an encoding scheme from specifying a compact representation of numeric data, therefore the editing meeting believes that item 4 has been appropriately applied.

Regarding the remaining comments from CD2 and the summary of those comments contained herein, it is believed that the text has been thoroughly scrubbed to apply the intent of these comments both as a result of applying the responses to the CD2 comments and comments submitted against the

#### FCD.

The editors are authorized by the editing meeting to perform any additional scrubbing needed to improve the quality of the text during the preparation of the next draft with particular emphasis on the text within the DRM class tables.

## **Technical**

### 5 Fundamental data types

#### UK\_T001:

#### Throughout

The data types that are actually realizations of data types in other standards are scattered throughout the various subclauses. A new major subclause should be added after the other major subclauses and should contain minor subclauses for each standard from which a data type is referenced. The current specifications for these data types should be moved to these minor subclauses.

#### **RESPONSE:** Accept.

#### 6 DRM class definitions

#### UK\_T002:

#### Throughout

There are two divergent types of information in Clause 6: constraint specifications and DRM class specifications. Consideration should be given to splitting this clause into Clause 6—Constraints and Clause 6*bis*—DRM classes. The reason that this is appropriate is highlighted by 6.1.2 which only refers to DRM classes. This would make a good introduction to a separate clause.

# **RESPONSE:** Accept. The two clauses will be entitled "DRM class definitions" and "DRM class constraints" and be included in that order. Appropriate introductory text will be provided for each clause.

#### C Media format references

#### UK\_T003:

#### Throughout

While this annex contains references to the various formats used in the DRM\_Browse\_Media class, corresponding references to the DRM\_Sound and DRM\_Symbol classes are missing and should be added.

**RESPONSE:** See response to SEDRIS\_T445.

## Editorial

None

\*\*\*\*\* End of UK Comments \*\*\*\*\*

## **United States**

## US Comments on 18023-1 FCD

#### GENERAL

#### **US G001**:

Throughout -- there should be no logos, other than ISO and IEC. Remove all SEDRIS logos and SEDRIS bars at the beginning of each clause.

#### **RESPONSE:** Accept.

#### **US\_G002:**

Throughout -- all occurrences of "an <DRM\_*classname*>" should be changed to read "a <DRM\_*classname*>" (change "an" to "a"). Prior to adding DRM\_ as a prefix to all class names, some class names were prefaced with "a", and some with "an". Now that we have added DRM\_ to all class names, all class names should be prefaced with only "a". For example, in the 5<sup>th</sup> paragraph of 4.8.2.1, it use to read "An <<u>Environmental Domain Summary></u> instance ...", but it now incorrectly reads "An <<u>DRM\_Environmental Domain Summary></u> instance ...", since now it should actually read "A <<u>DRM\_Environmental Domain Summary></u> instance ...".

#### **RESPONSE:** Accept.

## Technical

#### **US\_T001**: 4.2.2.3 **Problem:** Table of contents for Clause 4 is missing 4.2.2.3 **Recommendation**: Ensure Table of contents is correct

#### **RESPONSE:** Accept.

#### **US\_T002**: 4.2.2.3, penultimate paragraph, 2<sup>nd</sup> sentence

**Problem:** Please clarify what "the same organizing principle" means as it is defined later. **Recommendation**: Second sentence and third sentence should be removed.

**RESPONSE:** Accept. The third sentence includes the list.

# **US\_T003**: 4.7.5 Transforming from a model SRF to an environmental SRF

**Problem**: Need to make clause title and contents correspond. Title reference Model SRF and Environment SRF, however, the contents mainly reference "local SRF" and "world SRF", "Model SRF is only mentioned once in the 4<sup>th</sup> paragraph and "environmental SRF" is not mentioned at all.

**Recommendation:** Modify title to read "4.7.5 Representing models within an environment".

# **US\_T004**: 4.7.5 Transforming from a model SRF to an environmental SRF

**Problem**: There needs to be more detailed discussion of the organization of Data\_Tables with respect to the effect of the order of adding the tables axes and how the extents are calculated

Recommendation: Add discussion.

**RESPONSE:** This is actually about 4.9.1. The following text replaces the content of 4.9.1:

"The abstract  $\leq DRM \ Data \ Table >$  class specifies an n-dimensional array of data cells. This cell data is distinct from the DRM fields of the  $\leq DRM \ Data \ Table >$  class and is accessed through the specialized API functions, 7.3.23 GetDataTableData and 7.3.65 PutDataTableData.

The number of dimensions of the cell data array is determined by the number of ordered  $\langle DRM Axis \rangle$  instances aggregated by a given  $\langle DRM Data Table \rangle$  instance. The axis\_value\_count field of each  $\langle DRM Axis \rangle$  component specifies the number of cells in its corresponding dimension. The combination of the axis\_value\_count values defines the extents of a  $\langle DRM Data Table \rangle$  instance. Subsections of a  $\langle DRM Data Table \rangle$  instance's cell data are termed sub extents. The order of the cell data is determined by the ordered  $\langle DRM Axis \rangle$  components with the data corresponding to the final  $\langle DRM Axis \rangle$  component varying the most.

EXAMPLE 1 A <DRM Data Table> subclass instance of <DRM Property Grid> with one <DRM Axis> subclass instance of <Regular Axis> as specified in Figure 4.X would have 10 cell values, sub extents from [0] to [9], and the data cell layout given in Figure 4.X +1.



#### Figure 4.X Precipitation rate

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
) m									500

#### Figure 4.X+1 Precipitation rate cell data layout

EXAMPLE 1 A <u><DRM Data Table></u> instance with two axes with axis\_value\_count field values of s and t will have sxt cells

EXAMPLE 2 A *<DRM Data Table>* subclass instance of *<*DRM Property Grid> with two *<DRM Axis>* subclass instances of *<*Regular Axis> as specified in Figure 4.X would have 50 cell data values, sub extents from [0,0] to [9,4], and of the data cell ordering as shown in Figure 4.X+1.

DRM Property Grid	
Ŷ	
	DRM Classification Data
me	aning = ECC_TERRAIN_ELEVATION_PROPERTY_SET
	DRM Regular Axis #1
axis axis valu valu inte firs	s_type = EAC_SPATIAL_LINEAR_PRIMARY_COORDINATE s_value_count = 10 ue_unit = EUC_METRE ue_scale = ESC_UNI erpolation_type = LINEAR t_value = { FLOAT 0 0}
spa spa axis	acing = 50.0 acing_type = ARITHMETIC s_alignment = None
	DRM Regular Axis #2
axis axis valu valu inte	s_type = EAC_SPATIAL_LINEAR_SECONDARY_COORDINATE s_value_count = 10 ue_unit = EUC_METRE ue_scale = ESC_UNI erpolation_type = LINEAR
firsi spa spa axis	t_value = { FLOAT,0.0} acing = 100.0 acing_type = ARITHMETIC s_alignment = None
	DRM Table Property Description
valu valu valu valu valu cor	aning = EAC_TERRAIN_ELEVATION ue_unit = EUC_METRE ue_scale = ESC_UNI ue_type = FLOAT nponent_data_table_ecc = ECC_NULL

### Figure 4.X+2

500 r	n	
-------	---	--

#5	#10	#15	#20	#25	#30	#35	#40	#45	#50
#4	#9	#14	#19	#24	#29	#34	#39	#44	#49
#3	#8	#13	#18	#23	#28	#33	#38	#43	#48
#2	#7	#12	#17	#22	#27	#32	#37	#42	#47
#1	#6	#11	#16	#21	#26	#31	#36	#41	#46
m	1			I	I		I	I	5

#### Figure 4.X+3

Each cell in a data table may contain one or more properties. The ordered list of properties is termed a *signature* of the data table. This signature is constituted from the ordered list of  $\leq$ DRM Table Property Description> components associated with the  $\leq$ DRM Data Table> instance. A  $\leq$ DRM Table Property Description> in the signature describes a property contained in the cell data. It specifies the property's meaning, unit of measure, and data type. The dimensions and signature do not fully describe the intended meaning of the overall  $\leq$ DRM Data Table> instance. For that, a  $\leq$ DRM Classification Data> instance is provided as a component of each  $\leq$ DRM Data Table> instance.

The cell data for a  $\leq DRM Data Table >$  instance is represented by an array of values of data type Data\_Table\_Data. Each element of type Data\_Table\_Data in the array represents the array of property values for the cells of the  $\leq DRM Data Table >$  instance. Since the cell data may be arbitrarily large and consequently pose practical problems for access and storage, the <u>7.3.23 GetDataTableData</u> and <u>7.3.65 PutDataTableData</u> functions are provided to extract and insert sub-portions of cell data. Cell data may be accessed by individual properties and/or by a spatial sub-extents as specified by the extents field which is of data type Data\_Table\_Extents."

### US\_T005: 4.14.5.3.1 Overview

**Problem:** The second list appears to be incomplete. Should not the following be included: < DRM Property Description>, <DRM Property Table>, <DRM Property Table Reference>, and <DRM Property Value>. <DRM Reference Vector> probably also be included.

**Recommendation**: Either: 1) add these classes to the second list or 2) replace the second list and the preceding sentence with text describing remainder of the topics in 4.14. 5.3.

**RESPONSE:** Accept. The missing items will be added to the list.

# US\_T006: 4.16.4.2 Applying <DRM State Control Link> to a <DRM State Related Geometry>

**Problem**: The 1<sup>st</sup> 5 paragraphs and tables 4.8 to 4.11 are repeated starting at paragraph 6.

**Recommendation**: Delete correct duplicate.

**RESPONSE:** See response to SEDRIS\_T200.

### US\_T007: 5.2.7.22 Grid\_Overlap\_Operator

**Problem**: Not sure what operation the operator "MERGE" implies. It is not a well-defined mathematical operation. Does it mean where the base grid and overlapping grid point coincide use the base grid, and where they do not, use the value from either grid that is closest?

**Recommendation**: Manner in which the merge occurs needs to be specified in the description. Clarify or remove the operator MERGE.

#### **RESPONSE:** MERGE operations are table type dependent and use methods documented in metadata or outside of SEDRIS. Merge is much like the Interpolation\_Type enumerant METADATA\_SPECIFIED. The merge method is specified in the supplemental\_information field of the associated <DRM Description> object.

The following text will replace the Description of MERGE: "The description of the merge method is specified in the supplemental\_information field of the <DRM Description> instance associated with the <DRM Data Table> aggregate."

### US\_T008: 6.2.2 Axis type constraints

**Problem**: The constraints given cover more than just Axis type constraints. Suggest either renaming to Axis constraints or splitting up. If renamed move 6.2.49 Relative spatial axes values to the renamed class.

Recommendation: Suggest renaming "a-d" to "General axis constraints"

# **RESPONSE:** Items a)-d) will be collected into a new constraint "General axis constraints". The remaining item will be renamed "Spatial axis constraints". Spatial axis constraints applies to <DRM Property Grid> and <DRM Axis>.

### US\_T009: 6.2.2 Axis type constraints

#### **Problem**: There is no constraint that specifies the axis scanning order.

**Recommendation**: Add a constraint to 6.2.2 Axes type constraints (new name: Axes constraints) that describes how the order in which the axes are added determines the scanning order. That is, the last axes added varies the fastest when viewed as a linear array.

#### **RESPONSE:** See response to US\_T004.

## **US\_T010**: 6.2.2 Axis type constraints, item e.1

#### Problem: How does one know if

EAC\_SPATIAL\_ANGULAR\_PRIMARY\_COORDINATE corresponds to Latitude or Longitude? The community is about evenly divided as to which is specified first. This needs to be considered when specifying the order in which axes are added.

**Recommendation**: This needs to be clarified. Also, clarify that the primary axes does not need to be added first. Needs to be coordinated with the SRM. If previous comment accepted, this will now be in clause 6.2.51 (previously 6.2.49).

## **RESPONSE:** Insert the following text as a new subclause following 4.9.5.1, to ensure that "spatial axis" is defined before it is referenced:

"A spatial *<DRM Axis>* instance is a *<DRM Axis>* instance with one of the following as its axis\_type:

- a. For angular coordinates, such as latitude and longitude, EAC\_SPATIAL\_ANGULAR\_PRIMARY\_COORDINATE and EAC\_SPATIAL\_ANGULAR\_SECONDARY\_COORDINATE;
- b. For x, y coordinates, EAC\_SPATIAL\_LINEAR\_PRIMARY\_COORDINATE and EAC\_SPATIAL\_LINEAR\_SECONDARY\_COORDINATE; and
- c. For z and elevation coordinates, EAC\_SPATIAL\_LINEAR\_TERTIARY\_COORDINATE.

A spatial *<DRM Axis>* instance shall appear only as a component of a *<DRM* Property Grid> instance, as specified in 6.2.2 Axis type constraints e).

For any SRF,

- the primary component specified by the SRM is the EAC\_SPATIAL\_ANGULAR\_PRIMARY\_COORDINATE (if angular) or EAC\_SPATIAL\_LINEAR\_PRIMARY\_COORDINATE (if linear);
- the secondary component specified by the SRM is the EAC\_SPATIAL\_ANGULAR\_SECONDARY\_COORDINATE (if angular) or EAC\_SPATIAL\_LINEAR\_SECONDARY\_COORDINATE (if linear); and
- the tertiary component specified by the SRM is the EAC\_SPATIAL\_LINEAR\_TERTIARY\_COORDINATE.

The primary, secondary, and tertiary components for each SRF are specified by the corresponding record type in 11.8.6 of <u>ISO/IEC 18026</u>.

The designation of a  $\langle DRM Axis \rangle$  instance's axis\_type value as primary, secondary, or tertiary is independent of the order in which that  $\langle DRM Axis \rangle$  instance is attached to a  $\langle DRM Property Grid \rangle$  instance.

EXAMPLE

Consider a <DRM Property Grid> instance G specified in a 3D CD SRF, in which the data provider is supplying EAC\_TERRAIN\_ELEVATION data for a region. The spatial <*DRM Axis*> components are EAC\_SPATIAL\_ANGULAR\_PRIMARY\_COORDINATE, which for CD is longitude, and EAC\_SPATIAL\_ANGULAR\_SECONDARY\_COORDINATE, which for CD is latitude. The data provider who is creating G in this case is specifying the grid in the order (latitude, longitude), so the first <*DRM Axis*> component of G is that with axis\_type

EAC\_SPATIAL\_ANGULAR\_SECONDARY\_COORDINATE, while the second *<DRM Axis>* component of G is that with axis\_type EAC\_SPATIAL\_ANGULAR\_PRIMARY\_COORDINATE. The EAC\_TERRAIN\_ELEVATION information is specified by a *<*DRM Table Property Description> component of G having meaning = { ATTRIBUTE, {EAC\_TERRAIN\_ELEVATION}}."

#### Update 6.2.2 Axis type constraints, e to reflect 4.9.5.2 by adding the following:

"4. A spatial <DRM Regular Axis> instance or <DRM Irregular Axis> instance shall not have interpolation\_type set to DISALLOWED."

# **US\_T011**: 6.3.192 DRM\_Property\_Description, Figure 6.223 in Table 6.193

**Problem**: The entries in the bottom two classes are incorrect. The height EA has the values for the quality and the quality has the values for the height.

Recommendation: Switch the meaning entries.

**RESPONSE:** Accept.

# **US\_T012**: 6.3.217 DRM\_Regular\_Axis, Table 6.218, Definition, 6<sup>th</sup> para, 2<sup>nd</sup> sentence

**Problem**: Does the statement "When a <<u>DRM Data Table></u> has more than one axis, the order of the interpolations is in the order of axis definition." mean that the first interpolation is along the first axis added? Does this conflict with the order in which the axes are scanned, the last axes added varies the fastest.

**Recommendation**: The order as which the interpolation occurs is immaterial. Remove 2<sup>nd</sup> sentence.

**RESPONSE:** The last sentence of the definition of the interpolation\_type field will be removed.

## Editorial

#### **US\_E001**: index.html

The hyperlink to the ISO web site at the bottom of this clause (and all other clauses) is to a 18023-2 URL, not to a 18023-1 URL.

#### **RESPONSE:** Accept.

#### **US E002**: Foreword

The first two paragraphs each have a hyperlink to the ISO web site. The first appears in Times Roman font, and the second appears in Courier font. Make the use of fonts for hyperlinks consistent.

#### **US\_E003**: Foreword

In the 3<sup>rd</sup> paragraph, delete the period following "The SEDRIS Organization", and before the parenthetic SEDRIS web site citation.

#### **RESPONSE:** Accept.

#### Clause 0

#### **US E004**:

The 1<sup>st</sup> and 3<sup>rd</sup> paragraphs make reference to the DRM. In one case the words that make up the acronym are not capitalized, and in the other case they are capitalized. Make the capitalization for these references consistent.

#### **RESPONSE:** Accept.

#### Clause 1

#### **US E005**:

In subparagraph "c" of the section that provides examples of the representation of terrain data, add a closing parenthesis following the word "rivers".

#### **RESPONSE:** Accept.

#### **US\_E006**:

In subparagraph "b" of the section that provides examples of the representation of space data, delete the comma following the word "radiation" (a comma is not required unless the list contains at least three items).

#### **RESPONSE:** Accept.

#### Clause 3

#### **US E007**: Table 3.1

In the  $2^{nd}$  row, change "dimensional" to read "Dimensional" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### **US\_E008**: Table 3.1

Change "EDCS Unit Equivalence Class" to read "EDCS unit eQuivalence class" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### **US\_E009**: Table 3.1

Change "EDCS attribute Value Characteristics Code" to read "EDCS attribute Value characteristics Code" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### **US E010**: Table 3.1

Change "Geodetic" to read "GeoDetic" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### **US\_E011**: Table 3.1

Change "Out-the-Window" to read "Out-The-Window" (correct the capitalization), as per clause 3.2.

#### **US\_E012**: Table 3.1

Change "Extensible Markup Language" to read "eXtensible Markup Language" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### **US E013**: Table 3.1

Change "Extensible 3D" to read "eXtensible 3D" (correct the capitalization), as per clause 3.2.

#### **RESPONSE:** Accept.

#### Clause 4

#### **US E014**: Clause 4 -- (ref CD2 UK G002, UK G011 responses)

In checking the W3C html validation (at www.w3.org), the following errors were identified in the clause 4 file:

- 2. Line 4013, column 40: end tag for element "SPAN" which is not open

with a zero index separating each.</span>

#### **RESPONSE:** Accept.

#### **US\_E015**: 4.1.3

In the last sentence, change "... DRM class being used as an adjective ..." to read "... DRM class is being used as an adjective ..." (add the word "is").

#### **RESPONSE:** Accept.

#### **US E016**: 4.2.2.1.e and 4.2.2.1.f

Verify whether the order of these subparagraphs should be reversed (i.e., shouldn't ECs be referenced "logically" before EAs)?

#### **RESPONSE:** See response to SEDRIS\_T018.

#### **US E017**: 4.2.2.3

In the next to last subparagraph (before "a. time,"), change "... organizing principle may also specified ..." to read "... organizing principle may also be specified ..." (add the word "be").

#### **RESPONSE:** Accept.

#### **US E018**: 4.2.3.1

Change "This part of 18023 provides ..." to read "This part of ISO/IEC 18023 provides ..." (add the missing "ISO/IEC" as a prefix to 18023).

#### **RESPONSE:** Accept.

#### **US\_E019**: 4.2.3.1

In the 2<sup>nd</sup> paragraph, provide a hyperlink to clause 2 for the references to both ISO/IEC 18023-2 and ISO/IEC 18023-3, and change the reference to read "part 2 of ISO/IEC 18023" and "part 3 of ISO/IEC 18023" for consistency with other similar references throughout this standard.

#### **RESPONSE:** Accept.

#### **US\_E020**: 4.2.3.1

In the 3<sup>rd</sup> paragraph, reference is made to ISO/IEC 18023. Provide a hyperlink to clause 2, and add the basic ISO/IEC 18023 to clause 2.

#### **US\_E021**: 4.3.1.b (second occurrence)

Change "Environmental Data Coding Specification (EDCS)" to read "Environmental data coding specification (EDCS)", as per clause 2.

#### **RESPONSE:** Accept.

#### **US\_E022**: 4.3.1.c

Change "Spatial Reference Model (SRM)" to read "Spatial reference model (SRM)", as per clause 2.

#### **RESPONSE:** Accept.

#### **US\_E023**: 4.3.1.d

Change Part 2 of ISO/IEC 18023 to read part 2 of ISO/IEC 18023 for consistency with other similar references throughout this standard, and add a comma following the reference/hyperlink.

#### **RESPONSE:** Accept.

#### **US\_E024**: 4.3.2.2

In the last paragraph, change "<u>4.5 Data representation model (DRM) syntax</u>" to read "<u>4.5 DRM</u> <u>syntax</u>", as per the actual 4.5 subclause title.

#### **RESPONSE:** Accept.

#### **US\_E025**: 4.3.3.1.2

In the references/hyperlinks to parts 2 and 3 of ISO/IEC 18023, change "Part" to read "part" for consistency with other similar references throughout this standard.

#### **RESPONSE:** Accept.

#### **US\_E026**: 4.3.3.1.3

Change the subclause title, "Inter-Transmittal Referencing (ITR)", to read "Inter-transmittal referencing (ITR)" as per the Table of Contents (use standard ISO capitalization).

#### **RESPONSE:** Accept.

#### **US\_E027**: 4.5.3

This subclause references the UML standard (ISO/IEC 19501-1). It is not necessary to cite the full title of that standard, as full titles for other standards referenced in this standard are not provided.

#### **RESPONSE:** Accept.

#### **US\_E028**: 4.5.3 Modelling technique and notation, 4<sup>th</sup> paragraph

For clarity, at end of sentence replace "by depicting the name of the class in italics" by "by depicting the name of the abstract class italics"

## **RESPONSE:** Accept. The following text will be used: "by depicting the name of the abstract class in italics".

#### **US\_E029**: 4.5.3

In the 5<sup>th</sup> subparagraph, change all instances of "one way" and "two way" to read "one-way" and "two-way".

#### **RESPONSE:** Accept.

#### **US E030**: 4.5.3

In the 7<sup>th</sup> subparagraph, change "whole to part" to read "whole-to-part".

#### **RESPONSE:** Accept.

#### **US\_E031**: Figure 4.3

This figure is missing / does not appear when viewed online because the hyperlink cites "Multiplicity.jpg", whereas the actual filename is "multiplicity.jpg". All systems that enforce case-sensitivity for filenames will not display this image as coded in the html.

#### **RESPONSE:** Accept.

#### **US\_E032**: 4.5.4.1 Overview, last paragraph, 1<sup>st</sup> sentence

Incorrect font used in first part of sentence.

#### **RESPONSE:** Accept.

#### **US\_E033**: 4.5.5

In the 1<sup>st</sup> paragraph, change "<u>6 DRM Classes</u>" and "<u>Annex A UML Diagrams</u>" to read "<u>6 DRM</u> <u>classes</u>" and "<u>Annex A UML diagrams</u>" (correct capitalization), as per their actual clause/annex titles.

#### **RESPONSE:** Accept.

#### **US\_E034**: 4.6.1

In the 4<sup>th</sup> sentence, change "... individual classes or group of classes" to read either "... individual classes or <u>a</u> group of classes" (add the word "a") or "... individual classes or group<u>s</u> of classes" (make the word "group" plural).

#### **RESPONSE:** Accept.

#### **US\_E035**: 4.6.2 Spatial concepts, 1<sup>st</sup> paragraph

SRF is defined in the third sentence, however, "spatial reference frame" is still used in the 4<sup>th</sup> sentence, while SRF is used in the 5<sup>th</sup> sentence. Ones SRF is defined, should it not be used?

#### **RESPONSE:** Accept.

#### **US\_E036**: 4.6.2

In the 4<sup>th</sup> paragraph, change "... point-sampled grid of surfaces ..." to read "... a point-sampled grid of surfaces" (add the word "a").

#### **RESPONSE:** Accept.

#### **US\_E037**: 4.6.4

In the 1<sup>st</sup> paragraph, verify whether "EDCS Value\_Characteristic" should read "EDCS\_Value\_Characteristic" (appears the first underscore is missing).

#### **RESPONSE:** Accept.

#### **US E038**: 4.6.5

In the last paragraph, change " $\underline{4.10 \text{ Geometry}}$ " to read " $\underline{4.10 \text{ Geometry representation}}$ ", as per the actual title of the subclause.

#### **RESPONSE:** Accept.

#### **US E039**: 4.6.6

In the 1<sup>st</sup> paragraph, change "centerlines" to read "centrelines".

#### **RESPONSE:** Accept.

#### **US\_E040**: 4.6.6

In the last paragraph, change " $\underline{4.11 \text{ Features}}$ " to read " $\underline{4.11 \text{ Feature representation}}$ .", as per the actual title of the subclause.

#### **RESPONSE:** Accept.

#### **US E041**: 4.6.7

In this subclause, as well as throughout the remainder of clauses 4 and 5, change "<u><DRM Geometry</u> <u>Representation></u>" to read "<u><DRM Geometry Representation></u>" (add italics), as per Table 6.98 and Figure 6.114.

#### **US\_E042**: 4.6.7

In the 4<sup>th</sup> and 5<sup>th</sup> sentences, change "A <...> representations ..." to read either "<...> representations ..." or "A <...> representation ...".

#### **RESPONSE:** Accept.

#### **US E043**: 4.6.9

At the end of the 1<sup>st</sup> paragraph, verify whether the phrase "multi-level buildings" should be replaced with the more commonplace phrase "multi-elevation structures".

#### **RESPONSE:** Withdrawn.

**US\_E044**: 4.6.12 Models and model instancing, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence Incorrect font used in first part of sentence.

#### **RESPONSE:** Accept.

#### **US\_E045**: 4.6.14

The hyperlink to clause 4.16 actually points (or takes you) to 4.16.1.

#### **RESPONSE:** Accept.

#### **US\_E046**: 4.7.2.1

At the end of the 1<sup>st</sup> paragraph, correct the capitalization as shown below (the red underlined characters were previously capitalized:

"An SRF <u>s</u>et is a finite parameterized set of two or more SRFs. Furthermore, ISO/IEC 18026 defines SRF <u>instances</u> by specifying the SRF <u>t</u>emplate parameters for an instance. The DRM provides the ability to store SRF information through all three mechanisms, SRF <u>t</u>emplate <u>parameters</u>, SRF <u>set parameters</u>, and SRF <u>instances</u>."

#### **RESPONSE:** Accept.

#### **US\_E047**: 4.7.2.1

The 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs contain two phrases: "an srf\_info field " and "a srf\_info field", which should all be made consistent.

#### **RESPONSE:** Accept.

#### **US\_E048**: 4.7.2.2

Change all instances of "SRF Template" to read "SRF template".

#### **RESPONSE:** Accept.

#### **US\_E049**: 4.7.3

In Example 3, add a space character both before and after <<u>DRM Reference Surface</u>>.

#### **RESPONSE:** Accept.

**US\_E050**: 4.7.3 Location, 3<sup>rd</sup> paragraph not including bullets

Incorrect font used.

#### **RESPONSE:** Accept.

**US\_E051**: 4.7.3 Location, paragraph after Figure 4.7, 1<sup>st</sup> sentence

#### **RESPONSE:** Replace "of the" with "of the".

#### **US\_E052**: 4.7.4

In the 1<sup>st</sup> paragraph, change "<u>4.7.5 Transforming from a model SRF to an environment SRF</u>" to read "<u>4.7.5 Transforming from a model SRF to an environmental SRF</u>" (add "al" to environment), as per the actual subclause title.

#### **US\_E053**: 4.7.4

In the  $2^{nd}$  paragraph, change "<u>4.8 Semantic Attribution in the DRM</u>" to read "<u>4.8 Semantic attribution</u> in the DRM" (capitalization), as per the actual subclause title.

#### **RESPONSE:** Accept.

#### **US\_E054**: 4.7.4

In the 3<sup>rd</sup> paragraph, change "<u>6.2.50 Required Reference Vector Location</u>" to read "<u>6.2.50 Required</u> reference vector location" (capitalization), as per the actual subclause title.

#### **RESPONSE:** Accept.

#### **US\_E055**: 4.7.5

In the last paragraph, change "A <u><DRM Model></u> instanced defined with ..." to read "A <u><DRM</u> <u>Model></u> instance defined with ...".

#### **RESPONSE:** Accept.

#### **US\_E056**: 4.7.6

In the Example, clarify the meaning of "Consider the geodetic situation <u>in of</u> four points with ..." (note the underlined text).

#### **RESPONSE:** Accept.

#### **US\_E057**: 4.8

Throughout this clause, EDCS terms are used with inconsistent capitalization. For example, the phrases EDCS Attribute Codes, EDCS Unit and EDCS Scale appear as capitalized terms when they should be lower-case. Correct the capitalization.

#### **RESPONSE:** Accept.

#### **US\_E058**: 4.8.1.1

In the last paragraph, change "<u>6.2.20 Index codes within tables</u>" to read <u>6.2.20 Index Codes within tables</u>" (capitalization and underscore), as per the actual subclause title.

#### **RESPONSE:** Accept.

#### **US\_E059**: 4.8.3

In the  $2^{nd}$  paragraph (and throughout), change all instances of "<u>*DRM Spatial Association Data>*</u>" to read "<u>*DRM Spatial Association Data>*</u>" (delete italics), as per Table 6.247 and Figure 6.294.

#### **RESPONSE:** Accept.

#### **US\_E060**: 4.8.3 Relationships between representations

Believe that <u><DRM Base Association Data></u> is an abstract class and should be italicized. Check elsewhere in document also.

#### **RESPONSE:** Accept.

#### **US\_E061**: 4.8.3 Relationships between representations

<u>CRM Base Spatial Association Data></u> is an abstract class and should be italicized. Check elsewhere in document also.

#### **RESPONSE:** Accept.

#### **US\_E062**: 4.8.3 Relationships between representations, 1<sup>st</sup> para., 3<sup>rd</sup> sentence

Missing "of" in sentence: "...as instances of concrete subclasses..."

#### **US\_E063**: 4.9.5.1

In the last paragraph, the value\_unit and value\_scale fields referenced for <<u>DRM Axis></u> classes do not appear in Table 6.16. Clarify (should this reference have been to <<u>DRM Regular Axis></u> instead?).

#### **RESPONSE:** Accept.

#### **US\_E064**: 4.10.3.3.3

In the Example, change "... a count value of 30 ..." to read "... a count value of 30 ..." (change "count" to a Courier font).

#### **RESPONSE:** Accept.

#### **US\_E065**: 4.10.3.4.2

Add a space character following the first instance of <u><DRM Vertex></u>.

#### **RESPONSE:** Accept.

#### **US\_E066**: 4.10.3.5.3

In this clause (and throughout), change "<u><DRM Volume Extent></u>" to read "<u><DRM Volume Extent></u>", as per Table 6.298 and Figure 6.356.

#### **RESPONSE:** Accept.

#### **US\_E067**: 4.10.3.5.3

In the  $2^{nd}$  paragraph, change "center" to read "centre".

#### **RESPONSE:** Accept.

#### **US E068**: 4.10.3.5.3

In the last paragraph, change "<u><DRM Location 3D></u>" to read "<u><DRM Location 3D></u>", as per Table 6.142 and Figure 6.163.

#### **RESPONSE:** Accept.

#### **US\_E069**: 4.10.3.6

In the 2<sup>nd</sup> paragraph, 3<sup>rd</sup> sentence, change "An interior ring is polygon contained by …" to read "An interior ring is a polygon contained by …" (add the word "a").

#### **RESPONSE:** Accept.

#### **US E070**: 4.10.3.6

In the 4<sup>th</sup> paragraph, change "two dimensional" to read "two-dimensional" (add a hyphen).

#### **RESPONSE:** Accept.

#### **US\_E071**: 4.10.3.6

In the 5<sup>th</sup> paragraph, change "... with zeros values in ..." to read either "... with zero values in ..." (make "zeros" singular) or "... with zeros in ..." (delete the word "values").

#### **RESPONSE:** Accept.

#### **US E072**: Table 4.5

Change the table title from "Mesh face table for Figure 4.9" to read "Mesh face table for Figure 4.13".

#### **RESPONSE:** Accept.

#### **US E073**: 4.10.3.6

In Example 2, change the reference to Figure 4.9 to read Figure 4.13.

#### **US\_E074**: Table 4.6

Change the table title from "Adjacent face table for Figure 4.9" to read "Adjacent face table for Figure 4.13".

#### **RESPONSE:** Accept.

#### **US\_E075**: 4.11.2.4

In the  $2^{nd}$  paragraph, the hyperlink to <u><DRM Regular Feature Face></u> is inoperable.

#### **RESPONSE:** Accept.

#### **US\_E076**: 4.12.2.3.1

In the last paragraph (and throughout), change "<u><DRM Feature Face Ring></u>" to read "<u><DRM Feature Face Ring></u>" (remove italics), as per Table 6.77 and Figure 6.88.

#### **RESPONSE:** Accept.

#### **US\_E077**: 4.13.1.3

In the 1<sup>st</sup> paragraph, delete the carriage return following "... one branch of".

#### **RESPONSE:** Accept.

#### **US\_E078**: 4.13.5

In the 1<sup>st</sup> sentence, change "... organizing principles provides a ..." to read "... organizing principles provide a ..." (subject-verb agreement).

## **RESPONSE:** Accept in principle. "principles provides" will be changed to "principle provides".

#### **US\_E079**: 4.13.5

In the 1<sup>st</sup> paragraph, change "<u><DRM Base Level of Detail Data></u>" to read "<u><DRM Base LOD Data></u>", as per Table 6.19.

#### **RESPONSE:** Accept.

#### **US\_E080**: 4.13.5.d (second instance)

Change "begins" to read "begin" (subject-verb agreement).

#### **RESPONSE:** Moot per response to SEDRIS\_T157.

#### **US\_E081**: 4.13.7

Change "<u>6.2.35 Non-selfoverlapping Perimeter\_Data locations</u>" to read "<u>6.2.35 Non-selfoverlapping</u> <u>perimeter data locations</u>", and correct the hyperlink to point to the correct clause; it currently incorrectly points to 6.2.34.

#### **RESPONSE:** Accept.

#### **US\_E082**: 4.13.8

In the 1<sup>st</sup> and 5<sup>th</sup> paragraphs, change "<u>6.2.47 Quad tree related organizing principle</u>" to read "<u>6.2.47</u> <u>Quadrant related organizing principle</u>", and correct the hyperlinks to point to the correct location.

#### **RESPONSE:** Accept.

#### US\_E083: 4.13.9

In the 1<sup>st</sup> paragraph, change "<u><DRM Separated Plane Relations></u>" to read "<u><DRM Separating Plane Relations></u>".

#### **RESPONSE:** Accept.

#### **US\_E084**: 4.13.9

In the 1<sup>st</sup> paragraph, change "... data objects is on the ..." to read "... data objects are on the ..." (subject-verb agreement).

## **RESPONSE:** The text will be changed from "the environmental data objects is" to "an environmental data object is".

#### **US\_E085**: 4.13.10

In the 2<sup>nd</sup> paragraph, change "<u>6.2.52 Spatial Index related organizing principle</u>" to read "<u>6.2.52</u> <u>Spatial index related organizing principle</u>" (capitalization).

#### **RESPONSE:** Accept.

#### **US\_E086**: 4.14.2.2

At the very end of the subclause, the <u><DRM Feature Model></u> hyperlink is inoperable because the URL cited spells "Feature" as "Featurue". Correct the hyperlink.

#### **RESPONSE:** Accept.

#### **US E087**: 4.14.2.3

In the 3<sup>rd</sup> paragraph, change "… nine element matrix …" to read "… nine-element matrix …" (add a hyphen).

#### **RESPONSE:** Accept.

#### **US\_E088**: 4.14.3.2

In the 1<sup>st</sup> paragraph, change "<u><DRM Property Set Table Groups</u>" to read "<u><DRM Property Set Table</u> <u>Groups</u>" (make "Groups" singular).

#### **RESPONSE:** Accept.

#### **US E089**: 4.14.3.4

Change "<u>4.9 Data Tables</u>" to read "<u>4.9 Data tables</u>" (capitalization).

#### **RESPONSE:** Accept.

#### **US\_E090**: 4.14.3.6

Change "<u>4.5.11.1 Models</u>" to read "<u>4.14.2 Models</u>".

#### **RESPONSE:** Accept.

#### **US\_E091**: 4.14.5.1

In the 1<sup>st</sup> paragraph, the second instance of < DRM Aggregate Geometry> is inoperable because the hyperlink references "AggregateGeometry.html" rather than "Aggregate\_Geometry.html". Insert the missing underscore to correct the hyperlink.

#### **RESPONSE:** Accept.

#### **US\_E092**: 4.14.5.1

In the last paragraph, change all instances of "classification related" and "time related" to read "classification-related" and "time-related" (add hyphens).

#### **RESPONSE:** Accept.

#### **US E093**: 4.14.5.3.2 < DRM Classification Data>sentence, 2<sup>nd</sup> para., 1<sup>st</sup> sentence

Should read ... "the union\_reason field will have a value of CLASSIFIED\_OBJECT."

#### **RESPONSE:** Accept.

#### **US\_E094**: 4.14.5.3.5

In the 3<sup>rd</sup> and 4<sup>th</sup> paragraphs, change "<u>6.2.50 Required Reference Vector Location</u>" to read "<u>6.2.50</u> <u>Required reference vector location</u>" (capitalization), as per the actual subclause title.

#### **RESPONSE:** Accept.

#### US\_E095: 4.14.5.3.7

Change "<u>4.8.2.2 Qualification</u>" to read "<u>4.9.4.2 Qualification</u>".

#### **RESPONSE:** Accept.

#### **US\_E096**: 4.15.3.4

In the  $3^{rd}$  paragraph, change "... A <u><DRM Rendering Properties></u> instance ..." to read "... a <u><DRM</u> <u>Rendering Properties></u> instance ..." (capitalization of the word "a").

#### **RESPONSE:** Accept.

#### **US E097**: 4.15.3.5

In the  $4^{th}$  paragraph, end the  $2^{nd}$  sentence with a period ("... utilized. The ...").

#### **RESPONSE:** Accept.

#### **US\_E098**: 4.15.4.2

In the  $1^{st}$  paragraph, to make sense, the  $2^{nd}$  sentence appears to need to begin with the word "See ..." (See <u>4.14 Constructs for sharing data</u> and ...).

#### **RESPONSE:** Accept.

#### **US\_E099**: 4.15.4.4.a – c

Change "lower left", "upper left" and "upper right" to read "lower-left", "upper-left" and "upper-right" (add hyphens).

#### **RESPONSE:** Accept.

#### **US E100**: 4.15.5

In the  $2^{nd}$  paragraph, change "center" to read "centre".

#### **RESPONSE:** Accept.

#### **US\_E101**: 4.16.2.2

The  $1^{st}$  sentence requires a semicolon (;) following <u>*ARM Expression*</u>. Add the missing semicolon.

#### **RESPONSE:** Accept.

#### **US\_E102**: 4.16.2.2

In the 3<sup>rd</sup> paragraph, change "EDCS Unit" and "EDCS Scale" to read "EDCS unit" and "EDCS scale" (capitalization).

#### **RESPONSE:** Accept.

#### **US\_E103**: 4.16.2.2

In the 5<sup>th</sup> paragraph, change "The value is determined by an  $\underline{<DRM Expression}$ 's aggregated by ..." to read "The value is determined by  $\underline{<DRM Expression}$ 's aggregated by ..." (delete the word "an").

## **RESPONSE:** The following words will be used: "The value is determined by <DRM Expression> instances aggregated by ..."

#### **US\_E104**: Table 4.7

In the Category column, lower-case each row entry except for the initial word; e.g., "Mathematical Constants" becomes "Mathematical constants" (ISO capitalization).

#### **RESPONSE:** Accept.

#### **US\_E105**: 4.16.3.2

In the 1<sup>st</sup> paragraph, the two <u><DRM Light Rendering Properties Control Link></u> hyperlinks are inoperable online because they point to "Light\_Rendering\_Properties\_Control\_link.html" rather than to "Light\_Rendering\_Properties\_Control\_Link.html". Correct the hyperlinks.

#### **RESPONSE:** Accept.

#### **US\_E106**: 4.16.2.3.3 The <DRM Pseudo Code Function> class

**Problem:** It appears that the  $1^{st}$  paragraph and the  $2^{nd}$  and  $3^{rd}$  paragraph plus the list, present the same information.

**Recommendation**: Delete 1<sup>st</sup> paragraph.

#### **RESPONSE:** Accept.

#### **US\_E107**: 4.16.4.1

Change "EDCS Attributes" to read "EDCS attributes" (ISO capitalization).

#### **RESPONSE:** Accept.

#### **US\_E108**: 4.16.4.2

In the  $1^{st}$  paragraph, the phrases "four damage states ... as shown in <u>Table 4.8</u>" are confusing since Table 4.8 only shows the 0% (default) damage state. Reword for clarity.

#### **RESPONSE:** Accept.

#### **US E109**: 4.16.4.2

In the  $6^{th}$  paragraph, the phrases "shown in <u>Table 4.12</u> ... four damage states" are confusing since Table 4.12 only shows the 0% (default) damage state. Reword for clarity.

#### **RESPONSE:** Accept.

#### **US E110**: 4.16.4.2

In the  $9^{th}$  paragraph, the hyperlink to <u>Table 4.14</u> is inoperable online.

#### **RESPONSE:** Accept.

#### **US\_E111**: 4.16.4.2

In the  $10^{\text{th}}$  paragraph, the hyperlink to <u>Table 4.15</u> is inoperable online.

#### **RESPONSE:** Accept.

#### **US E112**: 4.17.2.2

Change "Mandatory Metadata" to read "mandatory metadata" (ISO capitalization).

#### **RESPONSE:** Accept.

#### **US\_E113**: 4.17.2.3, 4.17.2.4, 4.17.2.6, 4.17.2.7

In the 1<sup>st</sup> paragraph, change "<u>6.2.25 Mandatory Metadata</u>" to read "<u>6.2.25 Mandatory metadata</u>" (capitalization).

#### **RESPONSE:** Accept.

#### **US\_E114**: 4.17.2.4

The  $2^{nd}$  instance of <u><DRM Description></u> is inoperable because it points to "Point\_Of\_Contact.html" rather than to "Description.html".

#### **RESPONSE:** Accept.

**US\_E115**: 4.17.2.7.a Change "correspond" to read "corresponds" for consistency with 4.17.2.7.b & c.

#### **RESPONSE:** Accept.

#### **US\_E116**: 4.17.3.4

In the 2<sup>nd</sup> paragraph, change "<u>6.2.34 Non-overlapping DRM Class Summary Items</u>" to read "<u>6.2.34</u> <u>Non-overlapping DRM class summary items</u>" (capitalization), as per the actual title of this subclause.

#### **RESPONSE:** Accept.

#### **US\_E117**: 4.19.1.2

Change "implementation dependent information" to read "implementation-dependent information" (add a hyphen).

#### **RESPONSE:** Accept.

#### **US\_E118**: 4.19.2.2

In the 1<sup>st</sup> bullet, set off the phrase "... a specified DRM class ..." by providing commas before and after this phrase.

#### **RESPONSE:** Accept.

#### **US\_E119**: 4.19.2.3.1 -- (ref CD2 UK T065 response)

In the 1<sup>st</sup> paragraph, for each item in the list, "... an object in a transmittal" has not been replaced by "... the specified DRM object".

#### **RESPONSE:** Accept.

#### US E120: 4.19.2.3.3.2.h

Change "within a specified levels" to read either "within specified levels" or "within a specified level".

#### **RESPONSE:** Accept.

#### **US\_E121**: 4.19.3

Change the subclause title from "Inter-Transmittal Referencing (ITR)" to read "Inter-transmittal referencing (ITR)" (ISO capitalization).

#### **RESPONSE:** Accept.

#### **US\_E122**: 4.19.3

In the 3<sup>rd</sup> bullet, delete the extra space character between "a different".

#### **RESPONSE:** Accept.

#### **US E123**: 4.19.4

In the 1<sup>st</sup> bullet, change "that all that all" to read "that all".

#### **RESPONSE:** Accept.

#### **US\_E124**: 4.19.5

Change "API maintains" to read "the API maintains", change "may be retrieve via" to read "may be retrieved via", and change "following function support" to read "following functions support".

#### **RESPONSE:** Accept.

#### **US E125**: 4.19.6.3

Change "The API specifies the function <u>7.3.29 GetLastFunctionStatus</u> returns the status …" to read "The API specifies the function <u>7.3.29 GetLastFunctionStatus</u> to return the status …".

#### **RESPONSE:** Accept.

#### **US\_E126**: 4.20

In the 2<sup>nd</sup> paragraph, change "Default Profile" to read "default profile" (ISO capitalization).

#### **RESPONSE:** Accept.

**US\_E127**: 4.21.1 Provide a hyperlink to the International Registry of Graphical Items referenced here.

#### **RESPONSE:** Accept.

#### **US E128**: 4.21.2.c

Here, and in the 4<sup>th</sup> paragraph (two instances), change "implementation dependent values" to read "implementation-dependent values" (add a hyphen).

### Clause 5

#### US\_E129: 5.2.3.10

Verify whether "[0..4 294 967 295]" should be changed to read "[1..4 294 967 295]".

#### **RESPONSE:** Accept.

US\_E130: 5.2.3.11 – 5.2.3.13 Provide hyperlinks to clause 2 for the ISO/IEC 18025 and 18026 references.

#### **RESPONSE:** Accept.

#### **US\_E131**: 5.2.3.13

Cite the ISO/IEC 18026 subclause containing this information (similar to the EDCS subclause references in 5.2.3.11 and 5.2.3.12).

#### **RESPONSE:** Accept.

#### **US\_E132**: 5.2.4.1

Change "single and double precision" to read "single- and double-precision" (add the hyphens).

#### **RESPONSE:** Accept.

US\_E133: 5.2.4.4, 5.2.4.5

Provide hyperlinks to clause 2 for the ISO/IEC 18025 and 18026 references.

#### **RESPONSE:** Accept.

#### **US\_E134**: 5.2.4.5

Cite the ISO/IEC 18026 subclause containing this information (similar to the EDCS subclause reference in 5.2.4.4).

#### **RESPONSE:** Accept.

#### **US E135**: 5.2.5

In the  $2^{nd}$  sentence, clarify the reference to "ISO/IEC 646".

#### **RESPONSE:** Accept.

**US E136**: 5.2.6.10

In the Example, change "in X direction" to read "in the X direction".

#### **RESPONSE:** Accept.

#### **US E137**: 5.2.6.18

In the 1<sup>st</sup> sentence, change "data types specifies" to read "data type specifies" (subject-verb agreement).

#### **RESPONSE:** Accept.

#### **US E138**: Table 5.16

Add a space character following the  $2^{nd}$  instance of <u><DRM Model></u>.

#### **RESPONSE:** Accept.

#### US\_E139: 5.2.6.21

In the  $2^{nd}$  paragraph, change "... the division between from and back ..." to read "... the division between front and back ..." (change "from" to read "front").

#### **RESPONSE:** Accept.

#### US\_E140: 5.2.6.22

The text in the 2<sup>nd</sup> bullet of the Example references "CLOSEST\_TO\_VERTICAL\_DATUM", Table 5.17 references "CLOSEST\_TO\_VERTICAL\_OFFSET" and describes it as "...
datume", and the code following Table 5.17 references "CLOSEST\_TO\_VERTICAL\_DATUM". Correct the inconsistenc(ies).

## **RESPONSE:** Accept.

## **US\_E141**: 5.2.6.26

The text in the 2<sup>nd</sup> paragraph of the subclause references "THREE\_DIMENSIONAL\_ONLY", Table 5.21 references "THREE\_DIMENSIONAL", and the code following Table 5.21 references "THREE\_DIMENSIONAL". Correct the inconsistenc(ies).

## **RESPONSE:** Accept.

## **US\_E142**: 5.2.6.26

The text in the 3<sup>rd</sup> paragraph of the subclause references "TWO\_DIMENSIONAL", Table 5.21 references "TWO\_DIMENSIONAL\_OR\_SURFACE", and the code following Table 5.21 references "TWO\_DIMENSIONAL\_OR\_SURFACE". Correct the inconsistenc(ies).

## **RESPONSE:** Accept.

## **US\_E143**: 5.2.6.28 – 5.2.6.30

Provide hyperlinks to clause 2 for the references to ISO/IEC 18026, and cite the ISO/IEC 18026 subclause containing this information (similar to the EDCS subclause references in 5.2.7.9 - 5.2.7.13).

## **RESPONSE:** Accept.

#### **US\_E144**: Table 5.28

The values in the table cite "SINGLE\_LONG\_FLOAT" and "LONG\_FLOAT", but the code that follows the table references "SINGLE\_FLOAT" and "FLOAT". Correct the inconsistencies.

## **RESPONSE:** Accept.

## **US\_E145**: 5.2.7.9 – 5.2.7.13 -- (ref CD2 UK T099 response)

The names of these data types have not been changed to the names used in EDCS. For example, "EDCS\_Attribute\_Code" has not been changed to "Attribute\_Code".

## **RESPONSE:** Accept.

## US\_E146: 5.2.7.16

The code provided does not account for the usage of a value/index of 76 (i.e., the code jumps from 75 to 77..1000).

## **RESPONSE:** Accept.

## US\_E147: Tables 5.31, 5,35

In the THREE row, Relationships a, change "eqch" to read "each".

## **RESPONSE:** Accept.

## **US\_E148**: 5.2.7.19

The hyperlink to <u>Table 5.33</u> actually takes you to Table 5.63 instead.

## **RESPONSE:** Accept.

## US\_E149: Table 5.36

The last value in the table is "MEAN", but the code that follows the table references "AVERAGE". Correct the inconsistency.

## **RESPONSE:** Accept.

## **US E150**: Table 5.37

Spell out "HS" (Hierarchy Summary) in the table title. Such an abbreviation is not defined.

#### **US E151**: Table 5.39

The values in the table cite "I\_AND\_ALPHA" and "ALPHA", but the code that follows the table references "IA" and "A". Correct the inconsistencies.

## **RESPONSE:** Accept.

#### **US E152**: Table 5.40

In the 2<sup>nd</sup> non-header row, subparagraph a, change "color" to read "colour".

## **RESPONSE:** Accept.

## **US\_E153**: Table 5.40

The values in the table cite "RGB\_TO\_RGB\_ALPHA" and "RGB\_ALPHA\_TO\_RGB\_ALPHA", but the code that follows the table references "RGB\_TO\_RGBA" and "RGBA\_TO\_RGBA". Correct the inconsistencies.

## **RESPONSE:** Accept.

## **US\_E154**: Table 5.41

In the  $2^{nd}$  non-header row, change "... on top of anything the existing rendering" to read "... on top of anything in the existing rendering" (add the word "in").

## **RESPONSE:** Accept.

#### **US\_E155**: Table 5.41

In the last row, under "For images with image signature LUMINANCE\_ALPHA:", indent the line that reads "× image alpha".

## **RESPONSE:** Accept.

## **US\_E156**: Table 5.43

In the Description column for COLOUR\_COORDINATE\_1, change "the first for its colour model (G for RGB, M for CMY, or S for HSV)" to read "the first for its colour model (R for RGB, C for CMY, or H for HSV)".

## **RESPONSE:** Accept.

## **US E157**: Table 5.43

The code that follows the table has an enumerant named "BUMP", which does not appear as a value in the table. Correct the inconsistency.

## **RESPONSE:** Accept.

## **US\_E158**: Table 5.43

In the Description of the BUMP\_MAP\_HEIGHT row, change "omputing" to read "computing".

#### **RESPONSE:** Accept.

#### **US E159**: Table 5.45

In the 1<sup>st</sup> row, change "... instance is able reference its ..." to read "... instance is able to reference its ..." (add the word "to").

## **RESPONSE:** Accept.

## **US E160**: Table 5.46

In the code following the table, the value/index of "12" is used/listed twice (i.e., 12 and 12..1000).

## **RESPONSE:** Accept.

#### **US E161**: Table 5.48

In the code following the table, the value/index of "5" is used/listed twice (i.e., 5 and 5..1000).

## **US\_E162**: Table 5.49

The entries in the Value column appear in alphabetical order, however the code that follows the table has two entries out of alphabetical order -- 5:GIF and 6:EMF. The orderings should be consistent.

## **RESPONSE:** Accept.

## **US\_E163**: Table 5.52

In the IF row, the Definition appears to be missing a closing parenthesis.

## **RESPONSE:** Accept.

## **US\_E164**: Table 5.52

The table cites a value of "REFERENCE\_SURFACE\_ELEVATION", but the code that follows the table references "TERRAIN\_HEIGHT". Correct the inconsistency.

## **RESPONSE:** Accept.

## **US E165**: Table 5.52

In the TABLE\_VALUE row, change the definition from "This values allows" to read "This value allows" (make "values" singular).

