



INTERNATIONAL STANDARD ISO/IEC 23005-3:2013
TECHNICAL CORRIGENDUM 1

Published 2013-09-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Information technology — Media context and control —

Part 3: Sensory information

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Contrôle et contexte de supports

Partie 3: Information sensorielle

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 23005-3:2013 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

Replace the original Annex B Schema documents by the following schema:

Annex B (informative)

Schema documents

B.1 Sensory effect description language schema

```

<?xml version="1.0"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema" xmlns:sedl="urn:mpeg:mpeg-
v:2010:01-SEDL-NS" xmlns:mpeg7="urn:mpeg:mpeg7:schema:2004"
xmlns:si="urn:mpeg:mpeg21:2003:01-DIA-XSI-NS" xmlns:dia="urn:mpeg:mpeg21:2003:01-
DIA-NS" xmlns:ct="urn:mpeg:mpeg-v:2010:01-CT-NS" targetNamespace="urn:mpeg:mpeg-
v:2010:01-SEDL-NS" elementFormDefault="qualified"
attributeFormDefault="unqualified" version="ISO/IEC 23005-3" id="MPEG-V-
SEDL.xsd">
  <import namespace="urn:mpeg:mpeg7:schema:2004"
schemaLocation="http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-
7_schema_files/mpeg7-v2.xsd"/>
  <import namespace="urn:mpeg:mpeg21:2003:01-DIA-XSI-NS"
schemaLocation="http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-
21_schema_files/dia-2nd/XSI-2nd.xsd"/>
  <import namespace="urn:mpeg:mpeg21:2003:01-DIA-NS"
schemaLocation="http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-
21_schema_files/dia-2nd/UED-2nd.xsd"/>
  <import namespace="urn:mpeg:mpeg-v:2010:01-CT-NS" schemaLocation="MPEG-V-
CT.xsd"/>
  <!-- ##### -->
  <!-- SEM Base Attributes -->
  <!-- ##### -->
  <attributeGroup name="SEMBaseAttributes">
    <attribute name="activate" type="boolean" use="optional"/>
    <attribute name="duration" type="positiveInteger" use="optional"/>
    <attribute name="fade" type="positiveInteger" use="optional"/>
    <attribute name="alt" type="anyURI" use="optional"/>
    <attribute name="priority" type="positiveInteger" use="optional"/>
    <attribute name="location" type="mpeg7:termReferenceType" use="optional"/>
    <attributeGroup ref="sedl:SEMAdaptabilityAttributes"/>
  </attributeGroup>
  <simpleType name="intensityValueType">
    <restriction base="float"/>
  </simpleType>
  <simpleType name="intensityRangeType">
    <restriction>
      <simpleType>
        <list itemType="float"/>
      </simpleType>
      <length value="2" fixed="true"/>
    </restriction>
  </simpleType>
  <!-- ##### -->
  <!-- SEM