## **RESPONSE:** Accept.

## **US\_E166**: Table 5.54

In the LIGHT\_DIRECTION row, change "<u><DRM Directional Light Rendering Behaviour></u>" to read "<u><DRM Directional Light Behaviour></u>" (delete the word "Rendering", and add italics), and correct the <u><DRM Geometry Representation></u> hyperlink to point to "Geometry\_Representation.html" instead of Geometry.html".

## **RESPONSE:** Accept.

## **US E167**: Table 5.54

In the MAJOR\_AXIS row, change "<<u>DRM Cylindrical Volume Extent> instance</u>" to read "<<u>DRM</u> <u>Cylindrical Volume Extent></u> instance" (delete the hyperlink from under the word "instance").

## **RESPONSE:** Accept.

## **US\_E168**: Table 5.54

In the REFLECTIVITY\_EMISSIVITY\_AZIMUTH row, change "Reflectivity and/or Emissivity" to read "reflectivity and/or emissivity" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E169**: Table 5.54

In the REFLECTIVITY\_NORMAL row, change "instancew" to read "instance".

## **RESPONSE:** Accept.

## **US E170**: Table 5.61

The table cites a value of "WVE", but the code that follows the table references "WVI". Correct the inconsistency.

## **RESPONSE:** Accept.

## **US E171**: Table 5.64

In the code following the table, the value/index of "2" is used/listed twice (i.e., 2 and 2..1000).

## **US\_E172**: 5.2.7.53 – 5.2.7.61

Cite the ISO/IEC 18026 subclause containing this information (similar to the EDCS subclause references in 5.2.7.9 - 5.2.7.13).

#### **RESPONSE:** Accept.

#### **US E173**: 5.2.7.73, 5.4.2

In the 1<sup>st</sup> sentence, change "behavior" to read "behaviour".

#### **RESPONSE:** Accept.

## **US\_E174**: Table 5.76

The table cites values of "LSR\_LOCATION\_3D\_U", "LSR\_LOCATION\_3D\_V" and "LSR\_LOCATION\_3D\_W", but the code that follows the table references "LSR\_LOCATION\_3D\_X", "LSR\_LOCATION\_3D\_Y" and "LSR\_LOCATION\_3D\_Z". Correct the inconsistencies.

## **RESPONSE:** Accept.

#### US\_E175: 5.2.8.4

In the 2<sup>nd</sup> paragraph, change "... traversed in the ordered specified ..." to read "... traversed in the order specified ..." (change "ordered" to read "order").

## **RESPONSE:** Accept.

#### **US\_E176**: 5.3.2.1

In the  $2^{nd}$  paragraph, change "Each dimensions shall be ..." to read "Each dimension shall be ..." (make "dimensions" singular).

## **RESPONSE:** Accept.

#### **US E177**: 5.3.3.14

The hyperlink <u><DRM Animation Related Geometry></u> actually points to Table 6.8, DRM\_Alternate\_Hierarchy\_Related\_Features. Correct the hyperlink.

#### **RESPONSE:** Accept.

# **US\_E178:** 5.3.3.22 The hyperlink <<u>*DRM Base Spatial Association Data>*</u> actually points to Table 6.22, DRM\_Base\_Summary\_Item. Correct the hyperlink.

#### **RESPONSE:** Accept.

#### **US E179**: 5.3.3.26

The hyperlink <u><DRM Browse Media></u> actually points to Table 6.24, DRM\_Blend\_Directional\_Light. Correct the hyperlink.

#### **RESPONSE:** Accept.

## **US\_E180**: 5.3.3.48

The hyperlink <u><DRM Colour Shininess></u> actually points to Table 6.39, *DRM\_Colour*. Correct the hyperlink.

#### **RESPONSE:** Accept.

#### **US E181**: 5.3.3.54

Correct the hyperlink <u><DRM Continuous Level of Detail Related Geometry></u> to read <u><DRM</u> <u>Continuous LOD Related Geometry></u> (correct both the name & the URL).

## **US\_E182**: 5.3.3.58

Correct the hyperlink <u><DRM Volume Level Of Detail Data></u> to read <u><DRM Volume LOD Data></u> (correct both the name & the URL).

## **RESPONSE:** Accept.

## **US\_E183**: 5.3.3.60

The  $2^{nd}$  sentence references "ISO 8601 (see 2.[I8601])", however all other references in this standard to normative references appear to be of the form "ISO 8601". Clarify the inconsistency.

## **RESPONSE:** Accept.

## US\_E184: 5.3.3.62 Data\_Table\_Data

Remove ">" for INTEGER.

## **RESPONSE:** Accept.

## US\_E185: 5.3.3.101

In the 4<sup>th</sup> paragraph from the bottom, change "Spatial Search Boundary" to read "spatial search boundary" (ISO capitalization).

## **RESPONSE:** Accept.

## US\_E186: 5.3.3.101

In the 3<sup>rd</sup> paragraph from the bottom, change "<u><DRM Continuous LOD Geometry></u>" to read "<u><DRM</u> <u>Continuous LOD Related Geometry></u>".

## **RESPONSE:** Accept.

## **US\_E187**: 5.3.3.102

Verify whether the phrase in the first sentence is correct: "... from an <u>*ORM Aggregate Feature>*</u> object or <u>*ORM Aggregate Feature>*</u> object ..." (appears to be duplicate wording).

## **RESPONSE:** Accept.

## **US\_E188**: 5.3.3.118

Correct the <u><DRM Inline\_Colour></u> hyperlink. It is inoperable online because it points to InLine\_Colour.html rather than to Inline\_Colour.html (note the "L" in "InLine").

## **RESPONSE:** Accept.

#### **US E189**: 5.3.3.137

In the 3<sup>rd</sup> sentence, change "two character" and "three character" to read "two-character" and "three-character" (add hyphens).

## **RESPONSE:** Accept.

## **US E190**: 5.3.3.145

Change the <u><DRM LSR Location 3D Control Link></u> hyperlink to read <u><DRM LSR 3D Location</u> <u>Control Link></u> (correct both the name & the URL).

## **RESPONSE:** Accept.

## US E191: 5.3.3.146

Change the <u><DRM LSR 3D Location></u> hyperlink to point to "LSR\_3D\_Location.html" instead of "LSR\_Location\_3D.html".

## **RESPONSE:** Accept.

## **US E192**: 5.3.3.203

Change the <<u>DRM Property Table Reference Control Link></u> hyperlink to point to "Property\_Table\_Reference\_Control\_Link.html" instead of "Light\_Source\_Control\_Link.html".

## US\_E193: 5.3.3.261

Change <u>*CRM Spatial Association Data>*</u> to read <u>*CRM Spatial Association Data>*</u> (remove italics), as per Table 6.247 and Figure 6.294.

## **RESPONSE:** Accept.

## **US\_E194**: 5.3.3.264

Change the <<u>DRM Spatial Index Related Feature Topology></u> hyperlink to point to "Spatial\_Index\_Related\_Feature\_Topology.html" instead of "Spatial\_Index\_Related\_Geometry\_Topology.html".

## **RESPONSE:** Accept.

US\_E195: 5.3.3.267 Change <u><DRM Spatial Index Related Topology Geometry></u> to read <u><DRM Spatial Index Related</u> Geometry Topology>.

## **RESPONSE:** Accept.

## **US\_E196**: 5.3.3.274 – 5.3.3.284

Cite the ISO/IEC 18026 subclause containing this information (similar to the EDCS subclause references in 5.2.7.9 - 5.2.7.13).

## **RESPONSE:** Accept.

## US\_E197: 5.3.3.291

The 2<sup>nd</sup> paragraph cites a "... state\_array in this data type", however the data type code provided cites a "state\_entry\_array". Correct the inconsistency.

## **RESPONSE:** Accept.

## **US E198**: 5.3.3.346

Change the <u><DRM World 3x3></u> hyperlink to point to "World\_3x3.html" instead of "World\_Transformation.html".

## **RESPONSE:** Accept.

## **US E199**: 5.4.2

In the last paragraph, change "behavioral" to read "behavioural".

## **RESPONSE:** Accept.

## **US\_E200**: 6.2.3.a

This sentence repeats the same verbiage as the  $1^{st}$  sentence of 6.2.3. Delete 6.2.3.a, and renumber all subsequent 6.2.3.x subparagraphs accordingly.

## **RESPONSE:** Accept.

## **US\_E201**: 6.2.11.a, 6.2.15.a, 6.2.15.b

Change <u>*CDRM Feature Face Ring>*</u> to read <u>*CDRM Feature Face Ring>*</u> (remove italics), as per Table 6.77 and Figure 6.88.

## **RESPONSE:** Accept.

## **US\_E202**: 6.2.11.a, 6.2.15.a, 6.2.15.c

The <u><DRM Geometry Face Ring></u> hyperlinks in these subclauses are inoperable because it appears that either it is no longer a valid class name, or the Geometry\_Face\_Ring.html page is missing from the ISO/IEC FCD 18023-1 zip file distribution.

## **RESPONSE:** Accept.

## **US\_E203**: 6.2.20.b.3

Change the URL that <u>tag</u> points to from "Classification\_Data.html" to read "Classification\_Data.html#tag", and also implement such a hyperlink in 6.2.20.c.2 and 6.2.20.d.2.

## **US E204**: 6.2.21

Change the subclause title (and all references to it) from "Inheritance rule for Location" to read "Inheritance rule for location" (ISO capitalization).

#### **RESPONSE:** Accept.

## **US\_E205**: Table 6.2

In the 5<sup>th</sup> paragraph of the <u><DRM Responsible Party></u> row, change "the Contact\_Information> value" to read "the Contact\_Information value" (delete the ">" character).

#### **RESPONSE:** Accept.

#### **US E206**: 6.2.31

In the first paragraph, change "Associations are. By this rule:" to read "Associations are, by this rule:".

## **RESPONSE:** Accept.

## **US\_E207**: 6.2.33

Change the subclause title (and all references to it) from "Non-empty Model" to read "Non-empty model" (ISO capitalization).

#### **RESPONSE:** Accept.

## **US\_E208**: 6.2.40

In the  $2^{nd}$  paragraph (and throughout from this point forward), change <u><DRM Feature></u> and <u><DRM</u> <u>Geometry></u> to read <u><DRM Feature Representation></u> and <u><DRM Geometry Representation></u> (correct the names & the URLs).

## **RESPONSE:** Accept.

## US\_E209: 6.2.47.b.3

Change the <u><DRM Spatial Extent></u> hyperlink to point to "Spatial\_Extent.html" rather than to "Spatial\_Domain.html".

#### **RESPONSE:** Accept.

#### **US E210**: 6.2.51.b.2.ii

Verify whether the 1<sup>st</sup> sentence should begin "If S's strict\_organizing\_principle has value TRUE, ..." (adding the word "TRUE"), since the 2<sup>nd</sup> sentence begins "... has value FALSE, ...".

## **RESPONSE:** Accept.

## **US\_E211**: 6.2.53.a, 6.2.56.b

Change "EDCS Unit Equivalence Class" to read "EDCS unit equivalence class" (ISO capitalization).

## **RESPONSE:** Accept.

#### **US E212**: 6.2.55

Change the two hyperlinks to <u><DRM Absolute Time Point></u> to read either <u><DRM Absolute Time></u> or <u><DRM Absolute Time Interval></u>, as appropriate.

## **RESPONSE:** Accept.

## **US\_E213**: 6.2.55

In the  $1^{st}$  paragraph, change <u>6.2.55 Time dependency</u> to read <u>6.2.54 Time dependency</u>.

## **RESPONSE:** Accept.

#### **US E214**: 6.3.2 – 6.3.304

In the clause 6 tables that these subclauses reference, the names of *abstract* classes are not italicized in the Class and Class diagram rows of the tables. The names of abstract classes are italicized in the table

titles and when cited in other rows of these clause 6 tables (e.g., in Subclass, Definition, Clarifications, ... rows), and so it is unclear why this practice is not also adhered to for the Class and Class diagram row entries. Correct the inconsistencies.

## **RESPONSE:** Accept.

## **US\_E215**: 6.3.2 – 6.3.304, Tables 6.3 – 6.305

In the Constraints rows of these tables, the capitalization and punctuation of hyperlinks is often in error. For example, "<u>Publishable Object</u>" should read "<u>Publishable object</u>" (capitalization), as per subclause 6.2.46. Similarly, "<u>Non crossing aggregations</u>" should read "<u>Non-crossing aggregations</u>" (punctuation), as per subclause 6.2.29.

## **RESPONSE:** Accept.

## **US\_E216**: Table 6.4 — DRM\_Absolute\_Time\_Interval, definition, 1<sup>st</sup> paragraph

Add clarification indicator superscript 1 to <DRM Absolute Time>, i.e. <DRM Absolute Time><sup>1</sup>.

## **RESPONSE:** Accept.

## **US\_E217**: 6.3.2 - 6.3.302, Tables 6.3 - 6.303

In the Constraints rows, many of the hyperlinks only take you to the top of clause 6, rather than to the specific subclause(s) referenced. See the defective hyperlinks below.

Table(s)	Hyperlink(s)
1 able(s)	Trypermik(s)

6.3	Legal time ranges

6.6, 6.8, 6.14, 6.135,	Colour Mapping restrictions
6.166, 6.174, 6.178,	No attribute conflicts
6.187, 6.212, 6.251,	Precedence of Property Set Index
6.262, 6.277 & 6.303	

6.7, 6.9, 6.12, 6.34,Colour Mapping restrictions6.167, 6.175, 6.213,Distinct geometric centre6.252, 6.263 & 6.278No attribute conflictsPrecedence of Property Set Index

6.13 Colour Mapping restrictions <u>Continuous LOD restrictions</u> <u>Linear Geometry structure</u> <u>No attribute conflicts</u> <u>Precedence of Property Set Index</u>

> 6.16, 6.69, 6.121, 6.122, <u>Axis type restrictions</u> 6.194 & 6.218

6.19, 6.60, 6.117, 6.159, <u>LOD related organizing principle</u> 6.254 & 6.301

6.27, 6.83, 6.161 & 6.196 <u>No attribute conflicts</u>

6.33 <u>Colour Mapping restrictions</u> <u>Distinct link objects</u> <u>Precedence of Property Set Index</u>

- 6.39, 6.41 & 6.119 Colour Mapping restrictions
- 6.50 <u>Colour Mapping restrictions</u>

Continuous LOD restrictions Distinct geometric centre No attribute conflicts Precedence of Property Set Index

6.67, 6.177, 6.188,<br/>6.265, 6.299 & 6.302Colour Mapping restrictions<br/>Continuous LOD restrictionsNo attribute conflicts<br/>Precedence of Property Set Index

6.75 & 6.76Connected edge restrictionsFeature Edge restrictionsNo attribute conflicts

6.78, 6.80, 6.82, 6.94,No attribute conflicts6.96, 6.98 & 6.195Precedence of Property Set Index

6.81 <u>Connected edge restrictions</u> <u>Contained node restrictions</u> <u>No attribute conflicts</u>

6.85 <u>Connected edge restrictions</u> <u>Contained node restrictions</u> <u>No attribute conflicts</u> <u>Volume shell face consistency</u>

#### 6.86 <u>Volume shell face consistency</u>

6.87 <u>Colour Mapping restrictions</u> <u>Continuous LOD restrictions</u> <u>Finite Element Mesh structure</u> <u>No attribute conflicts</u> <u>Precedence of Property Set Index</u>

6.92 <u>Connected edge restrictions</u>

6.93 <u>Contained node restrictions</u>

6.95 <u>Continuous LOD restrictions</u>

6.97 <u>Connected edge restrictions</u>

6.101 <u>Connected edge restrictions</u> Contained node restrictions Faces bordering volumes

6.133 & 6.136 <u>Colour Mapping restrictions</u> <u>Continuous LOD restrictions</u> <u>Linear Geometry structure</u> <u>No attribute conflicts</u> Precedence of Property Set Index

6.144 <u>Colour Mapping restrictions</u> LOD related organizing principle No attribute conflicts Precedence of Property Set Index 6.145 Colour Mapping restrictions
Distinct geometric centre
LOD related organizing principle
No attribute conflicts
Precedence of Property Set Index

6.171 <u>Parallelepiped structure</u>

6.180 <u>Colour Mapping restrictions</u> <u>Continuous LOD restrictions</u> <u>No attribute conflicts</u> <u>Polygon as bounded plane</u> <u>Precedence of Property Set Index</u>

6.182 <u>Colour Mapping restrictions</u> <u>Continuous LOD restrictions</u> <u>No attribute conflicts</u> <u>Polyhedron structure</u> <u>Precedence of Property Set Index</u>

6.191 & 6.193 Property Characteristic restrictions
Property meaning restrictions

6.192 Property Characteristic restrictions

6.202 Axis type restrictions Finite Element Mesh structure

6.205 <u>No attribute conflicts</u> <u>Property Characteristic restrictions</u> <u>Property meaning restrictions</u>

6.219 & 6.220 Legal time ranges

6.234, 6.235 & 6.237 <u>Separating Plane related organizing principle</u>

6.236	Colour Mapping restrictions Distinct geometric centre No attribute conflicts Precedence of Property Set Index Separating Plane related organizing principle
6.289 & 6.293	Union organizing principle
6.290	<u>Classification data constraint</u> <u>Colour Mapping restrictions</u> <u>No attribute conflicts</u> <u>Precedence of Property Set Index</u> <u>Union organizing principle</u>
6.291 & 292	<u>Classification data constraint</u> <u>Colour Mapping restrictions</u> <u>Distinct geometric centre</u> <u>No attribute conflicts</u> <u>Precedence of Property Set Index</u> Union organizing principle

6.294	Classification data constraint
	Colour Mapping restrictions
	Continuous LOD restrictions
	Distinct geometric centre
	No attribute conflicts
	Precedence of Property Set Index
	Union organizing principle
6.295	Variable meaning restrictions

## **US\_E218**: 6.3.5 – 6.3.298

In many (but not all) of these subclauses, italicization of *abstract class names* is inconsistent. For example, in 6.3.5, *DRM\_Aggregate\_Feature* is italicized in the subclause title and in the reference to Table 6.6, but not in the text of subclause 6.3.5. Similarly, in 6.3.298, *DRM\_Volume\_Geometry* is italicized in the subclause title and in the reference to Table 6.299, but not in the text of subclause 6.3.298. Correct the inconsistencies.

## **RESPONSE:** Accept.

## **US\_E219**: 6.3.5, Table 6.6 -- (*ref CD2 UK T117, US G001 responses*)

The reference to the abstract class <DRM Aggregate Feature> in the Class row is not italicized. This error is still prevalent throughout the standard, particularly in the clause 6 tables.

## **RESPONSE:** Accept.

## **US\_E220**: 6.3.16, Table 6.17

In the Definition row, change "Azimuthal spherical (Az)" to read "Azimuthal spherical (AZ)".

## **RESPONSE:** Accept.

## **US\_E221**: 6.3.16 – 6.239, Tables 6.17 - 6.240

In the Definition rows of the following tables, change "The coordinate field ..." to read "The coordinate field ...", and hyperlink coordinate to the Field elements row.

6.17, 6.35, 6.62, 6.63, 6.66, 6.125, 6.126, 6.146, 6.147, 6.151 - 6.158, 6.168, 6.169, 6.179, 6.207, 6.208, 6.232, 6.238 - 6.240

## **RESPONSE:** Accept.

## **US\_E222**: 6.3.26, Table 6.27

In the Definition row, 5<sup>th</sup> paragraph, change "... that can be described by in one of ..." to read "... that can be described in one of ..." (delete the word "by").

## **RESPONSE:** Accept.

## **US\_E223**: 6.3.26, Table 6.27

In the Example(s) row, possibly the phrase "God's eye view" should be replaced by "bird's eye view". In any case, the reference to "God" should be removed from this International Standard, and replaced with some other technical (non-religious) means to describe the intended concept.

## **RESPONSE:** Accept.

## **US\_E224**: 6.3.29, Table 6.30

In the Definition row, change "Celestiodetic Surface" to read "Celestiodetic (CD) Surface".

## **RESPONSE:** Accept.

## **US\_E225**: 6.3.31, Table 6.32

The meaning of ECC is given in the Example(s) row, however it should appear first in the Definition row, as should the meaning of EAC.

#### **US\_E226**: 6.3.34

In the subclause text and the reference to Table 6.35, change "DRM\_CM\_Location" to read "DRM\_CM\_3D\_Location" (insert the "\_3D"), as per the subclause title and Table 6.35.

#### **RESPONSE:** Accept.

#### **US\_E227**: 6.3.34, Table 6.35

In the Definition row, change "Celestiomagnetic 3D SRF" to read "Celestiomagnetic (CM) 3D SRF".

## **RESPONSE:** Accept.

#### **US\_E228**: 6.3.40, 6.3.42, Tables 6.41 and 6.43

In the Example(s) rows, change "Out-the-Window (OTW)" to read "out-the-window (OTW)" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E229**: 6.3.41 – 6.3.286, Tables 6.42 – 6.287

In the Example(s) rows, the text in the following figures is blurry and difficult to read (all figures in the clause 6 tables are a little hazy, but these are particularly difficult to read).

Table		Figure(s)
6.42		6.44
6.61		6.69 - 6.71
6.64		6.75
	6.77	6.89
	6.193	6.223
6.205		6.241
6.212		6.249 & 6.250
6.213		6.252 & 6.253
6.215		6.256
	6.216	6.258 & 6.260
6.221		6.266
6.230		6.276
6.236		6.283
6.252		6.300
6.258		6.307
6.263		6.314 & 6.315
6.268		6.322
6.278		6.333 & 6.334
6.283		6.340
6.287		6.345

## **RESPONSE:** Accept.

## **US\_E230**: 6.3.44, Table 6.45

In the Example(s) row, 2<sup>nd</sup> paragraph, change "Out the Window (OTW)" to read "out-the-window (OTW)" (punctuation and ISO capitalization), and change "Night Vision Goggles (NVG)" to read "night vision goggles (NVG)" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E231**: 6.3.46

In the subclause text, change "DRM\_Colour\_Table\_Library" to read "DRM\_Cone\_Directional\_Light", as per the subclause title and the reference to Table 6.47.

## **US\_E232**: 6.3.46, Table 6.47

In the Definition row, 5<sup>th</sup> paragraph, change "Tvalue" to read "The value".

## **RESPONSE:** Accept.

## **US\_E233**: 6.3.46, Table 6.47

In the Example(s) row, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence, change "... <u><DRM Cone Directional Light></u>, instance, then all ..." to read "... <u><DRM Cone Directional</u> Light> instance, then all ..." (remove the incorrectly placed comma before "instance").

## **RESPONSE:** Accept.

## US\_E234: 6.3.46, Table 6.47

In the Example(s) row, 3<sup>rd</sup> paragraph, change "<u>parallel\_gravity</u> = = TRUE" to read "parallel\_gravity = TRUE" (remove the duplicate equality sign).

## **RESPONSE:** Accept.

## **US\_E235**: 6.3.49, Table 6.50

In the Example(s) row, change all occurrences of "Continuous LOD node" to read "continuous LOD node" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E236**: 6.3.51, Table 6.52

In the Example(s) row, change "Statement of Work" to read "statement of work", and change "Product Specification" to read "product specification" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E237**: 6.3.52, Table 6.53

In the Definition row,  $3^{rd} - 5^{th}$  paragraphs, change the 3 field element names to a Courier font, and hyperlink them to the Field elements row.

## **RESPONSE:** Accept.

## **US\_E238**: 6.3.52, Table 6.53

In the Example(s) row, change "modeled" to read "modelled".

## **RESPONSE:** Accept.

## **US\_E239**: 6.3.57, Table 6.58

In the Definition row, the [Foley] hyperlink is inoperable online because it points to bibliography.html instead of Bibliography.html. Correct the hyperlink.

## **RESPONSE:** Accept.

## **US\_E240**: 6.3.59, Table 6.60

In the Example(s) row, change all occurrences of "super-imposed" to read "superimposed".

## **RESPONSE:** Accept.

## **US\_E241**: 6.3.60, Table 6.61

In the Definition row, 1<sup>st</sup> paragraph, change "that are used that transmittal" to read "that are used in that transmittal" (insert the missing word "in").

## **RESPONSE:** Accept.

#### **US E242**: 6.3.60, Table 6.61

In the Clarifications row, #3, clarify the meaning of "... represents a class used in the entire the given transmittal". Possibly the words "the given" should be deleted.

## **US\_E243**: 6.3.61, Table 6.62

In the Definition row, change "Equidistant Cylindrical Augmented" to read "Equidistant Cylindrical (EC) Augmented".

## **RESPONSE:** Accept.

## **US\_E244**: 6.3.63, Table 6.64

In the Definition row, 1<sup>st</sup> paragraph, change "ECC and a set of and a set of" to read "ECC and a set of".

## **RESPONSE:** Accept.

## **US\_E245**: 6.3.68, Table 6.69

In the Example(s) row, change "<u>axis\_value\_array[]</u>" to read "<u>axis\_value\_array</u>" in both places (remove the square brackets). This notation is not employed elsewhere when referencing array names.

## **RESPONSE:** Accept.

## **US E246**: 6.3.72, Table 6.73

In the Definition row, change "The front field ..." to read "The front field ...", and hyperlink front to the Field elements row.

## **RESPONSE:** Accept.

## **US E247**: 6.3.76, Table 6.77

In the Example(s) row, change "2" to read "two" in both places.

#### **RESPONSE:** Accept.

#### **US\_E248**: 6.3.85, Table 6.86

In the Definition row, clarify whether the <u>universal</u> hyperlink should point to the Field elements row in Table 6.86, vice Table 6.85.

## **RESPONSE:** Accept.

## **US\_E249**: 6.3.90, Table 6.91

In the Example(s) row, in Figures 6.105 and 6.106, change "DRM 3D Location" to read "DRM Location 3D". And the text in Figure 6.107 is too small, which makes it difficult to read.

## **RESPONSE:** Accept.

## **US E250**: 6.3.94, Table 6.95

In the Clarifications row, #3, change "<u>Non empty Model</u>" to read "<u>Non empty model</u>" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E251**: 6.3.96, Table 6.97

In the Clarifications row, #4, clarify the meaning of: "The that contains the , if any" (several words/class names appear to be missing).

#### **RESPONSE:** Accept.

## **US E252**: 6.3.97, Table 6.98

In the Definition row, change "... this DRM class species" to read "... this DRM class specifies" (correct the spelling of "specifies").

#### **RESPONSE:** Accept.

## **US E253**: 6.3.106, Table 6.107

In the Example(s) row, Figures 6.124 and 6.125 are too wide, and cause the table to extend beyond 100% of the window size, causing the reader of the table to have to scroll left and right to read the

table contents. Make these figures narrower -- so the table does not extend beyond 100% of the window size.

## **RESPONSE:** Accept.

#### **US E254**: 6.3.106, Table 6.107

In the Example(s) row, 2<sup>nd</sup> paragraph, change "can therefore summarized as follows" to read "can therefore be summarized as follows" (insert the word "be").

#### **RESPONSE:** Accept.

## **US\_E255**: 6.3.106, Table 6.107

In the Example(s) row, Figure 6.125, in the class names, change "Level of Detail" to read "LOD" (4 places).

## **RESPONSE:** Accept.

#### **US E256**: 6.3.106, Table 6.107

In the Example(s) row, 4<sup>th</sup> paragraph, change "EDCS Classification Codes" to read "EDCS classification codes", and change "EDCS Attribute Codes" to read "EDCS attribute codes" (ISO capitalization).

#### **RESPONSE:** Accept.

## **US\_E257**: 6.3.110, Table 6.111

In the Definition row, 4<sup>th</sup> paragraph, change "<u>level\_count</u> == 1" to read "<u>level\_count</u> = 1" (delete the duplicate equals sign).

#### **RESPONSE:** Accept.

#### **US\_E258**: 6.3.110, Table 6.111

In the Definition row, only about half of the field names are hyperlinked to the Field elements row. Hyperlink all field names to the Field elements row.

## **RESPONSE:** Accept.

#### **US\_E259**: 6.3.110, Table 6.111

In the Definition row, in the 1<sup>st</sup> NOTE, change "material\_1" to read "material 1" (remove the incorrect underscore).

#### **RESPONSE:** Accept.

#### **US E260**: 6.3.110, Table 6.111

In the Example(s) row, change "Dismounted Infantryman icon" to read "dismounted infantryman icon", change "Infrared properties" to read "infrared properties", change "Night Vision Goggles properties" to read "night vision goggles properties", and change "Surface Material Category properties" to read "surface material category properties" (ISO capitalization).

#### **RESPONSE:** Accept.

## **US\_E261**: 6.3.113, Table 6.114

In the Definition row, only about half of the field names are hyperlinked to the Field elements row. Hyperlink all field names to the Field elements row.

## **RESPONSE:** Accept.

## **US\_E262**: 6.3.114, Table 6.115

In the Example(s) row,  $1^{st}$  paragraph, clarify the meaning of: "... the <u><DRM Image></u> is mapped the <u><DRM Polygon></u> using ..." (is the word "to" missing following "mapped"?).

## **US\_E263**: 6.3.128, Table 6.129

In the Example(s) row, change "An example might be a <u><DRM Point></u>, instance where …" to read "An example might be a <u><DRM Point></u> instance, where …" (reposition the incorrectly-placed comma).

## **RESPONSE:** Accept.

## **US\_E264**: 6.3.133, Table 6.134

In the Definition row, 1<sup>st</sup> paragraph, change "An instance of this DRM class either provides …" to read "An instance of this DRM class provides …" (delete "either", since the OR portion is provided in the subsequent, rather than the same, sentence).

## **RESPONSE:** Accept.

## **US\_E265**: 6.3.135, Table 6.136

In the Definition row, 1<sup>st</sup> paragraph, change "derived form this" to read "derived from this" (change "form" to read "from").

## **RESPONSE:** Accept.

## **US\_E266**: 6.3.139, Table 6.140

In the Definition row, 1<sup>st</sup> paragraph, change "derived from this this DRM class" to read "derived from this DRM class" (delete the duplicate "this").

## **RESPONSE:** Accept.

## **US\_E267**: 6.3.140, Table 6.141

In the Definition row, change "... two dimensional ..." to read "... two- dimensional ..." (insert the missing hyphen).

## **RESPONSE:** Accept.

## **US\_E268**: 6.3.141, Table 6.142

In the Definition row, change "... three dimensional ..." to read "... three-dimensional ..." (insert the missing hyphen).

## **RESPONSE:** Accept.

## **US\_E269**: 6.3.144, Table 6.145

In the Example(s) row, Figures 6.167 and 6.168, in the class names, change "Level of Detail" to read "LOD" (3 and 4 places, respectively).

## **RESPONSE:** Accept.

## US\_E270: 6.3.145, Table 6.146

In the Definition row, change "Local Space Rectangular (LSR2) 2D SRF" to read "Local Space Rectangular (LSR2) 2D SRF" (remove the extraneous "2" following LSR).

## **RESPONSE:** Accept.

## US\_E271: 6.3.148, Table 6.149

In the Example(s) row, 2<sup>nd</sup> bullet, change "modeled" to read "modelled".

## **RESPONSE:** Accept.

## **US\_E272**: 6.3.154, Table 6.155

In the Example(s) row, change "Local Tangent Euclidean SRF" to read "Local Tangent Space Euclidean SRF" (insert "Space").

## **RESPONSE:** Accept.

## **US\_E273**: 6.3.155, Table 6.156

In the Example(s) row, change "Local Tangent Euclidean (Surface) SRF" to read "Local Tangent Space Euclidean Surface" (insert "Space" and delete parentheses).

## **US\_E274**: 6.3.156, Table 6.157

In the Definition row, change "Augmented Mercator (MA) 3D SRF" to read "Mercator (M) Augmented 3D SRF".

## **RESPONSE:** Accept.

**US\_E275**: 6.3.157, Table 6.158 In the Example(s) row, change "Mercator SRF" to read "Mercator Surface SRF".

## **RESPONSE:** Accept.

## **US\_E276**: 6.3.160, Table 6.161

In the Clarifications row, clarify whether the <u>name</u> hyperlink should point to Table 6.161, versus Table 6.111.

#### **RESPONSE:** Accept.

## **US\_E277**: 6.3.161, Table 6.162

In the Constraints row, the meaning of the superscripted "1" ( $\underline{\text{Distinct link objects}^{1}$ ) is unclear, as its hyperlink is inoperative. Clarify.

## **RESPONSE:** Accept.

#### **US E278**: 6.3.167

In the subclause text, change "DRM\_OM\_Augmented\_3D\_LocationD" to read "DRM\_OM\_Augmented\_3D\_Location" (delete the "D" suffix).

## **RESPONSE:** Accept.

## **US\_E279**: 6.3.167, Table 6.168

In the Definition row, change "Oblique Mercator Augmented (OMA)" to read "Oblique Mercator (OM) Augmented".

## **RESPONSE:** Accept.

#### **US E280**: 6.3.168, Table 6.169

In the Example(s) row, change "Oblique Mercator SRF" to read "Oblique Mercator Surface SRF".

## **RESPONSE:** Accept.

## **US E281**: 6.3.179, Table 6.180

In the Definition row, 2<sup>nd</sup> paragraph, change "Polygon\_Flag tokens" to read "Polygon\_Flags tokens", as per the Field elements row.

## **RESPONSE:** Accept.

## **US E282**: 6.3.188, Table 6.189

In the Example(s) row, change "... and not is not an ..." to read "... and is not an ..." (remove the extraneous "not").

## **RESPONSE:** Accept.

# **US\_E283**: 6.3.189, Table 6.190

In the Example(s) row, change "ARC / INFO" to read "ArcInfo".

## **RESPONSE:** Accept.

## **US E284**: 6.3.192, Table 6.193

In the Example(s) row, in the text following the figure, begin subparagraph a) and b) with "the", versus "The".

## **US\_E285**: 6.3.193, Table 6.194

In the Definition row, 2<sup>nd</sup> paragraph, the end of the paragraph is missing a right closing parenthesis. Also, in subparagraph b), change "but as mentioned in a. above" to read "but as mentioned in a) above".

## **RESPONSE:** Accept.

## **US\_E286**: 6.3.195, Table 6.196

In the Example(s) row, 1<sup>st</sup> bullet, change "... instance, that references ..." to read either "... instance that references ..." (change "that" to read "which").

## **RESPONSE:** Accept.

## **US\_E287**: 6.3.195, Table 6.196

In the Example(s) row, 7<sup>th</sup> bullet, change "... then the three that are ..." to read "... then the two that are ...".

#### **RESPONSE:** Accept.

## **US\_E288**: 6.3.195, Table 6.196

In the Example(s) row, 8<sup>th</sup> bullet, change "... and and the second ..." to read "... and the second ..." (remove the duplicate "and").

#### **RESPONSE:** Accept.

#### **US\_E289**: 6.3.199, Table 6.200

In the Example(s) row, 3<sup>rd</sup> bullet, change "modelers" to read "modellers".

## **RESPONSE:** Accept.

#### **US\_E290**: 6.3.203, Table 6.204

In the Example(s) row, Figure 6.236 is missing / does not appear when viewed online because the hyperlink cites "PTRCLk\_Ex1a.png", whereas the actual filename is "PTRCLK\_Ex1a.png". All systems that enforce case-sensitivity for filenames will not display this image as coded in the html.

## **RESPONSE:** Accept.

## **US\_E291**: 6.3.204, Table 6.205

In the Example(s) row, last bullet, change "... measurements that that relate to ..." to read "... measurements that relate to ..." (remove the duplicate "that").

## **RESPONSE:** Accept.

#### **US\_E292**: 6.3.206, Table 6.207

In the Definition row, change "Polar Stereographic Augmented (PSA)" to read "Polar Stereographic (PS) Augmented".

## **RESPONSE:** Accept.

#### **US\_E293**: 6.3.209, Table 6.210

In the Definition row, 2<sup>nd</sup> paragraph, change "horizontal\_width or vertical\_width" to read "horizontal\_width or vertical\_width" (change field element fonts to Courier), and clarify the meaning of "... the value infinity is implied there are no bounds in that direction" (possibly an "and" should be inserted following "implied").

## **RESPONSE:** Accept.

## **US E294**: 6.3.214, Table 6.215

In the Definition row, 1<sup>st</sup> subparagraph c), change "(The initial default ..." to read "(the initial default ..." (capitalization is not required unless this were a separate sentence).

## **US\_E295**: 6.3.214, Table 6.215

In the Definition row, following 2<sup>nd</sup> subparagraph b), change "complexity)" to read "complexity" (remove the closing parenthesis).

## **RESPONSE:** Accept.

## **US\_E296**: 6.3.214, Table 6.215

In the Definition row, 2<sup>nd</sup> subparagraph c), change "Distance, Index, Map Scale, or Spatial Resolution" to read "distance, index, map scale, or spatial resolution" (ISO capitalization), and change "cases a and/or b above" to read "cases a) and/or b) above" (insert right parentheses).

## **RESPONSE:** Accept.

## **US\_E297**: 6.3.214, Table 6.215

In the Definition row, subparagraph d), change "cases a, b, or c" to read "cases a), b), or c)".

## **RESPONSE:** Accept.

## **US\_E298**: 6.3.214, Table 6.215

In the Definition row, last two paragraphs, hyperlink the field element names (multiplicity\_rule and lod\_rule) to the Field elements row.

## **RESPONSE:** Accept.

## **US\_E299**: 6.3.215, Table 6.216

In the Example(s) row, in the 4<sup>th</sup> bullet, change "modeled" to read "modelled" (international spelling), and change "retro- reflector" to read "retro-reflector" (remove the extra space character).

#### **RESPONSE:** Accept.

#### **US\_E300**: 6.3.217, Table 6.218

In the Definition row, 1<sup>st</sup> paragraph, change "class is an concrete instance" to read "class is a concrete instance" (change "an" to "a").

## **RESPONSE:** Accept.

## **US E301**: 6.3.217, Table 6.218

In the Definition row,  $5^{th}$  paragraph, change "(fe.g" to read "(e.g".

## **RESPONSE:** Accept.

## **US\_E302**: 6.3.217, Table 6.218

In the Example(s) row, 2<sup>nd</sup> paragraph, change "wind-chill" and "wind-speed" to read "wind chill" and "wind speed" (remove the incorrect hyphens).

## **RESPONSE:** Accept.

## **US\_E303**: 6.3.218, Table 6.219

In the Example(s) row, change "The date / time is a astronomical ..." to read "The date / time is an astronomical ..." (change "a" to "an").

## **RESPONSE:** Accept.

## **US E304**: 6.3.220, Table 6.221

In the Definition row, 2<sup>nd</sup> paragraph, change

"(<u>rendering\_priority</u>)" to read "(<u>rendering\_priority</u>)" (remove the extra space character).

## **RESPONSE:** Accept.

## **US\_E305**: 6.3.220, Table 6.221

In the Example(s) row, 1<sup>st</sup> bullet, change "modeler" to read "modeller".

## **US\_E306**: 6.3.220, Table 6.221

In the Example(s) row, 2<sup>nd</sup> bullet, change "instancecould be either" to read "instance could be either" (insert a space between the first two words).

## **RESPONSE:** Accept.

## **US E307**: 6.3.220, Table 6.221

In the Example(s) row, 3<sup>rd</sup> bullet, change "A plan view display ..." to read "A plan view display ..." (remove the duplicate space character between "plan" and "view").

## **RESPONSE:** Accept.

## **US\_E308**: 6.3.222, Table 6.223

In the Definition row, 2<sup>nd</sup> paragraph, change "the phrase the term *the data set*" to read either "the phrase *the data set*" or "the term *the data set*".

## **RESPONSE:** Accept.

**US\_E309**: 6.3.222, Table 6.223

In the Example(s) row, clarify the meaning of "The for the instance in this example ...".

## **RESPONSE:** Accept.

## **US E310**: 6.3.223, Table 6.224

In the Definition row, 2<sup>nd</sup> paragraph, change "colour model isoften" to read "colour model is often" (insert a space character between the last two words).

## **RESPONSE:** Accept.

## **US\_E311**: 6.3.224, Table 6.225

In the Definition row, change "redfield" to read "red field", change "greenfield" to read "green field", and change "bluefield" to read "blue field" (insert a space character between the two words).

## **RESPONSE:** Accept.

## US\_E312: 6.3.229, Table 6.230

In the Example(s) row, change the example title from "Externally Controlled Table-Based Animation" to read "Externally controlled table-based animation" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E313**: 6.3.230, Table 6.231

In the Definition row, 1<sup>st</sup> paragraph, change "(see examples)" to read "(see example)", as only a single example is provided.

## **RESPONSE:** Accept.

## **US\_E314**: 6.3.231, Table 6.232

In the Definition row, 1<sup>st</sup> paragraph, change "Geocentric Solar Ecliptic (GSE)" to read "Geocentric Solar Ecliptic (SEC)".

## **RESPONSE:** Accept.

#### **US E315**: 6.3.231, Table 6.232

In the Example(s) row, change "SEC" to read "Geocentric SEC".

## **RESPONSE:** Accept.

## **US E316**: 6.3.232

In the subclause text and the reference to Table 6.233, change "DRM\_SEDRIS\_Abstract\_ Base" to read "DRM\_SEDRIS\_Abstract\_Base" (delete the extra space before the word "Base").

## **US\_E317**: 6.3.241, Table 6.242

In the Definition row, subparagraph b), change "three dimensional" to read "three-dimensional" (insert the required hyphen).

## **RESPONSE:** Accept.

#### **US E318**: 6.3.241, Table 6.242

In the Definition row, subparagraph c), change "two dimensional" to read "two-dimensional", and change "three dimensional" to read "three-dimensional" (insert the required hyphens).

## **RESPONSE:** Accept.

#### **US\_E319**: 6.3.241, Table 6.242

In the Example(s) row, subparagraph b) is missing a closing parenthesis.

#### **RESPONSE:** Accept.

## **US\_E320**: 6.3.249, Table 6.250

In the Example(s) row, use consistent notation to represent "10 km" (versus 10km) and 500m (versus 500 m).

## **RESPONSE:** Accept.

#### **US E321**: 6.3.250, Table 6.251

The Example(s) row states: "See <u>Spatial index related organizing principle</u>, example #2", however this referenced subclause does not identify an "example #2".

#### **RESPONSE:** Accept.

#### **US\_E322**: 6.3.254, Table 6.255

In the Definition row, 1<sup>st</sup> paragraph, change "The effect is cause by light reflected ..." to read "The effect is caused by light reflected ..." (change "cause" to "caused").

## **RESPONSE:** Accept.

## **US\_E323**: 6.3.255, Table 6.256

In the Definition row, 2<sup>nd</sup> paragraph, change "The <u>radius</u> fields …" to read "The <u>radius</u> field …", as there is only one field.

#### **RESPONSE:** Accept.

#### **US\_E324**: 6.3.256, Table 6.257

In the Definition row, 1<sup>st</sup> paragraph, change "the radius field" to read "the radius field" and hyperlink radius to the Inherited field elements row, and change "This results in a cone-shaped ..." to read "This results in a cone-shaped ...".

#### **RESPONSE:** Accept.

## **US\_E325**: 6.3.256, Table 6.257

In the Definition row, there are three instances of "case: 0.0" that are all different in content. Clarify.

## **RESPONSE:** Accept.

#### **US\_E326**: 6.3.256, Table 6.257

In the Example(s) row, 2<sup>nd</sup> bullet, change "... as the source ..." to read "... as the source ..." (remove the extra space character between "the" and "source").

## **RESPONSE:** Accept.

## **US\_E327**: 6.3.261, Table 6.262

In the Example(s) row, 2<sup>nd</sup> paragraph, change "active\_state" to read "active\_state\_value".

## **US E328**: 6.3.262, Table 6.263

In the Example(s) row, paragraph following 1<sup>st</sup> subparagraph b), change "... value is provided which ..." to read "... value is provided that ..." (change "which" to "that"), and change "This is allows the ..." to read "This allows the ..." (remove incorrect "is").

#### **RESPONSE:** Accept.

## **US\_E329**: 6.3.262, Table 6.263

In the Example(s) row, 3<sup>rd</sup> bullet, change "modeled" to read "modelled".

#### **RESPONSE:** Accept.

#### **US\_E330**: 6.3.265, Table 6.266

In the Definition row, change "The symbol\_urn fields ..." to read "The symbol\_urn fields ...", and hyperlink symbol\_urn to the Field elements row.

## **RESPONSE:** Accept.

**US E331**: 6.3.268, Table 6.269

In the Definition row, change "image specified" to read "image-specified" (insert the missing hyphen).

## **RESPONSE:** Accept.

**US\_E332:** 6.3.270, Table 6.271 In the Example(s) row, change "lower left" to read "lower-left" (insert the missing hyphen).

#### **RESPONSE:** Accept.

**US\_E333:** 6.3.278, Table 6.279 In the Definition row, change "Transverse Mercator Augmented (TMA)" to read "Transverse Mercator (TM) Augmented".

#### **RESPONSE:** Accept.

**US\_E334**: 6.3.278, Table 6.279 In the Example(s) row, change "Transverse Mercator SRF" to read "TM Augmented SRF" (2 places).

#### **RESPONSE:** Accept.

**US\_E335**: 6.3.279, Table 6.280 In the Example(s) row, change "Transverse Mercator SRF" to read "TM Surface SRF" (2 places).

#### **RESPONSE:** Accept.

# US\_E336: 6.3.280, Table 6.281

In the Example(s) row, change "modeled" to read "modelled".

## **RESPONSE:** Accept.

## **US\_E337**: 6.3.286, Table 6.287

In the Definition row, subparagraph d), change "EDCS Classifications" to read "EDCS classifications" (ISO capitalization).

## **RESPONSE:** Accept.

#### **US\_E338**: 6.3.290, Table 6.291

In the Example(s) row, change "modeled" to read "modelled", and change "Radar Cross-section (RCS)" to read "radar cross-section (RCS)".

## **US\_E339**: 6.3.293, Table 6.294

In the Example(s) row, 3<sup>rd</sup> paragraph, change "the order in in which" to read "the order in which" (remove the duplicate "in").

## **RESPONSE:** Accept.

## **US\_E340**: 6.3.300, Table 6.301

In the Example(s) row, 1<sup>st</sup> paragraph, change "... used outside that volume" to read "... used beyond 1000m of the runway".

## **RESPONSE:** Accept.

## **US\_E341**: 6.3.303, Table 6.304

In the Definition row, 1<sup>st</sup> paragraph, change "nine element matrix" to read "nine-element matrix" (insert the missing hyphen).

#### **RESPONSE:** Accept.

## **US\_E342**: 6.3.304, Table 6.305

In the Example(s) row,  $2^{nd}$  bullet, change "The location, and orientation of ..." to read "The location and orientation of ..." (delete the extraneous comma).

## **RESPONSE:** Accept.

#### **US\_E343**: 7.2, Table 7.2

Fill-in the missing descriptions in the Semantics, Success status codes, and Failure status codes rows; and in the Output parameters row, left justify the **Parameter name** heading.

## **RESPONSE:** Accept.

#### **US\_E344:** 7.3.3, Table 7.4

In the Semantics row, in the 1<sup>st</sup> bullet following the NOTE, clarify the meaning of "Current status code is set to SUCCESS the requested composition relationship is added if …" (is an "and" missing between "SUCCESS" and "the requested …"?).

## **RESPONSE:** Accept.

#### **US\_E345**: 7.3.5, Table 7.6

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E346**: 7.3.7, Table 7.8

In the Semantics row, 2<sup>nd</sup> paragraph, change "An iterator are expected to retain ..." to read "An iterator is expected to retain ..." (change "are" to read "is").

## **RESPONSE:** Accept.

## **US\_E347**: 7.3.10, Table 7.11

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E348**: 7.3.11, Table 7.12

In the Semantics row, 1<sup>st</sup> bullet, clarify the meaning of "... the reference count for this object is decremented a valid parameter was passed in and ..." (is an "if" missing between "decremented" and "a valid parameter ..."?).

## **US\_E349**: 7.3.11, Table 7.12

In the Semantics row, 1<sup>st</sup> bullet, 2<sup>nd</sup> sentence, change "The" to read "The" (correct the font size on the leading "T").

## **RESPONSE:** Accept.

## **US\_E350**: 7.3.11, Table 7.12

In the Semantics row, 4<sup>th</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E351**: 7.3.12 – 7.3.17, Tables 7.13 - 7.18

In the Semantics rows, 3<sup>rd</sup> paragraphs, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

#### **RESPONSE:** Accept.

## **US\_E352**: 7.3.16, 7.3.24, Tables 7.17 and 7.25

In the Input/output parameters row, delete the horizontal line beneath the "None" entries, and unbold the "None" entries.

#### **RESPONSE:** Accept.

## **US\_E353**: 7.3.18, Table 7.19

In the Semantics row, 2<sup>nd</sup> bullet under "When this function completes in error", clarify the meaning of "... and no changes are if no aggregate object ..." (is a "made" missing between "are" and "if no aggregate object ..."?).

#### **RESPONSE:** Accept.

## **US\_E354**: 7.3.20, Table 7.21

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

#### **RESPONSE:** Accept.

## **US\_E355**: 7.3.21, Table 7.22

In the Semantics row, Example, the hyperlinks (2 places) to "<u><DRM Inline Colour></u>" are inoperable online because they point to "InLine\_Colour.html" instead of "Inline\_Colour.html". Change the hyperlinks to read "Inline" rather than "InLine".

## **RESPONSE:** Accept.

## **US\_E356**: 7.3.23, Table 7.24

In the Semantics row, 1<sup>st</sup> bullet, change "and and the requested data" to read "and the requested data" (delete the duplicate "and").

#### **RESPONSE:** Accept.

## **US\_E357**: 7.3.27, Table 7.28

In the Semantics row, 5<sup>th</sup> paragraph, change the font for "bits\_of\_ fields" from Times Roman to Courier.

## **RESPONSE:** Accept.

## **US\_E358**: 7.3.28, Table 7.29

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **US\_E359**: 7.3.28, Table 7.29

In the Input/output parameters row, delete the horizontal line beneath the "None" entry, and unbold the "None" entry.

## **RESPONSE:** Accept.

## **US\_E360**: 7.3.29, Table 7.30

In the Semantics row, 2<sup>nd</sup> paragraph, change "eturns" to read "returns".

## **RESPONSE:** Accept.

#### **US\_E361**: 7.3.29, 7.3.30, Tables 7.30 and 7.31

In the Input/output parameters row, left justify the **Parameter name** headings.

#### **RESPONSE:** Accept.

#### **US\_E362**: 7.3.33, Table 7.34

In the Semantics row, 1<sup>st</sup> sentence, change "... returns an object for ..." to read "... this function returns an object for ...".

## **RESPONSE:** Accept.

#### **US E363**: 7.3.37, Table 7.38

In the Semantics row, 1<sup>st</sup> paragraph, change "7.3.14 FreeObject" to read "7.3.11 FreeObject".

## **RESPONSE:** Accept.

#### **US\_E364**: 7.3.43, Table 7.44

In the Semantics row, 2<sup>nd</sup> bullet under "When this function completes in error", change "if an object have been removed from the transmittal in which they were stored" to read either "if objects have been removed from the transmittal in which they were stored" or "if an object has been removed from the transmittal in which they agreement).

## **RESPONSE:** Accept.

## **US\_E365**: 7.3.45, Table 7.46

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

#### **US\_E366**: 7.3.46, Table 7.47

In the Semantics row, under "When this function completes in error", change "<u>7.3.98</u> <u>UseDefaultSRFInfo</u>" to read "<u>7.3.87 UseDefaultSRFInfo</u>", and change "<u>7.3.92 SetSRFInfo</u>" (2 places) to read "<u>7.3.81 SetSRFInfo</u>".

## **RESPONSE:** Accept.

## **US\_E367**: 7.3.49, Table 7.50

In the Semantics row, 2<sup>nd</sup> bullet under "When this function completes in error", change "transmittal is not a valid to an open transmittal" to read "transmittal is not a valid handle to an open transmittal" (insert the word "handle").

## **RESPONSE:** Accept.

## **US\_E368**: 7.3.50, Table 7.51

In the Semantics row, 3<sup>rd</sup> and 4<sup>th</sup> paragraphs, change "Minor version are …" to read "Minor versions are …", and change "Interim version are …" to read "Interim versions are …" (change "version" to "versions" in both places).

## **US\_E369**: 7.3.50, Table 7.51

In the Semantics row, 6<sup>th</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E370**: 7.3.51, Table 7.52

In the Semantics row, 1<sup>st</sup> paragraph, change "this function returns in identifier ..." to read "this function returns in identifier ..." (change "identifier" to a Courier font).

## **RESPONSE:** Accept.

## **US\_E371**: 7.3.51, Table 7.52

In the Semantics row, 2<sup>nd</sup> bullet under "When this function completes in error", change "transmittal is not a valid open transmittal" to read "transmittal is not a valid handle to an open transmittal" (insert the words "handle to an").

## **RESPONSE:** Accept.

## **US\_E372**: 7.3.52, Table 7.53

In the Semantics row, 4<sup>th</sup> paragraph, change "<u>RFCxxxx</u>" to read "<u>RFC1738</u>".

#### **RESPONSE:** Accept.

## **US\_E373**: 7.3.54, Table 7.55

In the Semantics row, 1<sup>st</sup> paragraph, last sentence, change "... only condition a need be satisfied" to read "... only condition a) need be satisfied", for consistency with similar verbiage in Tables 7.56 and 7.57.

#### **RESPONSE:** Accept.

#### **US\_E374**: 7.3.56, Table 7.57

In the Semantics row, 7<sup>th</sup> paragraph, correct the <u><DRM Inline Colour></u> hyperlink. It is inoperable online because it points to InLine\_Colour.html rather than to Inline\_Colour.html (note the "L" in "InLine").

## **RESPONSE:** Accept.

#### **US E375**: 7.3.56, Table 7.57

In the Semantics row, near the bottom in subparagraph f), change "traversal order parameters" to read "traversal\_order\_parameters" (insert the missing underscores).

## **RESPONSE:** Accept.

## **US E376**: 7.3.56, Table 7.57

In the Semantics row, at the bottom, delete the extra space/line between subparagraph i) and j).

#### **RESPONSE:** Accept.

#### **US\_E377**: 7.3.57, Table 7.58

In the Semantics row, 4<sup>th</sup> paragraph, a closing parenthesis, ")", is provided in this paragraph, but no corresponding opening parenthesis, "(", is provided.

## **RESPONSE:** Accept.

## **US E378**: 7.3.58, Table 7.59

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **US\_E379**: 7.3.59, Table 7.60

In the Semantics row, 1<sup>st</sup> paragraph, change "result returns the value TRUE …" to read "result returns the value TRUE …" (change "result" to a Courier font).

## **RESPONSE:** Accept.

## **US\_E380**: 7.3.60, Table 7.61

In the Semantics row, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

#### **US\_E381**: 7.3.63, Table 7.64

In the Semantics row, 5<sup>th</sup> bullet, b), change "if create or update mode …" to read "create or update mode …" (delete the leading "if"; it is redundant since the 5<sup>th</sup> bullet ends in "if").

#### **RESPONSE:** Accept.

## **US\_E382**: 7.3.63, Table 7.64

In the Semantics row, 6<sup>th</sup> bullet, clarify the meaning of "... not supported by the implementation(s) of the linked to the application".

## **RESPONSE:** Accept.

## **US\_E383**: 7.3.64, Table 7.65

In the Semantics row, 1<sup>st</sup> paragraph, change "<u>7.3.28 GetLastFunctionStatus</u>" to read "<u>7.3.29</u> <u>GetLastFunctionStatus</u>".

#### **RESPONSE:** Accept.

## **US\_E384**: 7.3.65, Table 7.66

In the Semantics row,  $1^{st}$  paragraph, correct the <u><DRM\_Data\_Table></u> hyperlink. It is inoperable because it points to Data\_Table\_Data.html rather than to Data\_Table.html.

## **RESPONSE:** Accept.

#### **US\_E385**: 7.3.66, Table 7.67

In the Semantics row, last bullet, change "... set to INACTIONABLE\_FAILURE no changes are ..." to read "... set to INACTIONABLE\_FAILURE and no changes are ..." (insert the word "and").

## **RESPONSE:** Accept.

#### **US E386**: 7.3.67, Table 7.68

In the Semantics row, 5<sup>th</sup> paragraph, change "... and the appropriate bits\_of\_ fields as ..." to read "... and the appropriate bits\_of\_fields as ..." (delete the extra space character before the word "fields" and change "bits\_of\_fields" to a Courier font).

## **RESPONSE:** Accept.

## **US\_E387**: 7.3.70, Table 7.71

In the Semantics row, near the bottom in subparagraph d), change "are not related by an component relationship" to read "are not related by a component relationship" (change "an" to "a").

#### **RESPONSE:** Accept.

#### **US E388**: 7.3.71, Table 7.72

In the Semantics row, 1<sup>st</sup> bullet, clarify "and if valid parameters were …" (and *what*, if valid parameters were …? Possibly it should be something like: "and the object specified by old\_object is removed from the transmittal if valid parameters were …"?).

## **US\_E389**: 7.3.74 - 7.3.77, Tables 7.75 - 7.78

In the Semantics rows, following "When this function completes in error", change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E390**: 7.3.79, 7.3.80, Tables 7.80 and 7.81

In the Semantics rows, following "When this function completes in error", change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

## **US\_E391**: :7.3.80, Table 7.81

In the Semantics rows, 1<sup>st</sup> paragraph, add "(see <u>5.5.3 Status\_Logger</u>)" to the end of the last sentence.

## **RESPONSE:** Accept.

## **US\_E392**: 7.3.80, Table 7.81

In the Semantics rows, 2<sup>nd</sup> paragraph, last sentence, change "Has priority over ..." to read "*Has priority over ...*" (add *italics* for emphasis).

## **RESPONSE:** Accept.

## **US\_E393**: 7.3.81, Table 7.82

In the Semantics rows, 2<sup>nd</sup> paragraph, change "<u>7.3.87 UseDefaultSRFParameters</u>" to read "<u>7.3.87</u> <u>UseDefaultSRFInfo</u>", as per the 7.3.87 subclause title.

## **RESPONSE:** Accept.

## **US\_E394**: 7.3.81, Table 7.82

In the Semantics rows, 5<sup>th</sup> paragraph, 1<sup>st</sup> bullet, change "... if sufficient sufficient memory could ..." to read "... if sufficient memory could ..." (delete the duplicate "sufficient").

## **RESPONSE:** Accept.

## **US\_E395**: 7.3.83, 7.3.84, Tables 7.84 and 7.85

In the Semantics rows, 3<sup>rd</sup> paragraph, change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

**US\_E396**: 7.3.86, 7.3.87, Tables 7.87 and 7.88

In the Semantics rows, following "When this function completes in error", change "... one of the following actions occurs" to read "... the following action occurs", since only a single action follows this statement.

## **RESPONSE:** Accept.

#### **US E397**: 7.3.87, Table 7.88

Change the table title, "UseDefaultSRFParameters" to read "UseDefaultSRFInfo", as per the subclause title.

## **RESPONSE:** Accept.

#### **US\_E398:** 7.3.87, Table 7.88 In the Semantics rows, Example, change "Augmethted" to read "

In the Semantics rows, Example, change "Augmetnted" to read "Augmented".

## **RESPONSE:** Accept.

## **US\_E399**: 8.1.2

In the 2<sup>nd</sup> paragraph, change "Default Profile" to read "default profile", and change "<u>8.3.2 Default</u> <u>Profile</u>" to read "<u>8.3.2 Default profile</u>" (ISO capitalization).

## **US\_E400**: 8.2

Change "General Conformance" to read "General conformance" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E401**: 8.2.1.e

Change Part 3 of ISO/IEC 18023 to read part 3 of ISO/IEC 18023 for consistency with other similar references throughout this standard.

## **RESPONSE:** Accept.

## **US\_E402**: 8.3.1

Change "Default Profile (see <u>8.3.2 Default Profile</u>)" to read "default profile (see <u>8.3.2 Default profile</u>)" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E403**: 8.3.2

Change "Default Profile" to read "Default profile", here (in the title and in all 3 paragraphs) and in Table 8.1.

## **RESPONSE:** Accept.

## **US\_E404**: A.2.15

Change "... base classes and reference surfaces and volumes are ..." to read "... base classes, reference surfaces, and volumes are ..." (remove first "and", and correct punctuation).

## **RESPONSE:** Accept.

## **US\_E405**: A.2.18

Change "Expressions" to read "lights and rendering properties".

## **RESPONSE:** Accept.

## **US\_E406**: A.2.22

Change "Time and Metadata and depicted" to read "time and metadata are depicted" (ISO capitalization, and change "and" to "are").

## **RESPONSE:** Accept.

# US\_E407: B.1.2, Table B.1

Change "B.2 Table of contents" to read "B.1.2 Table of contents".

## **RESPONSE:** Accept.

## **US\_E408**: B.2, Figure B.2

Change the figure caption from "DRM Transmittal Root and Metadata" to read "DRM transmittal root and metadata" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E409**: B.2, Figure B.3

Change the figure caption from "DRM Model instanced within the DRM Environment Root" to read "DRM model instanced within the DRM environment root" (ISO capitalization).

## **RESPONSE:** Accept.

## **US\_E410**: B.2, Figure B.7

Change the figure caption from "DRM Environment Root" to read "DRM environment root" (ISO capitalization).

# **RESPONSE:** The caption will be changed to: "Root of the environment". Also, a paragraph will be appended to 4.1.3 that describes the conventions being used for the presentation of DRM class names in UML diagrams.

## **US\_E411**: C.2

This subclause states: "<u>Table C.2</u> contains each of the available media formats specified in <u>5.2.7.37</u> <u>Media\_Format</u>.", however the table is missing references for EMF, VRML, X3D and X3DV media formats. Provide the missing references.

## **RESPONSE:** Accept.

## **US\_E412**: C.2, Table C.2

In the AVI row, change "<u>Audio Video Interleave (AVI) standard</u>" to read "<u>AVI RIFF File Reference</u>", as the actual title that appears at the top of the web page should be cited.

## **RESPONSE:** Accept.

#### **US\_E413**: C.2, Table C.2

In the BIFF row, change "*Functional Specification*" to read "*Functional specification*" (capitalization), as per a search of www.iso.org.

## **RESPONSE:** Accept.

## **US\_E414**: C.2, Table C.2

In the BMP row, change "*BMP* - *Windows Bitmap Format references*" to read "*BMP* - *Windows Bitmap Format*", as the actual title that appears at the top of the web page should be cited.

## **RESPONSE:** Accept.

## **US\_E415**: C.2, Table C.2

In the CGM row, change "<u>ISO/IEC 8632:1999</u>" to read "<u>ISO/IEC 8632-1:1999</u>", and add "— *Part 1: Functional specification*" to the title listed, as the actual title that appears in the pdf file should be cited.

## **RESPONSE:** Accept.

## **US\_E416**: C.2, Table C.2

In the GIF row, change "*Graphics Interchange Format Specification Ver. 1989a*" to read "*GRAPHICS INTERCHANGE FORMAT(sm) Version 89a*", as the actual title (including original capitalization) that appears in the web page / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E417**: C.2, Table C.2

In the JPEG row, change " "JPEG File Interchange Format," *JFIF, Version 1.02*" to read "*JPEG File Interchange Format Version 1.02*", as the actual title that appears at the top of the web page / specification should be cited.

#### **RESPONSE:** Accept.

## **US\_E418**: C.2, Table C.2

In the JPEG2000 row, change "Information technology — Coding of Audio, Picture, and Multimedia and Hypermedia Information — Coding of Still Pictures — JPEG 2000 Part 1" to read "Information technology -- JPEG 2000 image coding system -- Part 1: Core coding system", as per a search of www.iso.org.

## ISO/IEC JTC1/SC24 N2702 ISO/IEC JTC1/SC24/WG8 N0396

## **US\_E419**: C.2, Table C.2

In the NITFS row, change "National Imagery Transmission Format for the National Imagery Transmission Format Standard Ver. 2.1" to read "National Imagery Transmission Format Version 2.1 for the National Imagery Transmission Format Standard", as the actual title that appears at the top of the web page / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E420**: C.2, Table C.2

In the PICT row, change "*with*" to read "*With*" (capitalization), as the actual title (including original capitalization) that appears in the web page / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E421**: C.2, Table C.2

In the PNG row, change <u>ISO/IEC 15948:2003(E)</u> to read <u>ISO/IEC 15948:2004</u> as per a search of www.iso.org.

## **RESPONSE:** Accept.

## **US\_E422**: C.2, Table C.2

In the QT row, change "*QuickTime 6 — The Digital Media Standard*" to read "*QuickTime File Format*", as the actual title that appears in the pdf file / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E423**: C.2, Table C.2

In the RIFF row, change "<u>Microsoft Video for Windows Development Kit (VFWDK)</u> Ver. 1.1e" to read "<u>RIFF - Microsoft Resource Interchange File Format</u>", as the actual title that appears in the web page / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E424**: C.2, Table C.2

In the SVG row, change "1.0 Specification" to read "1.1 Specification", as per the www.w3.org web page cited.

## **RESPONSE:** Accept.

## **US\_E425**: C.2, Table C.2

In the TIFF row, change "*TIFF Specification* Rev. 6.0" to read "*TIFF Revision 6.0*" as the actual title that appears in the pdf file / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E426**: C.2, Table C.2

In the WMF row, change "<u>Windows Metafile Format specification</u>" to read "<u>Microsoft Windows</u> <u>Metafile</u>", as the actual title that appears in the web page / specification should be cited. Note that here the hyperlink also changes by deleting the "#MICMETA-DMYID.4" portion.

## **RESPONSE:** Accept.

## **US\_E427**: C.2, Table C.2

In the XBM row, change "*X BitMap Distribution Format* Ver. 2.1" to read "*XBM* – *X BitMap*", as the actual title that appears in the web page / specification should be cited.

## **RESPONSE:** Accept.

## **US\_E428**: Bibliography

These document reference citations do not adhere to the standardized citation formats required by ISO (and as employed in the ISO/IEC FDIS 18025). The table should be changed to that shown below.

Identifier	Reference
18632	ISO/IEC 8632:1992 (all parts), Information technology — Computer graphics — Metafile for the storage and transfer of picture description information.
FOLEY	Foley, James D. and Van Dam, Andries. <i>Computer Graphics: Principles and Practice</i> . 2nd ed. Reading (Massachusetts): Addison-Wesley, 1990. ISBN 0201121107.
GAMMA	Gamma, Erich, et al. Design Patterns: Elements of Reusable Object- Oriented Software. Reading (Massachusetts): Addison-Wesley, 1997. ISBN 0201633612.
OLIVER	Oliver, Margaret A. <i>Geostatistics for Environmental Scientists</i> . New York: John Wiley, 2001. ISBN 0471965537.
PRENTER	Prenter, P. M. Splines and Variational Methods. 4th ed. New York: John Wiley, 1989. ISBN 0471504025.
RFC1766	Alvestrand, Harald Tveit. <i>Tags for the Identification of Languages</i> [online]. Place of publication unknown: Internet Engineering Task Force, 1995 [cited 12 August 2004]. Available from World Wide Web: < <u>http://www.ietf.org/rfc/rfc1766.txt</u> >. Document RFC 1766.
SAMET	Samet, Hanan. The Design and Analysis of Spatial Data Structures, Boston: Addison-Wesley, 1989. ISBN 0201502550.
WATT	Watt, Alan. 3D Computer Graphics. 2nd ed. Boston: Addison-Wesley, 1993. ISBN 0201631865.
ZWIL	Zwillinger, Daniel. CRC Standard Mathematical Tables and Formulae. 31st ed. Boca Raton (Florida): CRC Press, 2002. ISBN 1584882913.

## **US\_E429**: DRM class index

None of the figure numbers in the  $2^{nd}$  column should be italicized. Italicization of the abstract class names in the  $1^{st}$  column is sufficient.

## **RESPONSE:** Accept.

## **US\_E430**: DRM class index

Somewhere in the introductory paragraph, it should be explained what is available upon reaching the individual UML class / composite diagrams from the links in columns 2 and 3. That is, (1) the individual UML class diagrams contain hyperlinks back to the DRM class definitions, and similarly, (2) the individual UML composite diagrams contain hyperlinks back to the individual UML class diagrams.

# **SEDRIS**

## SEDRIS Organization Comments On

# Final Committee DRAFT ISO/IEC 18023-1 18 December 2004

# GENERAL

## **SEDRIS\_G001**: Throughout

The term "table of contents" at the beginning of each clause should be replaced by "topics".

**RESPONSE:** Accept.

**SEDRIS\_G002**: Throughout Running header with the copyright needs to be applied.

**RESPONSE:** Accept.

## **SEDRIS\_G003**: Throughout All references to items within ISO/IEC 18026 should be checked to ensure that they are up to date.

**RESPONSE:** Accept.

## SEDRIS\_G004: Throughout

Align SRM terminology with SRM specification (e.g. class names, types referenced in clause 5).

## **RESPONSE:** Accept.

## **SEDRIS\_G005**: Throughout

All occurrences of " " should be replaced by " ". An instance of this occurs in the example of Table 7.22.

## **RESPONSE:** Accept.

## **SEDRIS\_G006**: A.2, Clause 6, and elsewhere

All the UML diagrams should be reviewed to ensure that they are up to date.

## **RESPONSE:** Accept.

**SEDRIS\_G007**: Throughout Change "SEDRIS transmittal" to "transmittal".

**RESPONSE:** Accept.

## **SEDRIS\_G008:** Throughout Change "SEDRIS object" to "DRM object".

**RESPONSE:** Accept.

# **TECHNICAL**

## Introduction

**SEDRIS\_T001**: 0.1 Purpose, 3<sup>rd</sup> paragraph

Change "SEDRIS Data Representation Model (DRM)" to "DRM".

**RESPONSE:** Accept.

**SEDRIS\_T002**: 0.1 Purpose, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sentence Change "create" to "describe".

**RESPONSE:** Accept.

**SEDRIS\_T003**: 0.1 Purpose, 4<sup>th</sup> paragraph, 1<sup>st</sup> sentence Change "create" to "describe".

**RESPONSE:** Accept.

**SEDRIS\_T004**: 0.2 *Standardized software interface*, last paragraph, last sentence Remove sentence since it provides inappropriate level of detail for introduction.

**RESPONSE:** Accept.

Scope

**SEDRIS\_T005**: 1<sup>st</sup> list, item b Remove "specifications of".

**RESPONSE:** Accept.

## Clause 2

## **SEDRIS\_T006**: Throughout

Before FDIS publication, the numbers of the standards should be updated to reflect the current versions (e.g. EDCS).

**RESPONSE:** Accept.

Clause 3

**SEDRIS\_T007**: 3.1.4, hyperlink

Check that hyperlink refers to current version of DIS specification.

**RESPONSE:** The entry in Clause 2 will be checked to ensure that it references the latest version of ISO/IEC 19501-1.

## **SEDRIS T008**: 3.1.18

"defined in ISO/IEC 18023-3" should be enclosed in parentheses and moved after the phrase "binary encoding"; drop "(STF)" from the title.

## **RESPONSE:** Accept.

## SEDRIS T009: Table 3.1

X3D reference to the Web 3D Consortium should be replaced by ISO / IEC 19775, and a reference to 19775 should be placed in the bibliography (not clause 2).

**RESPONSE:** Accept except that the reference to 19775 will be placed in Annex C.

## Clause 4

**SEDRIS\_T010**: Clause 4, throughout

The first occurrence of SEDRIS API is the only one that should be "SEDRIS API"; the remainder should be just API; so change all occurrences of "SEDRIS API" except the first to "API".

## **RESPONSE:** Accept.

## **SEDRIS\_T011**: Clause 4, throughout

The first occurrence of "spatial reference frame" is the only one that should be spelled out; the remainder should be just SRF; so change all occurrences of "spatial reference frame" except the first to "SRF".

## **RESPONSE:** Accept.

SEDRIS\_T012: Clause 4, throughout

Verify all concrete classes are not italicized and abstract classes are.

**RESPONSE:** Accept.

**SEDRIS\_T013**: 4.1.2, 1<sup>st</sup> sentence Replace "this International Standard" with "this part of ISO/IEC 18023".

**RESPONSE:** Accept.

**SEDRIS\_T014**: 4.2.1, 2<sup>nd</sup> paragraph, 4<sup>th</sup> sentence

Change "real" to "natural" and "artificial" to "constructed" for clarity.

**RESPONSE:** Accept.

## **SEDRIS\_T015**: 4.2.1, 4<sup>th</sup> paragraph, before example 1

Change "artificial" to "constructed" for clarity.

**RESPONSE:** Accept.

**SEDRIS\_T016**: 4.2.1, 4<sup>th</sup> paragraph preceding example 8 Change "artificial" to "constructed" for clarity.

**RESPONSE:** Accept.

**SEDRIS\_T017**: 4.2.1, Example 28 Change "artificial" to "constructed" for clarity.

## **RESPONSE:** Accept.

## **SEDRIS\_T018**: 4.2.2.1, list

Update a, b to reflect name changes to the corresponding classes. Remove "the" in h for consistency. Transpose items f and e and relabel accordingly to reflect clause order in EDCS rather than alphabetical order. Insert new item for "spatial positions and directions" after item b. Should read as follows:

a. geometry representation,

b. features representation,

c. spatial positions and directions,

ed. topology,

de. metadata,

f. EDCS classifications (ECs) (see 5 EDCS classifications of <u>ISO/IEC 18025</u>),

e.g. EDCS attributes (EAs) (see 6 EDCS attributes of ISO/IEC 18025),

- f. EDCS classifications (ECs) (see 5 EDCS classifications of ISO/IEC 18025),
- h. relationships among data, and
- i. the organization of data.

**RESPONSE:** Accept.

**SEDRIS\_T019**: 4.2.2.2, 1<sup>st</sup> sentence

Change "represented in the DRM" to "represented using the DRM"; should read: The same environmental object may be represented inusing the DRM in different ways for different purposes.

#### **RESPONSE:** Accept.

## **SEDRIS**<u>T020</u>: 4.2.2.3, 1<sup>st</sup> paragraph

For clarity, change to:

The ability to support multiple forms of representations is called representational polymorphism. Polymorphism (from the Greek meaning "having multiple forms") is the ability to allow multiple forms. Representational polymorphism allows a variable, function, or object to have more than one formrepresentation. The DRM supports representational polymorphism by specifying DRM-classes that allow multiple, independent representations of environmental data to be created and the relationships among these representations to be expressed.

## **RESPONSE:** Accept.

## **SEDRIS\_T021**: 4.2.2.3, EXAMPLE 1

Correct use of "instance" versus "class", correct conjunction to read:

EXAMPLE 1 A road may be represented using:

- a. an instance of a DRM class specifying a linear feature, and/or
- b. an instance of another DRM class specifying a series of polygons.

## **RESPONSE:** Accept.

#### SEDRIS\_T022: 4.2.2.3, EXAMPLE 2

Correct use of "instance" versus "class", correct conjunction to read:

EXAMPLE 2 A cloud may be represented using:

- a. an instance of a DRM class specifying a 3D grid of moisture content, using a DRM class specifying a volumetric feature, and/or
- b. an instance of a DRM class specifying an areal feature of a cloudy region within a weather map.

#### **RESPONSE:** Accept.

#### **SEDRIS T023**: 4.2.2.3, d

Remove "or theme" to eliminate redundancy.

#### **RESPONSE:** Accept.

**SEDRIS\_T024**: 4.2.2.3 last paragraph, last sentence Drop last sentence to eliminate redundancy.

## **RESPONSE:** Accept.

## **SEDRIS\_T025**: 4.2.3.1, 2<sup>nd</sup> paragraph

#### For clarity change to:

A producer may create data for a variety of purposes including tailoring environmental data for use by a particular customer or application. Such purposes are supported through the use of a common object model (the SEDRIS DRM as specified in this part of ISO/IEC 18023), a common file format (the SEDRIS abstract transmittal format specified in part 2 of ISO/IEC 18023-2), and specific encodings such as that specified in part 3 of ISO/IEC 18023-3. Both are accessed Access to environmental data is through the application program interface that is specified in 7 Application program interface (API)).
#### **SEDRIS\_T026**: 4.2.3.2, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

For consistency & clarity change to: SEDRISThis part of ISO/IEC 18023 supports the creation and reuse of environmental data by providing a common representational mechanism.

#### **RESPONSE:** Accept.

#### **SEDRIS T027**: 4.2.3.2, 2<sup>nd</sup> paragraph, 5<sup>th</sup> and 6<sup>th</sup> sentences

For consistency & clarity replace with: <u>SEDRIS</u>This part of ISO/IEC 18023 makes it possible for such processing to be feasible. This meansby allowing data to be viewed from different perspectives. It also means and by providing data access facilities such so that the interface to data can be tailored to a given view and context under application control.

#### **RESPONSE:** Accept.

#### **SEDRIS T028**: 4.2.3.3

For consistency, format both lists as examples.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T029**: 4.2.3.3, last sentence

For clarity, change "provided by its data representation" to "defined by the application using the DRM".

#### **RESPONSE:** Accept. Also, the word "model" will be removed.

**SEDRIS\_T030**: 4.3.1, second list, item e Drop "SEDRIS".

**RESPONSE**: Accept.

#### **SEDRIS\_T031**: 4.3.1, 3<sup>rd</sup> paragraph from the end (antepenultimate)

Drop last sentence as redundant.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T032**: 4.3.2.1, 1<sup>st</sup> paragraph

This paragraph is awkward. Make the following changes:

- three things listed in sentence 1 should be an enumerated list
- change "relationship" to "relationships"
- swap order around so that "possible relationships" is last not first
- remove the phrase "a data model that allows"
- drop last sentence
- swap order of first and second sentences

#### Should look like:

The DRM provides the technology necessary to express the representation of an environmental object. Representation of an environmental object requires the expression of the environmental object's semantics, including:

- a. the composition and characteristics of that environmental object,
- b. the spatial attributes of that environmental object, and
- c. that environmental object's possible relationships to other environmental objects of interest.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T033**: 4.3.2.2, 2<sup>nd</sup> paragraph

For clarity, replace with:

The DRM relies on ISO/IEC 18025 for describing the semantics of what an object is (classification) and what characteristics it has (attribution). These descriptions use the entries in the EDCS. New environmental concepts can be added to the EDCS dictionaries without changing the DRM.

#### **RESPONSE:** Accept.

#### **SEDRIS T034**: 4.3.2.2, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sentence

The sentence is imprecise. Replace "or" with "and/or" and add "spatial" before "extent".

## **RESPONSE:** This comment actually applies to 4.3.2.1. Accept but also "environmental data object" is changed to "environmental object".

#### **SEDRIS\_T035**: 4.3.2.2, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

For clarity, change to: "Specific DRM classes are provided for creating DRM objects that hold values for location, classification, and attribution."

#### **RESPONSE:** Accept.

**SEDRIS\_T036**: 4.3.2.2, 1<sup>st</sup> paragraph 1, 2<sup>nd</sup> and 3<sup>rd</sup> sentences For correctness, change "DRM objects" to "DRM classes".

**RESPONSE:** Accept.

**SEDRIS\_T037**: 4.3.2.2, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence For consistency with EDCS terminology, change "EDCS entries" to "EDCS dictionary entries"

**RESPONSE:** Accept.

**SEDRIS\_T038**: 4.3.2.2, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence Change "The DRM objects for" to "The DRM objects used for" to supply missing word.

**RESPONSE:** Accept.

#### **SEDRIS\_T039**: 4.3.2.2, 2<sup>nd</sup> paragraph, last sentence

Remove sentence (redundant).

**RESPONSE:** Accept.

**SEDRIS\_T040**: **4.3.2.2**, **3**<sup>rd</sup> **paragraph**, **2**<sup>nd</sup> **sentence** For clarity & consistency, change "by type" to "by classification", and drop "and use".

**RESPONSE:** Accept.

#### **SEDRIS\_T041**: 4.3.2.2, 3<sup>rd</sup> paragraph, last sentence

For clarity, replace with: "Such organizations support the creation of unique sets of environmental data tailored to specific applications."

**RESPONSE:** Accept.

**SEDRIS\_T042**: 4.3.3.1.1

For consistency, replace "SEDRIS transmittal" with "transmittal"; apply elsewhere as well.

**RESPONSE:** Accept.

**SEDRIS\_T043**: **4.3.3.1.3**, **3**<sup>rd</sup> sentence For clarity, remove "still".

**RESPONSE:** Accept.

**SEDRIS\_T044**: 4.3.3.1.3, 1<sup>st</sup> paragraph, last sentence For consistency, replace "objects" with "DRM objects".

**RESPONSE:** Accept.

**SEDRIS\_T045**: 4.4.3, 1<sup>st</sup> sentence

For consistency, change "SEDRIS" to "this part of ISO/IEC 18023".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T046**: 4.5.2, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence

For clarity & correctness, change "or phenomena" to "and/or phenomena".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T047**: 4.5.3, 3<sup>rd</sup> paragraph following Figure 4.1, last sentence

For clarity, replace "All of these relationships" with "All of the relationships of a two-way association".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T048**: 4.5.3, final paragraph

For clarity, define "link classes" and provide a figure illustrating the concept.

#### Replace the last paragraph with the following:

"Some association and component relationships have a class associated with the relationship as shown in figure xxxx. Such classes are termed *link classes*. Instances of link classes specify information that applies to the given relationship. Instances of link classes are termed *link objects*."



#### **RESPONSE:** See response to Japan\_T006.

#### **SEDRIS\_T049**: 4.5.4.1, antepenultimate paragraph

For clarity & consistency, remove "type or" and change "thought of as" to "considered as".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T050**: 4.5.4.2, 2<sup>nd</sup> paragraph

For clarity, end first sentence after "directly"; replace the remainder of the sentence with "In this part of ISO/IEC 18023, concrete classes never have subclasses. Therefore, in this part of ISO/IEC 18023, superclasses are always abstract."

#### **RESPONSE:** Accept.

#### SEDRIS\_T051: 4.5.4.5, EXAMPLE

For clarity, add after "diagram" the words "depicted in Figure 4.6".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T052**: 4.5.5, Table 4.3, Class diagram

For clarity, replace "A UML diagram" with "A hyperlink to a UML diagram".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T053**: 4.5.5, Table 4.3, Associated with (two-way) (inherited), 1<sup>st</sup> & 2<sup>nd</sup> sentences

For correctness, change to: "A list of inherited DRM classes that may contain two-way associations to with the DRM class specified in this table. The DRM class specified in this table will have an association to with the DRM classes in this list"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T054**: 4.5.5, Table 4.3, Associated with (two-way)

For correctness, change to: "A list of DRM classes that may contain two-way associations to with the DRM class specified in this table. The DRM class specified in this table will have an association to with the DRM classes in this list."

#### **RESPONSE:** Accept.

#### **SEDRIS T055**: 4.5.5, Table 4.3, Property column

For clarity & consistency, change "Description" to "Definition", "Composed of" to "Composed of (two-way)", and "Component of" to "Component of (two-way)"

#### **RESPONSE:** Accept.

#### **SEDRIS T056**: 4.5.5, Table 4.3,

Per previous agreement, move Clarifications row under the Definition row (renamed from Description).

#### **RESPONSE:** See response to Japan\_T002.

#### **SEDRIS\_T057**: 4.6.2, antepenultimate paragraph

For clarity, consistency, and correctness, change "onto" to "unto", "the specific set of DRM objects" to "a specific set of DRM classes", and "fields of these DRM objects" to "fields of instances of these DRM classes".

#### **RESPONSE:** Accept.

#### SEDRIS\_T058: 4.6.2, last paragraph

For correctness, change "objects" to "classes".

**RESPONSE:** Accept.

#### **SEDRIS\_T059**: 4.6.5, 1<sup>st</sup> paragraph, last sentence

For correctness & consistency, change "DRM objects" to "DRM classes" and "geometry" to "geometry representation".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T060**: 4.6.5, last paragraph, last sentence

For correctness & consistency, change "Geometry" to "Geometry representation".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T061**: 4.6.6, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

Replace with: "In cases where an environmental object is best represented as a higher abstraction of its physical form or when the environmental object has no realizable physical form, the object is represented conceptually."

## **RESPONSE:** Accept except that "the object" will be replaced by "the environmental object". In addition, the following sentence is inserted after the 2<sup>nd</sup> sentence: "These environmental objects are modelled using feature representations."

#### **SEDRIS\_T062**: 4.6.6, 1<sup>st</sup> paragraph, last sentence

For correctness & consistency, change "objects" to "classes" and "features" to "feature representations".

**SEDRIS\_T063**: 4.6.6, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

Remove "And" at start of sentence.

**RESPONSE:** Accept.

**SEDRIS\_T064**: 4.6.6, 3<sup>rd</sup> paragraph, last sentence Change "feature" to "feature representation".

#### **RESPONSE:** Accept.

**SEDRIS\_T065**: 4.6.7, title

Change "features" to "feature".

**RESPONSE:** The title will be changed to "Distinction between feature representation and geometry representation".

**SEDRIS\_T066**: 4.6.9, last paragraph

Change "objects" to "classes".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T067**: 4.6.10, 2<sup>nd</sup> paragraph

Change "geometry and feature" to "geometry representation and feature representation", "themselves" to "itself", and remove the comma.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T068**: 4.6.10, 3<sup>rd</sup> paragraph

Change "geometry and feature" to "geometry representation and feature representation" throughout paragraph.

**RESPONSE:** Accept.

#### **SEDRIS\_T069**: 4.6.10, last paragraph

Change "objects" to "classes".

**RESPONSE:** Accept in principle. "DRM objects used as" will be changed to "DRM classes used to represent"

**SEDRIS\_T070**: 4.6.11, 1<sup>st</sup> paragraph

Change "an object" to "an environmental object" and drop "3D".

**RESPONSE:** "an object" will be changed to "an item". "3D models" will be changed to "models of environmental objects that can be instantiated".

#### **SEDRIS\_T071**: 4.6.12, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

Change "act analogous" to "behave analogously" and "feature and geometry" to "feature representation and geometry representation".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T072**: 4.6.12, last paragraph, 1<sup>st</sup> sentence

Insert "single" after first "a".

**RESPONSE:** The following text replaces the first sentence: "Alternatively, a single <DRM Model> instance without references to other models can represent a single environmental object (for example, a park bench, a door knob, or a tree) and can be reused within the environment."

**SEDRIS\_T073**: 4.6.13, 1<sup>st</sup>paragraph, 1<sup>st</sup>sentence Change "allows for inclusion of" to "supports".

#### **SEDRIS\_T074**: 4.6.13, penultimate paragraph

Change to: "The metadata associated with the contents of a transmittal is also supported in the DRM to allow automated machine-parsing of transmittals, if such metadata is present. Such metadata includes the following: a transmittal summary, included structures, use of EDCS, DRM classes used, and a summary of primitives and hierarchies used."

#### **RESPONSE:** Accept.

**SEDRIS\_T075**: 4.6.13, last paragraph Change "objects" to "classes".

**RESPONSE:** Accept.

**SEDRIS\_T076**: 4.7, Throughout

All of 4.7 should be reviewed and modified to correspond to the latest draft of SRM.

**RESPONSE:** Accept.

**SEDRIS\_T077**: 4.7.1, 1<sup>st</sup> sentence

Change "objects" to "classes" and add a comma after "location data".

**RESPONSE:** The first comma will be removed and "objects" will be changed to "classes".

**SEDRIS\_T078**: 4.7.2.2, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence

Change "object subtree" to "DRM object subtree",

**RESPONSE:** Accept.

**SEDRIS\_T079**: 4.7.2.2, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence Change "so that it is specified within the SRF Template" to "within the SRF context".

**RESPONSE:** The following text will be used: "within the SRF".

**SEDRIS\_T080**: 4.7.2.2, 1<sup>st</sup> paragraph, 4<sup>th</sup> sentence

Remove sentence.

**RESPONSE:** Accept.

#### **SEDRIS T081**: 4.7.2.2, 1<sup>st</sup> paragraph, 4<sup>th</sup> sentence

Change "A coordinate is compatible to" to "A coordinate is compatible with".

#### **RESPONSE:** This comment applies to the 6<sup>th</sup> and 7<sup>th</sup> sentences. Accept.

#### **SEDRIS\_T082**: 4.7.2.3, last sentence

Change "unique SRF" to "unique set of values for the srf\_info field".

#### **RESPONSE:** Accept.

#### **SEDRIS T083**: 4.7.3, Example 1

Ensure consistency with the SRM FDIS text regarding Geocentric Solar Magnetic and the abbreviation SMS.

#### **RESPONSE:** Accept.

#### **SEDRIS T084**: 4.7.3, Example 3

Move example 3 and its associated figure to immediately precede example 4.

## **RESPONSE:** Accept. Also, "of the" in the paragraph between Figures 4.7 and 4.8 should be "of the".

#### **SEDRIS\_T085**: 4.7.3, Figure 4.7 caption

Change "conformal points" to "conforming points".

**SEDRIS\_T086**: 4.7.4, 3<sup>rd</sup>paragraph, 1<sup>st</sup>sentence

Change "<DRM Reference Vector> object" to "<DRM Reference Vector> instance".

**RESPONSE:** Accept.

**SEDRIS\_T087:** 4.7.4, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> sentence Change "the <DRM Reference Vector>" to "a <DRM Reference Vector> instance".

**RESPONSE:** Accept.

**SEDRIS\_T088**: 4.7.4, 5<sup>th</sup> paragraph, 2<sup>nd</sup>sentence Change "<DRM Reference Vector> object" to "<DRM Reference Vector> instance".

**RESPONSE:** Accept.

**SEDRIS\_T089: 4.7.4 throughout** Replace the term "spheroid" with "ellipsoid" to align with the SRM.

**RESPONSE:** Accept.

**SEDRIS\_T090**: 4.7.4, 6<sup>th</sup>paragraph Replace "an ellipsoid" with "an oblate ellipsoid or a sphere".

**RESPONSE:** Accept.

**SEDRIS\_T091**: 4.7.4, 7<sup>th</sup>paragraph, 2<sup>nd</sup> sentence Change "same ray" to "ray".

**RESPONSE:** Accept.

**SEDRIS\_T092**: 4.7.4, 7<sup>th</sup> paragraph, last sentence Change "<DRM Reference Vector> object" to "<DRM Reference Vector> instance".

**RESPONSE:** Accept.

**SEDRIS\_T093**: 4.7.5, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence Replace "real-world location" with "location in a real or virtual world".

**RESPONSE:** Accept.

**SEDRIS\_T094**: 4.7.5, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence Remove "real-world".

**RESPONSE:** Accept.

**SEDRIS\_T095**: 4.7.5, 2<sup>nd</sup>paragraph, 3<sup>rd</sup> sentence Remove "thus" in front of "specified".

**RESPONSE:** Accept.

**SEDRIS\_T096**: 4.7.5, 3<sup>rd</sup> paragraph Change "instance" to "instantiate", "object" to "instance", and "are not restricted" to "is not restricted".

**RESPONSE:** Accept.

**SEDRIS\_T097**: 4.7.5, 4<sup>th</sup>paragraph Change "object hierarchy" to "DRM object hierarchy".

**RESPONSE:** Accept.

SEDRIS\_T098: 4.7.5, last paragraph

Change "instanced" to instance and "object hierarchy" to "DRM object hierarchy".

#### **SEDRIS T099**: 4.7.6, Example 1, 1<sup>st</sup> sentence

Remove "in" and change "ISO/IEC 180126" to "ISO/IEC 18026".

#### **RESPONSE:**

#### **SEDRIS\_T100**: 4.7.7, 1<sup>st</sup> paragraph

Change "object" to "DRM object", add "instance" to <DRM Perimeter Data>, and "nth" should be in code font (including the superscript).

#### **RESPONSE:** Accept.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T102**: 4.8.1, throughout

Reorganize clause structure once the final paragraph of 4.8.1.1 has been moved. Collapse 4.8.1.2.1 into 4.8.1.2. Renumber clauses as follows:

4.8.1.2.2 <DRM Property Characteristic> to 4.8.1.3

4.8.1.2.3 <DRM Property Value> to 4.8.1.4

- 4.8.1.2.4 <DRM Table Property Description> to 4.8.1.5
- 4.8.1.2.5 <DRM Property Description> to 4.8.1.6

## **RESPONSE:** Accept. The editors will ensure that references to these subclauses are updated where necessary.

#### **SEDRIS\_T103**: 4.8.1.1, list items c, d

"meaning" should be in code font.

#### **RESPONSE:** Accept.

#### SEDRIS\_T104: 4.8.1.1 final paragraph; 4.8.1.2.1, 4.8.1.2.4

The text describing the semantic meaning <DRM Property> and its subclasses corresponds to an earlier version of the specification. The following updates the text to reflect that <DRM Table Property Description> is no longer a subclass of <DRM Property>, and that the data type of the meaning field in <DRM Property> and that of <DRM Table Property Description> are no longer specified using the same data type from clause 5.

Remove the final paragraph of 4.8.1.1, and add pertaining information to 4.8.1.2.1 and 4.8.1.2.4, as described below.

Replace the first and second paragraphs of 4.8.1.2.1 with:

"For an instance of <DRM Property>, the semantic meaning is specified by a Property\_Code value, a data structure that is specified to contain either an EDCS\_Attribute\_Code or a Variable\_Code. The Variable\_Code data type supports semantic meanings of attributes that are specific to the DRM. Except for the special cases covered by Variable\_Code, the information represented by Property\_Code is specified by an EAC.

The set of data values bound to a given instance of <DRM Property> depends upon the concrete subclass involved. <DRM Property> has two concrete subclasses, each of which serves a somewhat different purpose and provides different functionality: <DRM Property Value> and <DRM Property Description>. The common characteristics abstracted by <DRM Property> are discussed above, with the exception of <DRM Property Characteristic>, which is described below."

Replace the text of 4.8.1.2.4 with: "<A DRM Table Property Description> instance is always a component of a <DRM Data Table> instance, and specifies the meaning of the corresponding set of

elements within the cells of the <DRM Data Table> instance. The semantic meaning of a <DRM Table Property Description> instance is specified by an Element\_Type value, a data structure that is specified to contain an EDCS Attribute Code, an Index Code, or a Variable Code. The Index Code and Variable Code data types support semantic meanings of attributes that are specific to the DRM. These two types are constrained regarding the contexts in which they can be used so that they convey semantically valid data.

EXAMPLE The Index\_Code value DATA\_TABLE\_COMPONENT is constrained by 6.2.20 Index codes within tables to appear only within the context of a <DRM Data Table> instance with appropriate characteristics.

A <DRM Table Property Description> instance also specifies the data type of the data, but the data itself is contained by the cells of the <DRM Data Table> instance. (See 4.9 Data tables for further details.)"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T105**: 4.8.2.1, 5<sup>th</sup> paragraph, 2<sup>nd</sup> sentence

Use code font for "classification" and change "resolution surface" to "reference surface".

**RESPONSE**: Accept.

#### **SEDRIS T106**: 4.8.2.2, 1<sup>st</sup> sentence

Change "object" to DRM object and example should be in example layout

#### This applies to the 1<sup>st</sup> paragraph. The occurrence of "object" in the 1<sup>st</sup> **RESPONSE**: sentence will be changed to "DRM object" and the example will be converted to example layout.

#### **SEDRIS T107**: 4.8.3, 1<sup>st</sup> paragraph

Italicize <DRM Base Association Data> and <DRM Geometry Representation> and add missing "of" in the last sentence.

#### **RESPONSE**: Accept.

#### **SEDRIS T108**: 4.8.3, 2<sup>nd</sup>paragraph

Italicize <DRM Base Association Data> and <DRM Base Spatial Association Data>, but remove italics from <DRM Spatial Association Data>.

#### **RESPONSE:** Accept.

#### **SEDRIS T109**: 4.8.3, Example

Move in last sentence of preceding paragraph, use code font for "meaning", change "specifying" to "specified" and "via" to "by", and remove italics from <DRM Spatial Association Data>.

#### **RESPONSE**: Accept. Also "Thus" will be removed.

**SEDRIS\_T110**: 4.8.3, 4<sup>th</sup> paragraph Change "proximity of" to "proximity to", italicize <DRM Base Association Data>, remove "examples of" and change "between the two objects" to "between the two environmental objects".

#### **RESPONSE:** Accept.

#### **SEDRIS T111**: 4.9.1, 3<sup>rd</sup> paragraph

Change "a signature" to "the signature".

#### **RESPONSE**: Accept.

#### **SEDRIS T112**: 4.9.1, last paragraph

Change "sub-extents" to "subextents", "sub-portions" to "portions", and "Data\_Table\_Extents" to "Data Table Sub Extents".

#### **RESPONSE:** The spelling of "sub-extent" will not be changed. Otherwise accept.

#### **SEDRIS\_T113**: 4.9.2, 1<sup>st</sup> paragraph

Change "some of the axes" to "at least one of the axes" and "surface" to "surfaces", add instance to <DRM Axis", and remove "therefore".

#### **RESPONSE:** Accept.

#### **SEDRIS T114**: 4.9.2, list

Change "preserves" to "determines".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T115**: 4.9.2, 4<sup>th</sup> paragraph

Break first sentence in two, put the analog part after what is currently the second part.

**RESPONSE:** The following text will be used: "The <DRM Property Grid Hook Point> class is a subclass of <*DRM Geometry Hierarchy*> that ties an instance of <DRM Property Grid> to a spatial location within its referenced geometric context. This is an analog to a <DRM Geometry Model> instance referenced at a spatial location using an instance of <DRM Geometry Model Instance> that provides a <*DRM Transformation*> instance."

#### **SEDRIS\_T116**: 4.9.2, last paragraph

Change "Note that" to "The", "This allows" to "Thus", "to be" to "may be". Add "field" after "location\_index" and remove "if desired".

#### **RESPONSE:** Accept.

#### **SEDRIS T117**: 4.9.4.1, 3<sup>rd</sup> and 4<sup>th</sup> paragraph

Missing "instance" and code font used for "meaning"

To clarify how indexing data tables plays a role with multiple signature items, replace the 3rd and 4th paragraphs with:

"In addition, the cells of a <DRM Data Table> instance may reference other <DRM Data Table> instances. In this case, all the data in the referenced <DRM Data Table> instance is represented by the referencing cell. The referenced <DRM Data Table> instance is termed a *component data table*. This component data table may exist as a direct component of the referencing <DRM Data Table> instance or as a component of a <DRM Data Table Library> instance.

For signature items that refer to component data tables, the meaning field of the applicable <DRM Table Property Description> instance is set to the appropriate Index\_Code, either DATA\_TABLE\_COMPONENT or DATA\_TABLE\_LIBRARY, indicating that the data table's cell values contain an index. For each cell in the referencing data table, the index value indicates which component data table is represented by the cell.

However, a <DRM Data Table> instance may have multiple signature items per cell and each may reference a different set of component data tables. Consequently, the set of component data tables that are referenced with a signature item shall all have the same ECC specified in a <DRM Classification Data> component. This ECC shall be distinct from any other ECCs for other component data tables. The signature item determines which set of component data tables to index using the component\_data\_table field of the <DRM Table Property Description> instance."

## **RESPONSE:** Accept except that the missing occurrences of "instance" and the code font for "meaning" is moot since the existing text is being replaced.

#### SEDRIS\_T118: 4.9.4.2, Example

Remove "a reference to" and change "as given by" to "specified by".

#### ISO/IEC JTC1/SC24 N2702 ISO/IEC JTC1/SC24/WG8 N0396

#### **RESPONSE:** Accept.

#### **SEDRIS\_T119**: 4.9.5.1, 1<sup>st</sup> paragraph

Change "type of spacing being used" to "whether arithmetic or geometric spacing is being used".

## **RESPONSE:** This comment applies to 4.9.5.2. The text "the type of spacing being used" will be replaced by "whether arithmetic or geometric spacing is being used".

#### **SEDRIS\_T120**: 4.9.5.1, 3<sup>rd</sup> paragraph

Change "Element\_Type" to "EDCS\_Attribute\_Code" and add "meaning" after "unambiguous".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T121**: 4.9.5.2, last paragraph

For clarity, add as new first sentence: "A spatial axis is an  $\underline{\langle Axis \rangle}$  instance that describes sampling along one of the components of an SRF."

#### **RESPONSE:** Accept except that "an <Axis>" will be changed to "a <DRM Axis>".

#### **SEDRIS\_T122**: 4.9.5.3

For clarity, change "ith spatial axis of a grid" to "for any particular spatial axis of a grid". Remove the last two paragraphs.

## **RESPONSE:** Accept. The last two paragraphs start with "In particular, ..." and runs to the end of the subclause.

#### **SEDRIS\_T123**: 4.9.5.5, last sentence

Change to "The interval entries shall not overlap and shall satisfy 6.2.2 Axis type constraints." and create hyperlink.

#### **RESPONSE:** Accept.

#### **SEDRIS T124**: 4.10.2.1, 1<sup>st</sup> paragraph

Change "The *<DRM Geometry Hierarchy>* class represents" to "The *<DRM Geometry Hierarchy>* class instances represent".

#### **RESPONSE:** Accept.

#### **SEDRIS T125**: 4.10.2.1, 2<sup>nd</sup> paragraph

Change "<DRM Geometry Model> instance" to "<DRM Geometry Model> component".

#### **RESPONSE:** Accept.

#### **SEDRIS T126**: 4.10.2.2

Add instance to "A <DRM Aggregate Geometry>" and add reference to "4.13 Organizing principles".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T127**: 4.10.2.3, Figure 4.11

Change "local\_index" to "location\_index" and change caption to "<DRM Property Grid Hook Point> usage".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T128**: 4.10.3.3.1, 2<sup>nd</sup> paragraph and Table 6.36 <DRM Linear Geometry>

The paragraph is not sufficiently clear as to how the fields of a <DRM Linear Geometry> instance are to be interpreted in the following cases:

- how "evenly spaced" is to be interpreted
- what happens when count = 1
- when a <DRM Light Rendering Properties> is present, and how any specific fields of <DRM Light Rendering Properties> affect the issue
- when a <DRM Light Rendering Properties> is not present
- how "alternating" is interpreted

- when a <DRM Rendering Properties> is present

- any specific constraints that affect the issue

#### ----

#### Replace paragraph 2 with the following:

"For a <DRM Linear Geometry> instance L, the value of the count field indicates how L is to be rendered; the count field is not related to the number of <DRM Vertex> or <DRM Location> instances specifying the geometry. The count field value is interpreted for L as follows:

a. If the count field value is zero, L is to be rendered as solid, and the suppress\_last field does not apply.

b. If the count field value is greater than zero and L does not have a <DRM Light Rendering Properties> component, count is the number of evenly spaced line segments to be rendered along L.

The length of a segment is calculated by dividing the total length of the <DRM Linear Geometry> instance by the count.

c. If the count field value is greater than zero and L has a <DRM Light Rendering Properties> component, count is the number of evenly spaced light points to be rendered along L.

The distance between light points is calculated by dividing the total length of the <DRM Linear Geometry> instance by the count. If the count value is 1, a single light point is placed at the halfway point of L.

For either b. or c., if count is greater than 1, suppress\_last indicates whether the last light point/segment in the sequence is to be suppressed or rendered.

--

Update Table 6.36 <DRM Linear Geometry> in accordance with the changes made to 4.10.3.3.1

The SEDRIS Organization is to provide further clarification, including an example, in a separate document at the editing meeting.

#### **RESPONSE:** Accept.

#### Changes highlighted with red strikethroughs for deletion, blue underlines for additions:

The count field of a *<DRM Linear Geometry>* instance does not refer to the number of <u><DRM</u> <u>Vertex> or <DRM Location> instances specifying the geometry. Instead, count</u> indicates how the <DRM Linear Geometry> instance is to be rendered. A count field value of zero for a given <DRM *Linear Geometry*> instance L indicates that L is to be rendered as one solid line segment, and the suppress\_last field does not apply. If, however, count is greater than zero and , the interpretation of count depends on whether L has a <DRM Light Rendering Properties> component the following applies: If a <<u>DRM Light Rendering Properties</u> component is present, a. count is the number of evenly spaced light points to be rendered along L. b. The distance between light points is calculated by dividing the total length of L by count c. If count is 1, a single light point is placed at the halfway point of L and suppress\_last field does not apply. d. If a <DRM Light Rendering Properties> component is present, then the fields of the <DRM Light Rendering Properties> are applicable to each light point, refer to 4.15.3.5. e. If a <DRM Rendering Properties> component is present it is applicable to each light point, refer to 4.15.3.4. f. no additional constraints are in effect. If count is greater than zero and L does not have a <<u>DRM Light Rendering Properties</u>> component the following applies: a. count is the number of evenly spaced light segment to be rendered along L. b. The length of a segment is calculated by dividing the total length of L by count c. If count is 1, a

single line segment is used and suppress\_last field does not apply. d. If a <DRM Light Rendering Properties> component is present, then the fields of the <DRM Light Rendering Properties> are applicable to each line segment, refer to 4.15.3.5. e. If a <DRM Rendering Properties> component is present it is applicable to each line segment, refer to 4.15.3.4. f. no additional constraints are in effect. Otherwise, count is the number of evenly spaced line segments to be rendered along L. In either of these two cases, The field suppress\_last indicates whether the last light point/segment in the sequence is to be suppressed or rendered.

#### Final look of paragraph (existing text with changes made and including example figures):

The count field of a <u>*CDRM Linear Geometry>*</u> instance indicates how the <u>*CDRM Linear*</u> <u>*Geometry>*</u> instance is to be rendered. A count field value of zero for a given <u>*CDRM Linear*</u> <u>*Geometry>*</u> instance L indicates that L is to be rendered as one solid line segment, and the suppress\_last field does not apply. If count is greater than zero and L has a <u>*CDRM Linear*</u> <u>*Rendering Properties>*</u> component the following applies:

- a. count is the number of evenly spaced light points to be rendered along L.
- b. The distance between light points is calculated by dividing the total length of L by count .
- c. If count is 1, a single light point is placed at the halfway point of L and suppress\_last field does not apply.
- d. If a <DRM Light Rendering Properties> component is present, then the fields of the <DRM Light Rendering Properties> are applicable to each light point, refer to 4.15.3.5.
- e. If a <DRM Rendering Properties> component is present it is applicable to each light point, refer to 4.15.3.4.
- f. No additional constraints are in effect.

If count is greater than zero and L does not have a <u><DRM Light Rendering Properties</u> component the following applies:

- a. count is the number of evenly spaced light segment to be rendered along L.
- b. The length of a segment is calculated by dividing the total length of L by count .
- c. If count is 1, a single line segment is used and suppress\_last field does not apply.
- d. If a <DRM Light Rendering Properties> component is present, then the fields of the <DRM Light Rendering Properties> are applicable to each line segment, refer to 4.15.3.5.
- e. If a <DRM Rendering Properties> component is present it is applicable to each line segment, refer to 4.15.3.4.
- f. No additional constraints are in effect.

The field suppress\_last indicates whether the last light point/segment in the sequence is to be suppressed or rendered.

EXAMPLE 1 *<DRM Linear Geometry>* subclass *<*DRM Line*>* instance rendered as a single light point



EXAMPLE 2 <*DRM Linear Geometry*> subclass <DRM Line> instance rendered as three line segments



#### **SEDRIS\_T129**: 4.10.3.3.3, EXAMPLE

Replace 3<sup>rd</sup> sentence with "The first and last light points are at the ends of L, and the remaining light points are evenly spaced between them."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T130**: 4.10.3.4.3, 1<sup>st</sup> paragraph

Add to last sentence "in the SRF in which they are specified".

#### **RESPONSE:** Accept.

#### **SEDRIS T131**: 4.10.3.4.3

For clarity (unnecessary explanation), remove 2<sup>nd</sup> paragraph.

#### **RESPONSE:** Accept.

#### SEDRIS\_T132: 4.10.3.5.2, 2<sup>nd</sup> and 3<sup>rd</sup> sentences

Change to "The exact volume is specified by a set of four or more <DRM Polygon> components. The set of <DRM Polygon> components shall specify a completely enclosed volume."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T133**: 4.10.3.6, paragraph immediately preceding Example 1

For clarity & completeness, add to end of paragraph: "Interior rings shall not overlap either with each other or with the boundaries of the parent mesh face. Each mesh face shall list the vertices in the same order as specified for <DRM Polygon>. Interior rings shall be listed in the opposite order."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T134**: 4.11.2.1, list

Add item d. for <DRM Volume Feature> to the itemized list.

## **RESPONSE:** Accept. Also, change "three" to either "four" or remove the number indication since it is obvious.

SEDRIS\_T135: 4.11.2.4, 2<sup>nd</sup> paragraph

Replace <DRM Regular Feature Face> with "regular <DRM Feature Face>".

#### **RESPONSE:** Accept.

#### **SEDRIS T136**: 4.11.2.4

Add section: 4.11.2.5 Volumetric Features

An instance of <u><DRM Volumetric Feature></u> is used to represent either an environmental object or the 3D universe within which all other <u><DRM Primitive Feature></u> instances are considered to be located.

If an instance of  $\langle DRM Volumetric Feature \rangle$  is used to represent an environmental object, it represents a single environmental object, such as a building, or boulder, in such a way that the spatial information associated with that representation has been abstracted to a bounded volume. The spatial information itself is provided by one or more associated  $\langle DRM Feature Volume \rangle$  instances (see <u>4.12</u> <u>Topology</u>).

If an instance of  $\leq$ DRM Volumetric Feature> is used to represent the 3D universe within which all other  $\leq$ DRM Primitive Feature> instances are being specified, the spatial information itself is provided using one associated universal  $\leq$ DRM Feature Volume> instance (see 4.12 Topology).

#### **RESPONSE:** Accept but the title will be changed to "Volumetric features".

SEDRIS\_T137: 4.11.3, last paragraph, last sentence

Add reference to 4.13 organizing principles.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T138**: 4.12.1

Add missing volume items to lists. Specifically, add <DRM Feature Volume> as item d. in the itemized list of <DRM Feature Topology> classes, and add <DRM Geometry Volume> as item d. in the itemized list of <DRM Geometry Topology> classes.

#### **RESPONSE:** Accept.

#### **SEDRIS T139**: 4.12.2.1

Add missing volume items to lists. Specifically, add item d. <DRM Feature Volume> to itemized list of <DRM Feature Topology>, and add item d. <DRM Geometry Volume> to itemized list of <DRM Geometry Topology>.

**RESPONSE:** Accept.

#### **SEDRIS T140**: 4.12.2.2

Remove NOTE (unnecessary explanation).

**RESPONSE:** Accept.

**SEDRIS\_T141**: 4.12.2.2, 2<sup>nd</sup> paragraph, last sentence For clarity, add "and there are intermediate <DRM Location> components".

**RESPONSE:** Accept.

**SEDRIS\_T142**: 4.12.2.3.1 2<sup>nd</sup> paragraph

Replace "No transmittal shall have more than one instance of <DRM Feature Face> characterized by having an infinite extent." with "A transmittal may have at most one universal <DRM Feature Face> instance for each <DRM Environment Root> instance in the transmittal.

#### **RESPONSE:** Accept.

#### **SEDRIS T143**: 4.12.2.3.4, item 0

Change "coordinates in space" to "position in space".

#### **RESPONSE:** Accept.

**SEDRIS T144**: 4.12.2.3.4, item 1

Change "coordinates in space" to "position in space".

#### **RESPONSE:** Accept.

**SEDRIS T145**: 4.12.2.3.4, item 3

Add missing "instances".

**RESPONSE:** Accept.

**SEDRIS\_T146**: 4.12.2.3.4, item 5

Apply code font to the field name "universal".

**RESPONSE:** Accept.

#### **SEDRIS\_T147**: 4.12.2.3.4, penultimate paragraph

Add wording to deal with multiple <DRM Environment Root> instances and how a universal <DRM Feature Face> relates to levels higher than three, as follows.

Add a following sentence after the current 2nd sentence that says, "Each <DRM Environment Root> instance has its own topology context."

#### **RESPONSE:** Accept.

#### SEDRIS\_T148: 4.12.2.4bis Volumes

Add the following section for <DRM Feature Volume>.

4.12.2.4 Volumes

4.12.2.4.1 Overview

A 3D volume in space that is significant in terms of its connectivity is represented with the DRM classes mentioned in the preceding sections as well as <DRM Feature Volume> and <DRM Feature Volume Shell>.

A <DRM Feature Volume> instance represents a 3D volume in space topologically. The 3D volume may be either infinite (*i.e.*, a universal <DRM Feature Volume> instance) or bounded (*i.e.*, a regular <DRM Feature Volume> instance). In addition, the volume may contain any number of holes. The <DRM Feature Volume Shell> class is used to represent a volume's outer boundary and also the boundaries of its holes.

4.12.2.4.2 <DRM Feature Volume Shell>

A <DRM Feature Volume Shell> instance specifies a 3D boundary as a sequence of two or more ordered <DRM Feature Face> instances forming a bounded volume. Each <DRM Feature Face> instance is associated through a <DRM Face Direction> instance, specifying whether the <DRM Feature Face> is facing towards or away from the volume.

4.12.2.4.3 Regular <DRM Feature Volume>

A regular <DRM Feature Volume> instance, as identified by having its Boolean universal field set to FALSE, is used to topologically represent a solid 3D object that may contain holes. The first <DRM

Feature Volume Shell> component represents the outer boundary of the object while inner holes are represented with other optional <DRM Feature Volume Shell> components.

4.12.2.4.4 Universal <DRM Feature Volume>

A universal <DRM Feature Volume> instance, as identified by having its Boolean universal field set to TRUE, is used to topologically represent an infinite volume. This volume is represented by a set of <DRM Feature Volume Shell> components that represent the only holes in the universal volume. There may be at most one universal <DRM Feature Volume> for each <DRM Environment Root> instance in a transmittal.

#### **RESPONSE:** Accept.

#### **SEDRIS T149**: 4.12.3

Change 2nd paragraph to:

"A <DRM Geometry Node> is always associated with an instance of one of the following:

<DRM Point>,

<DRM Vertex>,

<DRM Property Grid Hook Point>,

<DRM Ellipse>,

<DRM Volume Object>

The location of a <DRM Geometry Node> instance is specified by the <DRM Location> component of the associated <DRM Primitive Geometry> instance."

Change 3rd paragraph to:

"A <DRM Geometry Edge> instance has two <DRM Geometry Node> associates that topologically represent the starting and ending locations of the edge.

When a <DRM Geometry Edge> instance is associated with a <DRM Linear Geometry> instance, the actual locations of the endpoints represented by the associated <DRM Geometry Node> instances are specified with the first and last <DRM Vertex> components of the <DRM Linear Geometry> instance. A <DRM Geometry Edge> instance may also form part of a <DRM Geometry Face> instance."

Add the following between the 3rd and the 4th paragraph:

"A <DRM Geometry Face> instance topologically represents a finite geometric surface. The <DRM Geometry Face> instance is represented with one or more <DRM Geometry Edge> instances. In this case, the locations for the corresponding <DRM Geometry Node> instances are specified by the associated <DRM Polygon> instance. A <DRM Geometry Face> instance may also form part of a <DRM Geometry Volume> instance."

Add the following after the 4th paragraph:

"A <DRM Geometry Volume> instance topologically represents a 3D solid volume. The <DRM Geometry Volume> instance is represented with four or more associated <DRM Geometry Face> instances. The <DRM Geometry Volume> instance is associated to a <DRM Polyhedron> instance that contains the actual location information in its <DRM Polygon> components."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T150**: 4.13.1.1, 1<sup>st</sup>paragraph, 1<sup>st</sup> sentence

Change "the geometry data" to "geometry representation" and "the feature data" to "feature representation".

**RESPONSE:** Accept.

**SEDRIS\_T151**: 4.13.1.1, 2<sup>nd</sup> paragraph Remove for clarity.

**RESPONSE:** Accept.

#### **SEDRIS\_T152**: 4.13.1.1, list

Add continuous LOD and put union of features before union of geometry for completeness and consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T153**: 4.13.2, last sentence

Replace "link class <DRM Hierarchy Data> instance" with "<DRM Hierarchy Data> link object".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T154**: 4.13.5, 1<sup>st</sup> paragraph

Change as follows for clarity: The LOD organizing principle provides a DRM mechanism to represent support the representation of the same set of environmental data using alternative by providing equivalent representations at different levels of detail. This is done with the classes, using instances of <DRM LOD Related Geometry> and/or <DRM LOD Related Features>. These two DRM classes of aggregate objects, <<u>DRM Aggregate Features</u> and <<u>DRM Aggregate Geometry></u>, eontain the actual alternate representations at the differenting levels of detail are contained in instances of <DRM Geometry Hierarchy> and/or <DRM Feature Hierarchy>. The level of detail information is provided in the link object that will be of one of the DRM subclasses of <<u>DRM Base Lovel of Detail Datas</u> in an accompanying <<u>DRM Base LOD Datas</u> link object.

**RESPONSE:** Accept.

#### **SEDRIS\_T155**: 4.13.5, List 2, item b

Change "can begin to be faded in" to "begins to appear".

#### **RESPONSE:** Moot per response to SEDRIS\_T157.

#### **SEDRIS T156**: 4.13.5, List 2, item d

Change "begins to fade out" to "begins to disappear".

#### **RESPONSE:** Moot per response to SEDRIS\_T157.

#### **SEDRIS\_T157**: 4.13.5, 2<sup>nd</sup> paragraph

In order to better explain the concepts of fade bands, replace the list with text : "Instances of the <DRM Distance LOD Data> class specify the range in metres within which the corresponding instance of <DRM Feature Hierarchy> or <DRM Geometry Hierarchy> is valid, and fade bands at each end of the range that specify the size of the transition from invisible to fully visible (and vice versa) for the corresponding instance of <DRM Feature Hierarchy> or <DRM Geometry Hierarchy> or <DRM Geometry Hierarchy>.

#### **RESPONSE:** Accept except that the comment refers to the $3^{rd}$ paragraph.

#### **SEDRIS\_T158**: 4.13.5, last paragraph, 4<sup>th</sup> sentence

Remove sentence, the information is incorrect.

#### **RESPONSE:** Accept.

**SEDRIS\_T159**: 4.13.5, last paragraph

Add "The surface of the volume is considered inside the volume." for completeness.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T160**: 4.13.6, 1<sup>st</sup> paragraph

Insert new sentence to reference data type used with hyperlink: "The meaning of the octant field is specified in 5.6.2.18 Octant."

#### **RESPONSE:** The new sentence will be appended to the 1<sup>st</sup> paragraph.

#### **SEDRIS\_T161**: 4.13.6, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> sentence

Change "parallelepiped" to "bounding parallelepiped".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T162**: 4.13.8, 1<sup>st</sup> paragraph

Add sentence with hyperlink: "The notion of quadrant is analogous to that of an octant as discussed in 4.13.6 octant." for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T163**: 4.13.9

Add the following to define how to compute the normal: "The order of the <DRM Location> components is counter clockwise when viewed from the direction identified by computing the cross product of the vector from the first location to the second and the vector from the second location to the third."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T164**: 4.13.12, 2<sup>nd</sup> sentence

Change <DRM Aggregate Feature> to <DRM Feature Hierarchy> and <DRM Aggregate Geometry> to <DRM Geometry Hierarchy>.

**RESPONSE:** Accept.

#### **SEDRIS\_T165**: 4.14.2.3, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> sentence

For correctness, replace the sentence with the following: "The <DRM Location> instance is in a destination SRF, and specifies the position to which the origin of the model is transformed."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T166**: 4.14.2.3, 3<sup>rd</sup> paragraph, 3<sup>rd</sup> sentence

Remove "data" from " scaling and rotation data".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T167**: 4.14.2.3, last paragraph, last sentence

For clarity change to the following: "The transformation is specified by an instance of  $\langle DRM Local 4x4 \rangle$  and/or by an ordered set of instances of  $\langle DRM LSR Transformation Step \rangle$ , or both. If both are specified, the instance of  $\langle DRM Local 4x4 \rangle$  shall represent the composite of the set of  $\langle DRM LSR Transformation Step \rangle$  instances in compliance with 6.2.24 LSR Transformation components."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T168**: 4.14.3.5, 1<sup>st</sup> sentence

Replace with: "The <DRM Image Library> instance aggregates a complete list of the <DRM Image> instances that are resident in a transmittal." The current text doesn't reflect the fact that a <DRM Image Mapping Function> instance can reference a <DRM Image> instance resident in another transmittal.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T169**: 4.14.3.6, 1<sup>st</sup> sentence

For clarification, replace with: "The <DRM Model Library> aggregates a complete list of the <DRM Model> instances that are resident in a transmittal.".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T170**: 4.14.3.7, 1<sup>st</sup> sentence

For clarification, replace with: "The <DRM Sound Library> aggregates a complete list of the <DRM Sound> instances that are resident in a transmittal.".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T171**: 4.14.3.8, 1<sup>st</sup> sentence

For clarification, replace with: "The <DRM Symbol Library> aggregates a complete list of the <DRM Symbol> instances that are resident in a transmittal. See 4.15.7 Labels"

#### **SEDRIS\_T172**: 4.14.4, and clause 6 <DRM Property Set>

Remove the formal component relationship between <DRM Property Set> and <DRM Spatial Extent>, and remove <DRM Spatial Extent> from the list of inheritable property classes. (<DRM Spatial Extent>'s SRF context is not specified within a <DRM Property Set> instance, and the information it expresses is instance-specific rather than being appropriate for a set of shared properties.)

# **RESPONSE:** In 4.14.4, remove <DRM Spatial Extent> from the bulleted list. In 6.3.195, remove the entry for <DRM Spatial Extent> from the Composed of (two-way) table entry. In 6.3.247, remove the entry for <DRM Property Set> from the Component of (two-way) table entry.

#### SEDRIS\_T173: 4.14.5.1, last paragraph

For completeness, add "A similar inheritance occurs for time-related aggregations."

**RESPONSE:** Accept.

#### **SEDRIS\_T174**: 4.15.1, throughout

For consistency and correctness, replace "SEDRIS object" with "DRM object", and italicize "i.e.".

**RESPONSE:** Accept for all of 4.15.

#### **SEDRIS\_T175**: 4.15.1, list f and 3<sup>rd</sup> paragraph

For clarity, add a break before "In addition" to start new paragraph and combine with 3<sup>rd</sup> paragraph and rewrite to the following:

"For the cases where an organizing principle does not exclude two branches of an organization from being active simultaneously with potentially overlapping data, or for an organization that may have potentially overlapping data within the same branch, the following mechanisms are supplied to allow data providers to resolve potential ambiguities in the rendering of potentially overlapping data."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T176**: 4.15.3.1

For completeness, add "and light emission" after "reflectance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T177**: 4.15.3.5, 4<sup>th</sup> paragraph, 2<sup>nd</sup> sentence

Remove "The types of behaviour include:" and change the enumerated list with the actual names of subclasses with hyperlinks.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T178**: 4.15.4.2, 1<sup>st</sup> paragraph

The concept of an image has not been defined. Insert at the beginning of the paragraph: "An *image* is conceptually an n-dimensional array of elements. The elements are termed *texels*." The last sentence of the paragraph should be moved to become the new 3rd sentence.

**RESPONSE:** Accept.

#### **SEDRIS\_T179**: 4.15.4.2, 3<sup>rd</sup> paragraph, 5<sup>th</sup> sentence

Change "Image\_Data type" to "Image\_Data data type".

**RESPONSE:** Accept.

#### **SEDRIS\_T180**: 4.15.4.2, 3<sup>rd</sup> paragraph, last sentence

Change "These files are described as follows" to "The image data is described as follows" for correctness.

#### **SEDRIS\_T181**: 4.15.4.3, 4<sup>th</sup> paragraph, last sentence

Replace with "In the case where F specifies a planar projection and is part of a geometric representation, either <DRM Tack Point> or <DRM Texture Coordinate> instances are specified, or a <DRM Image Anchor> on F itself shall be specified."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T182**: 4.15.4.3, 5<sup>th</sup> paragraph

Remove paragraph since it is no longer needed given rewrite of 4th paragraph's final sentence in previous comment.

#### **RESPONSE:** Accept.

#### **SEDRIS T183**: 4.15.5

Update clause as follows:

#### 4.15.5 View-related concepts

#### 4.15.5.1 Overview

The DRM provides two specific classes for dealing with special view-related concepts. These are the <DRM Camera Point> and <DRM Stamp Behaviour> classes. These classes deal with different view-related concepts.

#### 4.15.5.2 Specifying vista points

An instance of the <DRM Camera Point>allows a data producer to designate a vista point within a 3D environment for a number of purposes. The <DRM Camera Point> class may be used to indicate a point of interest in the environment with a specific view direction and frustum. This can be used to provide specific views into the visual representation of a transmittal. In addition, the <DRM Camera Point> class may be used to designate a specific location from which data consumers can render an image and compare it to a reference image from the same position included in the transmittal. This allows data consumers to compare the result of their processed data to how the data producer had processed the same data.

The <DRM Camera Point> class includes the following parameters:

- a. location,
- b. camera orientation,
- c. projection type, and
- d. viewing frustum limits.

The location of the camera is specified by the <u><DRM Location 3D></u> component. The direction at which the camera is pointed is specified by the instance of <u><DRM Reference Vector></u> that has a vector\_type field value of CAMERA\_FORWARD\_AXIS. The up axis of the camera is specified by the instance of <u><DRM Reference Vector></u> that has a vector\_type field value of CAMERA\_UP\_AXIS. The up axis specifies the rotational orientation of the camera around the forward axis. These provide the necessary information to position the camera in the currently applicable SRF, orient the camera with respect to its up axis, and identify the direction in which the camera is pointing. The viewing frustum is centered horizontally and vertically around the forward axis, with origin at the location specified by the <u><DRM Location 3D></u> component.

The projection type is specified by the projection field, and may specify either an orthographic or a perspective projection. The projection type also specifies the fundamental shape of the viewing frustum. For an orthographic projection, the viewing frustum is a parallellepiped. For a perspective projection, the viewing frustum is a truncated pyramid. The width and height of the frustum is specified explicitly by the horizontal\_field\_of\_view and aspect\_ratio fields. The extents of the frustum closest and furthest from the camera are specified by the camera\_near and camera\_far fields, respectively.

To associate a specific image to a given vista point, an instance of the <DMR Image> may be associated with an instance of the <DRM Camera Point>. Such an association indicates that the given <<u>DRM Image></u> instance represents a picture taken from the location of the given <u><DRM Camera</u> Point> instance with the given aspect ratio, camera projection, and camera axes as specified by the <<u>DRM Reference Vector></u> instances.

#### 4.15.5.3 Orienting geometry representations to rendering viewpoints

When environmental data sets are used in 3D graphics applications, for efficiency it is often required to reduce the number of geometric primitives that are processed. To achieve this, in some applications it is desirable for some geometry representations to always have a specified orientation relationship to the viewpoint of the 3D graphics application at the time of rendering the data. The <<u>DRM Stamp Behaviour></u> class supports this type of view-related rendering used in 3D graphics applications.

An instance of <u><DRM Stamp Behaviour></u> specifies how a geometry representation (usually planar) shall be oriented such that it always faces the viewpoint when it is being rendered by a 3D graphics application. Such an instance is attached as a component of a <u><DRM Geometry Hierarchy></u> instance. The <u><DRM Geometry Hierarchy></u> instance rotates about the x, y, and/or z axes of its local coordinate system, with respect to the viewpoint of the 3D graphics application, and within the specified angular limits. The center of rotation is specified by the <u><DRM Location 3D></u> instance that is a component of the <u><DRM Stamp Behaviour></u> instance. Both clockwise and counter-clockwise angular limits may be specified for each axis independently. A value for infinity shall specify unlimited rotation.

## **RESPONSE:** Accept in principle. The text will be checked for correct grammar and spelling.

#### **SEDRIS\_T184**: 4.15.5

Change title to "View-related concepts" for clarity.

#### **RESPONSE:** Moot per response to SEDRIS\_T183.

#### **SEDRIS\_T185**: 4.16.1, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

For clarity replace with: "The need for this control extends beyond extracting individual <DRM Model> instances for use as moving models, or environmental objects that are moved through or within the environment represented by the transmittal; it includes the need to identify and control the state of environmental objects that have dynamic behaviour."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T186**: 4.16.1, final paragraph, penultimate sentence

Remove because neither italicized items are used in the standard.

**RESPONSE:** Accept.

#### **SEDRIS\_T187**: 4.16.1, final paragraph, list

Change to EXAMPLE form, and change "object" therein to "environmental object" throughout.

**RESPONSE:** Accept.

**SEDRIS\_T188**: 4.16.2.1, 2<sup>nd</sup> paragraph

Remove "constraint" in next-to-last sentence. Add the followings before the last sentence, "Such a field is termed a *constraint field*." Change "are indexes" to "specify indices".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T189**: 4.16.2.2, 1<sup>st</sup> paragraph

For clarity, replace with "<DRM Literal> is the subclass of <DRM Expression> that is used to specify constant values."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T190**: 4.16.2.2, 2<sup>nd</sup> paragraph

Add detailed example to show interrelationship of <DRM Control Link>, <DRM Expression>, and one or more target fields.

**RESPONSE:** Accept in principle. The following example will be used as the basis for changes to be appended to 4.16.2.2 except lighthouse will be replaced by buoy, a light will be added to the buoy, the last paragraph of the example will be cleansed, and the diagram will be modified accordingly:

"EXAMPLE Consider a lighthouse in which the foghorn of the lighthouse can be turned on and off. The <DRM Model> instance L represents the lighthouse by a <DRM Classification Data> component specifying ECC\_LIGHTHOUSE and a <DRM Geometry Model> component G specifying the geometric representation of the lighthouse.

The <DRM Union Of Geometry Hierarchy> component that organizes the geometry of G specifies a <DRM Sound Instance> component S representing the sound of the lighthouse foghorn. The active\_sound\_value of S is set to FALSE, indicating that the foghorn is turned off by default. The <DRM Sound Instance Control Link> component of S allows the foghorn to be turned on or off when L is instanced.

The <DRM Geometry Model Instance> X instances M through an association to G. X is required to supply values for all <DRM Variable> instances within M; that is, for every <DRM Variable> instance associated to the <DRM Interface Template> component of M, X supplies a value.

X supplies a <DRM Variable> instance F representing the existence of fog to be evaluated when L is instanced. Whether or not the foghorn sound is active depends on the environment variable F that indicates whether fog is present.

X specifies that F is to be substituted for L's <DRM Variable> instance V by means of the <DRM Model Instance Template Index> link object on the relationship between X and F. The index value of 1 specifies that F is to be substituted for the first <DRM Variable> instance associated with L's <DRM Interface Template> component.



Figure 4.W <DRM Variable> usage

#### **SEDRIS\_T191**: 4.16.2.2, 2<sup>nd</sup> and 4<sup>th</sup> paragraphs

For clarity, eliminate paragraph 4 by moving its text into a rewritten paragraph 2. Then define what a  $\langle DRM | Interface Template \rangle$  is. The following should be the new 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs:

"A <DRM Variable> instance exists to connect a <DRM Interface Template> instance to points within <DRM Expression> trees where outside control may be exerted. A <DRM Interface Template> instance is an ordered list of <DRM Variable> instances that exist within the DRM object hierarchy rooted at the instance of <DRM Environment Root> or <DRM Model> that aggregates the <DRM Interface Template> instance.

<DRM Variable> instances represent the variant information within <DRM Expression> trees. <DRM Expression> instances are components of instances of <DRM Geometry Model Instance>, <DRM Feature Model Instance>, or <DRM Control Link> (make this a list). A <DRM Interface Template> instance for a <DRM Environment Root> instance provides access to the <DRM Variable> instances that may be modified by the consuming application. The effect of changes in these <DRM Variable> instances occurs because these <DRM Variable> instances are linked to the <DRM Interface Template> instances at the point where their <DRM Expression> instances exist through <DRM Model Instance Template Index> link objects."

#### **RESPONSE:** Accept.

#### **SEDRIS T192**: 4.16.2.2, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sentence

Change "For an instance of a concrete subclass of <DRM Variable>, the meaning is specified by an Element\_Type value," to "For an instance of a <DRM Variable>, the meaning is specified by a Property\_Code value,"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T193**: 4.16.2.2, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> sentence

Change "Since any subclass of <DRM Variable> may represent" to "Since a <DRM Variable> instance may represent"

#### **RESPONSE:** Accept.

#### **SEDRIS T194**: 4.16.2.2, 3<sup>rd</sup> paragraph, 3<sup>rd</sup>, 4<sup>th</sup>, & 5<sup>th</sup> sentences

Remove and replace with the following: "The meaning field can be either an EDCS Attribute Code or a Variable\_Code. A Variable\_Code represents meanings that are defined within this part of ISO/IEC 18023."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T195**: 4.16.2.2, 5<sup>th</sup> paragraph

Replace with "For a <DRM Variable> instance contained within the DRM object hierarchy rooted at a <DRM Model> instance, evaluation is valid only for a specific model instance. The value is determined by a <DRM Expression> instance aggregated by the specific instance of <DRM Geometry Model Instance> or <DRM Feature Model Instance>."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T196**: 4.16.2.2, 6<sup>th</sup> paragraph

Replace with "For <DRM Variable> instances contained within the DRM object tree rooted at a <DRM Environment Root> instance, evaluation can only be performed within the context of values supplied by the consuming application."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T197**: 4.16.2.3.2, Table 4.7, row Mathematical Constants

Remove "FALSE" and "TRUE".

## **RESPONSE:** Accepted in principle. The new description will read "This category includes the value PI.

#### **SEDRIS\_T198**: 4.16.3.2

For clarity change "whether the target is "on" or "off", and" to "whether the target is on or off, and", "In addition, if the user allows the candela\_value field to vary" to "In addition, if the candela\_value is allowed to vary", and "The user is not required to provide control over all four fields." to ""It is not required that control be provided over all four fields."

#### **SEDRIS T199**: 4.16.4.1

Use code font for state\_tag, change "are designated as state applicable" to "are termed *state applicable*" and add "See 6.2.53 State-related organizing principle for rules on which attributes are considered state applicable."

#### **RESPONSE:** See response to SEDRIS\_T200.

#### **SEDRIS\_T200**: 4.16.4.2

Remove redundant material from this clause including duplication in tables and rewrite to remove reference to "user".

Rewrite of this section to be supplied by SEDRIS organization as separate document.

#### **RESPONSE:** The following text will replace 4.16.4:

#### "4.16.4 <DRM State Control Link>

A state-related aggregation represents an environmental object that can assume multiple states as described in 4.13.11. The remainder of this subclause explains how the aggregation is used in relation to control link objects.

The following example is stated in terms of <u><DRM State Related Geometry></u> instances only, but also applies without loss of generality to <u><DRM State Related Features></u> instances.

Consider a <DRM State Related Geometry> instance T. T represents an environmental object that can assume multiple states of the EDCS Attribute described by the state\_tag field of T, where each branch of T represents one of the possible states and the active\_state\_value field of T indicates which branch is currently active. In order for T to be able to assume a state other than that indicated by the value used by the data provider to populate the active\_state\_value field of T when T was created, T shall have an appropriate <DRM State Control Link> component C. C provides a connection between the active\_state\_value of T and the controlling <DRM Expression> component E of C, so that the active\_state\_value of T is determined by the value of E. Since active\_state\_value is the only controlled field in a <DRM State Related Geometry> instance, the <DRM State Control Link> has exactly one <DRM Expression> component, and its expression\_index field value is one as shown in Table 4.10.

Table 4.10 — <DRM State Control Link> fields for <DRM State Related Geometry>

expression_index	1
mismatch_behaviour	appropriate value

Consider a specific building represented by a <u><DRM State Related Geometry></u> instance B, where the data provider is concerned with representing the EAC\_GENERAL\_DAMAGE\_FRACTION state of the building. The data provider has chosen to model four damage states: 0% damaged, 25% damaged, 50% damaged, and 100% damaged (totally destroyed), as shown in Table 4.8.

Table 4.8 — Possible state values example	le
---	----

<drm state<="" th=""><th>  DRM State</th><th><drm state<="" th=""><th><drm data="" state=""></drm></th></drm></th></drm>	 DRM State	<drm state<="" th=""><th><drm data="" state=""></drm></th></drm>	<drm data="" state=""></drm>
--	---------------	--	------------------------------

	<u>Data&gt;</u>	<u>Data&gt;</u>	<u>Data&gt;</u>	
state_value	0%	25%	50%	100%
meaning	building is OK	some damage	heavy damage	completely demolished

<u>Table 4.9</u> indicates that the default state of B is 0% damage; that is, completely undamaged. The <u><DRM State Data></u> link objects of the branches have the possible field values (meanings given in the bottom row) shown in Table 4.8.

B needs a  $\leq$  DRM State Control Link> component C to allow the use of states other than the default of 0% damage as shown in Table 4.10.

Table 4.9 —	Exampl	e state s	pecification
-------------	--------	-----------	--------------

state_tag	EAC_GENERAL_DAMAGE_FRACTION
active_state_value	0%

As shown in <u>Table 4.11</u>, the <u><DRM Expression></u> component of C is a <u><DRM</u> <u>Variable></u> instance V, so that whatever value is plugged into V when B is instanced is fed into the active\_state\_value of B by C.

meaning	{ VARIABLE, ACTIVE_STATE_VALUE }	
value_unit	EUC_UNITLESS	
value_scale	ESC_UNI	
value_type	FLOAT	
description	{ DEFAULT, 12, "damage state"}	
runtime_label	{ DEFAULT, 0, ""}	

Table 4.11 — Example expression using a <DRM Variable> instance

Suppose that a value of 25% is supplied to the <DRM Variable> instance V. B then changes state to 25% damage. Then more damage is done, so that the damage is updated to 45%. This presents a problem, because the data provider has specified each branch with a single matching value, and 45% is not covered by any of the branches. At this point, the mismatch\_behaviour of the <DRM State Control Link> instance C comes into play. Since its value is LAST, B will remain in the 25% damage state.

There are two other possible choices for mismatch\_behaviour, but they are not appropriate for this example. DEFAULT would have reset B to its default state (that provided by the original unmodified active\_state\_value), namely, 0% damage. The effect would be that 45% damage would appear to return the building to its intact state, as for that matter, would 99% damage, or any other value not covered by the branches of B. The other possible choice, NONE , acts as an off state. The building would seem to disappear completely if none of the branches matched, then reappear when a matching value occurred. If that had been specified, 5% damage would make the building disappear from sight, but 25% damage would make it reappear. "

#### **SEDRIS\_T201**: 4.16.7, 1<sup>st</sup> paragraph

For SRM correlation, remove the last sentence.

**RESPONSE:** Accept.

#### SEDRIS\_T202: 4.17.2.1

For clarity, remove the last sentence.

**RESPONSE:** Accept.

#### **SEDRIS T203**: 4.17.2.3, list item c

Change "organization corresponds" to "organization\_name corresponds".

#### **RESPONSE:** Accept.

**SEDRIS\_T204**: 4.17.2.4, list Add missing field elements.

# **RESPONSE:** The mapping of the "credit\_count", "credit", and "supplemental\_information" fields to their corresponding ISO 19115 fields will be added to the list.

#### **SEDRIS\_T205**: 4.17.2.6

Update text to constrain the array to have at least one entry, array entries contain a semicolonseparated list fix; remove Keyword\_Structure and keyword\_list to current fields.

**RESPONSE:** The following text will be used: "The <DRM Keywords> class corresponds to the data element MD\_Keyword of ISO 19115, specifying a keyword\_count, keyword\_array, and type as fields, where <u>6.2.25</u> <u>Mandatory Metadata</u> constrains the data provider with further restrictions. The type field specifies the subject matter being used to group similar keywords in a given instance of <DRM Keywords>.The keyword\_count field specifies the number of entries in keyword\_array, each entry of which specifies a commonly used word, formalized word, or phrase used to describe the subject."

#### **SEDRIS T206**: 4.17.2.8, 1<sup>st</sup> paragraph

Change the last two sentences to read "A <DRM Browse Media> instance separates the file name and file type in the fields media\_format and media\_urn field."

**RESPONSE:** The following text will be used: "A <DRM Browse Media> instance separates the file name and file type of MD\_BrowseGraphic by using the fields media\_format and media\_urn."

#### **SEDRIS\_T207**: 4.17.2.8, 2<sup>nd</sup> paragraph

Remove paragraph because of redundancy.

#### **RESPONSE:** Accept.

#### SEDRIS\_T208: 4.17.3.2, last paragraph

Break <DRM DRM Class Summary Item> to its own paragraph, as follows:

"The optional <DRM DRM Class Summary Item> components are discussed in 4.17.3.4 DRM class summary."

Add new paragraphs at the end of 4.17.3.2:

"Each <DRM Environmental Domain Summary>, if present, specifies an ECC (possibly qualified as per 4.8.2.2 Qualification) that applies to the entire transmittal."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T209**: 4.19.2.4, 1<sup>st</sup> paragraph, and list

Change objects to DRM objects.

In the list, change object to DRM object; but not for object handle.

For TransmittalVersion list item, change "Transmittal Root object" to "<DRM Transmittal Root> instance"; add SRM ("DRM, EDCS, and SRM"); and drop rest of sentence for bullet. In last item, drop "specified by a single storage mechanism".

#### **RESPONSE:** Accept.

#### **SEDRIS T210**: 4.19.2.6

Change object to DRM object.

Change third list item to:

"7.3.52 GetUnresolvedObjectFromPublishedLabel creates a placeholder object to be used for creating relationships from the local DRM object to the unresolved DRM object when the unresolved DRM object is not available."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T211**: 4.19.2.9, and in Clause 7 and Clause 5

Rename CloneObject to CloneObjectHandle

#### **RESPONSE:** The name is changed to more correctly describe the purpose of the function.

#### **SEDRIS\_T212**: 4.19.3

Change the text for item "ResolveTransmittalName" to "resolves the specified transmittal name and returns the location of the transmittal."

Make similar change to get rid of URN for the other bullets that use it.

Change text for item "ResolveObject" to "calls the resolution mechanism on the specified DRM object", and drop rest of sentence.

Change all object to DRM object.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T213**: 4.21.2, last paragraph

The following statement should be appended to the last paragraph: "The selector number assigned to the selector shall be as specified by the Registry of Graphical Items."

#### **RESPONSE:** Accept.

#### Clause 5

#### **SEDRIS\_T214**: 5 Entire clause

Change "a random order" to "any order" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T215**: Table 5.1, CREATE

Change "add" to "add and subsequently change".

#### **RESPONSE:** Accept. Applies to table in 5.2.6.2.

#### **SEDRIS T216**: 5.2.6.5

Change first sentence to "Table 5.4 defines the Colour\_Binding data type that specifies which type of colour inheritance is in effect within the scope of the given <DRM Rendering Properties> instance." NORMAL Change "overload" to "override"

#### **RESPONSE:** Accept.

**SEDRIS\_T217**: 5.2.6.9

Change first sentence to "Table 5.6 defines the Hierarchy\_Inclusion data type that specifies, for a given subclass of <DRM Aggregate Feature> or <DRM Aggregate Geometry>, whether the instances and their components are included or excluded from a search."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T218**: Table 5.46 interpolation type

Add reference for OAML to bibliography.

#### **RESPONSE:** Accept.

#### SEDRIS\_T219: 5.2.7.34 LOD\_Data\_Type

Ensure that LOD\_Entry and LOD\_Data\_Type align with each other and that their entries are in alphabetical order.

**RESPONSE:** Accept.

#### **SEDRIS\_T220**: 5.2.6.14 LSR\_Transformation\_Axis

Change x, y, z to u, v, w to align with SRM.

**RESPONSE:** Accept.

#### **SEDRIS\_T221**: 5.2.6.22

To align with SRM, replace "datume" with "vertical offset model", and change CLOSEST\_TO\_VERTICAL\_DATUM to CLOSEST\_TO\_VERTICAL\_OFFSET.

**RESPONSE:** Accept except "vertical offset model" will be replaced by "vertical offset surface".

#### **SEDRIS\_T222**: 5.2.6.23 Reference\_Surface\_LOD\_Select

For consistency, relabel FULL to MOST\_DETAILED with a corresponding change in the table entry's description of MOST\_DETAILED.

**RESPONSE:** Accept.

#### SEDRIS\_T223: 5.2.6.24 Return\_Code

For consistency with Clause 7, change FAILED to FAILURE, and change SUCCEEDED to SUCCESS.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T224**: 5.2.6.25 Search Bounds Closure, 2<sup>nd</sup> paragraph

Replace first sentence with "Each Search\_Bounds value specifies an enclosed region of a tessellation." Use code font appropriately in sentences 1 and 2. In the last sentence, fix use of code font, and change "guaranteed" to "ensured".

#### **RESPONSE:** Accept.

**SEDRIS\_T225**: 5.2.6.26, 2<sup>nd</sup> paragraph Change "search dimension" to name of type in code font.

**RESPONSE:** Accept.

**SEDRIS\_T226**: 5.2.6.26, 3<sup>rd</sup> paragraph Change TWO\_DIMENSIONAL to TWO\_DIMENSIONAL\_OR\_SURFACE.

#### **RESPONSE:** Accept.

#### **SEDRIS T227**: 5.2.6.31

Add missing occurrences of "instance". Change order of DEFAULT and LAST to alphabetical order, so that DEFAULT is the first listed.

**RESPONSE:** Accept.

#### **SEDRIS\_T228**: 5.2.7.3 Camera\_Projection\_Type

Change "to be used when viewing a scene" to "that applies to a <DRM Camera Point> instance".

#### **RESPONSE:** Accept.

#### SEDRIS\_T229: 5.2.7.5 Colour\_Mapping

Since multiple values can be simultaneously specified, change this to a set type, moving to the appropriate section of Clause 5 accordingly.

In part c, change the asterisk to a multiply symbol.

For x, y change "object" to "environmental object"; otherwise "object" in this section is to be changed to "DRM object". Add missing occurrences of "instance" where needed. Remove the term "signatures" since already specified image\_signature. Correct the spelling of "instance".

Change mention of 123 COLOUR to image\_signature = 123COLOUR or image\_signature =

123COLOUR\_ALPHA because both apply.

In table, change "object" to "DRM object"

Update Colour\_Mapping to be a set data type, not a selection data type.

#### **RESPONSE:** Accept.

#### **SEDRIS T230**: 5.2.7.14, Table 5.29

Change text for Attribute to specify an EDCS\_Attribute\_Code not just an attribute.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T231**: 5.2.7.19, Table 5.33

Add missing comma after "attribution".

Before table 5.33, add the following sentence: "The DRM objects cited below correspond to the environmental objects that have the functional association."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T232**: 5.2.7.21, 1<sup>st</sup> paragraph

Replace with "Table 5.35 defines the Geometry\_Topology\_Level data type that specifies, for a given <DRM Geometry Topology Hierarchy> instance, the level of geometry topology that is present."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T233**: 5.2.7.23

In the first paragraph, change "objects" to "DRM objects". Change "how many of the object type" to "how many instances of the specified DRM class".

#### **RESPONSE:** Accept.

#### **SEDRIS T234**: 5.2.7.25

Update the labels for the entries of Image\_Lookup\_Signature to correspond to the terminology for Image\_Signature (e.g. RGB to 123 Colour, intensity to luminance).

#### **RESPONSE:** Accept.

#### **SEDRIS\_T235**: 5.2.7.26

Update the labels to correspond to the terminology for Image\_Signature (e.g. I\_TO\_I to L\_to\_L, "intensity" to "luminance", "RGB" to "123 colour" for I\_to\_RGB.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T236**: 5.2.7.28, Table 5.42

For CYLINDRICAL and SPHERICAL, insert "as specified by <DRM Image Anchor>" (right after the "warped to a xxx shape").

## **RESPONSE:** Accept except that "<DRM Image Anchor>" will be "the <DRM Image Anchor> instance".

**SEDRIS T237**: 5.2.7.32

Change "cell values" to "data table cell values".

#### **RESPONSE:** Accept.

#### **SEDRIS T238**: 5.2.7.38

For clarity, append to the end of the first sentence: "the components of a given instance of <DRM Union Of Features> or <DRM Union Of Geometry>".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T239**: 5.2.7.39, Table 5.51

Change CONSTANT's description to

"All pixels of the geometry representation are of the specified colour."

Change BLEND's description to

"The pixels of the geometry representation have a colour that is linearly interpolated from the various <DRM Vertex> instances of the representation."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T240**: 5.2.7.40, 2<sup>nd</sup> paragraph

Add comma before "continuing on". After "first argument" add "and is the first ordered component of the given <DRM Predefined Function> instance"; similarly for "second argument".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T241**: 5.2.7.40, Table 5.52

Delete the second paragraph for ADD (and elsewhere where it's obvious which is the left argument and which is the right argument); the paragraph preceding the table makes this text unnecessary. REFERENCE\_SURFACE\_ELEVATION insert missing "instances" in its description. For TABLE\_VALUE, change "<DRM Prespecified Function>" to "<DRM Predefined Function>"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T242**: 5.2.7.43 Search\_Rule\_Type

Rename ASSOCIATION\_DRM\_CLASS to ASSOCIATE.

Remove ASSOCIATION.

Rename COMPONENT\_DRM\_CLASS to COMPONENT.

For both ASSOCIATE and COMPONENT, change the validity rules to describe the meaning of NULL when passed for the DRM class (meaning that the related object may be of any DRM class). For the other rule types, specify that NULL is not allowed for the drm\_class. Make appropriate changes to Search\_Rule in 5.3.3.239.

#### **RESPONSE:** Accept.

#### **SEDRIS T243**: 5.2.7.44

Change "object" to "DRM object". In paragraph 2, next to last sentence, change "box search" to "bounding box search" for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T244**: 5.2.7.45, Table 5.57

Alphabetize entries to make locating entries easier.

Insert as last sentence of paragraph before table: "Data types from EDCS or SRM that correspond to the specified search value type are considered to be of the type specified by the Search\_Value\_Type."

#### **RESPONSE:** Accept.

#### SEDRIS T245: 5.2.7.47 Shading Method

For INTERPOLATED\_COLOUR, change "attribute" to "representation".

Italicize fixed shading, Gouraud shading, and Phong shading where terms are introduced, but do not capitalize "Fixed".

#### **SEDRIS T246**: 5.2.7.49

A reference to Annex C should be added, so that this type is handled in a manner consistent to Media\_Format (see comments against Annex C that adds references for this type).

#### **RESPONSE:** Accept.

#### **SEDRIS T247**: 5.2.7.50

Change wording to "Table 5.62 defines the Spacing\_Type data type that specifies, for a given <DRM Regular Axis> instance, how the spacing value is used to compute tick marks." Use code font for reference to spacing field.

#### **RESPONSE:** Accept.

#### **SEDRIS T248**: 5.2.7.51

Handle analogously to Function Association Meaning Type. Change "object" throughout table to "DRM object".

#### **RESPONSE:** Accept.

#### **SEDRIS T249**: 5.2.7.62

Reorder Status\_Code enumerants as shown in the following table, adding the missing entry for INVALID\_OBJECT\_LABEL for consistency with clause 7, and update descriptions of selectors where indicated.

Note that for clarity and consistency with clause 7, UNRESOLVED\_START\_OBJECT is to be relabelled to UNRESOLVED\_INPUT\_OBJECT, and UNRESOLVED\_OBJECT to UNRESOLVED\_OUTPUT\_OBJECT.

This status code is returned when the function
Succeeded and no further information is provided.
Other status codes do not necessarily indicate that
the function failed. See particular functions for more
information.
This status code is returned when the function
received as an argument a label that was not valid in
accordance with label syntax rules, or when an
attempt has been made to publish a DRM object
with a label that is already in use.
This status code is returned by GetAggregate,
GetAssociate, GetComponent, and GetNextObject
when there are no further objects to return that meet
the specified criteria
This status code is returned by the open transmittel
functions if the machined file leastion was not
functions if the resolved file location was not
accessible by the API. This can occur if the file was
opened for READ_ONLY or UPDATE access and
the file does not exist. It can also occur if the file
location specified a non-local file and the API had
no transport mechanism available capable of
accessing the remote file.

UNPUBLISHED_OBJECT	
UNRESOLVED_INPUT_OBJECT	
UNRESOLVED_OUTPUT_OBJECT	
UNRESOLVED_TRANSMITTAL	
UNSUPPORTED_ENCODING	

#### **SEDRIS\_T250**: 5.2.7.63

A reference to Annex C should be added, so that this type is handled in a manner consistent to Media\_Format (see comments against Annex C that adds references for this type).

#### **RESPONSE:** Accept.

#### **SEDRIS\_T251**: 5.2.7.65

Replace both occurrences of "<DRM Geometry Representation>" with "<DRM Time Related Geometry>".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T252**: 5.2.7.69 Transmittal\_API\_Function

Rename to API\_Function (because not all API functions have to do with transmittals) with appropriate changes made throughout specification.

#### **RESPONSE:** Accept.

#### **SEDRIS T253**: 5.2.7.75

Alphabetize the entries, and reorder the variants in Volume\_Extent\_Entry accordingly.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T254**: 5.2.8.4 (note has no table)

Change LEVEL\_OF\_DETAIL to LOD. Change OCT\_TREE to OCTANT Change QUAD\_TREE to QUADRANT. Remove "\_GENERAL" from SPATIAL\_INDEX\_RELATED\_GENERAL label, for consistency.

#### **RESPONSE:** Accept.

#### SEDRIS\_T255: 5.2.8.5 Polygon\_Flags

Rename the data type to Polygon\_Flag (other set data types such as Display\_Side and Display\_Style are named in the singular).

#### **RESPONSE:** Accept.

#### SEDRIS T256: 5.2.8.6 Polygon Flag

Add documentation for the following set members:

BACKDROP_GROUND	Indicates that the given <drm polygon=""> instance is the</drm>	
	default "ground" backdrop.	
BACKDROP_SKY	Indicates that the given <drm polygon=""> instance is the</drm>	
	default "sky" backdrop.	
CLUTTER_ENHANCED	Indicates that the given <drm polygon=""> instance has</drm>	
	algorithmically scattered model instances on it.	
CONCAVE	Indicates whether the given <drm polygon=""> instance is</drm>	
	concave.	
DECAL	Indicates that the given <drm polygon=""> instance shall</drm>	
	always be given rendering priority above any other coplanar	
	<drm polygon=""> instance. When set to TRUE, this flag</drm>	

	supercedes the index value in any applicable <drm< th=""></drm<>
	Rendering Priority Level> instance.
DONT_DRAPE	For conforming <drm polygon=""> instances (<drm< th=""></drm<></drm>
	Polygon> instances with all <drm 2d="" location="" lsr=""></drm>
	instances), a <drm polygon=""> instance usually drapes across</drm>
	the terrain, breaking into multiple polygons if the draped
	<drm polygon=""> instance crosses terrain facets. If this flag is</drm>
	set, then the given <drm polygon=""> instance is not draped</drm>
	and does not break at terrain facets; instead, terrain facets are
	ignored, and the given <drm polygon=""> instance is simply</drm>
	defined by the locations of its conformed <drm vertex=""></drm>
	components.
FOOTPRINT	Indicates that the given <drm polygon=""> instance is a</drm>
	footprint for other geometry.
HAT_TEST	Indicates that the given <drm polygon=""> instance P may be</drm>
	used to measure the vertical height of an environmental object
	A that is positioned directly above P such that the "height
	above terrain" (HAT) of A is taken to be its height above P.
INACTIVE	Indicates that the given <drm polygon=""> instance is inactive,</drm>
	or not used.
INVISIBLE	Indicates that the given <drm polygon=""> instance is invisible,</drm>
	or not seen.
LASER_RANGE_FINDING	Indicates that the given <drm polygon=""> instance is used for</drm>
	horizontal tests for computer image generator (CIG)
	applications. This flag is analogous to HAT_TEST, where
	LASER_RANGE_FINDING is used for tests in the
	horizontal direction.
MOON_REFLECTION	Indicates that the moon's reflection is to be generated upon
	the given <drm polygon=""> instance.</drm>
SHADOW	Indicates that the given <drm polygon=""> instance is in a</drm>
	shadow.
SUN_ILLUMINATED	Indicates that the given <drm polygon=""> instance is</drm>
	illuminated depending on the position of the sun.

#### **RESPONSE:** The current descriptions will be replaced by the provided text.

#### SEDRIS\_T257: 5.2.8.6 Polygon Flag

Add documentation for the following set members:

ENABLE_FEATURE_SIZE_BLENDING	This flag indicates whether feature-based blending is enabled. All <drm polygon=""> instances that have this flag set will blend (geometry and texture) simultaneously based on the size (radius) of the original</drm>
	feature that the <drm polygon=""> instances were derived from.</drm>
ENABLE_POLYGON_RANGE_BLENDING	Indicates whether range ring blending is enabled. All <drm polygon=""> instances that have this flag set will blend (geometry and texture) at the same range (distance).</drm>
ENABLE_FRACTAL	This flag exists to allow the face of the given <drm polygon=""> instance to fractalize in real-time, and is provided for use in applications such as representing sea states.</drm>

This flag indicates that the shape of the given <drm polygon=""> instance may change at run-time.</drm>
EXAMPLE A <drm polygon=""> instance representing part of the surface of a body of water, such as a sea. In such an example, the colour might also change if different colour textures were being used for the surface. For 3D representations of a sea surface that changes with (for instance) EAC_BEAUFORT_WIND_SCALE, the colour of a <drm polygon=""> instance may tend more towards white as the sea gets rougher.</drm></drm>

#### **RESPONSE:** The current description will be replaced by the provided text.

#### SEDRIS\_T258: 5.2.8.5 Polygon\_Flags, CUT, CUT\_IMAGERY, RAISED

Add documentation for the following set members:

CUT	Indicates that the given <drm polygon=""> instance was cut below the terrain surface. Such <drm polygon=""> instances are normally derived from <drm feature="" linear=""> instances corresponding to environmental objects such as roads and rivers.</drm></drm></drm>
CUT_IMAGERY	Indicates that the given <drm polygon=""> instance is to be used to cut geospecific imagery into any cultural features that are present.</drm>
RAISED	Indicates that the given <drm polygon=""> instance was a filling polygon above the terrain surface. Such <drm polygon=""> instances are normally derived from <drm feature="" linear=""> instances corresponding to environmental objects such as roads. This flag also indicates that the given <drm polygon=""> instance was raised above the surrounding terrain surface. Such <drm polygon=""> instances are normally derived from <drm areal="" feature=""> instances corresponding to environmental objects such as forest canopies.</drm></drm></drm></drm></drm></drm>

#### **RESPONSE:** Accept.

SEDRIS_T259: 5.2.8.5 Polygon_Flags, REFLECTIVE		
REFLECTIVE	This flag indicates that the given <drm polygon=""> instance reflects light that</drm>	
	is shown on it.	

Remove this set member; the reflectance properties of a <DRM Polygon> instance can be more clearly specified through the use of <DRM Property Value> components.

## **RESPONSE:** The text in the right column above replaces the current text describing the REFLECTIVE polygon flag.

**SEDRIS\_T260**: 5.2.8.5 Polygon\_Flags, COLLIDIBLE and PROJECTILE\_COLLIDIBLE Add documentation for the following set members:

COLLIDIBLE	Indicates that the given <drm polygon=""> instance is suitable</drm>
	an environmental object collides with the environmental
	object represented by the given <drm polygon=""> instance, a collision state is to be set in the consuming application.</drm>
-----------------------	---
PROJECTILE_COLLIDIBLE	Indicates that the given <drm polygon=""> instance is suitable</drm>
	for use for projectile collision detection in a consuming
	application. If an environmental object corresponding to a
	projectile collides with the environmental object represented
	by the given <drm polygon=""> instance, a projectile collision</drm>
	state is to be set in the consuming application.

**RESPONSE:** Accept. Actually, this is replacement text for the current content.

#### **SEDRIS\_T261**: 5.2.8.5 Polygon\_Flags

Remove the following set members as being superceded by the creation of the <DRM Polyhedron> class:

OPAQUE_TOP	This flag is used with the RAISED flag, to indicate that the given	
	<drm polygon=""> instance has been raised such that it now forms</drm>	
	part of a polyhedron, where the top of the polyhedron is opaque.	
VISIBLE_FLOOR	This flag is used with the RAISED flag, to indicate that the given	
	<drm polygon=""> instance has been raised such that it now forms</drm>	
	part of a polyhedron, where the floor of the polyhedron is visible.	
VISIBLE_INTERIOR	This flag is used with the RAISED flag, to indicate that the given	
	<drm polygon=""> instance has been raised such that it now forms</drm>	
	part of a polyhedron, where the interior wall of the polyhedron is	
	visible.	
VISIBLE_PERIMETER	This flag is used with the RAISED flag, to indicate that the given	
	<drm polygon=""> instance has been raised such that it now forms</drm>	
	part of a polyhedron, where the perimeter wall of the polyhedron is	
	visible.	

# **RESPONSE:** The text in the right column replaces the text in the corresponding entries within the definition of Polygon\_Flags with the addition that "polyhedron" be replaced by "<DRM Polyhedron> instance" throughout.

#### SEDRIS\_T262: 5.2.8.5 Polygon\_Flags, TERRAIN

Remove the set member TERRAIN. This semantic can be indicated by providing a <DRM Classification Data> component with tag = ECC\_TERRAIN for the given <DRM Polygon> instance.

#### **RESPONSE:** Withdrawn.

#### **SEDRIS\_T263**: 5.2.8.5 Polygon\_Flag, WATER\_BODY\_SURFACE

Remove the set member WATER\_BODY\_SURFACE. This semantic can be indicated by providing a <DRM Classification Data> component with tag = ECC\_WATERBODY\_SURFACE for the given <DRM Polygon> instance.

If WATERBODY\_SURFACE is retained, rename it to WATERBODY\_SURFACE, for consistency with EDCS.

**RESPONSE:** Change the name of the flag to be "WATERBODY\_SURFACE" and replace "surface of a body of water" with " an environmental object classified as an ECC\_WATERBODY\_SURFACE". Replace all occurrences of "polygon" with "<DRM\_Polygon> instance".

#### SEDRIS\_T264: 5.3.3.6 Address

Postal\_code and country have their data types transposed; correct this. Add a statement that the country code is as specified as is the country code for Locale.

**RESPONSE:** Accept. (The data type for Postal Code should be String and the data type for country code should be Character[3]). Also, Postal Code precedes Country.

#### **SEDRIS\_T265**: 5.3.3.9 Alternate\_Hierarchy\_Parameters

Use Code font for type names and field names. Change "object" to "instance".

Remove "as appropriate in this structure", and change the two field names to "hierarchy\_data\_array". Insert missing "and" after last comma in last paragraph.

#### **RESPONSE:** Accept.

#### **SEDRIS T266**: 5.3.3.15

Change "object" to "instance". Fix "an" to "a". Remove last sentence as inappropriate.

## **RESPONSE:** Accept. Also, the word "instance" will be inserted after the 2<sup>nd</sup> <DRM Animation Related Geometry>.

#### **SEDRIS T267**: 5.3.3.44

Remove this; CMYK\_Data is no longer used in this specification.

**RESPONSE:** Accept.

#### **SEDRIS\_T268**: 5.3.3.52 Contact\_Information, new type Telephone\_Information

This data type, for compliance with ISO 19115, should support multiple voice and facsimile telephone numbers.

Replace the voice\_phone, fax\_phone, and tdd\_tty\_phone fields of Contact\_Information with a single field, "phone Telephone\_Information", where the new data type Telephone\_Information is specified as follows.

The Telephone\_Information data type encapsulates the complete set of telephone contact information used by Contact\_Information.

Telephone\_Information :=

{

voice _count	Short_Integer_Unsigned;
voice	String[voice_count];
facsimile_count	Short_Integer_Unsigned;
facsimile	String[facsimile_count];
tdd_tty_count	Short_Integer_Unsigned;
tdd_tty	String[tdd_tty_count];

};

## **RESPONSE:** Accept in principle. Add explanation that this is derived from CI\_Telephone defined in ISO 19115.

#### **SEDRIS\_T269**: 5.3.3.54

Correct class name to <DRM Continuous LOD Related Geometry>

**RESPONSE:** Accept.

#### **SEDRIS T270**: 5.3.3.62

Change function references to proper hyperlinked references to Clause 7.

#### **RESPONSE:** Accept.

#### **SEDRIS T271**: 5.3.3.63

For consistency, change "Data\_Table\_Extents" to "Data\_Table\_Sub\_Extent".

#### **RESPONSE:** Accept.

#### **SEDRIS T272**: 5.3.3.78

In the first sentence, replace "the type of data for which a DRM class instance applies" with "the type of data being specified by a <DRM Table Property Description> instance".

#### **SEDRIS T273**: 5.3.3.93

Change the paragraphs after the first colon to a three-entry list corresponding to Hierarchy\_Inclusion's entries.

Throughout, replace "hierarchy object" with "hierarchy".

Change the last two paragraphs before the data type definition to a list, similarly to the material after the first colon.

#### **RESPONSE:** Accept.

#### **SEDRIS T274**: 5.3.3.101

Insert missing "of" after "branches", and change "object to "instance".

Change "specified by the data model" to "specified by the DRM"

Add missing entries for spatial resolution for LOD.

Update Octant and Quadrant enumerant labels to match the corresponding type's entries.

Change "ordered by the data model" to "ordered by the DRM"

In the fields, change oct\_tree to octant, and change quad\_tree to quadrant.

For correctness, replace the last paragraph with: "For all other subclasses of <DRM Aggregate

Feature> and <DRM Aggregate Geometry>, see the specifications for the appropriate subclasses."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T275**: 5.3.3.102, 1<sup>st</sup> paragraph

Change "an" to "a".

Change second "<DRM Aggregate Feature>" to "<DRM Aggregate Geometry>". Change "object" to "instance" throughout where appropriate. Add missing occurrences of "instance" in later paragraphs.

#### **RESPONSE:** Accept.

#### SEDRIS\_T276: 5.3.3.102, last paragraph

Change "<DRM Feature Representation>" to "<DRM Aggregate Feature>", and change "<DRM Geometry Representation>" to "<DRM Aggregate Geometry>". Change "types" to "subclasses".

Fix capitalization of \_PARAMETERS to "\_Parameters".

#### **RESPONSE:** Accept.

#### **SEDRIS T277**: 5.3.3.122

Change "<DRM Enumeration Axis>" to "<DRM Interval Axis>".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T278**: 5.3.3.142

Change last part to "specifies a single value for a long float interval".

**RESPONSE:** Accept.

#### **SEDRIS\_T279**: 5.3.3.143, 1<sup>st</sup> sentence

Change "Float\_Interval\_Value" to "Long\_Float\_Interval\_Value"; change "variant record" to not be in code font; and change "float interval value" to "long float interval value".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T280**: 5.3.3.177 Packed\_Hierarchy\_Object

For consistency with similar field names in other types, change "number\_of\_components" to "component\_count", and change "number\_of\_aggregates" to "aggregate\_count"

**RESPONSE:** Accept.

**SEDRIS T281**: 5.3.3.224

For consistency with similar field names in other types, change "number\_of\_objects" to "object\_count"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T282**: 5.3.3.245 and 5.3.3.242

Search\_Rule\_Field\_Array is currently the same as Search\_Rule\_Field, and cannot specify an array. After drm\_class, replace the current value field with "array\_size Short\_Integer\_Positive" "value\_array Any\_Search\_Value[array\_size]"

Make similar updates to Search\_Rule\_Component\_Field\_Array.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T283**: 5.3.3.247 Search\_Rule\_Predicate

The first field of Search\_Rule\_Predicate should be "test\_data Test\_Data"

**RESPONSE:** Accept.

#### **SEDRIS\_T284**: 5.3.3

Add SRM\_Coordinate data type to 5.3.3, and suitably reference the new text to the SRM.

#### **RESPONSE:** Accept.

#### **SEDRIS T285**: 5.3.3.301

Remove month, since it is no longer a DRM class that can be used to create components of <DRM Time Constraints Data>.

#### **RESPONSE:** Accept.

#### **SEDRIS T286**: 5.4.3

Remove item c (unsaved state no longer exists). Also remove references to c from the second paragraph.

#### **RESPONSE:** Accept.

#### SEDRIS\_T287: 5.5.2 Predicate

Change the text to: "The Predicate data type specifies a callback function used during searching.

Whenever the rule\_type value for a Search\_Rule data type instance holds the value of PREDICATE, a function with the following signature shall be provided:

Return value: Boolean

Parameters: Object Object Test\_Data

During the filtering process, the iterator invokes the predicate function, passing: a. a handle to the DRM object to be tested to the first parameter;

b. a handle to the link object, if encountered, to the second parameter; and

c. a handle to some arbitrary test data to the third parameter.

The test data is specified as described in 5.3.3.247 Search\_Rule\_Predicate."

#### **RESPONSE:** Accept.

#### Clause 6

#### SEDRIS\_T288: 6.2.2 Axis type constraints, e.1

Replace "A spatial <DRM Axis> is a <DRM Axis> instance with one of the following as its axis\_type" with "A spatial <DRM Axis> instance is an instance with one of the following as its axis\_type:"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T289**: 6.2.2 Axis type constraints, e.2

For clarity, replace sentence with: "The number of spatial <DRM Axis> components of a <DRM Property Grid> instance is specified by spatial\_axes\_count. These spatial <DRM Axis> components shall be the first listed <DRM Axis> components of the <DRM Property Grid> instance, and shall correspond to a coordinate of the <DRM Property Grid> instance's SRF."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T290**: 6.2.5 Connected edge constraints

Rename constraint to "Valid node/edge relationships", and change the first sentence from "The following constraints apply to instances of connected edge DRM classes" to "The following specifies the constraints for forming valid relationships between <DRM Feature Node> / <DRM Geometry Node> and <DRM Feature Edge> / <DRM Geometry Edge> instances, respectively"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T291**: 6.2.5 Connected edge constraints, a.3

Change "shall be" to "shall not be" for consistency with the relationships being described, and in "a" change the first "components" to "instances".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T292**: 6.2.6 Contained node constraints

In the first sentence, change "instances of contained node DRM classes" to "instances of <DRM Feature Node> / <DRM Geometry Node> that are contained within an instance of <DRM Feature Face> / <DRM Geometry Face> or <DRM Feature Volume> / <DRM Geometry Volume>, respectively."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T293**: 6.2.6 Contained node constraints, c

Change "E" to "F".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T294**: 6.2.6 Contained node constraints

After "conversely," in a. add "at feature topology levels 3 and higher," and in c. add "at geometry topology levels 3 and higher,".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T295**: 6.2.6 Contained node constraints

After "conversely," in b. add "at feature topology levels 5 and higher," and in d. add "at geometry topology levels 5 and higher,".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T296**: 6.2.8

Remove this constraint (superceded by 6.2.42).

**RESPONSE:** Accept.

#### **SEDRIS\_T297**: 6.2.9

Remove the second paragraph; this became obsolete when <DRM Elliptic Cylinder> was replaced by <DRM Volume Object>.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T298**: 6.2.9*bis*, Distinct Geometric Centre

Add this constraint: "If an instance of <DRM Aggregate Geometry> specifies more than one <DRM Geometric Centre> component, each shall specify a different value for its meaning field."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T299**: 6.2.10 Distinct link objects

For a, b add "or components, as appropriate" after "field values".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T300**: 6.2.11 Edges bordering faces

For <DRM Geometry Edge>, remove a.. For b., remove "of any <DRM Geometry Face Ring> instances". These changes result from the earlier elimination of the <DRM Geometry Face Ring> class.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T301**: 6.2.14

Make a consistent with Clause 4. Add missing occurrence(s) of "instance". Check <DRM Feature Edge> constraints for completeness after incorporating the topology additions for clause 4.

#### **RESPONSE:** The following text will be used:

The following restrictions apply:

- a. The *<DRM Location>* instances within a *<*DRM Feature Edge> instance shall be distinct; that is, no two *<DRM Location>* instances may have the same position in space.
- b. <DRM Feature Edge> instances may meet only at <DRM Feature Node> instances, and <DRM Feature Face> instances may meet only along one or more <DRM Feature Edge> instances.
- c. At feature topology level 2 or higher, no <DRM Feature Edge> instance may intersect with or overlap another <DRM Feature Edge> instance.
- d. At feature topology level 3, each <DRM Feature Edge> instance forms part of the boundaries of exactly two <DRM Feature Face> instances.
- e. At feature topology level 4, at least one <DRM Feature Edge> instance forms part of the boundary of more than two <DRM Feature Face> instances.
- f. At feature topology level 5, if a <DRM Feature Edge> instance E is located within a <DRM Feature Volume> instance V, E shall associate to V.

#### **SEDRIS\_T302**: 6.2.15 Reference Surface example (and example for class itself)

Update to deal with removal of ALL from Reference\_Surface\_LOD\_Select.

## **RESPONSE:** This comment actually applies to 6.3.214. In the first example, the text "lod rule = ALL" is replaced by "lod rule = MOST DETAILED".

#### **SEDRIS T303**: 6.2.15

Change <DRM Geometry Face Ring> to <DRM Geometry Face> throughout, due to the earlier elimination of the <DRM Geometry Face Ring> class.

#### **RESPONSE:** Accept. Also apply elsewhere as appropriate.

#### **SEDRIS T304**: 6.2.16

For c.3, change "with the constraint" to "with the following constraints:".

For c.3.ii, add "value" after multiplicity\_meaning and "field" after "multiplicity"; similarly for c.5.1.ii and c.5.3.ii.

#### **SEDRIS\_T305**: 6.2.18 Image\_Anchor spatial reference frame

Change "srf\_parameters" to "srf\_info field", in accordance with the earlier revision of the <DRM Image Anchor> class. In a, change "within" to "as allowed by".

In b, change "either a component of" to "a component of either", and remove the second "of". In c, change "equal those" to "specify the same value as that".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T306**: 6.2.19 Image mapping functions and texture coordinates

Change "<DRM Image Mapping Function> instances" to "<DRM Image Mapping Function> components".

Change "a concrete subclass of <DRM Geometry Representation>" to "<DRM Geometry Representation>" throughout, and italicize.

Also, change "a concrete subclass of <DRM Feature Representation>" to "<DRM Feature Representation>" throughout, and italicize.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T307**: 6.2.20 Index\_Codes within tables

Change "DT" to "D" in b.

In b.3, unhyperlink "tag" and change to "tag field". Add "field" after "component\_data\_table\_ecc".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T308**: 6.2.22 Level of detail related organizing principle

Rename to "LOD related organizing principle".

**RESPONSE:** Accept.

#### **SEDRIS\_T309**: 6.2.22 Level of detail related organizing principle, b

Change first sentence to: "For each pair of branches with <DRM Distance LOD Data> or <DRM Volume LOD Data> that overlap, neither shall be a subset of the other."

#### **RESPONSE:** Accept.

#### **SEDRIS T310**: 6.2.24

Change "An" to "A". After the last sentence, add: "If a <DRM LSR Transformation> instance is specified by a <DRM Local 4x4> component only, it shall be possible to express the <DRM LSR Transformation> instance as an ordered set of <DRM LSR Transformation Step> components."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T311**: 6.2.25 Mandatory metadata

For <DRM Access>, a, change "access\_constraints" to "access\_constraints field" For <DRM Access>, b, change "use\_constraints" to "use\_constraints field"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T312**: 6.2.25 Mandatory metadata, Keywords

The constraint was not updated to reflect earlier changes for compliance with ISO 19115. Replace the text for <DRM Keywords> with the following: "All the <DRM Keywords> components of a given DRM object shall have distinct type codes. Within a given <DRM Keywords> instance, the entries of the keyword\_array shall be distinct."

# **RESPONSE:** The following text will be used: "No two <DRM Keywords> components shall have same type and <DRM Citation> component field values. Within a given <DRM Keywords> instance, the entries of the keyword\_array shall be distinct."

#### **SEDRIS\_T313**: 6.2.25 Mandatory metadata, <DRM Responsible Party>

Put "String" and "Address" in code font. Delete the duplicate paragraph for the locale of the String field's country code.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T314**: 6.2.25 Mandatory metadata, <DRM Responsible Party>

Change the text for email\_address to reflect that it is now an array: "Each element of the email\_address array of the Contact\_Information value shall contain a syntactically valid email address." Delete the duplicate paragraph for email\_address.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T315**: 6.2.25 Mandatory metadata, <DRM Responsible Party>

Change the text for web\_site to reflect that it is now a structured type field named online\_resource: "The online\_resource field of the Contact\_Information value, if specified, shall specify a syntactically valid URL in its linkage field." Delete the duplicate paragraph for web\_site.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T316**: 6.2.27 Model spatial reference frame

Add to the end of b.3, "or the <DRM Geometry Model Instance> instance or <DRM Feature Model Instance> instance that references M contains a <DRM Transformation> component that maps the SRF of M into the target SRF."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T317**: 6.2.28 Nested primitive geometry

For clarity, replace the first paragraph with: "When a <DRM Primitive Geometry> instance contains a <DRM Union Of Primitive Geometry> instance, the resulting geometry shall lie on the surface of the parent geometry."

Replace the second sentence with: "Allowed nesting combinations are:" Change the list from bulleted format to enumerated.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T318**: 6.2.29 Non-crossing aggregations

Rename the constraint to "Constraints on components", and revise for clarity by replacing the text of the constraint with the following:

"DRM objects are constrained in taking component DRM objects as follows:

1. Let M be an instance of <DRM Model>.

a. Let T be an instance of <DRM Property Table>. If T appears in the component tree of M, T shall not appear in the component tree of a <DRM Data Table Library> instance.

b. Let X be an instance of <DRM Property Grid> that is not a component of a <DRM Data Table Library> instance, where X appears in the component tree of M.

i. X shall not appear in the component tree of a <DRM Model> instance other than M.

ii. X shall not appear in the component tree of a <DRM Environment Root> instance.

c. Let X be an instance of a class other than <DRM Property Grid> or <DRM Symbol>, where X appears in the component tree of M.

i. X shall not appear in the component tree of a <DRM Model> instance other than M.

ii. X shall not appear in the component tree of a <DRM Environment Root> instance.

2. Let R be an instance of <DRM Environment Root>.

a. Let T be an instance of <DRM Property Table>. If T appears in the component tree of R, T shall not appear in the component tree of a <DRM Data Table Library> instance.

b. Let X be an instance of <DRM Property Grid> that is not a component of a <DRM Data Table Library> instance, where X appears in the component tree of R.

i. X shall not appear in the component tree of a <DRM Environment Root> instance other than R.

ii. X shall not appear in the component tree of a <DRM Model> instance.

c. Let X be an instance of a class other than <DRM Property Grid> or <DRM Symbol>, where X appears in the component tree of R.

i. X shall not appear in the component tree of a <DRM Model> instance.

ii. If X appears in the component tree of another <DRM Environment Root> instance R2, the srf\_info of R2 shall match that of R.

#### **RESPONSE:** Accept except that the enumerated numbering scheme will be corrected.

#### **SEDRIS\_T319**: 6.2.30 Non-crossing associations

Rename the constraint to "Constraints on associates", and revise for clarity by replacing the text of the constraint with the following.

"DRM objects are constrained in taking associate DRM objects as follows:

"1. Let M be an instance of <DRM Model>.

a. Let M have a <DRM Feature Model> component F, and let F1 be a <DRM Feature Representation> instance in the component tree of F and T be a <DRM Feature Topology> instance in the component tree of F.

i. F1 shall not associate to a <DRM Feature Representation> instance outside the component tree of F.

ii. No <DRM Feature Representation> instance outside the component tree of F shall associate to F1.

iii. F1 shall not associate to a <DRM Feature Topology> instance outside the component tree of F.

iv. No <DRM Feature Topology> instance outside the component tree of F shall associate to F1.

v. T shall not associate to a <DRM Feature Topology> instance outside the component tree of F.

vi. No <DRM Feature Topology> instance outside the component tree of F shall associate to T.

b. Let M have a <DRM Geometry Model> component G, and let G1 be a <DRM Geometry Representation> instance in the component tree of G and T be a <DRM Geometry Topology> instance in the component tree of G.

i. G1 shall not associate to a <DRM Geometry Representation> instance outside the component tree of G.

ii. No <DRM Geometry Representation> instance outside the component tree of G shall associate to G1.

iii. G1 shall not associate to a <DRM Geometry Topology> instance outside the component tree of G.

iv. No <DRM Geometry Topology> instance outside the component tree of G shall associate to G1.

v. T shall not associate to a <DRM Geometry Topology> instance outside the component tree of G.

vi. No <DRM Geometry Topology> instance outside the component tree of G shall associate to T.

c. Let M have both a <DRM Feature Model> component F and a <DRM Geometry Model> component G. Let F1 be a <DRM Feature Representation> instance in the component tree of F and let G1 be a <DRM Geometry Representation> instance in the component tree of G.

i. F1 shall not associate to a <DRM Geometry Representation> instance outside the component tree of G.

ii. No <DRM Geometry Representation> instance outside the component tree of G shall associate to F1.

iii. G1 shall not associate to a <DRM Feature Representation> instance outside the component tree of F.

iv. No <DRM Feature Representation> instance outside the component tree of F shall associate to G1.

2. Let R and R2 be instances of <DRM Environment Root>, where the srf\_info of R does not match that of R2.

a. Let R have a <DRM Feature Hierarchy> component F, and let X be a <DRM Feature Representation> instance in the component tree of F. Let R2 have a <DRM Feature Hierarchy> component F2, and let X2 be a <DRM Feature Representation> instance in the component tree of F2. X shall not associate to X2, and X2 shall not associate to X.

b. Let R have a <DRM Geometry Hierarchy> component G, and let Y be a <DRM Geometry Representation> instance in the component tree of G. Let R2 have a <DRM Geometry Hierarchy> component G2, and let Y2 be a <DRM Geometry Representation> instance in the component tree of G2. Y shall not associate to Y2, and Y2 shall not associate to Y.

c. Let R have a <DRM Feature Hierarchy> component F, and let X be a <DRM Feature Representation> in the component tree of F. Let R2 have a <DRM Geometry Hierarchy> component G2, and let Y2 be a <DRM Geometry Representation> in the component tree of G2. X shall not associate to Y2, and Y2 shall not associate to X."

#### **RESPONSE:** Accept except that the enumerated numbering scheme will be corrected. **SEDRIS T320**: 6.2.32, a

Replace with: "A <DRM Model> instance shall have a <DRM Feature Model> instance and/or a <DRM Geometry Model> instance."

**RESPONSE:** Accept.

#### **SEDRIS\_T321**: 6.2.32

For b, change ", that is, a <DRM Geometry Model> without a component <DRM Geometry Hierarchy>, " to "(a <DRM Geometry Model> without a <DRM Geometry Hierarchy> component)". Similarly, for c, change ", that is, a <DRM Feature Model> without a component <DRM Feature Hierarchy>, " to "(a <DRM Feature Model> without a <DRM Feature Hierarchy> component)" Add missing period at the end of d.

#### **RESPONSE:** Accept.

#### **SEDRIS T322**: 6.2.34

Change "type fields set to the same class type" to "drm\_class fields set to the same DRM class."

#### **RESPONSE:** Accept.

#### **SEDRIS <u>T323</u>**: 6.2.37 Octant related organizing principle

Change "oct tree-related" to "octant-related". In a, first sentence, change "that the oct tree is organizing into" to "is being organized into". Update references to Octant enumerants to use the correct terms.

#### **RESPONSE:** Accept.

## **SEDRIS\_T324**: octant related, quadrant related, perimeter related, separating plane related, spatial index related

Revise constraints to address the cases where a geometry/feature lies entirely along the boundary of a tile, whether separating plane, spatial index, perimeter, octant, or quadrant. Also, the constraints require clarification on which tiles include/exclude objects lying on the boundary. Update 4.13.10 and related sections of clause 4 as needed accordingly.

Revision to be supplied by the SEDRIS organization as a separate document.

#### **RESPONSE:** The following changes will be made:

#### 6.2.37 OCTANT

(for the UPPER\_LEFT\_BACK octant's constraints, b.4, add)

b.4.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the UPPER\_LEFT\_BACK octant but within that of the UPPER\_RIGHT\_BACK octant.

b.4.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_BACK octant and not within that of the UPPER\_LEFT\_FRONT octant.

b.4.v. In the case where a primitive lies entirely along the lower boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_BACK octant and not within that of the LOWER\_LEFT\_BACK octant.

(for the UPPER\_RIGHT\_BACK octant's constraints, b.5, add)

b.5.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_BACK octant and not that of the UPPER\_LEFT\_BACK octant.

b.5.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_BACK octant and not within that of the UPPER\_RIGHT\_FRONT octant.

b.5.v. In the case where a primitive lies entirely along the lower boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_BACK octant and not within that of the LOWER\_RIGHT\_BACK octant.

(for the UPPER\_LEFT\_FRONT octant's constraints, b.6, add)

b.6.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the UPPER\_LEFT\_FRONT octant but within that of the UPPER\_RIGHT\_FRONT octant.

b.6.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_BACK octant and not within that of the UPPER\_LEFT\_FRONT octant.

b.6.v. In the case where a primitive lies entirely along the lower boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_FRONT octant and not within that of the LOWER\_LEFT\_FRONT octant.

(for the UPPER\_RIGHT\_FRONT octant's constraints, b.7, add)

b.7.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_FRONT octant and not that of the UPPER\_LEFT\_FRONT octant.

b.7.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_BACK octant and not within that of the UPPER\_RIGHT\_FRONT octant.

b.7.v. In the case where a primitive lies entirely along the lower boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_FRONT octant and not within that of the LOWER\_RIGHT\_FRONT octant.

(for the LOWER\_LEFT\_BACK octant's constraints, b.8, add)

b.8.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the LOWER\_LEFT\_BACK octant but within that of the LOWER\_RIGHT\_BACK octant.

b.8.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_LEFT\_BACK octant and not within that of the LOWER\_LEFT\_FRONT octant.

b.8.v. In the case where a primitive lies entirely along the upper boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_BACK octant and not within that of the LOWER\_LEFT\_BACK octant.

(for the LOWER\_RIGHT\_BACK octant's constraints, b.9, add)

b.9.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_RIGHT\_BACK octant and not that of the LOWER\_LEFT\_BACK octant.

b.9.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_RIGHT\_BACK octant and not within that of the LOWER\_RIGHT\_FRONT octant.

b.9.v. In the case where a primitive lies entirely along the upper boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_BACK octant and not within that of the LOWER\_RIGHT\_BACK octant.

(for the LOWER\_LEFT\_FRONT octant's constraints, b.10, add)

b.10.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the LOWER\_LEFT\_FRONT octant but within that of the LOWER\_RIGHT\_FRONT octant.

b.10.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_LEFT\_BACK octant and not within that of the LOWER\_LEFT\_FRONT octant.

b.10.v. In the case where a primitive lies entirely along the upper boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_LEFT\_FRONT octant and not within that of the LOWER\_LEFT\_FRONT octant.

(for the LOWER\_RIGHT\_FRONT octant's constraints, b.11, add)

b.11.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_RIGHT\_FRONT octant and not that of the LOWER\_LEFT\_FRONT octant.

b.11.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the LOWER\_RIGHT\_BACK octant and not within that of the LOWER\_RIGHT\_FRONT octant.

b.11.v. In the case where a primitive lies entirely along the upper boundary of the branch, the primitive is considered to lie within the spatial extent of the UPPER\_RIGHT\_FRONT octant and not within that of the LOWER\_RIGHT\_FRONT octant.

#### 6.2.39 PERIMETER

In the case of a primitive lying on the boundary specified by the <DRM Perimeter Data> instance corresponding to a branch, the primitive shall be considered to have a spatial extent fully contained within that specified by the <DRM Perimeter Data> instance.

#### 6.2.47 QUADRANT

Consider a quadrant component C of Q. Where a boundary of C touches that of another quadrant of Q, C is considered to include its lower and left boundaries, but not to include its upper and right boundaries.

(for the LEFT\_BACK quadrant's constraints, b.4, add)

b.4.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the LEFT\_BACK quadrant but within that of the RIGHT\_BACK quadrant.

b.4.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the LEFT\_BACK quadrant and not within that of the LEFT\_FRONT quadrant.

(for the RIGHT\_BACK quadrant's constraints, b.5, add)

b.5.iii. In the case where a primitive lies entirely along the left boundary of the branch, the primitive is considered to lie within the spatial extent of the RIGHT\_BACK quadrant and not within that of the LEFT\_BACK quadrant.

b.5.iv. In the case where a primitive lies entirely along the front boundary of the branch, the primitive is considered to lie within the spatial extent of the RIGHT\_BACK quadrant and not within that of the RIGHT\_FRONT quadrant.

(for the LEFT\_FRONT quadrant's constraints, b.6, add)

b.6.iii. In the case where a primitive lies entirely along the right boundary of the branch, the primitive is considered not to lie within the spatial extent of the LEFT\_FRONT quadrant but within that of the RIGHT\_FRONT quadrant.

b.6.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the LEFT\_BACK quadrant and not within that of the LEFT\_FRONT quadrant.

(for the RIGHT\_FRONT quadrant's constraints, b.6, add)

b.6.iii. In the case where a primitive lies entirely along the left boundary of the branch, the primitive is considered not to lie within the spatial extent of the LEFT\_FRONT quadrant but within that of the RIGHT\_FRONT quadrant.

b.6.iv. In the case where a primitive lies entirely along the back boundary of the branch, the primitive is considered to lie within the spatial extent of the RIGHT\_BACK quadrant and not within that of the RIGHT\_FRONT quadrant.

#### 6.2.51 SEPARATING PLANE (b.2)

For each <DRM Separating Plane Relations> component R of S, let P be the <DRM Separating Plane> component of R:

i. For each *<DRM Primitive Geometry>* instance X in the component tree of a branch of R, X shall have a spatial extent overlapping that of the half-space specified that branch.
ii. Let X be a *<DRM Primitive Geometry>* instance such that X lies entirely within the plane of P.

If X is a  $\langle DRM Polygon \rangle$  component of a  $\langle DRM Polyhedron \rangle$  that otherwise lies entirely within the positive half-space defined by P, X is considered to lie within the positive half-space defined by P. Otherwise, X is considered to lie within the negative half-space defined by P.

iii. If the strict\_organizing\_principle field of S has the value TRUE, every primitive within each branch of R shall have a spatial extent fully contained within the half-space specified by the <DRM Separating Plane Data> instance corresponding to the branch.

iv. If the strict\_organizing\_principle field of S has the value FALSE, no guarantees exist as to how accurately the DRM objects of the component tree rooted at S were placed into their sorted bins apart from that specified by b.2.i above.

#### 6.2.52 SPATIAL INDEX (a.3.iii)

Consider a cell C of S. Where a boundary of C touches that of another cell of S, C is considered to include its lower and left boundaries, but not to include its upper and right boundaries. Consequently, a primitive that lies entirely along the lower and/or left boundary of C is considered to lie within C, but a primitive that lies entirely along the upper and/or right boundary of C is not considered to lie within C.

#### **SEDRIS\_T325**: 6.2.37, item c

Revise to spell out how strict organizing principle more correctly, along the lines of how spatial index does it.

SEDRIS organization to supply as separate document.

#### **RESPONSE:** The following changes will be made:

The following text replaces the first sentence in 6.2.37.

"Consider an instance O, which is either a <DRM Octant Related Features> or a <DRM Octant Related Geometry> instance."

Insert b.1*bis*. :

"For each branch of O, each primitive within the branch shall have a spatial extent fully contained within that specified by the <DRM Spatial Extent> instance corresponding to the branch. Consequently, the unique\_descendants field of O shall be set to TRUE, because no DRM object can be fully contained within the <DRM Spatial Extent> instance of more than one branch of O."

Replace c. with:

"If O has eight branches, the strict\_organizing\_principle field of O shall be set to TRUE; otherwise it shall be set to FALSE."

The following text replaces the first sentence of 6.2.47:

"Consider an instance Q, which is either a <DRM Quadrant Related Features> or a <DRM Quadrant Related Geometry> instance."

Insert b.1*bis*:

"For each branch of Q, each primitive within the branch shall have a spatial extent fully contained within that specified by the <DRM Spatial Extent> instance corresponding to the branch. Consequently, the unique\_descendants field of Q shall be set to TRUE, because no DRM object can be fully contained within the <DRM Spatial Extent> instance of more than one branch of Q."

Add new c.:

"If Q has four branches, the strict\_organizing\_principle field of Q shall be set to TRUE; otherwise it shall be set to FALSE."

#### **SEDRIS\_T326**: 6.2.38 Perimeter related feature topology partitioning

Remove; superseded by 6.2.39.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T327**: 6.2.40

Change "Instances of concrete subclasses of" to "Instances of" throughout.

Add missing occurrences of "instance" throughout. Change uses of the form "<DRM xxx> object" to "<DRM xxx> instance", and other occurrences of "object" to "DRM object".

Ensure that all class names are enclosed in brackets.

Change "apply based on this enumeration." to "apply:"

Change <DRM Geometry> to <DRM Geometry Representation> throughout; similarly for <DRM Feature> to <DRM Feature Representation>.

#### **RESPONSE:** Accept.

#### **SEDRIS T328**: 6.2.40

Clarify/specify what the conflicts represent, and how this is supposed to apply to the data provider. To be supplied as a separate document by the SEDRIS organization.

#### **RESPONSE:** The following changes will be made:

The following text replaces the content of 6.2.40:

"Consider an instance P of  $\leq DRM$  Geometry Representation> or  $\leq DRM$  Feature Representation>, where P has a  $\leq DRM$  Property Set Index> component X that references a  $\leq DRM$  Property Set> instance S.

- a. Let S have a component C and let P have a component D such that C and D are instances of the same class.
  - 1. Let C be an instance of any of the following:
    - <u><DRM Access></u>,
    - <<u>DRM Citation></u>,
    - <<u>DRM Classification Data></u>,
    - <<u>DRM Data Quality></u>,
    - <<u>DRM Description</u>>,
    - <<u>CRM Image Mapping Function></u>,
    - <<u>DRM Light Rendering Properties></u>,
    - <<u>DRM Presentation Domain></u>,
    - <u><DRM Rendering Priority Level></u>,
    - <u><DRM Rendering Properties></u>, or
    - <u><DRM Time Constraints Data></u>.

D takes precedence over C, such that C is not treated as a directly attached component of P.

- 2. If C and D are instances of <u><DRM Cross Reference></u>, C is treated as a directly attached component of P.
- 3. Let C and D be instances of <u>CRM Property Table></u>. If C and D have matching <u>CRM Classification Data></u> components, D takes precedence over C, such that C is not treated as a directly attached component of P. Otherwise, C is treated as a directly attached component of P.
- 4. Let C and D be instances of <u><DRM Property Table Reference></u>. If C and D refer to <u><DRM Property Table></u> instances having matching <u><DRM Classification Data></u>

components, D takes precedence over C, such that C is not treated as a directly attached component of P. Otherwise, C is treated as a directly attached component of P.

- 5. Let C and D be instances of <<u>DRM Property Value</u>>. If C and D have matching <u>meaning</u> field values, D takes precedence over C, such that C is not treated as a directly attached component of P. Otherwise, C is treated as a directly attached component of P.
- 6. Let C and D be instances of <u>*Colour*</u>. If C and D specify conflicting <u>*Colour*</u>. If C and D specify conflicting <u>*Colour*</u>. Presentation <u>*Domain*</u> instances, D takes precedence over C, such that C is not treated as a directly attached component of P.
- b. Let P have another <u><DRM Property Set Index></u> component Y that references a <u><DRM</u> <u>Property Set></u> instance S2, where Y appears further down the ordered list of <u><DRM Property</u> <u>Set Index></u> components of P than does X. Let S have a component C and let S2 have a component C2 such that C and C2 are instances of the same class, where P does not have a component that is an instance of that class.
  - 1. Let C2 be an instance of any of the following:
    - <u><DRM Access></u>,
    - Image: Content of the second secon
    - <u><DRM Classification Data></u>,
    - <u><DRM Data Quality></u>,
    - <u><DRM Description></u>,
    - <<u>ORM Image Mapping Function></u>,
    - <<u>DRM Light Rendering Properties></u>,
    - <<u>CDRM Presentation Domain></u>,
    - <u><DRM Rendering Priority Level></u>,
    - <u><DRM Rendering Properties></u>, or
    - <<u>CORM Time Constraints Data></u>.

C takes precedence over C2, such that C2 is not treated as a directly attached component of P.

- 2. If C and C2 are instances of <u><DRM Cross Reference></u>, C2 is treated as a directly attached component of P.
- 3. Let C and C2 be instances of <<u>DRM Property Table></u>. If C and C2 have matching <<u>DRM Classification Data></u> components, C takes precedence over C2, such that C2 is not treated as a directly attached component of P. Otherwise, C2 is treated as a directly attached component of P.
- 4. Let C and C2 be instances of <u><DRM Property Table Reference></u>. If C and C2 refer to <u><DRM Property Table></u> instances having matching <u><DRM Classification Data></u> components, C takes precedence over C2, such that C2 is not treated as a directly attached component of P. Otherwise, C2 is treated as a directly attached component of P.
- 5. Let C and C2 be instances of <<u>DRM Property Value</u>>. If C and C2 have matching <u>meaning</u> field values, C takes precedence over C2, such that C2 is not treated as a directly attached component of P. Otherwise, C2 is treated as a directly attached component of P.
- Let C and C2 be instances of <u><DRM Colour></u>. If C and C2 specify conflicting <u><DRM</u> <u>Presentation Domain></u> instances, C takes precedence over C2, such that C2 is not treated as a directly attached component of P."

The following text forms a new constraint entitled "<DRM Presentation Domain> conflicts":

- a. In a given transmittal, every instance of <u>*Colour*</u>, <u>*Colour*</u>, <u>*Colour*</u>, <u>*Colour*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*</u>, <u>*And*</u>, <u>*And*, <u>*And*, <u>*And*</u>, <u>*And*, *And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, *And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, *And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, <u>*And*, *And*, <u>*And*, *And*, <u>*And*, <u>*And*, *And*, <u>*And*, <u>*And*, *And*, *And*, <u>*And*, *And*, <u>*And*, *And*, *And*, <u>*And*, *And*, *And*, <u>*And*, *And*, *And*, *And*, *And*, <u>*And*, *And*, *And*,</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>
- b. In a given transmittal, every instance of <u><DRM Image></u> that specifies a <u><DRM Image</u> <u>Anchor></u> component shall specify a <u><DRM Presentation Domain></u> component.
- c. Let X be a DRM object such that X has <<u>DRM Image Mapping Function</u>> components F1 and F2. F1 shall specify a <<u>DRM Presentation Domain</u>> component P1 and F2 shall specify a <<u>DRM Presentation Domain</u>> component P2 such that the <u>presentation\_domain</u> sets of P1 and P2 do not intersect.
- d. Let X be a DRM object such that X has <u><DRM Colour></u> components F1 and F2. F1 shall specify a <u><DRM Presentation Domain></u> component P1 and F2 shall specify a <u><DRM Presentation Domain></u> component P2 such that the <u>presentation\_domain</u> sets of P1 and P2 do not intersect.
- e. The <u>presentation\_domain</u> field of a <DRM Presentation Domain> instance shall not be empty."

The new constraint applies to the following classes:

- <DRM Aggregate Feature>
- <DRM Aggregate Geometry>
- <DRM Data Table>
- <DRM Primitive Feature>
- <DRM Primitive Geometry>
- <DRM Property Set>
- <DRM Vertex>
- <DRM Colour>
- <DRM Image Mapping Function>
- <DRM Rendering Properties>
- <DRM Image>
- <DRM Presentation Domain>

#### **SEDRIS T329**: 6.2.41

In c, change "either in its <DRM Feature Hierarchy> instance, its <DRM Geometry Hierarchy> instance, or both" to "in its <DRM Feature Hierarchy> instance and/or its <DRM Geometry Hierarchy> instance"

In d, eliminate the "either...or both" by changing to use "and/or" In e, remove "This constraint implicitly enjoins the constraint that".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T330**: 6.2.43

Replace with:

"For a <DRM Property> instance P, the following conditions shall hold:

- a. If P is an instance of <DRM Property Value>, its value.attribute\_value\_type field shall be consistent with the restrictions imposed by the meaning field value of P.
- b. If P specifies a real-valued EA or real-valued Variable\_Code M as its meaning, the value\_unit of P shall specify a unit belonging to the EDCS Unit Equivalence class to which M is bound.
- c. If P does not specify a real-valued EA or real-valued Variable\_Code as its meaning, the value\_unit and value\_scale shall be set to EUC\_UNITLESS and EUC\_UNI, respectively.

For a <DRM Table Property Description> instance P, the following conditions shall hold:

- a. If P is an instance of <DRM Table Property Description>, its value\_type field and those of the corresponding elements of any applicable <DRM Data Table> instances shall be consistent with the restrictions imposed by the meaning field of P.
- b. If P specifies a real-valued EA or real-valued Variable\_Code M as its meaning, the value\_unit of P shall specify a unit belonging to the EDCS Unit Equivalence class to which M is bound.

c. If P does not specify a real-valued EA or real-valued Variable\_Code as its meaning, the value\_unit and value\_scale shall be set to EUC\_UNITLESS and EUC\_UNI, respectively."

#### **RESPONSE:** Accept.

**SEDRIS T331**: 6.2.46 Add the following classes to the list: <DRM Feature Topology Hierarchy>, <DRM Geometry Topology Hierarchy> <DRM Library> <DRM Model> <DRM Separating Plane Relations> (remove <DRM Property Grid> from list) Add the following: "2. Instances of the following classes may be published, where they serve the role of link objects: <DRM Base LOD Data> <DRM Classification Data> <DRM Hierarchy Data> <DRM Octant Data> <DRM Perimeter Data> <DRM Quadrant Data> <DRM Separating Plane Data> <DRM Spatial Index Data> <DRM State Data> <DRM Time Constraints Data> 3. An instance of a class not covered by 1 or 2 above shall not be published."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T332**: 6.2.47 Quadrant related organizing principle

Change "quad tree-related" to "quadrant-related". In a, first sentence, change "that the quad tree is organizing into" to "is being organized into". Update references to Quadrant enumerants to use the correct terms.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T333**: 6.2.48 Reference to Data\_Table\_Library

Add missing occurrences of "instance". Change name of constraint to: "Characteristics of DRM\_Property\_Table\_Reference"

#### **RESPONSE:** Accept.

#### **SEDRIS\_T334**: 6.2

Where reference is made to class names in constraint names, ensure that the class name always has "DRM" in front of it within the constraint name.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T335**: 6.2.44 Property Set constraints

This constraint expresses how the referenced members of a <DRM Property Set> instance are to be interpreted, rather than expressing a constraint as such; it describes how <DRM Property Set> behaves, rather than correct usage.

The text of this constraint should be moved to Table 6.196's definition, after the list. The constraint will therefore no longer exist, so it will no longer be referenced in clause 6.

#### **RESPONSE:** Accept.

#### **SEDRIS T336**: 6.2.49

Add "Within a <DRM Property Grid> instance, " at the beginning of the constraint.

#### **SEDRIS T337**: 6.2.51

For clarity, in a, change "shall specify a plane" to "shall not be collinear or coincident". For b.2.ii, change the first part of sentence 1 to read "If the strict\_organizing\_principle field of S has value TRUE".

For sentence 2, use a similar construction. Change "bins" to "half-spaces".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T338**: 6.2.52

For b.2, change "by b.1 above" to "a.3.iii".

#### **RESPONSE:** Accept.

#### **SEDRIS T339**: 6.2.54

Change "time configuration" to code font and insert the missing underscore throughout. For b, specify the range in range notation [(1-day)...(30-day)]

#### **RESPONSE:** Accept.

#### SEDRIS\_T340: 5.3.3.300 Time\_Day\_Of\_Year\_Value

The range for day shall be 0 to 365 inclusive.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T341**: 6.2.55

Change <DRM Absolute Time Point> to <DRM Absolute Time> throughout due to earlier class rename. Reference "6.2.55" should be to "6.2.54". Change "time configuration" to code font and insert the missing underscore throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T342**: 6.2.56

Change "variable code" to "Variable\_Code" in code font. Fix "Unitless" to "EUC\_UNITLESS" and "Uni" to "ESC\_UNI".

#### **RESPONSE:** Accept.

#### **SEDRIS T343**: 6, all classes

Ensure that the examples and their diagrams are up to date.

#### **RESPONSE:** Accept.

#### SEDRIS\_T344: Table 6.5 < DRM Access> and Table 6.57 < DRM Description>

Currently every class that has an instance of <DRM Access> as a component may also have an instance of <DRM Description> as a component. <DRM Description> itself does not take <DRM Access> as a formal component, although in the equivalent classes in ISO 19115 such a relationship exists.

For closer correlation with ISO 19115, revise the composition relationships of <DRM Access> as follows:

To <DRM Description>'s composed of list, add 0 or 1 instance of <DRM Access>

For each class that in the current version of the specification takes <DRM Access> as a component (<DRM Transmittal Root>, etc.), remove the relationship (which will now be provided by placing the <DRM Access> component on the <DRM Description> component instead, to more closely reflect ISO 19115).

Update the Mandatory Metadata constraint in clause 6 to reflect that for a <DRM Description> instance that is a component of a <DRM Transmittal Root> instance, the <DRM Access> component of <DRM Description> is required.

#### **RESPONSE:** Accept.

#### SEDRIS\_T345: Table 6.5 <DRM Access>

<DRM Access> currently combines the functionality of both the MD\_LegalConstraints and MD\_SecurityConstraints entities from ISO 19115, where the <DRM Access> component-of relationships have the multiplicity of the latter. However, this currently restricts the DRM's ability to support ISO 19115 compliant information, since legal constraint information compliant with ISO 19115 has a different multiplicity than security constraints information.

Make the following updates to <DRM Access>:

1) Replace the use\_limitation field with two fields, added in front of the current first field in <DRM Access>.

use\_limitation\_count Short\_Integer\_Unsigned

use\_limitation String[use\_limitation\_count]

2) Replace the security field of <DRM Access> with the fields of the Security\_Constraints data type from clause 5, and remove the Security\_Constraints data type from clause 5 as this was its only use case in this part of ISO / IEC 18023.

3) Add the following field after the new classification field:

user\_note String;

4) Rename the <DRM Access> class <DRM Security Constraints>.

5) Create a new class, <DRM Legal Constraints>, as follows.

- Add the following fields as its first two fields, defined as above:

use\_limitation\_count Short\_Integer\_Unsigned

use\_limitation String[use\_limitation\_count]

- Move the access\_constraints, use\_constraints, and other\_constraints fields from <DRM Access> to <DRM Legal Constraints>.

- Make <DRM Legal Constraints> a formal component of <DRM Description>, where a <DRM Description> instance can have zero or more <DRM Legal Constraints> components, and a <DRM Legal Constraints> instance can belong to zero or more <DRM Description> instances.

Update all examples currently referring to <DRM Access> to refer to <DRM Legal Constraints> and <DRM Security Constraints> appropriately. Update the Mandatory metadata constraint in clause 6 to reflect these changes.

#### **RESPONSE:** Accept.

**SEDRIS\_T346:** Table 6.6 <DRM Aggregate Feature> and each of its subclasses, Clarifications For the clarification for the <DRM Presentation Domain> component, replace "This is needed for cases in which an <DRM Aggregate Feature> is" with "A <DRM Presentation Domain> component is needed for instances of <DRM Aggregate Feature> that are".

#### **RESPONSE:** Accept.

## **SEDRIS\_T347**: Table 6.6 and Table 6.7 <DRM Aggregate Feature>, <DRM Aggregate Geometry>, Definition

For the STATE and TIME sections, replace "represents something" with "represents an environmental object".

To comply with earlier name changes to the classes involved, for the OCTANT portion, replace "represents an octant" with "represents an octant-related organization", and for the QUADRANT portion, replace "represents a quadrant" with "represents a quadrant-related organization".

#### **RESPONSE:** Accept.

#### **SEDRIS T348**: Table 6.24 < DRM Blend Directional Light>, Example(s)

For clarity, replace occurrences of "vertical axis vector" with "VERTICAL\_AXIS vector".

#### **RESPONSE:** Accept.

**SEDRIS\_T349**: Table 6.27 < DRM Camera Point>

Replace the use of X, Y, Z in this class with U,V,W, consistent with earlier changes to the coordinate field names of LSR.

Revise the specification of viewing volumes by clipping planes to specify volumes by the use of a <DRM Volume Extent> component instead, for consistency with how volumes are specified elsewhere in the DRM, and for clarity in cases where a <DRM Camera Point> is instanced in a non-LSR SRF. In the case of ORTHOGRAPHIC projection, a <DRM Parallelepiped Volume Extent> would be equivalent to specification of a volume by clipping planes. In the case of perspective projection, the field-of-view/aspect ratio method can always be used rather than providing the alternative method of specifying the viewing volume as a frustrum bounded by the clipping planes.

## **RESPONSE:** Only the change of X,Y,Z to U,V,W will be made. The second paragraph of the comment is not applied.

#### **SEDRIS\_T350**: Table 6.31 <DRM Citation>

For compliance with ISO 19115, change the multiplicity of the composition relationship with <DRM Absolute Time> from "exactly 1" to "1 or more", adding a constraint to Mandatory metadata in clause 6 that if a <DRM Citation> instance has multiple <DRM Absolute Time> components, their time\_significance field values shall be distinct.

For compliance with ISO 19115, change the multiplicity of the composition relationship with <DRM Responsible Party> from "exactly 1" to "0 or more", adding a constraint to Mandatory metadata in clause 6 that if a <DRM Citation> instance has multiple <DRM Responsible Party> components, their role codes shall be distinct.

## **RESPONSE:** Accept all aspects except that the request to add a constraint about role codes being distinct is rejected.

**SEDRIS\_T351**: Table 6.45 <DRM Colour Table Group>

Remove first example.

**RESPONSE:** Accept.

#### **SEDRIS\_T352**: Table 6.52 <DRM Cross Reference>

Now that ISO/IEC 18023 supports ISO 19115-compliant metadata, this class has been superceded by other metadata mechanisms in the DRM. Remove it.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T353**: Table 6.54 <DRM Data Quality>

For consistency with how properties are treated elsewhere in the DRM, replace the fields making optional statements of accuracy with <DRM Property Value> components, as follows:

Add the following component relationships:

- <DRM Property Value> (zero or more)

- <DRM Property Description> (zero or more)

Remove the following fields:

- absolute\_horizontal\_positional\_accuracy

- relative\_horizontal\_positional\_accuracy
- absolute\_vertical\_positional\_accuracy
- relative\_vertical\_positional\_accuracy

The fields being removed can be expressed, as currently indicated by their clarifications, through the use of EDCS in <DRM Property Value> and <DRM Property Description> instances.

#### **RESPONSE:** Withdrawn.

#### **SEDRIS\_T354**: Table 6.57 <DRM Description>

To support future registration of more keyword types, change the multiplicity of the <DRM Keywords> component from 0..5 to zero or more.

For compliance with ISO 19115, add a <DRM Citation> component to this class to permit a <DRM Description> instance to specify recommended bibliographic reference information for the DRM object(s) being described by the <DRM Description>.

With the addition of this <DRM Citation> component to <DRM Description>, the following classes (which currently take a <DRM Description> component) no longer need a direct <DRM Citation> component, so remove it from their composition relationships:

- <DRM Colour Table>

- <DRM Colour Table Group>
- <DRM Data Table>
- <DRM Environment Root>
- <DRM Image>
- <DRM Library>
- <DRM Model>
- <DRM Property Set>
- <DRM Property Set Table>
- <DRM Property Set Table Group>
- <DRM Sound>
- <DRM Symbol>
- <DRM Transmittal Root>

Update Mandatory metadata in clause 6 accordingly so that a <DRM Description> component of a <DRM Transmittal Root> instance is required to specify a <DRM Citation> component.

For compliance with ISO 19115, change the multiplicity of the <DRM Responsible Party> component from exactly 1 to zero or more, to permit the specification of responsible parties playing different roles. Update the Mandatory metadata constraint in clause 6 to indicate that if a DRM object specifies the same responsible party twice, the two shall be playing different roles.

## **RESPONSE:** Accept but also rename the <DRM Description> class to <DRM Identification>.

#### **SEDRIS\_T355**: Table 6.60 < DRM Distance LOD Data>, clarifications

For the <DRM Location> component, change "This is" to "If present, the <DRM Location> component is".

#### **RESPONSE:** Accept. Also, check size of superscript at <DRM Location>.

#### SEDRIS\_T356: Table 6.64 < DRM EDCS Use Summary Item>

The phrase "specifies a pattern of EDCS codes that appears" is not clear!

Replace the sentence with "Within the scope being summarized, a <DRM EDCS Use Summary Item> instance can specify either an ECC with an optional set of EACs, or just an individual EAC."

#### **RESPONSE:** Accept.

**SEDRIS\_T357**: Table 6.71 < DRM Environmental Domain Summary>

Missing constraint for qualified ECC

**RESPONSE:** The constraint "No property conflicts" will be added to <DRM Environmental Domain Summary>, <DRM Classification Data>, and <DRM Reference Surface>.

## **SEDRIS\_T358**: Table 6.85 < DRM Feature Volume> and Table 6.86 < DRM Feature Volume Shell>

The universal field of the <DRM Feature Volume Shell> class is defined to apply to the entire <DRM Feature Volume> to which a <DRM Feature Shell> instance belongs, rather than the <DRM Feature Volume Shell> instance itself.

Remove the universal field from <DRM Feature Volume Shell> and add it to <DRM Feature Volume> instead, updating the definition, clarifications, and example text accordingly.

Make the component relationship between <DRM Feature Volume> and <DRM Feature Volume Shell> an ordered relationship.

## **RESPONSE:** Accept. Also in <DRM Feature Volume> clarifications, remove inappropriate occurrence of "SE\_".

#### SEDRIS T359: Table 6.93

"The external boundary of a <DRM Geometry Face> instance is specified by its <DRM Geometry Face> component." Replace with "The external boundary of a <DRM Geometry Face> instance is specified by its <DRM Geometry Edge> associates."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T360**: Table 6.95 < DRM Geometry Model>, Examples

Replace the second example with the following:

"Consider a <DRM Model> instance M specified in an LSR 3D SRF, representing a missile and specifying a geometric representation. M is a component of a <DRM Model Library> instance containing many <DRM Model> instances representing missiles, each of which for consistency is expected to be specified in the same LSR 3D SRF and oriented pointing down the positive V axis.

In the case of M, however, the <DRM Geometry Model> component was provided by a data provider who uses the desired LSR 3D SRF, but for whom it is customary to specify missiles pointing down the -W axis. To make M consistent with the rest of the

<DRM Model Library> instance in which it resides, therefore, the <DRM Geometry Model> component of M has an <DRM LSR Transformation> component to reorient it to point down the positive V axis."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T361**: Table 6.131 <DRM Light\_Source>

Add an optional <DRM Classification Data> component to <DRM Light Source> to allow a data provider to specify whether a <DRM Light Source> instance represents an environmental object, such as the sun.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T362**: Table 6.178 < DRM Point Feature>

In the examples, replace "classifying it as a well" with "classifying it as ECC\_WELL" and "identifying it as a building" with "classifying it as ECC\_BUILDING".

Replace "<DRM Classification Data> instance" with "<DRM Classification Data> component" throughout. For the third example, replace "its height" with

"EAC\_HEIGHT" and "its building function category" with "EAC\_BUILDING\_FUNCTION".

#### **RESPONSE:** Accept.

#### SEDRIS\_T363: Table 6.191 <DRM Property>

Add a Boolean field apply\_property\_inheritance to this class (and thus its subclasses). The clarification text for this field: "If apply\_property\_inheritance is TRUE for a given instance P of <DRM Property>, P is inherited; otherwise, P is not inherited." This allows a data provider to specify whether a property applies to the entire representation of an environmental object, or only to the DRM object at the root of the representation (for example, the LENGTH of an entire environmental object versus the material composition that would be inherited).

Update the property inheritance section of clause 4 accordingly. To be supplied by the SEDRIS organization as a separate document.

## **RESPONSE:** Accept. In addition, the following text is inserted before the 1st paragraph of 4.14.5.3.6:

"A directly attached <<u>DRM Property Description</u>> component is inherited

only if its apply\_property\_inheritance field is set to TRUE; otherwise it is not inherited."

The following text is inserted before the 1st paragraph of 4.14.5.3.9:

"A directly attached <<u>DRM Property Value</u>> component is inherited only if its apply\_property\_inheritance field is set to TRUE; otherwise it is not inherited."

#### SEDRIS\_T364: Table 6.194 <DRM Property Grid>

Currently data providers must specify <DRM Property Grid> instances' cell data relative to a hook point, whether or not the <DRM Property Grid> instance's SRF is a local SRF, and whether a given <DRM Property Grid> instance is a "generic" <DRM Property Grid> instance or one describing a specific region.

Add a Boolean field relative\_to\_hook\_point, defined as "The relative\_to\_hook\_point field specifies whether the cell data of the given <DRM Property Grid> instance is specified relative to the context of a <DRM Property Grid Hook Point> instance that references it."

Add the following constraint to the <DRM Property Grid> class: "A <DRM Property Grid> instance G may be a component of a <DRM Data Table Library> instance only if the relative\_to\_hook\_point field value of G is TRUE."

Update the appropriate section of clause 4 to reflect these changes.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T365**: Table 6.223 <DRM Responsible Party>

Currently the role played by the responsible party is embedded in the <DRM Responsible Party> class itself, rather than being associated as link data with the relationship between the <DRM Responsible Party> and its aggregate. This reduces the DRM's ability to reuse information when the same party plays multiple roles.

To address this, create a <DRM Role Data> class as follows:

- Definition: An instance of this DRM class specifies the role performed by the given responsible party.
- Fields: (Move the role field from <DRM Responsible Party> to this new class).
- Examples: See <DRM Responsible Party>.

For the relationships between <DRM Responsible Party> and <DRM Citation>,<DRM Description>, and <DRM Process Step>, add an instance of <DRM Role Data> as a link object. Update the examples of <DRM Responsible Party> to reflect this change.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T366**: Table 6.257 < DRM Spot Light>, Clarifications

For the <DRM Lobe Data> component, replace "This" with "The <DRM Lobe Data> component".

**RESPONSE:** Accept.

#### **SEDRIS\_T367**: Table 6.259 <DRM Stamp Behaviour>

To clarify what is meant by the viewer, change "with respect to the viewer's location" to "a 3D graphics application's viewpoint at the time that the environmental object assigned the <DRM Stamp Behaviour> is rendered".

Add the following constraint for <DRM Stamp Behaviour>, which is currently implicit in its definition:

"A <DRM Stamp Behaviour> instance shall be specified only within the context of an LSR 3D SRF."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T368**: Table 6.285 < DRM Translucency Control Link>, Definition

Append the following to the last paragraph, "Thus, this value specifies which <DRM Expression> component controls the translucency\_value field of the affected <DRM Translucency> instance(s)."

#### **SEDRIS\_T369**: Table 6.286 < DRM Transmittal Root>, Clarifications

Change "1 For each such <DRM Base Time Data> instance, the time\_significance field shall not be set to Time\_Significance." to "None.", and remove the superscript on the <DRM Base Time Data> component. (The constraints already cover this).

#### **RESPONSE:** Accept. Also add a new constraint "Distinct time significance" that states: "For any instance of <DRM Transmittal Root> or <DRM Environment Root>, no two <*DRM Base Time Data*> components shall specify the same time\_significance value." Add this constraint to <DRM Transmittal Root> and <DRM Environment Root>.

#### **SEDRIS\_T370**: Table 6.286 <DRM Transmittal Root>

Add version fields for the SRM, similar to those for the DRM and EDCS.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T371**: Table 6.286 <DRM Transmittal Root>, Example(s)

Replace "Databases such as Grafenfels and Ft. Knox." with a self-contained example.

**RESPONSE:** Accept.

Clause 7

#### **SEDRIS\_T372**: 7, all functions

Check that at least one function still retains the use of "Input/Output parameters". If not, remove the corresponding row from Table 7.2 and all functions. (Note: If comments for FreePackedHierarchy and FreeRemainingObjectList are accepted, such functions will exist.)

#### **RESPONSE:** Accept.

#### **SEDRIS\_T373**: 7, all functions

For the SUCCESS case, remove the phrase (or equivalent wording) "if valid parameters were passed in" since this condition will always apply in the success case.

#### **RESPONSE:** Accept.

#### **SEDRIS T374**: 7.3.1 Overview

The overview should summarize all API functions, not just those that have to do with transmittals. Suggest adding the following sentence:

"There are also functions that interface with the error handling mechanism specified by the API."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T375**: 7.3.2 AddAssociateRelationship, Table 7.3

For clarity, add the following text: "If the requested relationship has already been established, another such relationship is established and SUCCESS is returned."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T376**: 7.3.3 AddComponentRelationship, Table 7.4

#### Remove the NOTE.

For clarity, add the following text: "If the requested relationship has already been established, no action is taken and SUCCESS is returned."

For UNPUBLISHED\_OBJECT, ensure that the link\_object is also addressed by changing "if both component\_object and aggregate\_object" to "if all involved objects", and changing "either is" to "any are".

For UNRESOLVED\_INPUT\_OBJECT, b, remove "not".

#### **SEDRIS T377**: 7.3.4 CloneObject, Table 7.5

Rename the parameter currently called "object" to "original\_object", for clarity.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T378**: 7.3.6 CreateObject, Table 7.7

Rename the parameter currently called "new\_object\_type" to "new\_object\_class".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T379**: 7.3.7 CreateSearchFilter, Table 7.8

The encoding parameter is no longer needed for this function, since it no longer identifies API implementation; remove it.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T380**: 7.3.8 CreateSpatialSearchBoundary, Table 7.9

The encoding parameter is no longer needed for this function, since it no longer identifies API implementation; remove it.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T381**: 7.3.9 DetermineSpatialInclusion, Table 7.10

The encoding parameter is no longer needed for this function, since it no longer identifies API implementation; remove it.

Remove the UNRESOLVED\_OUTPUT\_OBJECT segment from the list of failure actions and from the list of failure status codes, because it cannot occur.

Remove "of the search boundary" from the descriptions of search\_bounds\_parameter and search\_bounds\_closure.

In the 3rd paragraph, change "spatial search area" to "spatial extents" (this may be either a volume or an area). In the paragraph describing the output parameters, change "search area" to "spatial extents". For clarity, rename the "object" parameter to "test\_object".

# **RESPONSE:** Accept except that the removal of UNRESOLVED\_OUTPUT\_OBJECT is rejected. Instead the description accompanying UNRESOLVED\_OUTPUT\_OBJECT is changed to: "if an unresolved <*DRM Location*> object is encountered." Also, only " boundary" is removed instead of the requested "of the search boundary".

#### **SEDRIS\_T382**: 7.3.10 FreeIterator, Table 7.11

For clarity, rename the "to\_free\_object" parameter to "to\_free\_iterator".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T383**: 7.3.12 FreePackedHierarchy, Table 7.13

In the first paragraph, add a new final sentence, "All memory allocated by GetPackedHierarchy is freed when this function completes successfully."

Remove the second sentence in the SUCCESS action accordingly.

Change to\_free to an input/output parameter and rename it to "to\_free\_hierarchy" for consistency. For INACTIONABLE\_FAILURE, change "handle to a DRM object" to " instance of Packed Hierarchy".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T384**: 7.3.13 FreeRemainingObjectsList, Table 7.14

In the first paragraph, add a new final sentence, "All memory allocated by GetRemainingObjectsList is freed when this function completes successfully."

Remove the second sentence in the SUCCESS action accordingly.

Change to\_free to an input/output parameter and rename it to "to\_free\_list" for consistency.

For INACTIONABLE\_FAILURE, change "handle to a DRM object" to " instance of Remaining\_Objects\_List".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T385**: 7.3.14 FreeRemainingPackedHierarchiesList, Table 7.15

In the first paragraph, add a new final sentence, "All memory allocated by GetRemainingPackedHierarchiesList is freed when this function completes successfully." Remove the second sentence in the SUCCESS action accordingly. Change "to\_free" to an input/output parameter and rename it to "to\_free\_hierarchies\_list" for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T386**: 7.3.15 FreeSearchFilter, Table 7.16

Rename "to\_free" to "to\_free\_filter" for consistency.

**RESPONSE:** Accept.

#### **SEDRIS\_T387**: 7.3.16 FreeSpatialSearchBoundary, Table 7.17

Rename "to\_free" to "to\_free\_boundary" for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T388**: 7.3.17 FreeTransmittal, Table 7.18

For SUCCESS, change "given handle" to "the memory associated with the given handle". For INACTIONABLE\_FAILURE, change "was not " to "was". Rename "to\_free" to "to\_free\_transmittal" for consistency.

# **RESPONSE:** The first and last are accept. For INACTIONABLE\_FAILURE item b, the following text replaces the existing text: "to\_free\_transmittal is the only handle to an open transmittal; or".

#### **SEDRIS\_T389**: 7.3.18 GetAggregate, Table 7.19

Rename the "object" parameter to "component\_object" for clarity.

Add the following to the first paragraph: "If more than one valid aggregate of the specified class has component\_object as a component, the first encountered aggregate is retrieved."

For UNRESOLVED\_OUTPUT\_OBJECT, change "and/or" to "or", and change "point to an unresolved object" to "an unresolved object handle".

For DIFFERENT\_TRANSMITTAL, change d to "the aggregate (and link\_object, if appropriate) from a new, different transmittal was successfully resolved and retrieved".

Remove item c of INACTIONABLE\_FAILURE (cannot occur).

#### **RESPONSE:** Accept.

#### **SEDRIS\_T390**: 7.3.19 GetAssociate, Table 7.20

Rename the "object" parameter to "associating\_object" for clarity.

For DIFFERENT\_TRANSMITTAL, change d to "the associate (and link\_object, if appropriate) from a new, different transmittal was successfully resolved and retrieved".

For UNRESOLVED\_OUTPUT\_OBJECT, change "and/or" to "or", and change "point to an unresolved object" to "an unresolved object handle".

Change "link class object" to "link object" throughout.

Remove item c of INACTIONABLE\_FAILURE (cannot occur).

#### **RESPONSE:** Accept.

#### **SEDRIS\_T391**: 7.3.21 GetComponent, Table 7.22

Rename the "object" parameter to "aggregate\_object" for clarity. For DIFFERENT\_TRANSMITTAL, change d to "the component (and link\_object, if appropriate) from a new, different transmittal was successfully resolved and retrieved". Remove item c of INACTIONABLE\_FAILURE (cannot occur).

#### **SEDRIS\_T392**: 7.3.22 GetContextTransformation, Table 7.23

Rename "object" to "transformed\_object" and ensure that it is in code font throughout. For clarity, in the first paragraph, replace "current effective transformation" with "currently effective composition of *<DRM Transformation>* instances".

In the first case, replace "<DRM Transmittal Root>" with "<DRM Environment Root>" throughout. In the third paragraph, remove "depending on whether the object was or was not part of a <DRM Model>".

#### **RESPONSE:** Accept.

**SEDRIS\_T393**: 7.3.23 GetDataTable, Input parameters

Change "Data\_Table\_Extents" to "Data\_Table\_Sub\_Extent".

#### **RESPONSE:** Accept.

#### SEDRIS\_T394: 7.3.24 GetDRMClass, Table 7.25

Rename "object\_type" to "object\_class". For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

**SEDRIS\_T395**: 7.3.25 GetEncoding, Table 7.26 For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

#### SEDRIS T396: 7.3.26 GetFields

Add a new entry to Status\_Code in clause 5, SRF\_OPERATION\_UNSUPPORTED, and add it to the Failure status codes for GetFields. For the completes in error section, add "Current status code is set to SRF\_OPERATION\_UNSUPPORTED and no changes are made if object is a handle to a *<DRM Location>* instance and 7.3.81 SetSRFInfo has been invoked to set the current SRF to an SRF to which object cannot be converted."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T397**: 7.3.28 GetIterationLengthRemaining, Table 7.29

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

#### **SEDRIS\_T398**: 7.3.35 GetObjectFromIDString, Table 7.36

Add "Current status code is set to OUT\_OF\_MEMORY and no changes are made if sufficient memory could not be allocated", and add OUT\_OF\_MEMORY to the Failure status codes section.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T399**: 7.3.36 GetObjectIDString, Table 7.37

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b. Add "Current status code is set to OUT\_OF\_MEMORY and no changes are made if sufficient memory could not be allocated", and add OUT\_OF\_MEMORY to the Failure status codes section.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T400**: 7.3.37 GetObjectReferenceCount, Table 7.38

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

#### **RESPONSE:** Accept.

#### SEDRIS\_T401: 7.3.38 GetPackedHierarchy, Table 7.39

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

#### **SEDRIS\_T402**: 7.3.39 GetPublishedLabels, Table 7.40

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b. Add "Current status code is set to OUT\_OF\_MEMORY and no changes are made if sufficient memory could not be allocated", and add OUT\_OF\_MEMORY to the Failure status codes section. Rename "number\_labels" to "label\_count".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T403**: 7.3.40 GetPublishedObjectList, Table 7.41

Rename "number\_published\_objects" to "published\_object\_count". For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T404**: 7.3.41 GetReferencedTransmittalList, Table 7.42

For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

**SEDRIS\_T405**: 7.3.43 GetRemainingObjectsList, Table 7.44 For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

**SEDRIS\_T406**: 7.3.44 GetRemainingPackedHierarchiesList, Table 7.45 For INACTIONABLE\_FAILURE, a, change ";" to "; or" and remove b.

**RESPONSE:** Accept.

**SEDRIS\_T407**: 7.3.45 GetRootObject, Table 7.46 For INACTIONABLE\_FAILURE, remove b.

#### **RESPONSE:** Accept.

**SEDRIS\_T408:** 7.3.46 GetSRFInfo, Table 7.47 For INACTIONABLE\_FAILURE, remove c (this is a valid case covered by SUCCESS, as explained in case 2 in the semantics segment). Add "or" at the end of b.

**RESPONSE:** Accept.

**SEDRIS\_T409**: 7.3.47 GetTransmittalFromObject, Table 7.48 For INACTIONABLE\_FAILURE, remove b.

**RESPONSE:** Accept.

**SEDRIS\_T410**: 7.3.48 GetTransmittalLocation, Table 7.49 For INACTIONABLE\_FAILURE, remove b. Add "or" at the end of a.

**RESPONSE:** Accept.

**SEDRIS\_T411:** 7.3.49 GetTransmittalName, Table 7.50 For INACTIONABLE\_FAILURE, remove b. Add "or" at the end of a, and add "handle" after "valid".

**RESPONSE:** Accept.

**SEDRIS\_T412**: 7.3.50 GetTransmittalVersionInformation, Table 7.51 For INACTIONABLE\_FAILURE, remove b. Add "or" at the end of a.

**RESPONSE:** Accept.

#### **SEDRIS\_T413**: 7.3.51 GetUniqueTransmittalID, Table 7.52

For INACTIONABLE\_FAILURE, remove b. Add "or" at the end of a, and change "valid" to "a handle to a valid".

#### **SEDRIS\_T414**: 7.3.52 GetUnresolvedObjectFromPublishedLabel, Table 7.53

For INVALID\_TRANSMITTAL\_NAME, remove "according to the SEDRIS URN syntax rules (see 2.[RFCxxx])" (the URN data type definition in clause 5 has the information). Add "Current status code is set to OUT\_OF\_MEMORY and no changes are made if sufficient

memory could not be allocated", and add OUT\_OF\_MEMORY to the Failure status codes section.

#### **RESPONSE:** Accept.

#### **SEDRIS T415**: 7.3.52 GetUnresolvedObjectFromPublishedLabel, Table 7.53

For "the label syntax rules", add a reference to the appropriate section of 7.3.64 PublishedObject.

**RESPONSE:** Accept.

**SEDRIS\_T416**: 7.3.53 GetUserData For INACTIONABLE FAILURE, remove b. Add "or" at the end of a.

**RESPONSE:** Accept.

#### **SEDRIS T417**: 7.3.54 InitializeAggregateIterator

For INACTIONABLE\_FAILURE, remove c and d (the conditions cannot occur).

**RESPONSE:** Accept.

**SEDRIS\_T418**: 7.3.55 InitializeAssociateIterator For INACTIONABLE\_FAILURE, remove c and d (the conditions cannot occur).

**RESPONSE:** Accept.

**SEDRIS\_T419**: 7.3.56 InitializeComponentIterator For INACTIONABLE\_FAILURE, remove d, h and i (the conditions cannot occur).

**RESPONSE:** Accept.

**SEDRIS\_T420**: 7.3.57 InitializeInheritedComponentIterator For INACTIONABLE\_FAILURE, remove c, d and e (the conditions cannot occur).

**RESPONSE:** Accept.

SEDRIS\_T421: 7.3.58 IsIteratorComplete

For SUCCESS, remove the second sentence since it is redundant with the first paragraph.

**RESPONSE:** Accept.

#### **SEDRIS\_T422**: 7.3.61 ObjectsAreSame

For INACTIONABLE\_FAILURE, remove b. and replace c. with standard wording.

**RESPONSE:** Accept.

**SEDRIS\_T423**: 7.3.62 OpenTransmittalByLocation

For INVALID\_ACCESS, replace current wording with that specified by OpenTransmittalByName.

#### **RESPONSE:** Accept.

#### **SEDRIS T424**: 7.3.63 OpenTransmittalByName

For INVALID\_TRANSMITTAL\_NAME, replace "valid according to the format of the SEDRIS namespace" with "a validly formed transmittal name".

For UNRESOLVED\_TRANSMITTAL, the text "to a file location" should be removed since it is redundant.

For UNSUPPORTED\_ENCODING, remove the text "by the implementation(s) of the linked to the application" as it is unnecessary for understanding the error.

For INACTIONABLE\_FAILURE, the text "transmittal is invalid or " since the case cannot occur.

#### **SEDRIS\_T425**: 7.3.64 PublishedObject

Define the label syntax rules for a valid object label. They are that a label, if valid, shall

consist only of letters, numbers, and underscores from the Latin-1 character set, and
 begin with a letter.

For INVALID\_OBJECT\_LABEL, replace "the required conventions" with "the label syntax rules".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T426**: 7.3.65 PutDataTableData

For SUCCESS, the text "and no error description is produced" should be removed since this is true for most functions and has not been included elsewhere.

Change "Data\_Table\_Extents" to "Data\_Table\_Sub\_Extent".

#### **RESPONSE:** Accept.

#### **SEDRIS\_T427**: 7.3.66 PutFields, 2<sup>nd</sup> paragraph

The text "in UPDATE mode" should be changed to "in either CREATE or UPDATE mode" since CREATE mode allows further modification.

**RESPONSE:** Accept.

#### **SEDRIS\_T428**: 7.3.67 PutImageData, 5<sup>th</sup> paragraph

The text "encoding" should be changed to "form" since the use of "encoding" is reserved for transmittal encodings.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T429**: 7.3.69 RemoveAssociateRelationship

For INACTIONABLE\_FAILURE, c, The text "if link\_object is required and " should be inserted in front of "link\_object".

#### **RESPONSE:** Accept.

#### **SEDRIS T430**: 7.3.70 RemoveComponentRelationship, 2<sup>nd</sup> paragraph

The text "in UPDATE mode" should be changed to "in either CREATE or UPDATE mode" since CREATE mode allows further modification.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T431**: 7.3.70 RemoveComponentRelationship

For UNRESOLVED\_OUTPUT\_OBJECT, there are no output objects, so this condition cannot occur and should be removed (including from the list of failure status codes).

For UNRESOLVED\_INPUT\_OBJECT, add " or component\_object" before "is unresolved". For INVALID\_ACCESS\_MODE:

- In a, add "or component\_object" after "aggregate\_object", and add "or" after semicolon".

- In b, replace "; and/or" with a period.

- Remove item c.

For INACTIONABLE\_FAILURE, c, The text "if link\_object is required and " should be inserted in front of "link\_object".

## **RESPONSE:** Accept for UNRESOLVED\_INPUT\_OBJECT, "or" should be "and/or" (two cases).

#### **SEDRIS\_T432**: 7.3.71 RemoveFromTransmittal

In the 4th paragraph, the text "in UPDATE mode" should be changed to "in either CREATE or UPDATE mode" since CREATE mode allows further modification.

Clarify text for UNRESOLVED\_INPUT\_OBJECT by removing "or old\_object was removed but the object it referenced in another transmittal was not."

#### **RESPONSE:** Accept.

#### **SEDRIS\_T433**: 7.3.72 ResolveObject

Replace "UNRESOLVED\_OUTPUT\_OBJECT" with "UNPUBLISHED\_OBJECT" throughout.

## **RESPONSE:** Accept. Also, RemoveFromTransmittal will be changed to generate an INACTIONABLE\_FAILURE if an attempt is made to remove a published object.

#### **SEDRIS\_T434**: 7.3.73 ResolveTransmittalName

Add "(see 5.3.3.340 URN)" to the end of paragraph 2.

For INACTIONABLE\_FAILURE, remove b (the condition cannot occur).

#### **RESPONSE:** Accept.

#### SEDRIS\_T435: 7.3.78 SetRootObject

For INACTIONABLE\_FAILURE, remove c (the condition cannot occur).

#### **RESPONSE:** Accept.

#### **SEDRIS\_T436**: 7.3.77 SetGeneralCallback

For clarity, add "The value NULL for Status\_Logger indicates that a callback function is not being requested." as a new paragraph after the first paragraph.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T437**: 7.3.77 SetGeneralCallbackForOneFunction

For clarity, add "The value NULL for Status\_Logger indicates that a callback function is not being requested." as a new paragraph after the first paragraph.

#### **RESPONSE:** Accept.

#### **SEDRIS T438**: 7.3.80 SetSpecificCallback

At the end of the 1st paragraph, add "(see 5.5.3 Status\_Logger)".

In the 2nd paragraph, change "Has priority over" to "This".

In the 3rd paragraph, change "transmittal API function" to "API function" throughout.

For clarity, add "The value NULL for Status\_Logger indicates that a callback function is not being requested." as a new paragraph after the first paragraph.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T439**: 7.3.82 SetUserData

Add as a new paragraph after the first paragraph: "If user\_data is NULL, the presence of user data is reset.", and remove the second sentence of the SUCCESS case accordingly.

#### **RESPONSE:** Accept.

#### **SEDRIS\_T440**: 7.3.84 TransmittalsAreSame

For INACTIONABLE\_FAILURE, remove b (this condition cannot occur).

**RESPONSE:** Accept.

#### SEDRIS\_T441: 7.3.85 UnpublishObject

For paragraph 3, change "UPDATE" to "CREATE or UPDATE". For INVALID\_ACCESS\_MODE, change "read-only" to READ\_ONLY. For INACTIONABLE\_FAILURE, replace the text of c with "the function fails for any other reason".

#### **RESPONSE:** Accept.

#### Clause 8

#### **SEDRIS\_T442**: 8.2.1, b

Change "an API error message" to "a suitable Status\_Code".

Annex A

#### **SEDRIS\_T443**: A.1.1

Change "this International Standard" to this part of ISO/IEC 18023"

**RESPONSE:** Accept.

#### Annex C

#### **SEDRIS\_T444**: Annex C

Add missing reference for EMF Add missing reference for VRML: ISO/IEC 14772-1 Add missing references for X3D: ISO/IEC 19776-1 Add missing references for X3DV: ISO/IEC 19776-2

#### **RESPONSE:** Accept except the reference for EMF is the same as the reference for WMF.

#### **SEDRIS\_T445**: Annex C

Change name of Annex to "Format references" Change C.2 heading to "Media\_Format references" Add new subclause C.3 "Sound\_Format references" Add references for the Sound\_Format entries Add new subclause C.4 "Symbol\_Format references" Add references for the Symbol\_Format entries

Suggested replacements:

EMF - http://wvware.sourceforge.net/caolan/orawmf.html ???

Format	Name	Reference	
AIFC	Audio Interchange Format, Compressed sound file	http://www.tsp.ece.mcgill.ca/MMSP/Documents/AudioFormats/AIFF/AIFF.html	
AIFF	Audio Interchange File Format	http://www.tsp.ece.mcgill.ca/MMSP/Documents/AudioFormats/AIFF/AIFF.html http://www.borg.com/~jglatt/tech/aiff.htm	
AVI	Audio Video Interleave	Microsoft Corporation (MS). <u>Audio Video Interleave (AVI) standard</u> . Redmond (Washington).	
IFF	Interchange File Format	http://netghost.narod.ru/gff/vendspec/iff/index.htm http://www.borg.com/~jglatt/tech/aboutiff.htm	
MIDI	Musical	http://www.midi.org/about-midi/specinfo.shtml	

#### Table xxx — Sound\_Format References

	Instrument Digital Interface		
MP2	MPEG Layer 2 Audio	ISO/IEC 13818-3	
MP3	MPEG Layer 3 Audio	ISO/IEC 11172-3	
MPG	MPEG Video	ISO/IEC 11172-2	
QT	QuickTime	http://developer.apple.com/referencelibrary/API_Fundamentals/QuickTime-api- date.html	
RA	Real Audio file	http://www.real.com/	
SND	Sound file	http://ccrma.stanford.edu/courses/422/projects/NextFormat/	
VOC	Creative Voice file	http://www.programmersheaven.com/zone10/cat133/2166.htm	
WAV	Waveform Audio	http://www.borg.com/~jglatt/tech/wave.htm http://www.sonicspot.com/guide/wavefiles.html	
WVE	Electronic Art's file format with .wve extension	http://web.coehs.siu.edu/Utilities/Storage/FileFormats/ind_wave.htm http://www.wotsit.org/search.asp?page=27&s=ALLFILES	

#### Table — Symbol\_Format values

Name	Description	Reference
CGM	Computer Graphics Metafile	ISO/IEC 8632-2
		ISO/IEC 8632-3
SVG	Scalable Vector Graphics	http://www.w3.org/TR/SVG11/

**RESPONSE:** Accept. Also, add MPEG to the table of acronyms in Clause 3. The editors will confirm that each is the proper reference and add appropriate bibliographic information.

#### **DRM Class Index**

#### **SEDRIS T446**: DRM Class Index

The entries in the table should be reviewed to ensure that they are up to date.

**RESPONSE:** Accept.

#### **EDITORIAL**

Foreword

**SEDRIS\_E001**: 2<sup>nd</sup> Paragraph Hyperlink to ISO is in the wrong font.

**RESPONSE:** Accept.

#### Introduction

**SEDRIS\_E002**: 0.1, 1<sup>st</sup> paragraph

Remove extra space before "ocean".

**RESPONSE:** Accept.

#### **SEDRIS\_E003**: 0.2, Characteristics of SEDRIS technology

In *Universal lossless data interchange*, 2nd sentence, replace sentence with "Standardized access and the polymorphic representation of data through the DRM ensure that users can share a common description of the environmental data."

**RESPONSE:** Accept.

#### Scope

**SEDRIS\_E004**: 1<sup>st</sup> sentence Add comma after "syntax".

**RESPONSE:** Accept.

**SEDRIS\_E005**: 1<sup>st</sup> list Change semicolons to commas.

**RESPONSE:** Accept.

**SEDRIS\_E006**: 2<sup>nd</sup> list, item c Add missing parenthesis after rivers.

**RESPONSE:** Accept.

**SEDRIS\_E007**: Sentence leading to each of the first four lists Change "include, " to "include" (dropping comma).

**RESPONSE:** Accept.

**SEDRIS\_E008**: 4<sup>th</sup> list Remove "a" in front of "space".

**RESPONSE:** Accept.

Clause 3

#### **SEDRIS E009**: 3.1.13

The leading around the note seems too large.

#### **RESPONSE:** Accept.

#### SEDRIS E010: Table 3.1

3D should capitalize the D in Three-dimensional EQ should capitalize as "EDCS unit eQuivalence class" EVC should capitalize as "EDCS attribute Value characteristics Code" GD should capitalize as "GeoDetic" OTW should capitalize the 'T' in "the" XML capitalize the X and not the E in the expansion X3D capitalize the X and not the E in the expansion

#### **RESPONSE:** Accept.

#### Clause 4

#### SEDRIS E011: Table 4.1

Fix hyperlink from 4.16 to go to 4.16 instead of 4.16.1.

**RESPONSE:** Accept.

#### **SEDRIS\_E012**: 4.1.3, last paragraph, last sentence

The word "is" is missing from the leading clause, change to: If the DRM class is being used as an adjective, the noun refers to an instance of a concrete subclass of that class.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E013**: 4.2.2.2, Examples 1, 2; all sub-lists

Investigate the leading of these examples; it should be closer to that used in the first list.

**RESPONSE:** Accept.

#### **SEDRIS E014**: 4.2.2.3, paragraph following Example 2, 2<sup>nd</sup> sentence

Missing "be" before "specified".

**RESPONSE:** Accept.

### **SEDRIS\_E015**: 4.3.2.2, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

"set" and "are instanced" singular/plural grammar don't match; change to "is instanced".

#### **RESPONSE:** Accept.

**SEDRIS\_E016**: 4.3.2.2, 4<sup>th</sup> paragraph Correct "data modeler" to double-L spelling.

#### **RESPONSE:** Accept.

**SEDRIS\_E017**: 4.3.3.1.1 First occurrence of "transmittal" should be italicized.

**RESPONSE:** Accept.

#### **SEDRIS\_E018**: 4.3.3.1.3

Example should be in EXAMPLE form.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E019**: 4.5.1, 1<sup>st</sup> sentence Change "data representation model" to "DRM".
**SEDRIS\_E020**: 4.5.2, 2<sup>nd</sup> paragraph Change double quotes to curved quotes.

**RESPONSE:** Accept.

**SEDRIS\_E021**: 4.5.2, 2<sup>nd</sup> paragraph, penultimate sentence Change "phenomena" to "phenomenon".

#### **RESPONSE:** Accept.

**SEDRIS\_E022**: 4.5.3, 1<sup>st</sup> paragraph, last sentence For correctness, change "use" to "usage".

#### **RESPONSE:** Accept.

**SEDRIS\_E023**: 4.5.3, 3<sup>rd</sup> paragraph following Figure 4.1 "one-way" and "two-way" need to be hyphenated consistently.

#### **RESPONSE:** Accept.

**SEDRIS\_E024**: 4.5.3, 4<sup>th</sup> paragraph following Figure 4.1 "plain-line" should not be hyphenated.

**RESPONSE:** Accept.

**SEDRIS\_E025**: 4.5.3, 2<sup>nd</sup> paragraph Figure 4.1 hyperlink should go to the figure, not the caption.

**RESPONSE:** Accept.

**SEDRIS\_E026**: 4.5.4.1, last paragraph, 1<sup>st</sup> sentence Leading clause is incorrectly formatted as 11 point type.

#### **RESPONSE:** Accept.

**SEDRIS\_E027**: 4.5.4.2, 3<sup>rd</sup> paragraph Change "vs." to "versus".

#### **RESPONSE:** Accept.

**SEDRIS\_E028**: 4.5.4.2, Figure 4.5, caption Change "vs." to "versus".

#### **RESPONSE:** Accept.

# **SEDRIS\_E029**: 4.5.5, 1<sup>st</sup> paragraph

Change "DRM Classes" (classes should use lowercase c) and "Annex A UML Diagrams" (d should be lowercase).

#### **RESPONSE:** Accept.

**SEDRIS\_E030**: 4.6.6, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence Correct "centerline" spelling to "centerline".

**RESPONSE:** Accept.

**SEDRIS\_E031**: 4.6.7, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence Change "representations" to "representation".

# **RESPONSE:** Accept.

**SEDRIS\_E032**: 4.6.7, 1<sup>st</sup> paragraph, 4<sup>th</sup> sentence Change "representations" to "representation".

**SEDRIS\_E033**: 4.6.12, 2<sup>nd</sup> paragraph First sentence has wrong font size (span command).

**RESPONSE:** Accept.

**SEDRIS\_E034**: **4.6.12**, **last paragraph**, **last sentence** Change "is discussed" to "are discussed".

#### **RESPONSE:** Accept.

**SEDRIS\_E035**: 4.6.14, last sentence Fix duplicate comma and 4.16 hyperlink.

**RESPONSE:** Accept.

**SEDRIS\_E036**: 4.7.2.1, 2<sup>nd</sup> paragraph Change "a srf\_info" to "an srf\_info".

**RESPONSE:** Accept.

**SEDRIS\_E037**: 4.7.2.2

Remove inappropriate blank paragraph preceding 4.7.2.3

**RESPONSE:** Accept.

**SEDRIS\_E038**: 4.7.2.3 Change "by aggregation" to "by aggregating".

**RESPONSE:** Accept.

**SEDRIS\_E039**: 4.7.3, Example 1 Fix missing underscore in hyperlink.

# **RESPONSE:** Accept.

**SEDRIS\_E040**: 4.7.3, Example 3, 2<sup>nd</sup> sentence Fix misplaced period.

**RESPONSE:** Accept.

**SEDRIS\_E041**: 4.7.3, paragraph after Example 3, 1<sup>st</sup> sentence Fix missing space in "ofthe".

**RESPONSE:** Accept.

**SEDRIS\_E042**: 4.7.4, 3<sup>rd</sup> paragraph, 1<sup>st</sup> sentence Remove comma before the "or".

**RESPONSE:** Accept.

**SEDRIS\_E043**: **4.7.6**, **1**<sup>st</sup> **paragraph** First reference to ISO/IEC 18026 should be hyperlinked.

**RESPONSE:** Accept.

**SEDRIS\_E044**: **4.8.2.1**, **5**<sup>th</sup> **paragraph**, **1**<sup>st</sup> **sentence** Change "An <DRM Environmental Domain Summary>" to "A <DRM Environmental Domain Summary>". and use code font for "classification".

**RESPONSE:** Accept.

**SEDRIS\_E045**: 4.8.2.2, 3<sup>rd</sup> sentence Put example in proper example layout.

**SEDRIS\_E046**: 4.9.2, 4<sup>th</sup> paragraph, last sentence

Correctly capitalize the name of the constraint.

**RESPONSE:** Accept.

**SEDRIS\_E047: 4.9.2, Example & last paragraph** Add "instances" to DRM classes where appropriate.

**RESPONSE:** Accept.

**SEDRIS\_E048**: 4.9.3 Missing "instance" in paragraph and change "spatial reference frame" to SRF.

**RESPONSE:** Accept.

**SEDRIS\_E049**: 4.9.4.1, 1<sup>st</sup> paragraph Change "a numeric" to "numeric".

**RESPONSE:** Accept.

**SEDRIS\_E050**: 4.9.4.1, 2<sup>nd</sup> paragraph Missing "instance".

**RESPONSE:** Accept.

**SEDRIS\_E051**: 4.9.4.1, Example 1 Change "two dimensional" to 2D.

**RESPONSE:** Accept.

**SEDRIS\_E052**: 4.9.4.2, 1<sup>st</sup> paragraph Add missing "instance" and split first sentence in two at the "which".

# **RESPONSE:** Accept.

#### SEDRIS\_E053: 4.9.5.2, Example

The numbers should be in code font where getting assigned to fields and in the last sentence: change "," before first V to "and".

**RESPONSE:** Accept.

**SEDRIS\_E054**: 4.9.5.2, last paragraph Change "tick mark in the axis" to "tick mark on the axis".

**RESPONSE:** Accept.

**SEDRIS\_E055**: 4.10.2.3, 1<sup>st</sup> paragraph Add missing "instance"

**RESPONSE:** Accept.

**SEDRIS\_E056**: 4.10.3.1, 2<sup>nd</sup> paragraph Change "instance are aggregated" to "instance is aggregated".

**RESPONSE:** Accept.

**SEDRIS\_E057**: 4.10.3.3.2 Put example in proper example form.

**RESPONSE:** Accept.

**SEDRIS\_E058**: 4.10.3.3.3, Figure 4.12 Fix bad capital letters in field names

Page 147 of 199

**SEDRIS\_E059**: 4.10.3.3.3, Example Start first sentence with capital letter

#### **RESPONSE:** Accept.

**SEDRIS\_E060**: 4.10.3.4.2, 1<sup>st</sup> sentence Add space after <DRM Vertex>.

#### **RESPONSE:** Accept.

**SEDRIS\_E061**: **4.10.3.4.2**, **last sentence** Change "bits sets" to "bits set".

#### **RESPONSE:** Accept.

**SEDRIS\_E062**: **4.10.3.5.3**, last paragraph Fix misplaced period.

#### **RESPONSE:** Accept.

**SEDRIS\_E063**: 4.10.3.6, 2<sup>nd</sup> paragraph, 3<sup>rd</sup> sentence Add missing "a" before polygon.

#### **RESPONSE:** Accept.

**SEDRIS\_E064**: 4.10.3.6, 2<sup>nd</sup> paragraph (after list) Change "object" to "instance" and "two dimensional" to "two-dimensional"

#### **RESPONSE:** Accept.

# **SEDRIS\_E065**: 4.10.3.6, 3<sup>rd</sup> paragraph

Change "unsigned integer" to "non-negative, representing indices" and "zeros values" to "zero values".

#### **RESPONSE:** Accept.

**SEDRIS\_E066**: 4.10.3.6, Table 4.5 Caption should refer to figure 4.13.

#### **RESPONSE:** Accept.

**SEDRIS\_E067**: 4.10.3.6, Table 4.6 Caption should refer to figure 4.13.

#### **RESPONSE:** Accept.

**SEDRIS\_E068**: 4.10.3.6, Example 2 Change hyperlink to reference to figure 4.13

**RESPONSE:** Accept.

**SEDRIS\_E069**: 4.11.3, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence Change "instance" to "instances".

**RESPONSE:** Accept.

**SEDRIS\_E070**: 4.12.1, EXAMPLE Number example 1 and start sentence with capital letter.

**RESPONSE:** Accept.

#### SEDRIS E071: 4.12.1, EXAMPLE

Number example 2 and start sentence with capital letter.

# **SEDRIS\_E072**: 4.12.2.3.1, 2<sup>nd</sup> paragraph

Italicize "universal" and "regular" in the next-to-last and last sentences, remove quotes from "regular".

**RESPONSE:** Accept.

SEDRIS\_E073: 4.12.2.3.1, 3<sup>rd</sup> paragraph

Change "by using by a" to "by using a".

#### **RESPONSE:** Accept.

**SEDRIS E074**: 4.12.2.3.2

All occurrences of the class Feature Face Ring are concrete and should no longer be italicized.

**RESPONSE:** Accept.

#### **SEDRIS\_E075**: 4.12.2.3.2, 2<sup>nd</sup> paragraph

Correct incorrect leading preceding and following.

#### **RESPONSE:** Accept.

#### **SEDRIS E076**: 4.12.2.3.3

Amount of leading on the 5th level heading appears to be incorrect (preceding text differs from succeeding text), Fix.

**RESPONSE:** Accept.

**SEDRIS\_E077**: 4.12.3, 2<sup>nd</sup> paragraph Add missing "instances".

**RESPONSE:** Accept.

# **SEDRIS\_E078**: 4.13.1.2, 2<sup>nd</sup> paragraph, after 3<sup>rd</sup> sentence

Remove extra period.

**RESPONSE:** Accept.

**SEDRIS\_E079**: 4.13.1.3, 1<sup>st</sup> paragraph Fix incorrect carriage return.

#### **RESPONSE:** Accept.

# **SEDRIS\_E080**: 4.13.2, 1<sup>st</sup> paragraph

Change "organizing principles" to "organizing principle", "geometry data" to "geometry representation", "feature data" to "feature representation", "the link class <DRM Hierarchy Data> instance" to "the instance of the link class <DRM Hierarchy Data>", and "for each branch" to "for each specific branch".

#### **RESPONSE:** Accept.

# **SEDRIS\_E081**: 4.13.3, 1<sup>st</sup> paragraph

Change "comprise" to "comprises".

#### **RESPONSE:** Accept.

#### **SEDRIS E082**: 4.13.3, list

Fix inappropriate underscores in <DRM Animation Related Geometry> since it is preventing the lines from breaking properly.

# **RESPONSE:** Accept.

**SEDRIS\_E083**: 4.13.4

Rewrite for clarity to the following:

The classification related organizing principle groups environmental data by ECC using the DRM classes instances <<u>DRM Classification Related Features</u> and/<u>or</u> <<u>DRM Classification Related</u> Geometry>. Each instance of The class <<u>DRM Classification Related Features</u> and/<u>or</u> <<u>DRM Classification Related</u> Geometry>. Each instance of The class <<u>DRM Classification Related Features</u> shall have at least one component <<u>DRM Feature Hierarchy> with</u> instance of <<u>*DRM Aggregate Feature*> and the ECC specified in an accompanying stored in a link object of DRM classification Related Geometry> shall have at least one instance component of <<u>*DRM Aggregate Geometry>* as a component <<u>*DRM Geometry*</u> Hierarchy> with and the ECC stored in a link object of DRM class specified in an accompanying <<u>*DRM Geometry*</u> Hierarchy> with and the ECC stored in a link object of DRM class specified in an accompanying <<u>*DRM Geometry*</u> Hierarchy> with and the ECC stored in a link object of DRM class specified in an accompanying <<u>*DRM Geometry*</u> Hierarchy> with and the ECC stored in a link object of DRM class specified in an accompanying <<u>*DRM Classification Data* specified in an accompanying </u><<u>*DRM Classification Data* specified in an accompanying <<u>*DRM Classification Data* specified in an accompanying </u><<u>*DRM Classification Data* specified in an accompanying </u><<u>*DRM Classification Data* specified in an accompanying <<u>*DRM Classification Data* specified in an accompanying </u><<u>*DRM Classification Data* specified specified specifi</u></u></u></u></u></u></u></u></u></u></u></u></u></u>

# **RESPONSE:** Accept.

#### **SEDRIS E084**: 4.13.5, last paragraph, 1<sup>st</sup> sentence

For clarity, change "data is in or outside of the volume" to "data is inside or outside the volume".

**RESPONSE:** Accept.

#### **SEDRIS E085**: 4.13.6, title

Change to "Octant related organization" for consistency.

**RESPONSE:** Accept.

# **SEDRIS\_E086**: 4.13.6, 3<sup>rd</sup> paragraph, merge 1<sup>st</sup> and 2<sup>nd</sup> sentences

Replace as follows for clarity: "To begin specifying an octant, the region being subdivided into octants shall be specified. A is specified by attaching a three-dimensional <<u>DRM Spatial Extent></u> component is attached to each octant related aggregation, <u>This <DRM Spatial Extent></u> component specifies specifying the parallelepiped that is being divided into octants."

#### **RESPONSE:** Accept.

**SEDRIS\_E087**: 4.13.6, 5<sup>th</sup> paragraph, 1<sup>st</sup> sentence Fix bad hyperlink to 6.2.37.

#### **RESPONSE:** Accept.

**SEDRIS\_E088**: 4.13.7, last sentence Change "meet" to "satisfy"

**RESPONSE:** Accept.

**SEDRIS\_E089**: 4.13.8, title Change to "Quadrant related organization" for consistency.

**RESPONSE:** Accept.

# **SEDRIS\_E090**: 4.13.8, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

Fix bad hyperlink to 6.2.47.

**RESPONSE:** Accept.

# **SEDRIS\_E091**: 4.13.8, 3<sup>rd</sup> paragraph, last sentence

Use code font for quadrant in "its quadrant field" and add the following sentence with hyperlink: "The meaning of the quadrant field is specified in 5.6.2.21 Quadrant."

**RESPONSE:** Accept.

**SEDRIS\_E092**: 4.13.8, 4<sup>th</sup> paragraph, 2<sup>nd</sup> sentence Change example to EXAMPLE form.

**RESPONSE:** Accept.

**SEDRIS\_E093**: 4.13.8, 5<sup>th</sup> paragraph, 1<sup>st</sup> sentence Fix wrong name for organizing principle, and bad hyperlink.

**SEDRIS\_E094**: 4.13.8, 5<sup>th</sup> paragraph, 2<sup>nd</sup> sentence

Remove quotes from "size".

#### **RESPONSE:** Accept.

# **SEDRIS\_E095**: 4.13.8, 5<sup>th</sup> paragraph, last sentence

Add "instance" to <DRM Spatial Extent>.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E096**: 4.13.8, last paragraph, 1<sup>st</sup> sentence

Change as follows: "A <DRM Spatial Extent> component specifies a <u>bounding box strict boundary</u>, such that no position information in the scope of its aggregate may lie outside the bounding rectangle (if the <DRM Spatial Extent> <u>instance</u> is two-dimensional) or bounding parallelepiped (if the <DRM Spatial Extent> <u>instance</u> is three-dimensional) <del>specified by the <DRM Spatial Extent></del>."

#### **RESPONSE:** Accept.

# **SEDRIS\_E097**: 4.13.8, last paragraph, 3<sup>rd</sup> sentence

Change "In addition, since the quadrants partition the quadrant's region and" to "Since the quadrants".

# **RESPONSE:** Accept.

# **SEDRIS E098**: 4.13.9, 2<sup>nd</sup> sentence

Rewrite sentence for clarity to the following: "Environmental data organized by separating planes uses instances of <DRM Separating Plane Relations> that aggregates instances of <DRM Geometry Hierarchy> and a component of <DRM Separating Plane>. A <DRM Separating Plane Data> link object provides a Boolean field specifying if the environmental data objects are on the positive or negative side of the plane specified by the <DRM Separating Plane> instance."

#### **RESPONSE:** Accept.

# **SEDRIS\_E099**: 4.13.10, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

Italicize tile the first time.

#### **RESPONSE:** Accept.

# **SEDRIS\_E100**: 4.13.11, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence

#### **RESPONSE:** Accept.

#### **SEDRIS\_E101**: 4.13.11, last paragraph, last sentence

Change as follows" "Since EAs that are used as state tags are restricted to those EDCS attributes having percentage or enumerated values (see 6.2.53 State related organizing principle). Therefore, unit and scale information need not be specified.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E102**: 4.13.12, list

Enumerate list with elements followed by comma and comma at the end of the next to last.

#### **RESPONSE:** Accept.

# SEDRIS\_E103: 4.13.12, last sentence

For clarity change the sentence to the following: "The <DRM Time Related Features> and <DRM Time Related Geometry> classes contain a time\_data\_type field for specifying the type of time data."

#### **SEDRIS\_E104**: 4.13.13.1, 2<sup>nd</sup> paragraph

Put example in EXAMPLE form and replace "instanced in with" to "instanced with".

**RESPONSE:** Accept.

# **SEDRIS\_E105**: 4.13.13.1, 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> paragraphs

Add missing "instances"

#### **RESPONSE:** Accept.

**SEDRIS\_E106**: 4.13.13.1, 4<sup>th</sup> paragraph Change example to use EXAMPLE format for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E107**: 4.13.13.1, last paragraph, last sentence

Replace with "For instances where there is no ordering reason, the ordering\_reason field shall be set to NONE." for clarity.

#### **RESPONSE:** Accept.

**SEDRIS\_E108**: 4.13.13.2, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence Change example to use EXAMPLE format for consistency.

#### **RESPONSE:** Accept.

**SEDRIS\_E109**: 4.13.13.2, 3<sup>rd</sup> paragraph Add multiple missing "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E110**: 4.13.13.2, last paragraph, last sentence

For clarity, replace with: "For instances where there is no ordering reason, the ordering\_reason field shall be set to NONE."

#### **RESPONSE:** Accept.

**SEDRIS\_E111**: 4.13.13.3, 4<sup>th</sup> paragraph Add multiple missing "instance" and put example in EXAMPLE form.

**RESPONSE:** Accept.

**SEDRIS\_E112**: 4.13.13.3, last paragraph, 1<sup>st</sup> sentence For clarity, remove "its union reason, and its ordering reason".

**RESPONSE:** Accept.

# SEDRIS\_E113: 4.13.13.3, last paragraph, last sentence

For clarity, replace with "For instances where there is no ordering reason, the ordering\_reason field shall be set to NONE, and similarly for union\_reason.".

#### **RESPONSE:** Accept.

**SEDRIS\_E114**: 4.14.1, list item c Add missing period after property sets.

**RESPONSE:** Accept.

#### SEDRIS E115: 4.14.2.1, EXAMPLE

Begin sentence with capital letter and end with period.

**RESPONSE:** Accept.

# **SEDRIS\_E116**: 4.14.2.1, 2<sup>nd</sup> paragraph

For clarity change to the following: "When a model can stand alone in the transmittal, it is termed a *root model*. If it cannot stand alone, it is termed a *component model*.".

# **RESPONSE:** Accept.

#### **SEDRIS E117**: 4.14.2.1, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> sentence

Change "feature and geometry representation" to "feature representation and a geometry representation"

#### **RESPONSE:** Accept.

#### SEDRIS\_E118: 4.14.2.1, last paragraph

Change "onto themselves" to 'unto themselves', add missing "instance", break off EXAMPLE and include <Environment Root> section of example.

#### **RESPONSE:** Accept.

#### **SEDRIS E119**: 4.14.2.2

Remove extra spacing embedded throughout the paragraph and inappropriate underscores in the names of several of the classes.

#### **RESPONSE:** Accept.

# **SEDRIS\_E120**: 4.14.2.3, 2<sup>nd</sup> paragraph

Italicize <DRM Transformation> and <DRM Location> throughout and change "to provide both" to "to support both".

#### **RESPONSE:** Accept.

### SEDRIS\_E121: 4.14.2.3, last paragraph

Change multiple "a LSR" to "an LSR".

#### **RESPONSE:** Accept.

# **SEDRIS\_E122**: 4.14.3.1, 1<sup>st</sup> sentence

Change "an <DRM Environment Root>" to "a <DRM Environment Root>" and add multiple missing "instance".

# **RESPONSE:** Accept.

#### **SEDRIS\_E123**: 4.14.3.1, list

Alphabetize list, remove "physical" from item e, replace comma with semicolon on item f, and remove "drop" from item g.

#### **RESPONSE:** Accept.

#### **SEDRIS E124**: 4.14.3.1

Reorder the clauses to match the order in the list.

#### **RESPONSE:** Accept.

#### **SEDRIS E125**: 4.14.3.2, 1<sup>st</sup> and 2<sup>nd</sup> sentences

Change "<DRM Property Set Table Groups>" to "<DRM Property Set Table Group>", add multiple missing "instance", replace multiple "object" with "instance".

# **RESPONSE:** Accept.

#### **SEDRIS E126**: 4.14.3.2, 3<sup>rd</sup> sentence

For clarity change to "The class <DRM Property Set> aggregates properties to be referenced as a set.".

# **RESPONSE:** Accept.

**SEDRIS\_E127**: 4.14.3.2 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

Change "the transmittal" to "a transmittal".

#### **RESPONSE:** Accept.

#### **SEDRIS E128**: 4.14.3.3, 1<sup>st</sup> paragraph

Add multiple missing "instance", change "object" to "instance", change "This class" to "The <DRM Colour Table Group> class" and "allows for" to "supports".

#### **RESPONSE:** Accept.

**SEDRIS\_E129**: 4.14.3.3, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence Change "the primitive colours" to "primitive colours".

**RESPONSE:** Accept.

**SEDRIS\_E130**: **4.14.3.4**, **last sentence** Reference to 4.9 Tables should be lowercase.

**RESPONSE:** Accept.

**SEDRIS\_E131**: 4.14.3.7, last sentence For consistency add hyperlinked "(see 4.15.6 Sound)".

**RESPONSE:** Accept.

**SEDRIS\_E132**: 4.14.4, 1<sup>st</sup> sentence

Change "object representation" to "environmental object representation".

**RESPONSE:** Accept.

**SEDRIS E133**: 4.14.4, list

Enumerate the list.

**RESPONSE:** Accept.

#### **SEDRIS\_E134**: 4.14.4, penultimate paragraph, last sentence

For clarity replace with the following: "This mechanism specifies, for a given kind of environmental object, a collection of characteristics of that kind of environmental object so that those characteristics can be shared by different representations."

**RESPONSE:** Accept.

**SEDRIS\_E135**: 4.14.5.1, 1<sup>st</sup> paragraph, last sentence

Remove sentence since it is redundant.

**RESPONSE:** Accept.

**SEDRIS\_E136**: 4.14.5.1, 2<sup>nd</sup> paragraph Change "applies to" to "apply to".

**RESPONSE:** Accept.

**SEDRIS\_E137: 4.14.5.1, list item e** Change "attributes of" to "properties of".

**RESPONSE:** Accept.

**SEDRIS\_E138**: 4.14.5.1, 3<sup>rd</sup> paragraph, last sentence Remove last comma.

#### **RESPONSE:** Accept.

**SEDRIS\_E139**: 4.14.5.1, EXAMPLE Add multiple "instance" and remove comma.

#### **SEDRIS E140**: 4.14.5.1, 4<sup>th</sup> paragraph

Change "attribute inheritance" to "property inheritance".

**RESPONSE**: Accept.

# **SEDRIS E141**: 4.14.5.1, 5<sup>th</sup> paragraph

Italicize <DRM Geometry Representation> and add multiple missing "instance".

#### **RESPONSE:** Accept.

**SEDRIS\_E142**: 4.14.5.1, 6<sup>th</sup> paragraph Change "attribute inheritance" to "property inheritance" and "attribute object" to "property object". Add missing "instance" and hyperlinked "(see 4.16 Constructs for controlling dynamic data)".

**RESPONSE**: Accept.

**SEDRIS E143**: 4.14.5.2, title

Change "General inheritance rules" to "General inheritance rule".

**RESPONSE**: Accept.

**SEDRIS E144**: 4.14.5.3.2, 1<sup>st</sup> paragraph Add missing "instance".

**RESPONSE**: Accept.

**SEDRIS\_E145**: 4.14.5.3.2, 2<sup>nd</sup> paragraph Insert "have" before "value".

**RESPONSE**: Accept.

**SEDRIS E146**: 4.14.5.3.3 Add multiple missing "instance".

**RESPONSE**: Accept.

**SEDRIS\_E147**: 4.14.5.3.3, 1<sup>st</sup> paragraph, 2<sup>nd</sup> and 3<sup>rd</sup> sentences Change "attribute object" to "property object".

**RESPONSE**: Accept.

# **SEDRIS\_E148**: 4.14.5.3.3, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence

Put hyphen before specific in both places.

**RESPONSE:** Accept.

**SEDRIS E149**: 4.14.5.3.4 Change "object" to "instance", add missing "instance", and use "descendants" for last "components".

**RESPONSE**: Accept.

**SEDRIS E150**: 4.14.5.3.5

Add multiple missing "instance" and correlate the LTP acronym versus the latest draft of the SRM.

**RESPONSE:** Accept.

**SEDRIS E151**: 4.14.5.3.5, 3rd paragraph Change "aggregation tree" to "component tree", for consistency.

**RESPONSE:** Accept.

SEDRIS E152: 4.14.5.3.5, last paragraph Remove comma before "and".

#### **SEDRIS\_E153**: 4.14.5.3.6, 1<sup>st</sup> paragraph

Change "attribute" to "property".

**RESPONSE:** Accept.

**SEDRIS\_E154**: **4.14.5.3.6** paragraph **2** Add missing "instance".

#### **RESPONSE:** Accept.

**SEDRIS E155**: 4.14.5.3.7

Change "object" to "instance"

#### **RESPONSE:** Accept.

# **SEDRIS\_E156**: 4.14.5.4, 2<sup>nd</sup> paragraph

For clarity and consistency change as follows: "Instances of <DRM Citation> cannot be inherited. The <DRM Citation> <u>instance</u> at the top of any <u>DRM object</u> hierarchy specifies the bibliographic citation information for the collection as a whole. Referencing any part of the collection specifically requires its own <DRM Citation> <u>instance</u>."

#### **RESPONSE:** Accept.

# **SEDRIS\_E157**: 4.14.5.4, 3<sup>rd</sup> paragraph

For clarity and consistency change as follows: "Instances of <DRM Keywords> apply only to the <u>DRM</u> object to which they are attached, because the keywords applicable at the level of a <u>DRM object</u> hierarchy at which a <DRM Keywords> instance is specified are built up from smaller subsets of keywords derived from lower levels of that hierarchy. Consequently, property inheritance does not apply to instances of <DRM Keywords>."

#### **RESPONSE:** Accept.

#### SEDRIS\_E158: 4.14.5.4, EXAMPLE

Add missing "instance".

**RESPONSE:** Accept.

#### **SEDRIS E159**: 4.15.1, list a

For clarity, replace "at his or her own risk" with "with no knowledge of how the conflict is resolved", and "should not be" with "are not".

**RESPONSE:** Accept.

**SEDRIS\_E160**: 4.15.1, list d Remove comma before "and" for correctness.

**RESPONSE:** Accept.

SEDRIS\_E161: 4.15.1, list e

Remove comma before "and" and remove "or" for correctness.

**RESPONSE:** Accept.

#### **SEDRIS E162**: 4.15.3.2, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> and 4<sup>th</sup> sentences

Add missing "instance".

**RESPONSE:** Accept.

# **SEDRIS\_E163**: 4.15.3.2, 3<sup>rd</sup> paragraph

Add multiple missing "instance", and change "A <DRM Colour Table> can contain a" to "A <DRM Primitive Colour> instance can contain a" as well as "and" to "and/or" (before emissive colour).

# **SEDRIS\_E164**: 4.15.3.2, 3<sup>rd</sup> paragraph, last sentence

For brevity change "is composed of a *<DRM Colour Data>*, as described in the beginning of this section, that contains the actual colour values for the ambient, diffuse, specular, and emissive characteristics of the coloured object, respectively." to "is composed of a *<*DRM Colour Data> instance that contains the actual colour values."

#### **RESPONSE:** Accept.

**SEDRIS\_E165**: 4.15.3.2, 4<sup>th</sup> paragraph

Add missing "instance" for every DRM class.

**RESPONSE:** Accept.

#### **SEDRIS\_E166**: 4.15.3.2, 4<sup>th</sup> paragraph, 3<sup>rd</sup> sentence

Change "specifies how the colour is applied to the coloured object, such as the side of the object to which the colour should be applied and how the colour should be combined with a <DRM\_Image>, if present." to "specifies how the colour is applied to the environmental object." for clarity.

**RESPONSE:** Accept.

**SEDRIS\_E167**: 4.15.3.3, 1<sup>st</sup> paragraph For clarity break the first sentence at the semicolon.

**RESPONSE:** Accept.

**SEDRIS\_E168**: 4.15.3.3, 2<sup>nd</sup> paragraph, last sentence

Remove parentheses.

**RESPONSE:** Accept.

# **SEDRIS\_E169**: 4.15.3.4, 3<sup>rd</sup> paragraph

Fix miscapitalized "A" in "A <DRM Rendering Properties> instance" and italicize <DRM Geometry Representation> throughout.

#### **RESPONSE:** Accept.

**SEDRIS\_E170**: 4.15.3.5, 4<sup>th</sup> paragraph, 2<sup>nd</sup> sentence

Add missing period after utilized for correctness.

**RESPONSE:** Accept.

SEDRIS\_E171: 4.15.4.1

Italicize <DRM Geometry Representation> throughout for correctness.

**RESPONSE:** Accept.

# **SEDRIS\_E172**: 4.15.4.2, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence

Insert "See" before "4.14" for consistency and insert missing "instance".

**RESPONSE:** Accept.

**SEDRIS\_E173**: 4.15.4.2, 1<sup>st</sup> paragraph, 3<sup>rd</sup> sentence

Insert missing "instance" for consistency.

**RESPONSE:** Accept.

#### **SEDRIS\_E174**: 4.15.4.2, list item a

Change "not being used" to "does not indicate are being used" for clarity

#### **RESPONSE:** Accept.

# SEDRIS\_E175: 4.15.4.2, last paragraph

Add missing "instance" and change the last sentence to read as follows for clarity: "The use of the optional <DRM Property Table Reference> components for the ONE\_MATERIAL,

TWO\_MATERIALS, and THREE MATERIALS selection values is described in 5.2.7.29 Image Signature."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E176**: 4.15.4.3, 1<sup>st</sup> paragraph

Add missing "instance" and change "through reference by a" to "by reference from a".

#### **RESPONSE:** Accept.

# **SEDRIS\_E177**: 4.15.4.3, 2<sup>nd</sup> paragraph

Add missing "instance" and change "object(s)" to "DRM object(s)"

#### **RESPONSE:** Accept.

# **SEDRIS\_E178**: 4.15.4.3, 3<sup>rd</sup> paragraph

For clarity, replace the paragraph with the following: "Details of how <DRM Image Mapping Information> is to be combined with colour information is specified in 5.2.7.5 Colour\_Mapping."

#### **RESPONSE:** Accept.

# **SEDRIS\_E179**: 4.15.4.3, 4<sup>th</sup> paragraph, 3<sup>rd</sup> sentence

Add missing "instance" for consistency.

**RESPONSE:** Accept.

### **SEDRIS\_E180**: 4.15.4.4, 1<sup>st</sup> paragraph

Add multiple missing "instance", change "may be called" to "is termed" and "geo-specific" to "geo specific".

#### **RESPONSE:** Accept.

**SEDRIS\_E181**: 4.15.4.4, 2<sup>nd</sup> paragraph Add multiple missing "instance" including list occurrences.

#### **RESPONSE:** Accept.

# **SEDRIS\_E182**: 4.15.4.4, 3<sup>rd</sup> paragraph

Add missing "instance" and unbold "not".

#### **RESPONSE:** Accept.

# **SEDRIS\_E183**: 4.16.1, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence

For clarity, change to the following: "This mechanism can be used to dynamically control DRM objects within a transmittal."

# **RESPONSE:** Accept.

# **SEDRIS\_E184**: 4.16.1, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence

Change "<DRM Model>s" to "<DRM Model> instances" and "object" to "environmental object" for consistency.

# **RESPONSE:** Accept.

#### **SEDRIS\_E185**: 4.16.1, 2<sup>nd</sup> paragraph , last sentence

For correctness change "these objects" to "environmental objects", example to EXAMPLE format, and remove the last two items from the list.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E186**: 4.16.2.1, 1<sup>st</sup> paragraph, last sentence

For consistency, insert "an instance of" before "the specialized <DRM Control Link>".

# **SEDRIS\_E187**: 4.16.2.1, 3<sup>rd</sup> paragraph

Add missing "instance", change "SEDRIS objects" to "DRM objects". Replace "called..." with "termed *target fields* and *target objects*, and eliminate the parentheses.

# **RESPONSE:** Accept.

# **SEDRIS\_E188**: 4.16.2.1, 4<sup>th</sup> paragraph

Change example to EXAMPLE form, "The <DRM State Control Link>'s" to "A <DRM State Control Link> instance", and add missing "instance" at the end of the sentence.

#### **RESPONSE:** Accept.

# **SEDRIS\_E189**: 4.16.2.1, final paragraph

For clarity, change list to enumerated list and add final sentence afterward: "These subclasses are described below."

#### **RESPONSE:** Accept.

# **SEDRIS\_E190**: 4.16.2.2, 2<sup>nd</sup> paragraph, 1<sup>st</sup> sentence

Add the missing instances, and correct "a" to "an".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E191**: 4.16.2.3.1

Change "<DRM Expression>s" to "<DRM Expression> instance,",

"<DRM Function>" to "<DRM Function> instance", and "<DRM Function>" to "<DRM Function> instance". Remove quotes from around "returned" and add to end of paragraph "These are described below."

#### **RESPONSE:** Accept.

# SEDRIS\_E192: 4.16.2.3.1, 2<sup>nd</sup> paragraph

Add multiple missing "instance", and remove "therefore" and last sentence.

#### **RESPONSE:** Accept.

### **SEDRIS\_E193**: 4.16.2.3.3, 1<sup>st</sup> paragraph

Remove paragraph because it is redundant with the subsequent paragraph.

#### **RESPONSE:** Accept.

#### SEDRIS\_E194: 4.16.2.3.3, last paragraph

Remove paragraph since it is inappropriate for an international standard.

#### **RESPONSE:** Accept.

#### **SEDRIS E195**: 4.16.3.1

Replace "consuming system" to "consuming application", remove "at will".

#### **RESPONSE:** Accept.

#### **SEDRIS E196**: 4.16.3.3

Replace "consuming system" to "consuming application", remove "at will", and add missing "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E197**: 4.16.4.2

For clarity:

- 1. Move paragraph before table 4.10 up to be the first paragraph in the section.
- 2. Change current paragraph 1 to EXAMPLE form and include tables 4.8 and 4.9.
- 3. Switch the order of tables 4.9 and 4.8 and move the sentence immediately preceding 4.9 after "(totally destroyed).".
- 4. Fix leading after current table 4.8.

- 5. Move the first sentence currently following table 4.8 to precede table 4.8.
- 6. Move the first sentence following table 4.9 to the end of the new first paragraph.
- 7. Remove "Consequently," from the sentence following Table 4.9.
- 8. Table 4.11 first row should not be formatted as a column heading row, but just another row; it's part of the example.

**SEDRIS\_E198**: 4.16.5.1, 2<sup>nd</sup> paragraph

Use code font for field names

# **RESPONSE:** Accept.

#### SEDRIS\_E199: 4.16.5.1, 3<sup>rd</sup> paragraph

For correctness change to the following:

"<DRM RGB Colour> instances within the context of a <DRM Colour Table> shall not have <DRM RGB Colour Control Link> components, because a <DRM Colour Table> instance does not provide ana <DRM Interface Template> instance to allow values to be supplied for <DRM Variable> instances. Data consumers need only concern themselves with <DRM RGB Colour Control Link> instances in the context of <DRM Model> and <DRM Environment Root> instances, and even in that case primarily with the former rather than the latter."

**RESPONSE:** Accept.

**SEDRIS\_E200**: 4.16.5.1, 4<sup>th</sup> paragraph

Add multiple missing "instance" for each DRM class and put car example in EXAMPLE form.

**RESPONSE:** Accept.

SEDRIS E201: 4.16.5.3, 1<sup>st</sup> sentence

Use code font for fields "s" and "t".

**RESPONSE:** Accept.

**SEDRIS E202**: 4.16.5.3, 2<sup>nd</sup> sentence

For clarity, replace with "It is not required that control over both fields be provided."

**RESPONSE:** Accept.

# **SEDRIS\_E203**: 4.16.5.3, 3<sup>rd</sup> sentence

The current sentence is awkward, change to "Setting a link field (s\_expression\_index or t\_expression\_index ) within a <DRM Texture Coordinate Control Link> instance to zero specifies that the target field is not dynamically altered."

#### **RESPONSE:** Accept.

**SEDRIS\_E204**: 4.16.6.1, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence Change "<DRM Property Set Control Link" to "A <DRM Property Set Control Link> instance".

**RESPONSE:** Accept.

**SEDRIS\_E205**: 4.16.6.1, EXAMPLE, 2<sup>nd</sup> sentence Change "an <DRM Property Set Table>" to "a <DRM Property Set Table>".

**RESPONSE:** Accept.

#### **SEDRIS\_E206**: 4.16.6.1, EXAMPLE, last sentence

Use code font for "index" and add missing "instance" to <DRM Property Set>.

#### **RESPONSE:** Accept.

**SEDRIS E207**: 4.16.6.2, 1<sup>st</sup> sentence

Change "<DRM Colour Index Control Link>" to "A <DRM Colour Index Control Link> instance".

#### **SEDRIS E208**: 4.16.6.2, 2<sup>nd</sup> and 3<sup>rd</sup> sentences

For clarity change to "It is not required that control over both fields be provided. A target field is unaffected by specifying zero for the link field within a <DRM Colour Index Control Link> instance."

#### **RESPONSE**: Accept.

#### **SEDRIS E209**: 4.16.6.3, 1<sup>st</sup> paragraph

For clarity change to "A <DRM Property Table Reference Control Link> instance provides control over the index\_on\_axis field of the target <DRM Property Table Reference> instances. This allows the selection of different n-1 dimensional slices of the n-dimensional <DRM Property Table> instance that is referred to by a given <DRM Property Table Reference> instance."

#### **RESPONSE**: Accept.

#### **SEDRIS E210**: 4.16.6.3, EXAMPLE

For clarity, change "can be changed at will" to "can be changed".

#### **RESPONSE**: Accept.

# **SEDRIS E211**: 4.16.7, 2<sup>nd</sup> paragraph

For clarity, add missing "instance", change 2<sup>nd</sup> sentence to "It is not required that control over all three fields be provided", and 3<sup>rd</sup> sentence to "The target field is unaffected by specifying zero for the link fields within a <DRM LSR 3D Location Control Link> (u\_expression\_index,

v expression index.orw expression index)"

#### **RESPONSE**: Accept.

#### **SEDRIS E212**: 4.16.7, EXAMPLE

Add multiple missing "instance" and change "an <DRM LSR 3D Location Control Link>" to "a <DRM LSR 3D Location Control Link>".

#### **RESPONSE**: Accept.

# **SEDRIS\_E213**: 4.16.8, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

Change "<DRM Reference Vector Control Link>" to "A <DRM Reference Vector Control Link> instance".

#### **RESPONSE**: Accept.

# **SEDRIS\_E214**: 4.16.8, 1<sup>st</sup> paragraph, 2<sup>nd</sup> and 3<sup>rd</sup> sentences

For clarity, change to "It is not required that control over all three entries of the unit\_vector be provided. The target field is unaffected by specifying zero for the link fields within a <DRM Reference Vector Control Link> (v0\_expression\_index, v1\_expression\_index, or v2\_\_\_expression\_index)".

#### **RESPONSE:** Accept.

# **SEDRIS E215**: 4.16.8, 2<sup>nd</sup> paragraph

Change to EXAMPLE form, replace the overused word "control", and remove unnecessary comma in last sentence.

#### **RESPONSE**: Accept.

**SEDRIS E216**: 4.17.1, 1<sup>st</sup> paragraph To remove redundancy, remove the last sentence.

#### **RESPONSE:** Accept.

# **SEDRIS E217**: 4.17.1, list, item a

Add missing comma before "or".

**SEDRIS E218**: 4.17.2.1, 1<sup>st</sup> sentence

Change "were" to "are" and remove "ISO standard for ".

#### **RESPONSE:** Accept.

**SEDRIS\_E219**: 4.17.2.1, 2<sup>nd</sup> sentence

Change "Objects" to "DRM objects".

**RESPONSE:** Accept.

**SEDRIS\_E220**: 4.17.2.1, 3<sup>rd</sup> sentence Remove the second "within this part of ISO/IEC 18023".

**RESPONSE:** Accept.

#### **SEDRIS\_E221**: 4.17.2.2, 1<sup>st</sup> paragraph

Replace semicolon with period and change the rest of the sentence to "The required information that shall be provided in the fields of <DRM Responsible Party> instances to ensure such correspondence is specified in 6.2.25 Mandatory metadata.".

**RESPONSE:** Accept.

**SEDRIS\_E222:** 4.17.2.2, list Add the missing "the" before "data element linkage".

**RESPONSE:** Accept.

# **SEDRIS\_E223**: 4.17.2.3, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence

Correct capitalization of "Metadata" in constraint name.

**RESPONSE:** Accept.

#### **SEDRIS E224**: 4.17.2.3

Missing heading for Spatial Extent and for time-related information.

**RESPONSE:** Accept.

**SEDRIS\_E225**: 4.17.2.4, 1<sup>st</sup> sentence Fix "Mandatory Metadata" capitalization.

**RESPONSE:** Accept.

**SEDRIS\_E226**: 4.17.2.5 Add header for Lineage and add multiple missing "instance".

**RESPONSE:** Accept.

**SEDRIS\_E227**: 4.17.2.6 Fix capitalization of Mandatory Metadata.

**RESPONSE:** Accept.

**SEDRIS\_E228**: 4.17.2.7, list a Change "correspond" to "corresponds in".

**RESPONSE:** Accept.

**SEDRIS\_E229**: 4.17.2.7, 3<sup>rd</sup> paragraph Fix capitalization of Mandatory Metadata and change "kind," to "kind" in last sentence.

# **RESPONSE:** Accept.

# **SEDRIS\_E230**: 4.17.2.8 1<sup>st</sup> sentence

Change "date" to "data".

#### **SEDRIS\_E231**: 4.17.3.1, 1<sup>st</sup> paragraph

Remove quotes from around "metadata".

#### **RESPONSE:** Accept.

#### **SEDRIS E232**: 4.17.3.1, 2<sup>nd</sup> paragraph

Drop last part of sentence from comma forward.

#### **RESPONSE:** Accept.

# **SEDRIS\_E233**: 4.17.3.2, 1<sup>st</sup> paragraph, 1<sup>st</sup> and 2<sup>nd</sup> sentences

In 1<sup>st</sup> sentence, change "is required to provide" to "provides"

Replace 2<sup>nd</sup> sentence with "The information provided by a <DRM Transmittal Summary> instance provides a summary of the contents of a transmittal."

#### **RESPONSE:** Accept.

# **SEDRIS\_E234**: 4.17.3.2, 2<sup>nd</sup> paragraph

Merge the paragraph into paragraph 1.

Replace the 2<sup>nd</sup> sentence with "The kinds of information include features, geometry, and/or geometry topology."

And change final sentence to a NOTE format as follows: "NOTE There is no

feature\_topology\_present field, since the presence of features automatically ensures the presence of feature topology."

### **RESPONSE:** Accept.

#### SEDRIS\_E235: 4.17.3.2, 3<sup>rd</sup> paragraph

Add missing "instance" Change example to EXAMPLE form

#### **RESPONSE:** Accept.

**SEDRIS\_E236**: 4.17.3.2, 4<sup>th</sup> paragraph Change "shall be required" to "may need".

#### **RESPONSE:** Accept.

**SEDRIS\_E237**: 4.17.3.2, 6<sup>th</sup> paragraph Add the missing "instances" for <DRM Feature Topology>.

#### **RESPONSE:** Accept.

# **SEDRIS E238**: 4.17.3.2, 8<sup>th</sup> paragraph

Drop the "For example" out of the second sentence (don't make it EXAMPLE format). And change "would contain" to "contains".

#### **RESPONSE:** Accept.

# SEDRIS\_E239: 4.17.3.2, last paragraph

Add missing occurrences of "instance". Replace "as is the optional EDCS usage summary information" with "as are the optional <DRM EDCS Use Summary Item> components."

# **RESPONSE:** Accept.

# **SEDRIS\_E240**: 4.17.3.3, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence

The phrase "specifies a pattern of EDCS codes that appears" is not clear!

Replace the sentence with "Within the scope being summarized, a <DRM EDCS Use Summary Item> instance can specify either an ECC with an optional set of EACs, or just an individual EAC." (2nd sentence as currently standing)

### **SEDRIS E241**: 4.17.3.3, list

All three items a, b, and c should use sub-clause references, and also include "instance".

#### **RESPONSE:** Accept.

# SEDRIS\_E242: 4.17.3.3, 3rd paragraph

Add the missing "instance".

#### **RESPONSE:** Accept.

# **SEDRIS\_E243**: 4.17.3.4, 1<sup>st</sup> paragraph

# Add the missing "instance".

In the first sentence, replace "within the context being summarized" with "within the following: a. transmittal summary

- b. feature hierarchy, or
- c. geometry hierarchy"

#### **RESPONSE:** Accept.

# **SEDRIS\_E244**: 4.17.3.4, 2<sup>nd</sup> paragraph

Add the missing "instance" in various places. Change "or" to "and/or". And drop the comma before "to prevent", and drop the phrase "non-value-adding".

#### **RESPONSE:** Accept.

#### SEDRIS\_E245: 4.17.3.4, last paragraph

Remove "note that". Add missing "instance" in various places.

# **RESPONSE:** Accept.

#### **SEDRIS\_E246**: 4.17.3.5, 1<sup>st</sup> paragraph

Change "constraint specifies constraints so" to "ensures". Change "an" to "a". Add the missing "instance". Eliminate "or both" by using "and/or" Break off last sentence to EXAMPLE form.

#### **RESPONSE:** Accept.

**SEDRIS\_E247**: 4.17.3.5, 3<sup>rd</sup> paragraph End sentence at summarized

#### **RESPONSE:** Accept.

# **SEDRIS\_E248**: 4.17.3.5, 4<sup>th</sup> paragraph Add missing "instance".

Drop "patterns of".

# **RESPONSE:** Accept.

**SEDRIS\_E249**: 4.17.3.5, last paragraph Remove last sentence.

#### **RESPONSE:** Accept.

**SEDRIS\_E250**: 4.17.3.6, 1<sup>st</sup> paragraph Add missing occurrences of "instance". Change first sentence to "In addition to any hierarchy summary that may be present, a <DRM Model> instance or <DRM Environment Root> instance may be provided with a list of <DRM Primitive Summary Item> instances. These concepts provide different functionality." Drop second sentence.

Break off last sentence as EXAMPLE format and add UML instance diagram.

#### **RESPONSE:** Accept.

**SEDRIS\_E251**: 4.17.3.6, 2<sup>nd</sup> paragraph Add the missing instance.

#### **RESPONSE:** Accept.

#### **SEDRIS E252**: 4.18.2

Change "The <DRM Transmittal Root>" to "A <DRM Transmittal Root> instance". Remove "SEDRIS" throughout. Change "data item" to DRM object. In last sentence, change object to instance. Change "subordinate classes" to subordinate components.

#### **RESPONSE:** Accept.

# **SEDRIS\_E253**: 4.18.2, 2<sup>nd</sup> paragraph

Change object to instance, and data item to components. Drop last sentence.

### **RESPONSE:** Accept.

#### **SEDRIS E254**: 4.18.3.1

Change "An <DRM Environment Root>" to "A <DRM Environment Root> instance". Change "its content occupies" to "the corresponding content occupies". Change data item to DRM classes. Add the missing "instance".

#### **RESPONSE:** Accept.

# **SEDRIS\_E255**: 4.18.3.2, 1<sup>st</sup> paragraph

Change specify to specifies. Change "its ..." to "the ... of the <DRM Environment Root> instance are specified". Change "and" to "and/or". Drop 2nd sentence. Change 3<sup>rd</sup> sentence to "A <DRM Environment Root> instance may not be empty."

#### **RESPONSE:** Accept.

# **SEDRIS\_E256**: 4.18.3.2, 2<sup>nd</sup> paragraph

Add missing "instance" and missing "field". Change "a data set" to "an environment", and drop "for example".

#### **RESPONSE:** Accept.

#### **SEDRIS E257**: 4.18.3.3

Add missing instance. Change the first "represented" to "contained". Change data to environmental data (both).

#### **RESPONSE:** Accept.

# **SEDRIS\_E258**: 4.19.1.1, list

Item "a" is missing a comma. Change item e to "accessing error information".

#### **SEDRIS E259**: 4.19.1.1

Change work with to operate on. Insert "the transmittals" before DRM objects.

#### **RESPONSE:** Accept.

#### **SEDRIS E260**: 4.19.1.2

Missing "an" before object handle.

#### **RESPONSE:** Accept.

#### **SEDRIS E261**: 4.19.1.4

Italicize transmittal handle (first occurrence). Last sentence, "Close Transmittal" should be presented and hyperlinked as in previous sentence.

#### **RESPONSE:** Accept.

# **SEDRIS\_E262**: 4.19.1.5, list

Missing commas and period. Each item should be hyperlinked to the appropriate part of Clause 7

#### **RESPONSE:** Accept.

**SEDRIS\_E263**: 4.19.1.5, 2<sup>nd</sup> paragraph Italicize iterator handle (first occurrence)

**RESPONSE:** Accept.

**SEDRIS\_E264**: 4.19.1.6

Italicize search filter handle

**RESPONSE:** Accept.

**SEDRIS\_E265**: 4.19.1.7, next to last paragraph Insert missing "a" before parameter.

#### **RESPONSE:** Accept.

#### **SEDRIS E266**: 4.19.2.2, list

Change "may be created by:" to "may be placed in a transmittal by performing the following steps:" And change the list as follows:

a. creating a new DRM object,

b. storing the data corresponding to the new DRM object, and

c. establishing the relationships between the new DRM object and other DRM objects in the transmittal.

#### **RESPONSE:** Accept.

#### SEDRIS\_E267: 4.19.2.2, bulleted list

Missing "of" in first bullet. Remove ", insert, " in the sentence prior to bulleted list. Move last paragraph with its bullets to the beginning of the section. Remove the "Accessing" paragraph.

#### **RESPONSE:** Accept.

#### **SEDRIS E268**: 4.19.2.3.1

Change "to related DRM objects" to "of DRM objects may be retrieved from a transmittal" Throughout the list, change "an object in a transmittal" to "a DRM object".

#### **SEDRIS E269**: 4.19.2.3.1

Change reference to 4.19.2.7 to use current title (add "and mesh face table data")

#### **RESPONSE:** Accept.

#### **SEDRIS E270**: 4.19.2.3.2

Add comma after right parenthesis In the list, change "the specified object" to "the specified DRM object", and the "next object" to "next DRM object".

#### **RESPONSE:** Accept.

#### **SEDRIS E271**: 4.19.2.3.3.2

Check leading for level 6

#### **RESPONSE:** Accept.

#### **SEDRIS\_E272**: 4.19.2.3.3.2

Change "The search filter" to "A search filter". Drop "SEDRIS". Change "object" to "DRM object" throughout the list. In item h, change "a specified levels" to "to a maximum search depth".

#### **RESPONSE:** Accept.

#### **SEDRIS E273**: 4.19.2.3.3.3, 1<sup>st</sup> paragraph

Change object to DRM object. Throughout list, drop "specify". Change "if" to "whether" in c,d,e. Change "exact location objects" to "exact location".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E274**: 4.19.2.3.3.4 Searching by hierarchy organization

In the list, change "will be" to "are" throughout.

In the second paragraph, first sentence, replace "instance provides" with "parameter specifies", and change "is to be included" to "indicates which branches are to be included".

In the second paragraph, last sentence, replace with "This parameter of 7.3.56

InitializeComponentIterator determines which types of hierarchies are to be included and under what criteria those hierarchies are to be included."

# **RESPONSE:** Accept.

**SEDRIS\_E275**: 4.19.2.3.4 Change ID to IDs before the colon

**RESPONSE:** Accept.

#### **SEDRIS E276**: 4.19.2.3.5

Change object to DRM object In last list item, change "associated to" to "associated with"

**RESPONSE:** Accept.

# **SEDRIS\_E277**: 4.19.2.7

Change selected cells to selected portions

#### **RESPONSE:** Accept.

SEDRIS\_E278: 4.19.2.8

Both bullets: insert "as specified in".

# **SEDRIS E279**: 4.19.2.9

Change real to actual.

#### **RESPONSE:** Accept.

#### **SEDRIS E280**: 4.19.3

In third list item, remove extra space. Change all "object" to "DRM object".

#### **RESPONSE:** Accept.

#### **SEDRIS E281**: 4.19.4

In the list items, get rid of redundant "that all", and 2 "of the DRM objects". Insert "originally" before "stored in the transmittal" (two items). Change object to instance; and "the field values" to "field values".

#### **RESPONSE:** Accept.

#### **SEDRIS E282**: 4.19.5

In 4<sup>th</sup> sentence, change API to the API. In 6<sup>th</sup> sentence, change "may be retrieve" to "may be retrieved". In last sentence, change "The following function" to "The following functions".

#### **RESPONSE:** Accept.

#### **SEDRIS E283**: 4.19.6.1, and title of 4.19.6.2

"call back" should be 1 word

#### **RESPONSE:** Accept.

#### **SEDRIS E284**: 4.19.6.3

Drop "human readable"

#### **RESPONSE:** Accept.

**SEDRIS\_E285**: 4.21.1, 1<sup>st</sup> sentence Change "of one of" to "of instances of".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E286**: 4.21.1, 1<sup>st</sup> sentence

There should be a footnote to International Registry of Graphical Items. This is a standard footnote stating who maintains that registry.

**RESPONSE:** Accept.

# **SEDRIS\_E287**: 4.21.2, 2<sup>nd</sup> paragraph

Change "in this standard" to "in this part of ISO/IEC 18023" (both places).

#### **RESPONSE:** Accept.

#### **SEDRIS E288**: 4.21.3

Add after first sentence:

"A registration proposal for a set member shall contain the name for the set member as well as the meaning associated with that name. Such meanings shall not duplicate existing set members and shall not modify the intent of the set data type."

#### **RESPONSE:** Accept.

Clause 5

#### **SEDRIS\_E289**: Table 5.1

There are currently two tables numbered 5.1 (the table of contents and the next table). Correct table numbering throughout clause 5 accordingly.

#### **RESPONSE:** Accept.

#### **SEDRIS E290**: 5.1.2

Change "SEDRIS" to "this part of ISO/IEC 18023", and change "SEDRIS objects" to "DRM objects". Remove "SEDRIS" before "transmittal".

**RESPONSE:** Accept.

**SEDRIS\_E291**: 5.2.5, 1<sup>st</sup> paragraph Add comma after "Hence"

**RESPONSE:** Accept.

**SEDRIS E292**: 5.2.6.2, 1<sup>st</sup> paragraph

Change Access\_Mode to code font.

**RESPONSE:** Accept.

**SEDRIS\_E293**: 5.2.6.18 Octant, 1<sup>st</sup> paragraph Change "data types" to "data type", remove "of an oct tree".

**RESPONSE:** Accept.

**SEDRIS\_E294**: 5.2.6.15, Model\_Reference\_Type

Add missing occurrences of "instance" in table entries.

**RESPONSE:** Accept.

#### **SEDRIS\_E295**: 5.2.6.18, Octant

The spelling of the word "oct tree" should be consistent between Clauses 4 and 5 The spelling of the word "quad tree" should be consistent between Clauses 4 and 5 Check SAMET for proper terms.

#### **RESPONSE:** Accept.

**SEDRIS\_E296**: 5.2.6.20 Present\_In Add missing occurrences of "instance".

**RESPONSE:** Accept.

**SEDRIS\_E297**: 5.2.6.21 Quadrant, 1<sup>st</sup> paragraph Change "data types" to "data type", remove "of a quad tree".

**RESPONSE:** Accept.

**SEDRIS\_E298**: 5.2.6.26, Table 5.21 Change "object" to "DRM object" throughout.

**RESPONSE:** Accept.

**SEDRIS\_E299**: 5.2.7.17, Table 5.31 Change "object" to "DRM object" in table entries.

**RESPONSE:** Accept.

#### **SEDRIS E300**: 5.2.7.20

Change "reason for" to "semantic meaning of".

**RESPONSE:** Accept.

**SEDRIS\_E301**: 5.2.7.22, 1<sup>st</sup> paragraph

Add missing occurrences of "instance".

**RESPONSE:** Accept.

**SEDRIS\_E302**: 5.2.7.27, Table 5.41 Change "object" to "DRM object".

**RESPONSE:** Accept.

**SEDRIS\_E303**: 5.2.7.31 First entry's description, insert missing "to" after "able".

**RESPONSE:** Accept.

**SEDRIS\_E304**: 5.2.7.34, Table 5.48 Change "data" to "environmental data" throughout.

**RESPONSE:** Accept.

**SEDRIS\_E305**: 5.2.7.38, Table 5.50 FIXED\_LISTED has extra space in non-depth-buffered

**RESPONSE:** Accept.

#### **SEDRIS\_E306**: 5.2.7.43, Table 5.55

The second sentence of the first paragraph of FIELD is in the wrong font. Change "object" to "DRM object".

**RESPONSE:** Accept.

**SEDRIS\_E307**: 5.2.7.52 Check that "arc-second" is hyphenated correctly according to SI.

#### **RESPONSE:** Accept.

**SEDRIS\_E308**: 5.2.7.66, Table 5.69 Correct spelling error for RELATIVE\_TO\_REFERENCE\_TIME

**RESPONSE:** Accept.

**SEDRIS\_E309**: 5.2.7.70

Add missing occurrence(s) of "instance".

**RESPONSE:** Accept.

**SEDRIS\_E310**: 5.2.8.3, Table 5.79 Remove inappropriate characters from the Description column header.

**RESPONSE:** Accept.

**SEDRIS\_E311**: 5.3.3.36

Correct "Classification\_Parameter" to "Classification\_Parameters"

**RESPONSE:** Accept.

**SEDRIS E312**: 5.3.3.37

Correct Classification\_Parameter to Classification\_Parameters, first sentence Use code font for type names and field names. Change "object" to "instance" For ""types" of branches", remove the quotes.

#### **RESPONSE:** Accept.

**SEDRIS\_E313**: 5.3.3.58

Fix hyperlink and class name for <DRM Volume LOD Data>.

**SEDRIS\_E314**: 5.3.3.106, 2<sup>nd</sup> paragraph

Change field names (hue, saturation, value) to code font.

#### **RESPONSE:** Accept.

#### **SEDRIS E315**: 5.3.3.112

Change "a" to "an". Add missing occurrence(s) of "instance". Italicize "i.e."

**RESPONSE:** Accept.

#### **SEDRIS E316**: 5.3.3.137

Remove misplaced parenthesis.

**RESPONSE:** Accept.

#### **SEDRIS E317**: 5.3.3.138

Layout isn't right for the volume line.

**RESPONSE:** Accept.

**SEDRIS\_E318**: 5.3.3.141, last paragraph, 2<sup>nd</sup> sentence Change to example form.

**RESPONSE:** Accept.

**SEDRIS\_E319**: 5.3.3.172 Change "an" to "a" and change "object" to "instance".

**RESPONSE:** Accept.

#### **SEDRIS E320**: 5.3.3.176, 5.3.3.177, 5.3.3.178

Move right brace down to the next line.

**RESPONSE:** Accept.

**SEDRIS\_E321**: 5.3.3.214 Quadrant Select Parameters Change "an" to "a" and change "object" to "instance"

**RESPONSE:** Accept.

#### SEDRIS\_E322: 5.3.3.231 RGB\_Data

Use code font for field names. Also check that CMY\_Data's and HSV\_Data's text are handled correctly.

#### **RESPONSE:** Accept.

#### **SEDRIS E323**: 5.3.3.238

Change Search\_Bounds to code font. Change "user specified" to take hyphen. In the second paragraph, change "minimum point" and "maximum point" to the form of field names.

**RESPONSE:** Accept.

SEDRIS\_E324: 5.3.3.239 Search Rule

Change comma to "and" separating 5.4.2 Iterator and next hyperlink.

**RESPONSE:** Accept.

**SEDRIS\_E325**: 5.3.3.252 Separating\_Plane\_Select\_Parameters Change "object" to "instance".

#### **SEDRIS\_E326**: 5.3.3.254

Add missing occurrences of "instance". Change "<DRM Enumeration Axis>" to "<DRM Regular Axis> and <DRM Irregular Axis>".

#### **RESPONSE:** Accept.

#### **SEDRIS E327**: 5.3.3.263

Change "object" to "instance".

**RESPONSE:** Accept.

#### **SEDRIS\_E328**: 5.3.3.291

Change "object" to "instance", and add missing period at end of final sentence Change "do not disagree" to "satisfy".

#### **RESPONSE:** Accept.

**SEDRIS\_E329**: 5.3.3.297 Italicize "e.g." throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E330**: 5.3.3.313 Time\_Select\_Parameters

Change "object" to "instance". In EXAMPLE, change season to code font

#### **RESPONSE:** Accept.

#### **SEDRIS E331**: 5.4.2

Change "object" to "DRM object". Change "for instance" segment to example form. Change "SEDRIS" to "this part of ISO/IEC 18023".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E332**: 5.4.3

Change "DRM class instance " to "DRM object" throughout this section. Italicize "i.e." and "e.g.". Change "object" to "DRM object". Change "class handle" to "object handle" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS E333**: 5.4.6

On c, remove the parentheses around the last sentence. Change function references to cite appropriate sections of Clause 7.

### **RESPONSE:** Accept.

**SEDRIS\_E334**: 5.5 Parameters' layout should be corrected for all parameter lists throughout this section.

**RESPONSE:** Accept.

**SEDRIS\_E335**: 5.5.1, 5.5.2, 5.5.3 For 5.5.1, remove quotes from "call-back". Change "call-back" to "callback" throughout.

#### **RESPONSE:** Accept.

Clause 6

#### **SEDRIS\_E336**: 6, entire clause

Replace "SEDRIS transmittal" with "transmittal", "SEDRIS object" with "DRM object".

#### **RESPONSE:** Accept.

#### **SEDRIS E337**: 6, entire clause

Replace "EDCS Classification Code (ECC)" with "ECC", and "EDCS Attribute Code (EAC)" with "EAC" throughout.

#### **RESPONSE:** Accept.

**SEDRIS\_E338**: 6, entire clause

Change "spatial reference frame" to "SRF".

#### **RESPONSE:** Accept.

#### **SEDRIS E339**: 6, entire clause

Hyphenate "counter-clockwise" consistently throughout.

#### **RESPONSE:** The spelling "counterclockwise" will be used throughout.

#### **SEDRIS E340**: 6.1.2 Description

Change "objects" to "environmental objects".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E341**: 6.2, all constraints

Use code font for field names, enumerants, and selectors throughout. For readability, the letters representing specific instances of a construct should be in a distinct font and/or style.

#### **RESPONSE:** Accept.

**SEDRIS\_E342**: 6.2.2 Axis type constraints, a.2

Change the comma after "distinct" to an "and".

#### **RESPONSE:** Accept.

**SEDRIS\_E343**: 6.2.2 Axis type constraints, b.2 and d.2 Change "the axis\_type's value" to "the value of the axis\_type".

**RESPONSE:** Accept.

# **SEDRIS\_E344**: 6.2.2 Axis type constraints, c.5

Change ", and" to a period.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E345**: 6.2.3 Colour mapping constraints

Add missing occurrences of "instance" for <DRM Colour> and <DRM Light Rendering Properties>.

**RESPONSE:** Accept.

**SEDRIS\_E346**: 6.2.4 Colour table size Insert missing occurrence of "instance" for <DRM Colour Table Group>.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E347**: 6.2.5 Connected edge constraints

Add missing occurrences of "instance" for <DRM Feature Node>, <DRM Geometry Node>, <DRM Feature Edge>, and <DRM Geometry Edge>.

Correct <Feature Edge> to <DRM Feature Edge> and <Geometry Edge> to <DRM Geometry Edge> throughout.

#### **SEDRIS\_E348**: 6.2.7 Continuous LOD constraints

Add missing occurrence of "instance" after <DRM Environment Root> in a, and change "some" to "a".

For b, insert "instance" after <DRM Continuous LOD Related Geometry>.

#### **RESPONSE:** Accept.

**SEDRIS E349**: 6.2.12 Environment\_Root spatial reference frame

Add missing occurrences of "instance" in b, c.

**RESPONSE:** Accept.

**SEDRIS\_E350**: 6.2.13 Face Direction levels 0 – 3 Change "true" to "TRUE" in code font.

#### **RESPONSE:** Accept.

**SEDRIS\_E351**: 6.2.16, c.5 This segment should be 6.2.16, item d.

**RESPONSE:** Accept.

**SEDRIS E352**: 6.2.16, c.6

This segment should be 6.2.16, item e.

**RESPONSE:** Accept.

#### **SEDRIS E353**: 6.2.17

Add missing occurrences of "instance": "A <DRM Light Rendering Properties> instance may contain instances of only one subclass of <DRM Directional Light Behaviour>."

**RESPONSE:** Accept.

#### **SEDRIS\_E354**: 6.2.18 Image\_Anchor spatial reference frame

Remove quotes from around "extended".

**RESPONSE:** Accept.

#### **SEDRIS E355**: 6.2.20

For all items that start with "For each", consistent presentation should be provided. In the items under b, c, and d, the list items should end with periods, not commas or ", and" (for 1, 2).

**RESPONSE:** Accept.

**SEDRIS\_E356**: 6.2.20, throughout

Change wording of the form "component DRM\_xxx instances" to "DRM\_xxx components".

#### **RESPONSE:** Accept.

#### **SEDRIS E357**: 6.2.20 Index Codes within tables, b

In sentence 2, change "<Data Table Library> instance" to "<Data Table Library> instance L", and for the remainder of b, replace "<Data Table Library> instance L" with L.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E358**: 6.2.20 Index\_Codes within tables, b.3, c.2, and d.2

At the end of the first sentence, add ", as follows:" and remove the period. Throughout, change "the <DRM Table Property Description> instance X" to "X".

#### **RESPONSE:** Accept.

**SEDRIS E359**: 6.2.20, f

Change "EAC" to "EDCS\_Attribute\_Code" in code font. Change "DT" to "D".

#### **SEDRIS\_E360**: 6.2.21 Inheritance rule for Location

Change "object" to "DRM object" throughout, and change "aggregation tree" to "component tree" for consistency of terminology.

#### **RESPONSE:** Accept.

### **SEDRIS\_E361**: 6.2.22 Level of detail related organizing principle

Replace "whether a" with "whether an instance of". For b, change "of the other" to "of the other, as follows:".

# **RESPONSE:** Accept.

#### **SEDRIS\_E362**: 6.2.23 LSR model and reference surfaces

Add missing occurrence of "instance" after <DRM Model>, and change "spatial reference frame (SRF)" to "SRF", and remove "(aggregate)".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E363**: 6.2.24 LSR\_Transformation components

Change "An" to "a", add "component" after <DRM Local 4x4> in all occurrences.

**RESPONSE:** Accept.

#### **SEDRIS\_E364**: 6.2.25 Mandatory metadata, <DRM Lineage>

For a, b, add missing occurrences of "instance", and for b change "or" to "and/or".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E365**: 6.2.26 Model reference type constraints

Change "the <DRM Model> instance's name" to "name of the <DRM Model> instance", and add missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E366**: 6.2.27 Model spatial reference frame

Change "Local Space Rectangular" to "LSR" to reflect the SRM's terminology.

Throughout, change "M's has\_moving\_parts field" to "The has\_moving\_parts field of M". Change "a Local Space Rectangular" to "an LSR". Change "M's has\_units field" to "The has\_units field of M". Change "non-LSR reference frame" to "non-LSR SRF", and change "Local Space Rectangular reference frame" to "LSR SRF".

#### **RESPONSE:** Accept.

#### **SEDRIS E367**: 6.2.31

Add missing occurrences of "instance", and change "object" to "DRM object".

#### **RESPONSE:** Accept.

**SEDRIS\_E368**: 6.2.32

Change "An" to "a".

# **RESPONSE:** Accept.

**SEDRIS\_E369**: 6.2.32, b and c Add missing occurrences of "instance". In 2, change "tag" to "tag field".

#### **RESPONSE:** Accept.

#### **SEDRIS E370**: 6.2.36

Remove line breaks at the end of the first sentence of a, and the end of the first sentence of b. Add missing occurrences of "instance".

#### **SEDRIS\_E371**: 6.2.39

In b.2, change "nstance" to "instance". In b.c, add missing "a" after "either". In c.3 and d.3, add missing occurrences of "instance".

## **RESPONSE:** Accept.

#### **SEDRIS\_E372**: 6.2.42

Italicize <DRM Geometry Representation> throughout. Change "instance of a concrete subclass of" to "instance of" throughout.

#### **RESPONSE:** Accept.

**SEDRIS\_E373**: 6.2.45 Change "shall hold" to "holds".

**RESPONSE:** Accept.

#### **SEDRIS E374**: 6.2.50

Add missing occurrences of "instance".

**RESPONSE:** Accept.

#### **SEDRIS\_E375**: 6.2.52 Spatial index related organizing principle

Italicize <DRM Geometry Representation> throughout. For a.3.ii, do not capitalize "The". Change "S's strict\_organizing\_principle" to "The strict\_organizing\_principle field of S" throughout. Change "sorted bins" in b.2 to "indexed bins", removing the quotes. In b.2, insert an "i.e." before "the branches of S".

#### **RESPONSE:** Accept.

**SEDRIS\_E376**: 6.2.53, title Add hyphen between "state" and "related"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E377**: 6.2.53

Add missing occurrences of "instance". In a, change "in EUC\_PERCENT units with ESC\_UNI" to "with EUC\_PERCENT units and ESC\_UNI scale factor." In b, change "S's active\_state\_value" to "the active\_state\_value field of S".

#### **RESPONSE:** Accept.

**SEDRIS\_E378**: 6.3.1, 2<sup>nd</sup> paragraph, last sentence Change "While DRM class instances" to "While instances".

**RESPONSE:** Accept.

**SEDRIS\_E379**: 6, all classes

For all occurrences of "An <DRM xxx>" change to "A <DRM xxx>."

**RESPONSE:** Accept.

**SEDRIS\_E380**: Table 6.3 < DRM Absolute Time> Supply missing occurrences of "instance" in the Examples.

**RESPONSE:** Accept.

#### **SEDRIS\_E381**: Table 6.4 < DRM Absolute Time Interval>

Supply missing occurrences of "instance" in the Examples.

**RESPONSE:** Accept.

**SEDRIS\_E382**: Table 6.7 < DRM Aggregate Feature>, Definition

Add missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E383**: Table 6.7 < DRM Aggregate Geometry>, Definition

Add missing occurrences of "instance". In the CLASSIFICATION section, replace "for example" with "e.g." in italics, for consistency with how <DRM Aggregate Feature> is presented.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E384**: Table 6.16 <DRM Axis> and its subclasses

Replace any occurrences of the terms "hash mark" or "tic mark" with "tick mark", for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS E385**: Table 6.20 < DRM Base Positional Light>

In the definition, put non-breaking spaces in the  $(a + bd + cd^2)$  equation.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E386**: Table 6.32 < DRM Classification Data>, Definition

Supply missing occurrences of "instance", and change "object" to "DRM object" where appropriate. Replace "<DRM Classification Data> is used" with "<DRM Classification Data> instances are used".

#### **RESPONSE:** Accept.

# **SEDRIS\_E387**: Table 6.44 < DRM Colour Table>, Examples

Replace "represented in SEDRIS" with "represented".

**RESPONSE:** Accept.

**SEDRIS\_E388**: Table 6.45 < DRM Colour Table Group>

Update examples to use complete sentences.

#### **RESPONSE:** Accept.

# **SEDRIS\_E389**: Table 6.45 < DRM Colour Table Group>, Examples

Replace the first example with "Consider a transmittal containing a <DRM Colour Table Library> instance with only one <DRM Colour Table Group> component, which in turn has only one <DRM Colour Table> component. That <DRM Colour Table> instance is the one and only <DRM Colour Table> instance for the entire transmittal."

Change "Out the Window (OTW)" to "OTW" and "Night Vision Goggles (NVG)" to "night vision goggles".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E390**: Table 6.45 < DRM Colour Table Group>, Examples

Add missing occurrences of "component" after "<DRM Colour Table>". Add missing occurrences of "instance".

#### **RESPONSE:** Accept.

**SEDRIS\_E391**: Table 6.46 < DRM Colour Table Library>, Examples Change "represented in SEDRIS" to "represented".

**RESPONSE:** Accept.

**SEDRIS\_E392**: Table 6.47 < DRM Cone Directional Light>, Examples Change "0.8" to "0,8" and add missing occurrences of "instance".

**RESPONSE:** Accept.

#### **SEDRIS E393**: Table 6.47 < DRM Cone Directional Light>, Examples

In the Example(s), change the following equation to add a set of parentheses around the "(width / 2,0) - degrees\_away\_from\_direction\_vector":

#### Change

" final\_intensity = minimum\_colour\_intensity + (((width / 2,0) - degrees\_away\_from\_direction\_vector / (width / 2,0))" -to-

" final\_intensity = minimum\_colour\_intensity + ((((width / 2,0) - degrees\_away\_from\_direction\_vector) / (width / 2,0))"

#### **RESPONSE:** Accept.

**SEDRIS\_E394**: Table 6.48 < DRM Conformal Behaviour>, Definition

Add missing occurrences of "instance".

#### **RESPONSE:** Accept.

**SEDRIS\_E395**: Table 6.50 <DRM Continuous LOD Related Geometry>, Definition Add missing occurrences of "instance".

**RESPONSE:** Accept.

#### SEDRIS\_E396: Table 6.52 <DRM Cross Reference>

Supply missing occurrences of "instance" in the Definition and Example(s).

#### **RESPONSE:** Accept.

#### **SEDRIS\_E397** Table 6.56 < DRM Data Table Library>, 1st example

Replace the following, "A generic seamount could be modeled as a 2D <DRM Property Grid> of the bottom elevation, surface properties, or other properties This grid could be instanced in multiple places in the environment by means of" with "Consider a generic seamount represented as a 2D <DRM Property Grid> instance representing the bottom elevation, surface properties, and other properties. This grid can be referenced as needed in a transmittal by means of".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E398**: Table 6.56 < DRM Data Table Library>, 2nd example

Replace the following, "A table of material properties can be placed in a <DRM Data Table Library> and accessed via" with "Consider a <DRM Property Table> instance T representing material properties, where T is a component of a <DRM Data Table Library> instance. T can be accessed using".

Also, replace the following, "instances to identify the materials and their properties for objects in the given transmittal (e.g., the optical or electromagnetic properties in various wavelength bands)." with "instances by DRM objects in the given transmittal. In this manner DRM objects representing environmental objects composed of the same materials with the same properties, such as optical or electromagnetic properties in various wavelength bands, can be specified."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E399**: Table 6.57 <DRM Description>, Example(s)

Change the following "The description of a <DRM Model> of a particular aircraft," to "The description of a <DRM Model> instance representing a particular type of aircraft,".

# **RESPONSE:** Accept.

# **SEDRIS\_E400**: Table 6.72 <DRM Expression>, Definition

Replace "consuming system" with "consuming application" and replace "object" with "DRM object".

**RESPONSE:** Accept.

# **SEDRIS\_E401**: Table 6.75 < DRM Feature Edge>, Example(s)

Add missing occurrences of "instance".

#### **SEDRIS\_E402**: Table 6.79 <DRM Feature Model>, Example(s)

Add missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E403**: Table 6.85 < DRM Feature Volume>

Supply missing occurrences of "instance" in the Example(s) (except for <DRM Label>, which should take "component" instead for clarity).

#### **RESPONSE:** Accept.

#### **SEDRIS\_E404**: Table 6.86 < DRM Feature Volume Shell>, Example(s)

In the Example(s), change the following, "would consist of a single" to "consists of a single". Change the following, "would be associated with the <DRM Feature Face>" to "is associated with the <DRM Feature Face>".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E405**: Table 6.86 < DRM Feature Volume Shell>, Definition

Remove quotes from the word outside in the following "instance lies "outside" any other volumes. Since the".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E406**: Table 6.86 < DRM Feature Volume Shell>, Example(s)

Change the following, "representing a building. It has an associated" to "instance V representing a building. V has an associated".

#### **RESPONSE:** Accept.

#### **SEDRIS E407**: Table 6.86 < DRM Feature Volume Shell>, Example(s)

Change the comma after composition to a semi-colon - "describe its characteristics, such as material composition; and a" (or turn the list into list form).

# **RESPONSE:** Accept.

#### **SEDRIS\_E408**: Table 6.91 < DRM Geometric Centre>, Definition

Replace "an instance of a concrete subclass of <DRM Aggregate Geometry>" with "a <DRM Aggregate Geometry> instance"

# **RESPONSE:** Accept.

#### **SEDRIS\_E409**: Table 6.95 < DRM Geometry Model>, Clarification

In the Clarifications, replace the following, "Although not required, this allows a data provider to specify a uniform model orientation within a <DRM Model Library>." with "The <DRM LSR Transformation> component allows a data provider to specify a uniform model orientation within a <DRM Model Library> instance. (Note that a data provider is not required to do so.)".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E410**: Table 6.96 < DRM Geometry Model Instance>, Example(s)

Remove the parentheses from "<DRM Model>'s (0, 0, 0) coordinate will be instanced," making it "<DRM Model> instance's (0, 0, 0) coordinate will be instanced,".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E411**: Table 6.97 < DRM Geometry Node>, Definition

Change "object" to "DRM object" where appropriate. Change "geometry node" to "<DRM Geometry Node> instance". Change "is the same location as" to "is the same as that of".

# **SEDRIS E412**: Table 6.97 <DRM Geometry Node>

In the clarifications, add missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS E413**: Table 6.98 < DRM Geometry Representation>

In the definition, replace "a concrete class derived from this DRM class species:" with "this DRM class specifies either"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E414**: Table 6.101 <DRM Geometry Volume>, Examples

Add missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E415**: Table 6.102 <DRM Grid Overlap>, Definition:

Change "<DRM Property Grids>" to "<DRM Property Grid> instances"

**RESPONSE:** Accept.

#### **SEDRIS\_E416**: Table 6.107 < DRM Hierarchy Summary Item>

Add missing occurrences of "instance" in the Definition and Example(s). In the definition, Add "being summarized" after "transmittal". In the examples, change "EDCS Classification Codes" to "ECCs" and change "EDCS Attribute Codes" to EACs".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E417:** Table 6.107 <Hierarchy Summary Item>

Rescale the figures to keep the tables from getting "too wide" Multiplicity note.

Change "should be set to zero" to "shall be set to zero".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E418**: Table 6.111 < DRM Image>, Definition

For level count, replace occurrences of "2" with "two" where appropriate, and replace "SEDRIS" with "the DRM". Throughout, change "consumer's system" to "consuming application".

In the 5th paragraph, change the following, "a power of 2. Please note that SEDRIS places no restriction on" to "a power of two. Please note that the DRM places no restriction on", and change the note to a NOTE and the EXAMPLE is an example.

Put a comma after "image\_signature value" for bits\_of\_material2\_percentage.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E419**: Table 6.111 <DRM Image>, Clarifications

Change the following, "<DRM Image Mapping Function>, because an <DRM Image> may be significant only for a particular domain, e.g. radar, thermal, out-the-window." to "<DRM Image Mapping Function> instance, because a <DRM Image> instance may be significant only for a particular domain, such as radar, thermal, or out-the-window.".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E420**: Table 6.112 < DRM Image Anchor>, Example(s)

Add missing occurrences of "instance" in the Definition and Example(s). In the first example, remove "global".

In the second example, change the first occurrence of "data" to "instance".

### **RESPONSE:** Accept.

#### **SEDRIS\_E421**: Table 6.113 < DRM Image Library>

In the examples, add missing occurrence(s) of "instance", and change "world SRF" to "SRF".
**SEDRIS\_E422**: Table 6.115 < DRM Image Mapping Function>

In the examples, add missing occurrence(s) of "instance".

**RESPONSE:** Accept.

**SEDRIS\_E423**: Table 6.119 <DRM Inline Colour>

Add missing occurrences of "instance" in the Definition.

**RESPONSE:** Accept.

**SEDRIS\_E424**: Table 6.120 <DRM Interface Template> Add missing occurrences of "instance" in the Definition.

#### **RESPONSE:** Accept.

**SEDRIS\_E425**: Table 6.128 < DRM Light Rendering Behaviour>

In the definition, italicize "type" in the expression "type of light".

**RESPONSE:** Accept.

**SEDRIS\_E426**: Table 6.133 < DRM Line>, Clarifications Change the EXAMPLE to the correct style.

**RESPONSE:** Accept.

#### **SEDRIS E427**: Table 6.136 < DRM Linear Geometry>

In the definition, replace "instance of a concrete class derived form this DRM class" with "instance of this DRM class".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E428**: Table 6.139 < DRM Local 4x4>, Definition

Add missing occurrences of "instance" throughout. In the 2nd paragraph, remove the 2nd and 3rd sentences since they are tutorial in nature.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E429**: Table 6.139 <DRM Local 4x4>, Definition

Change the following, "specified in an LSR SRF as a world SRF, in which case" to "specified in an LSR SRF, in which case".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E430**: Table 6.149 < DRM LSR Transformation >

Supply missing occurrences of "instance" in the Example(s).

#### **RESPONSE:** Accept.

#### **SEDRIS\_E431**: Table 6.160 < DRM Mesh Face Table>, Definition

Throughout, change "node" to "vertex" for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS E432**: Table 6.161 <DRM Model>

In the Example(s), change the following, "<DRM Models> in this data provider's mapping to a transmittal can reference the "automobile" <DRM Model>." to "<DRM Model> instances in this data provider's mapping to a transmittal can reference the "automobile" <DRM Model> instances.".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E433**: Table 6.163 < DRM Model Library>, Definition

Change the following, "<DRM Model> instances that are stored in the transmittal." to "<DRM Model> instance(s) that are stored in the given transmittal."

#### **SEDRIS E434**: Table 6.172 <DRM Perimeter Data>

Supply missing occurrences of "instance" in the Example(s).

#### **RESPONSE:** Accept.

#### **SEDRIS E435**: Table 6.178 < DRM Point Feature>, Definition:

Italicize "zero-dimensional".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E436**: Table 6.186 < DRM Primitive Colour>

For each step, add "component" after the class name. For the first three steps, begin the step with the word "combine".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E437**: Table 6.191 <DRM Property>, Definition

Change the following, "its meaning (specified using an Attribute\_Code," to "its meaning (specified using an EAC,".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E438**: Table 6.192 < DRM Property Characteristic>, Example(s), 1st example

In the first example, first sentence change "<DRM Property Value> instance" to "<DRM Property Value> component".

#### **RESPONSE:** Accept.

# **SEDRIS\_E439**: Table 6.192 < DRM Property Characteristic>, Examples, last example, last paragraph

Add a comma after "components" in "components provided that they have different meaning values. For example, this" making it "components, provided that they have different meaning values. For example, this".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E440**: Table 6.195 < DRM Property Grid Hook Point>, Example(s)

Change the following, "Consider a two-dimensional <DRM Property Grid>" to "Consider a 2D <DRM Property Grid>"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E441**: Table 6.196 < DRM Property Set>, Definition

Change the following, "An <DRM Property Set> instance " to "A <DRM Property Set> instance "

#### **RESPONSE:** Accept.

#### **SEDRIS\_E442**: Table 6.196 <DRM Property Set>,Example(s)

Change the following, "<DRM Property Set Index> instance, that references an <DRM Property Set> containing" to "<DRM Property Set Index> instance that references a <DRM Property Set> instance containing".

Change "instance also has an" to "instance also has a"

Change "referencing an <DRM Property Set> containing a" to "referencing a <DRM Property Set> instance containing a"

Change the following, "components, which references an <DRM Property Set>" to "components, which references a <DRM Property Set> instance"

Change the following, "which references an <DRM Property Set> that contains another two. As a <DRM Primitive Geometry> may contain many ordered" to "which references a <DRM Property Set> instance that contains another two. As a <DRM Primitive Geometry> instance may contain many ordered"

#### **SEDRIS\_E443**: Table 6.197 < DRM Property Set Index>, Definition

Change the following, "specifies which of its <DRM Property Set Table> components is being used, while the <DRM Property Set Index> specifies which <DRM Property Set> within that primary <DRM Property Set Table>" to "instance to which it is associated. The <DRM Property Set Table Group> instance specifies which of its <DRM Property Set Table> components is being used, while the <DRM Property Set Index> instance specifies which <DRM Property Set> component within that primary <DRM Property Set Table> instance specifies which <DRM Property Set> component within that primary <DRM Property Set Table> instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E444**: Table 6.197 < DRM Property Set Index>, Definition and Example(s) Supply missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E445**: Table 6.198 < DRM Property Set Index Control Link>, Example(s)

Change the following, "This could be achieved by using a" to "This can be achieved by using a" Supply missing occurrences of "instance".

Change the following, "<DRM Image Mapping Function>. An" to "<DRM Image Mapping Function> instance. A"

#### **RESPONSE:** Accept.

#### **SEDRIS E446**: Table 6.199 < DRM Property Set Table>, Examples

Supply missing occurrences of "instance".

#### **RESPONSE:** Accept.

**SEDRIS\_E447**: Table 6.200 <DRM Property Set Table Group>, Definition

Supply missing occurrences of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E448**: Table 6.200 < DRM Property Set Table Group>, Example(s)

Replace the first example with "Consider a transmittal containing a <DRM Property Set Table Library> instance with only one <DRM Property Set Table Group> component, which in turn has only one <DRM Property Set Table> component. That <DRM Property Set Table> instance is the one and only <DRM Property Set Table> instance for the entire transmittal."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E449**: Table 6.201 < DRM Property Set Table Library>, Definition

Change the following, "<DRM Library> instance containing many" to "<DRM Library> instance of"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E450**: Table 6.210 < DRM Pyramid Directional Light>, Definition

Change the following, "When one of these values is set to 0, the value infinity is implied there are no bounds in that direction." to "When one of these values is set to 0, then it means infinity, and that there are no bounds in that direction."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E451**: Table 6.210 < DRM Pyramid Directional Light>, Definition

Change the following, "This value is used in conjunction with the primary colour's intensity value. If the primary colour is specified by a" to "The value of the minimum\_colour\_intensity field is used in conjunction with the primary colour's intensity value. If the primary colour is a"

Change "then nothing is visible" to "nothing is visible" for minimum\_colour\_intensity.

#### **SEDRIS\_E452**: Table 6.210 < DRM Pyramid Directional Light>, Example(s)

Change angular measures from degrees to radians.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E453**: Table 6.212 < DRM Quadrant Related Features>, Example(s)

In the Example(s), change the following, "Consider a <DRM Quadrant Related Features> instance linked to a <DRM Union Of Features> instance representing its back-left quadrant by a" to "Consider a <DRM Quadrant Related Features> instance linked to a <DRM Union Of Features> instance representing its UPPER\_RIGHT quadrant, using a"

Update the examples and figures to use the correct names for the quadrants.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E454**: Table 6.213 < DRM Quadrant Related Geometry>, Example(s)

Update the examples and figures to use the correct names for the quadrants.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E455**: Table 6.214 < DRM Reference Origin>, Definition

Change the following, "This specifies the spatial reference frame within which the given" to "The srf\_info field specifies the SRF within which the given"

#### **RESPONSE:** Accept.

#### SEDRIS\_E456: Table 6.215 < DRM Reference Surface>

In the Definition, change the following, "The lod\_rule field value specifies a rule to select one LOD branch." to "The lod\_rule field specifies a rule to select one LOD branch."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E457**: Table 6.215 < DRM Reference Surface>, Example(s)

Change "aggregation tree " to "component tree "

#### **RESPONSE:** Accept.

#### **SEDRIS\_E458**: Table 6.217 < DRM Reference Vector Control Link>, Example(s)

Change the following,

"A <DRM Model> instance of a lighthouse has a <DRM Geometry Model> instance with a <DRM Union Of Geometry Hierarchy> instance, to which is attached a <DRM Spot Light> instance representing the lighthouse light. The <DRM Spot Light> instance has a <DRM Lobe Data> instance describing the shape of the light code" to

"A <DRM Model> instance representing a lighthouse has a <DRM Geometry Model> component with a <DRM Union Of Geometry Hierarchy> instance, to which is attached a <DRM Spot Light> instance representing the lighthouse light. The <DRM Spot Light> instance has a <DRM Lobe Data> instance describing the shape of the light lobe "

#### **RESPONSE:** Accept.

#### **SEDRIS\_E459**: Table 6.218 < DRM Regular Axis>, Definition

Change "an concrete instance" to "a concrete instance"

Change the following, "The value\_unit field specifies the unit of measurement of the <DRM Regular\_Axis> instance that" to "The value\_unit field specifies the unit of measurement of the given <DRM Regular Axis> instance that"

For value\_unit, value\_scale, remove mentions of these being specified in combination with a meaning bound to the data type STRING. (The <DRM Regular Axis>, <DRM Interval Axis>, and <DRM Irregular Axis> classes are constrained so that such a case cannot occur).

Make similar changes for the definition text of the value\_unit, value\_scale fields of <DRM Irregular Axis> and <DRM Interval Axis>.

Change "fe.g." to "e.g." and italicize.

#### **SEDRIS\_E460**: Table 6.219 < DRM Relative Time>, Example(s)

```
Change the following, "
```

Relative Time> instance are set as follows:

delta\_days = 0 delta\_hours = 6 delta\_minutes = 25 delta\_seconds = 30,0

" to "

Relative Time> instance are set as follows.

delta\_days 0 delta\_hours 6 delta\_minutes 25 delta\_seconds 30,0

#### **RESPONSE:** Accept.

#### **SEDRIS\_E461**: Table 6.221<DRM Rendering Priority Level>, Example(s)

Change "(where the <DRM Model> instancecould be either a building" to "(where the <DRM Model> instance could represent either a building"

Remove extra space by changing "A plan view display can display" to "A plan view display can display"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E462**: Table 6.223 < DRM Responsible Party>, Definition

Change the following, "the phrase the term the data set refers to the collection of environmental data being described by the" to "the phrase the data set refers to the collection of environmental data being described by the given".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E463**: Table 6.223 < DRM Responsible Party>, Example(s)

Replace "following data." with "following data:". Also check that the correct field names are used in the examples.

#### **RESPONSE:** Accept.

**SEDRIS\_E464**: Table 6.224 <DRM RGB Colour>, Definition

Change "isoften" to "is often".

**RESPONSE:** Accept.

#### **SEDRIS E465**: Table 6.226 < DRM Rotating Light Behaviour>, Definition

Change "An instance of this DRM class is a concrete instance of <DRM Light Rendering Behaviour>" to "An instance of this DRM class is a <DRM Light Rendering Behaviour> instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E466**: Table 6.227 <DRM Rotation>, Example(s)

Change "the X axis." to "the u axis." Change "the Y axis." to "the v axis." Change "the Z axis." to "the w axis."

#### **RESPONSE:** Accept.

**SEDRIS\_E467**: Table 6.236 < DRM Separating Plane Related Geometry>, Example(s)

Change the following, "of a house, consisting of a <DRM Geometry Model Instance> instance of a chimney <DRM Model> instance, and a" to "representing a house, consisting of a <DRM Geometry Model Instance> instance of a <DRM Model> instance representing a chimney, and a" Change the following, "the rest of the house model's geometry." to "the rest of the house model's geometry, represented by the <DRM Union Of Primitive Geometry> instance."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E468**: Table 6.242 < DRM Sound Instance>, Definition

Change "spatialized audio." to "spatialized audio:".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E469**: Table 6.242 <DRM Sound Instance>, Example(s)

The text in b. starting with the 2nd sentence should be part of the base text of the 3rd example.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E470**: Table 6.243 < DRM Sound Instance Control Link>, Example(s)

Change "A <DRM Model> instance of a lighthouse has a <DRM Geometry Model> instance with a" to "A <DRM Model> instance representing a lighthouse has a <DRM Geometry Model> component with a"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E471**: Table 6.248 < DRM Spatial Extent>, Example(s)

Change "a <DRM Model> instance of a building" to "a <DRM Model> instance representing a building"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E472**: Table 6.250 <DRM Spatial Index Related Feature Topology>, Example(s)

Change "single 10 km by 10 km spatial organization of topology spanning the entire transmittal, as well as one 500m by 500m" to "single 10 kilometre by 10 kilometre spatial organization of topology spanning the entire transmittal, as well as one 500 metres by 500 metres"

Change "one for the 10km squares and one for the 500m squares." to "one for the 10 kilometre squares and one for the 500 metre squares."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E473**: Table 6.251 < DRM Spatial Index Related Features>, Definition

Change the following, "<DRM Feature Hierarchy> objects in which each <DRM Feature Hierarchy> component" to "<DRM Feature Hierarchy> instances in which each <DRM Feature Hierarchy> component"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E474**: Table 6.252 < DRM Spatial Index Related Geometry>, Definition

Change "<DRM Geometry Hierarchy> objects in which each <DRM Geometry Hierarchy> component" to "<DRM Geometry Hierarchy> instances in which each <DRM Geometry Hierarchy> component"

#### **RESPONSE:** Accept.

**SEDRIS\_E475:** Table 6.256 < DRM Spherical Volume Extent>, Definition Change "The radius fields" to "The radius field".

#### **RESPONSE:** Accept.

**SEDRIS\_E476**: Table 6.257 < DRM Spot Light>, Definition Change all the numbers represented by "#.#" to "#,#".

#### **SEDRIS\_E477**: Table 6.258 < DRM SRF Summary>, Definition

Change "This specifies the spatial reference frame " to "The srf\_info field specifies the SRF "

#### **RESPONSE:** Accept.

#### **SEDRIS\_E478**: Table 6.260 < DRM State Control Link>, Definition

Change "This specifies which <DRM Expression>" to "The expression\_index field specifies which <DRM Expression>"

Change "This specifies the behaviour state control when the specified controlling <DRM Expression> instance" to "The mismatch\_behaviour field specifies the behaviour state control when the specified controlling <DRM Expression> instance"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E479**: Table 6.262 < DRM State Related Features>, Definition

Change "component, this field is the target of that" to "component, the active\_state\_value field is the target of that"

#### **RESPONSE:** Accept.

**SEDRIS\_E480**: Table 6.262 <DRM State Related Features>

Insert missing uses of "instance".

**RESPONSE:** Accept.

#### **SEDRIS\_E481**: Table 6.263 < DRM State Related Geometry>

Insert missing uses of "instance".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E482**: Table 6.263 < DRM State Related Geometry>, Example(s)

Change "Figure 6.314 - <DRM State Related Geometry> four representation example" to "Figure 6.314 - <DRM State Related Geometry> four damage states example"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E483**: Table 6.264 < DRM Strobing Light Behaviour>, Definition

Change "The period field specifies in seconds " to "The period field specifies, in seconds," Change "The delay field specifies in seconds " to "The delay field specifies, in seconds, "

#### **RESPONSE:** Accept.

#### **SEDRIS\_E484**: Table 6.266 <DRM Symbol>, Clarifications

Add for <DRM Description>, "If provided, the <DRM Description> component may be used to provide a more detailed description than that specified by the name field." and update the name field's definition text accordingly.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E485**: Table 6.266 <DRM Symbol>, Example(s)

Change "On an operational chart, the tactical overlays are comprised of the symbols" to "On a representation of an operational chart, the tactical overlays are comprised of <DRM Symbol> instances".

#### **RESPONSE:** Accept.

#### **SEDRIS E486**: Table 6.268 < DRM Table Property Description>, Definition

Change "<DRM Data Table> instance by providing: an Attribute\_Code," to "<DRM Data Table> instance by providing an EAC,"

Change "The component\_data\_table\_ecc specifies" to "The component\_data\_table\_ecc field specifies".

#### **SEDRIS\_E487**: Table 6.269 <DRM Tack Point>

Change "image specified" to "image-specified".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E488**: Table 6.271 < DRM Texture Coordinate>, Definition

Change "should be displayed based on the <DRM Texture Coordinates>" to "should be displayed based on the <DRM Texture Coordinate> components".

For the t field, "coordinate" should be "texture coordinate".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E489**: Table 6.284 < DRM Translucency>, Example(s)

Change "The alpha value for an ambient OTW colour can be encoded in the DRM" to "The alpha value for an ambient, OTW colour can be represented in a transmittal".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E490**: Table 6.285 < DRM Translucency Control Link>, Definition

Change "<DRM Translucency> instance's translucency\_value field" to "translucency\_value field of the <DRM Translucency> instance"

Change "field specifies a 1-based index" to "field specifies a one-based index".

Add "This value specifies which <DRM Expression> component controls the translucency\_value of the affected <DRM Translucency> instance(s)."

#### **RESPONSE:** Accept.

#### **SEDRIS\_E491**: Table 6.286 < DRM Transmittal Root>, Definition

Change "DRM class instances in a single transmittal." to "DRM objects in a single transmittal." Change "Th minor\_EDCS\_Version field " to "The minor\_EDCS\_version field"

#### **RESPONSE:** Accept.

#### **SEDRIS\_E492**: Table 6.291 < DRM Union Of Geometry>, Example(s)

Change "What the radar sees is modeled" to "What the radar sees is modelled". Change "antenna" to "aerial" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E493**: Table 6.294 < DRM Union Of Primitive Geometry>, Example(s)

Change "Tthe <DRM Polygon> instance" to "The <DRM Polygon> instance".

**RESPONSE:** Accept.

#### **SEDRIS\_E494**: Table 6.295 <DRM Variable>, Example(s)

Change "Consider a tank <DRM Model> in such a database." to "Consider a <DRM Model> instance representing a tank in such a database."

#### **RESPONSE:** Accept.

**SEDRIS\_E495**: 6, all classes Spell out "metre" for "m" and "kilometre" for "km" throughout, and similarly for other metric units.

**RESPONSE:** Accept.

#### Clause 7

#### **SEDRIS\_E496**: 7 throughout

Change "for writing or modification" to "with either Access\_Mode CREATE or Access\_Mode UPDATE" throughout.

#### **SEDRIS\_E497**: 7 throughout

Italicize all occurrences of "i.e." and "e.g." (see InitializeAggregateIterator for an occurrence of the former).

#### **RESPONSE:** Accept.

#### **SEDRIS\_E498**: 7, all functions

Change "link\_class\_object" to "link\_object" and "link class object" to "link object" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E499**: 7 all functions

Ensure that all the references to the field names of record type parameters are consistent with their specifications in clause 5. Example: The "number\_of\_objects" field referred to in the semantics of GetRemainingObjectList.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E500**: 7.1.2

Change "SEDRIS API" to "API".

**RESPONSE:** Accept.

#### **SEDRIS E501**: 7.3.1 Overview

In the first sentence, change "file" to "clause".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E502**: 7.3.2 AddAssociateRelationship, Table 7.3

Change the period to a colon after "met" in the first sentence. Add the missing period for second item c.

For INVALID\_ACCESS\_MODE, item a, insert a comma after link\_object.

For UNPUBLISHED\_OBJECT, change "is in another transmittal than from\_object" to "is in a different transmittal from from\_object" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E503**: 7.3.3 AddComponentRelationship, Table 7.4

First sentence, add "This function" at the beginning of the sentence, and change the period to a colon. In b, change "access mode" to Access\_Mode.

For INVALID\_ACCESS\_MODE, a, change the ",." to ", or"

#### **RESPONSE:** Accept.

#### SEDRIS\_E504: 7.3.4 CloneObject, Table 7.5

In the first sentence, change "same object" to "same DRM object". At the first bullet, change "the object referenced by" to "the DRM object referenced by".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E505**: 7.3.6 CreateSearchFilter, Table 7.7

Change "object" to "DRM object" where appropriate.

In the first paragraph, first sentence, add "This function" before "defines". In the second sentence, replace "pass the set of rules into an iterator when creating the iterator" with "the set of rules is passed to an iterator creation function". Change the third sentence to "The iterator will then use that set of rules to filter all DRM objects that will be returned by that iterator."

In the second paragraph, second sentence, change "iterator are" to "iterator is".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E506**: 7.3.8 CreateSpatialSearchBoundary, Table 7.9

For INACTIONABLE\_FAILURE, b, change ", or" to "; or". For c, remove "if".

#### **SEDRIS\_E507**: 7.3.9 DetermineSpatialInclusion, Table 7.10

Change "i.e." to "i.e.," (add missing comma). Change "object" to "DRM object" where "object" occurs in isolation.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E508**: 7.3.11 FreeObject, Table 7.12

In paragraph 2, change "same object" to "same DRM object". For SUCCESS, add "if" in front of "a valid parameter". The "T" at the beginning of the second sentence is in the wrong font.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E509**: 7.3.16 FreeSpatialSearchBoundary, Table 7.17

In the input/output parameters and in the output parameters, "None" appears in an incorrect style.

#### **RESPONSE:** Accept.

#### SEDRIS\_E510: 7.3.18 GetAggregate, Table 7.19

Change "link\_class\_object" to "link\_object" throughout.

In the first paragraph, change "type" to "DRM class". Change "object" to "DRM object" where appropriate. Ensure that all parameter names appear in the proper font.

For SUCCESS, change "one valid" to "a valid".

For DIFFERENT\_TRANSMITTAL, b, change description to "automatic resolution of ITR references was requested".

For UNRESOLVED\_OUTPUT\_OBJECT in the error conditions, change "were passed" to "were passed in".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E511**: 7.3.19 GetAssociate, Table 7.20

Remove the first paragraph (superceded by the second paragraph). Change "type" to "DRM class". Change "will look for" to "retrieves" and "will be returned" to "is retrieved". Change "object" to "DRM object" where appropriate.

For SUCCESS, change "point to the associate" to "a handle to the associate".

For DIFFERENT\_TRANSMITTAL, b, change description to "automatic resolution of ITR references was requested".

For UNRESOLVED\_OUTPUT\_OBJECT in the error conditions, change "were passed" to "were passed in".

For NO\_OBJECT, change "no aggregate" to "no associate".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E512**: 7.3.20 GetColourModel, Table 7.21

Change occurrences of "object" to "instance" or "DRM object" as appropriate. In Case 1, change "type" to "DRM class".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E513**: 7.3.21 GetComponent, Table 7.22

Add missing occurrences of "instance". Change "link\_class\_object" to "link\_object" throughout. In paragraph 2, change "will be" to "are".

For the example, correct the spelling of "immediate" and "inherited", and capitalize "Setting" at the beginning of the sentence.

For the itr\_traversal parameter, change "Inter-Transmittal Reference (ITR)" to "ITR reference". For SUCCESS, change "only one object" to "a DRM object".

For DIFFERENT\_TRANSMITTAL, change "associate" to "component" throughout, and change "inter-transmittal references (ITR)" to "ITR references".

For DIFFERENT\_TRANSMITTAL, b, change description to "automatic resolution of ITR references was requested".

For UNRESOLVED\_OUTPUT\_OBJECT (successful completion case), change "only one object" to "a component DRM object (and link object, if appropriate)". Add "and/or link\_object" after "the component object".

Change "associate\_object" to "component\_object" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E514**: 7.3.22 GetContextTransformation, Table 7.23

Add missing occurrences of "instance". Change "object" to "DRM object" where appropriate. For SUCCESS, change "current effective" to "currently effective".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E515**: 7.3.23 GetDataTableData, Table 7.24

For SUCCESS, change "and and" to "and". Change "object" to "DRM object" throughout.

**RESPONSE:** Accept.

**SEDRIS\_E516**: 7.3.24 GetDRMClass, Table 7.25 Change "object" to "DRM object" throughout.

**RESPONSE:** Accept.

**SEDRIS\_E517**: 7.3.25 GetEncoding, Table 7.26 Change "object" to "DRM object" throughout.

**RESPONSE:** Accept.

**SEDRIS\_E518**: 7.3.26 GetFields, Table 7.27 Change "object" to "DRM object" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E519**: 7.3.27 GetImageData, Table 7.28

Add missing occurrences of "instance".

In paragraph 5, change "two or three-dimensional" to "2D or 3D". Break the 3rd sentence by placing a period after "boundaries". The new 4th sentence reads "The fields of image\_object specify the form of the texel component values".

Change "bits\_of\_" to use code font.

In paragraph 6, add "fields" after "scan\_direction\_z". In the example, begin the first sentence with a capital letter. For SUCCESS, change "in data" to "in image\_data".

#### **RESPONSE:** Accept.

**SEDRIS\_E520**: 7.3.28 GetIterationLengthRemaining, Table 7.29 In the input/output parameters, "None" appears in an incorrect style.

**RESPONSE:** Accept.

**SEDRIS\_E521**: 7.3.29 GetLastFunctionStatus, Table 7.30 In the second paragraph, replace "eturns" with "returns".

**RESPONSE:** Accept.

**SEDRIS\_E522**: 7.3.30 GetMeshFaceTableData, Table 7.31 For SUCCESS, change "and and " to "and".

**RESPONSE:** Accept.

**SEDRIS\_E523**: 7.3.31 GetNextObject, Table 7.32

For SUCCESS, change "point to" to "the handle of ".

For DIFFERENT\_TRANSMITTAL, b, change description to "automatic resolution of ITR references was requested".

For UNRESOLVED\_OUTPUT\_OBJECT, change "point to" to "the handle of".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E524**: 7.3.32 GetNthAssociate, Table 7.33

For SUCCESS, insert "a handle to" before "the desired associate object". Change "from\_object" to be in code font.

#### **RESPONSE:** Accept.

#### SEDRIS\_E525: 7.3.33 GetNthComponent, Table 7.34

In the 1st paragraph, 1st sentence, insert "this function" before "returns". For DELETED\_OBJECT, c, change "associate" to "component". For INACTIONABLE\_FAILURE, b, remove "or".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E526**: 7, all functions

Change "object" to "DRM object" throughout, except where it occurs as a parameter name or data type name, or where it appears immediately after a class name (when it should be replaced by "instance" instead).

#### **RESPONSE:** Accept.

#### **SEDRIS E527**: 7.3.37 GetObjectReferenceCount, Table 7.38

Change "type" to "data type" throughout.

#### **RESPONSE:** Accept.

# **SEDRIS\_E528**: 7.3.38 GetPackedHierarchy, Table 7.39 For DELETED\_OBJECT, a, change the period to "; or".

#### **RESPONSE:** Accept.

# **SEDRIS\_E529**: 7.3.39 GetPublishedLabels, Table 7.40 For DELETED\_OBJECT, remove the colon.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E530**: 7.3.42 GetReferencedTransmittalList, Table 7.41

First paragraph, remove "using Inter-Transmittal Referencing (ITR)" from the first sentence as redundant.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E531**: 7.3.43 GetRemainingObjectsList, Table 7.43

For DELETED\_OBJECT, change "have been" to "has been" and "they were" to "it was". For NO\_OBJECT, change "is out of objects" to "has no more objects".

#### **RESPONSE:** Accept.

### **SEDRIS\_E532**: 7.3.44 GetRemainingPackedHierarchiesList, Table 7.45 Change "sub-hierarchy" to "subhierarchy" throughout.

For NO\_OBJECT, change "is out of objects" to "has no more objects".

#### **RESPONSE:** Accept.

#### SEDRIS\_E533: 7.3.46 GetSRFInfo, Table 7.47

Change "spatial reference frame (SRF) parameters" to "definition of the SRF". Paragraph 3, change "answer" to "value of srf\_info". In case 1, replace sentence 3 with "This indicates that the SRF used to originally produce the given transmittal was overridden by a call to the 7.3.81 SetSRFInfo function."

In case 2, remove the last sentence (redundant with the status code information below it). For SUCCESS, change "SRF parameters are" to "SRF definition is".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E534**: 7.3.50 GetTransmittalVersionInformation, Table 7.51

Change "the version of the Data Representation Model, Environmental Data Coding Specification, and Spatial Reference Model" to "the versions of the implementations of the DRM, EDCS, and SRM".

For the paragraphs on major, minor, and interim versions, change "specification" to "implementation".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E535**: 7.3.51 GetUniqueTransmittalID, Table 7.52

Change "identifier" to code font.

**RESPONSE:** Accept.

#### SEDRIS\_E536: 7.3.53 GetUserData

In the first paragraph, 1st sentence, insert "the handle to" before "user data", and in the 2nd sentence, change "This is data" with "This is a user data handle".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E537**: 7.3.54 InitializeAggregateIterator

In the first paragraph, b, change first sentence to "If a search filter filter is defined for the iterator, the aggregates satisfy the rules specified in filter." In sentence 2, add a period after "a". In DELETED OBJECT, change "it in which" to "in which".

#### **RESPONSE:** Accept.

#### SEDRIS\_E538: 7.3.55 InitializeAssociateIterator

For clarity, in the 1st paragraph, 1st sentence, change "to those" to "to those DRM objects".

In the 1st paragraph, a and b, sentence 1, change the first "They" to "The DRM objects".

In the 1st paragraph, a, sentence 2, remove the end of the sentence starting at "since".

In the 1st paragraph, b, change first sentence to "If a search filter filter is defined for the iterator, the associates satisfy the rules specified in filter." In sentence 2, add a period after "a".

In paragraph 2, combine the two sentences by removing "for that start\_object shall not return any objects. An associate iterator".

For SUCCESS, add "is" before "returned in".

For UNRESOLVED\_INPUT\_OBJECT, correct spelling of "changes".

For DELETED\_OBJECT, change "it in which" to "in which".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E539**: 7.3.56 InitializeComponentIterator

For clarity, in the 1st paragraph, 1st sentence, change "to those" to "to those DRM objects". In the 2nd paragraph, sentence 1, change "Objects" to "DRM objects". In a and b and c, sentence 1, change the first "They" to "The DRM objects".

In the 2nd paragraph a, change "transitively" to "indirectly".

In the 2nd paragraph b, change "sub-tree" to "subtree".

In the 2nd paragraph c, add missing space before "If", and change "a)" to "a." and change "b)" to "b.". In paragraph 3, combine the two sentences by removing "for that start\_object, search\_filter, and spatial search boundary will not return any objects. A component iterator".

In paragraph 7, change "actual SEDRIS objects can be examined by the consumer through" to "handles to the actual DRM objects are returned by". Change "object types" to "DRM objects". For the directly\_attach\_table\_components parameter, b, correct "an" to "a" for <DRM Inline Colour>. For the process\_inheritance parameter, correct the spelling.

For the transform\_locations parameter, change "the transformations (...)" to "the *<DRM Transformation>* instances".

#### **RESPONSE:** Accept.

#### **SEDRIS E540**: 7.3.56 InitializeComponentIterator

Change "aggregation tree" to "component tree", for consistency.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E541**: 7.3.57 InitializeInheritedComponentIterator

Remove xtra right parenthesis from 4th paragraph. For DELETED\_OBJECT, "it in" should be "in".

#### **RESPONSE:** Accept.

#### **SEDRIS E542**: 7.3.59 ObjectIsPublished

In the first paragraph, remove the extra "a" after "given". Also, result should be in code font.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E543**: 7.3.67 PutImageData, 5<sup>th</sup> paragraph

In the last sentence, "bits\_of\_" should be in code font. FOR INACTIONABLE\_FAILURE, d, "or stop greater" should be "or stop is greater" and the terminating "or" should be removed.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E544**: 7.3.69 and 7.3.70, both 1st paragraphs

The word "not" should not be italicized.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E545**: 7.3.71 RemoveFromTransmittal

In the 2nd paragraph, change "will" to "shall". Change "component subtree" to "component tree" throughout for consistency.

For DIFFERENT\_TRANSMITTAL, change "than" to "from".

For INVALID\_ACCESS\_MODE, change "read-only" to READ\_ONLY.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E546**: 7.3.72 ResolveObject

Replace 1st paragraph with: "Given a DRM object specified by object, this function attempts to resolve the reference. If object is already resolved, no action occurs." In the 2nd paragraph, add at the beginning: "If object is unresolved, ". For UNRESOLVED\_OUTPUT\_OBJECT, change "object passed in" to "object". In the failure status codes, remove the extra vertical bar.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E547**: 7.3.74 SetColourModel

Remove underscores from class names. Change "RGB\_MODEL" to "RGB" in code font. Change the last two sentences of the first paragraph to an EXAMPLE in example format.

#### **RESPONSE:** Accept.

#### **SEDRIS E548**: 7.3.76 SetGeneralCallback

In paragraph 2, change "this general" to "this general function callback", and add an apostrophe after "all functions". Change "one of the following action occurs" to "the following action occurs".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E549**: 7.3.77 SetGeneralCallbackForOneFunction

In the first paragraph, change "the transmittal API function" to "the API function".

Remove the last sentence of the 2nd paragraph, and remove the 3rd paragraph as redundant.

#### **RESPONSE:** Accept.

#### SEDRIS\_E550: 7.3.78 SetRootObject

For SUCCESS, remove the second sentence as redundant. For INVALID\_ACCESS\_MODE, change "read-only" to READ\_ONLY.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E551**: 7.3.79 SetSecondErrorMessage

Change "one of the following action occurs" to "the following action occurs".

#### **RESPONSE:** Accept.

#### SEDRIS\_E552: 7.3.81 SetSRFInfo

In the first paragraph, change "spatial reference frame (SRF)" to "SRF", and don't italicize "after". After the first sentence, add "This SRF is specified by new\_srf\_info." In the 2nd paragraph, change "UseDefaultSRFParameters" to "UseDefaultSRFInfo". Throughout, change "new\_srf\_parameters" to "new\_srf\_info". For OUT\_OF\_MEMORY, remove the excess "sufficient". For INACTIONABLE\_FAILURE, remove b as redundant with a.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E553**: 7.3.82 SetTransmittalName

For INVALID\_ACCESS\_MODE, change "read-only" to READ\_ONLY. For INACTIONABLE\_FAILURE, remove a as redundant with the INVALID\_TRANSMITTAL\_NAME case.

#### **RESPONSE:** Accept.

#### **SEDRIS\_E554**: 7.3.82 SetUserData

For the completes in error case, change "one of the following actions" to "the following action".

#### **RESPONSE:** Accept.

**SEDRIS\_E555**: 7.3.85 UnpublishObject In 2nd paragraph, don't italicize "may".

#### **RESPONSE:** Accept.

#### **SEDRIS E556**: 7.3.86 UseDefaultColourModel

In paragraph 1, sentence 1, change "used to produce" to "specified in the <DRM Transmittal Summary> component of the <DRM Transmittal Root> instance in".

Change paragraph 2 to EXAMPLE format.

Remove underscores from the class names throughout.

In paragraph 4, remove "Instead of returning a value".

In the error conditions, change "one of the following" to "the following".

#### **RESPONSE:** Accept.

#### SEDRIS\_E557: 7.3.87 UseDefaultSRFInfo

For Table 7.88, change caption from "UseDefaultSRFParameters" to "UseDefaultSRFInfo".

In the example, change "a transmittal was defined with" to "positions in a transmittal are represented with", and correct the spelling of "Augmented".

In paragraph 3, change "world coordinate system parameters are" to "SRF is".

In paragraph 4, change "coordinate system" to "SRF".

In the error conditions, change "one of the following" to "the following".

#### Clause 8

#### **SEDRIS\_E558**: 8 throughout

Change "application program interface" to "API" throughout. Change "this International Standard" to "this part of ISO/IEC 18023". Change "SEDRIS transmittals" to "transmittals" throughout. Change "SEDRIS API" to "API" throughout.

#### **RESPONSE:** Accept.

#### **SEDRIS E559**: 8.1.2

In a, change "SEDRIS" to "this part of ISO/IEC 18023". In c and d, change "SEDRIS application program interface" to "API specified in this part of ISO/IEC 18023".

#### **RESPONSE:** Accept.

#### **SEDRIS\_E560**: 8.2.1

There's too much leading between items a and b.

**RESPONSE:** Accept.

#### Annex A

**SEDRIS\_E561**: A.2.23 Change "SEDRIS transmittal" to "transmittal" throughout.

**RESPONSE:** Accept.

#### Annex B

**SEDRIS\_E562: B** Change "SEDRIS transmittal" to "transmittal" throughout.

**RESPONSE:** Accept.

#### **Editing Meeting**

#### Technical

#### EM\_T001: 6.259, Table 6.260 <DRM\_State\_Control\_Link>

#### 1) "Definition" field

The expression "...from of all target state-related aggregation instances ..." is awkward. It should be changed to "... from all target <u><DRM State Related Features></u> and/or <u><DRM State Related</u> <u>Geometry></u> instances ...".

#### 2) "Component of" field

It should be changed from

- zero or more <u><DRM State Related Features></u> instances
- zero or more <u><DRM State Related Geometry></u> instances
- to
- one or more <<u>DRM State Related Features></u> and/or <<u>DRM State Related Geometry></u> instances

# **RESPONSE:** The following text will be inserted as a new paragraph preceding the last paragraph of 4.5.5: 'Any DRM class instance not being used solely as a link object that has an entry in either the "Component of (two-way) (inherited)" or "Component of (two-way)" rows will have at least one aggregate from the entries in these rows.'

### EM\_T002: Table 6.204, "Example(s)" Problem:

The examples here are too complex to be included as the examples of one DRM class. They should be moved to 4.16 and only the reference to 4.16.xx should be given here.

As well as this example, the "light house example" and the "windsock/wind vane example" s should be moved to 4.16 as a good example of using contril links.

#### **RESPONSE:** A new example will be inserted as the first example with the following text: "A simple example is provided in 4.16.6.3 <DRM Property Table Reference Control Link>."

#### EM\_T003: Table 6.284, NOTE in "Definition"

The word "transparency" should be changed to "translucency".

# **RESPONSE:** Accept in principle. The word "transparency" will be changed to "translucency\_value" and will be displayed in code font.

#### EM\_T004: Table 6.285, "Example(s)"

#### **Problem:**

The "puddle" example here is not a good example because the change of puddles is not a matter of translucency.

# **RESPONSE:** Accept. The following text will be used: "The appearance of polarized glass may be controlled by altering the translucency of the surface using a <DRM Translucency Control Link> instance."

#### EM\_T005: 4.16.3

The title and the contents (choice of the DRM classes introduced here) are too ad-hoc. This subclause should be merged with 4.16.5 because "light" and "colour" are in close relation.

**RESPONSE:** The following changes to the subclass titles will be made. For 4.16.3, "<DRM Control Link> subclasses that turn on and off" will be replaced by "Boolean control". For 4.16.4, "<DRM State Control Link>" will be changed to "Discrete state control". For 4.16.5, "Customizing or dynamically changing appearance" will be changed to "Continuous control". For 4.16.6, "<DRM Control Link> subclasses for table indices" to "Control using table indices". For 4.16.7, "<DRM Control Link> subclasses for spatial location" to "Control of spatial location". For 4.17.8, "<DRM Reference Vector Control Link>" to "Control of direction".

#### EM\_T006: 4.16.3

There are much duplication between subclasses 4.13.11 and 4.16.4.1 and their relation is not explicitly described.

Suggested change:

#### 4.13.11 State

The state related organizing principle provides representation of the same environmental data with different state values. This is implemented with the DRM classes <<u>DRM State Related Features</u>> and <<u>DRM State Related Geometry></u> that aggregate instances of DRM class <<u>DRM Feature Hierarchy></u> and <<u>DRMGeometry Hierarchy></u>, respectively, through use of <DRM State Data> link objects, where each branch of the aggregation represents a particular state. <<u>DRM State Related Features></u> and <<u>DRM State Related Geometry></u> instances have both state\_tag and active\_state\_value fields. The state\_tag field is the EAC that is being used to differentiate the components of the state aggregation. The state is one of a special set of EDCS Attributes that are termed *state applicable*. See 6.2.53 State-related organizing principle for rules on which attributes are considered state applicable. The active\_state\_value field specifies the default value for the state information. If the given <DRM State Related Features> or <<u>DRM State Related Geometry></u> instance has a <<u>DRM State Control Link></u> component, this field is the target of that <<u>DRM State Control Link></u> instance.

The <u><DRM State Data></u> instance stores a value for the specific branch of the same fundamental type as specified by the active\_state\_value field.

In state-related aggregations, the state\_tag field specifies the semantic meaning of the related <<u>DRM State Data></u> field values, as well as that of the active state of the aggregation as a whole. Since EAs that are used as state tags are restricted to those EDCS attributes having percentage or enumerated values, unit and scale information need not be specified. A more detailed explanation relating to the control link mechanism is given in 4.16.4.

#### **RESPONSE:** Accept.

#### EM\_T007: 6.261, Table 6.262 and elsewhere

Change "with a <DRM\_xxx> link object" to "through the use of a <DRM xxx> link object".

#### **RESPONSE:** Accept.

# EM\_T008: 6. DRM classes composing of <DRM ... Control Link> Problem:

The subclasses of <DRM Control Link> are as follows:

- <u><DRM CMY Colour Control Link></u>
- <<u>>DRM Colour Index Control Link></u>
- <u><DRM HSV Colour Control Link></u>
- <u><DRM Light Rendering Properties Control Link></u>
- <u><DRM Light Source Control Link></u>
- <u><DRM Polygon Control Link></u>
- <<u>DRM Property Set Index Control Link</u>>
- Image: A state of the s
- <<u>DRM Reference Vector Control Link</u>>
- <u><DRM RGB Colour Control Link></u>
- <u><DRM Rotation Control Link></u>
- <<u>DRM Scale Control Link></u>
- <u><DRM Sound Instance Control Link></u>
- <u><DRM State Control Link></u>
- <u><DRM Texture Coordinate Control Link></u>
- <u><DRM Translation Control Link></u>
- <u><DRM Translucency Control Link></u>
- Among the DRM classes which have those subclasses of <DRM Control Link> as their components, only
- <u><DRM State Related Features></u>, <u><DRM State Related Geometry></u>, and <u><DRM Light Source></u>
- describe the role of the control link components. All the other classes should describe the role in a similar manner.

# **RESPONSE:** Accept in principle. The following form will be used for each field that can be controlled by a control link: "For a <u>*ORM xxx>*</u> with a <u>*ORM xxx*</u> with a <u>*ORM xxx*</u> instance as a component, the value of the xxx field is obtained from the control link."

#### EM\_T009: 6.3.130, Table 6.131

Remove the last sentence of the definition as it does not have any meaning.

#### **RESPONSE:** Accept.

#### EM\_T010: All DRM classes

The default values have not been specified for any of the fields. It is suggested that the default values be collected into an Annex with a hyperlink from a new "Default field values" row to the corresponding entry in the annex. This new row will immediately follow the "Field elements" row.

#### **RESPONSE:** Accept.

#### **EM\_T011: Bibliography**

To provide access to assistance in using the standard, an entry should be placed in the Bibliography that references the SEDRIS Organization web site.

**RESPONSE:** Accept.

#### Editorial

#### EM\_E001:

#### Throughout

Uses of ECCs as nouns should be replaced by text similar to "environmental object classified as ECC\_xxx"

#### **RESPONSE:** Accept.

#### EM\_E002:

#### 4.14.2.3 Transformation and 4.14.3.4, 4.14.3.7

Replace "through" with "using" for each occurrence, to avoid confusion with link object terminology.

#### **RESPONSE:** Accept.

#### EM\_E003:

#### 4.19.5, 5th sentence

Replace with "User data associated with a DRM object may be retrieved using any handle to that DRM object."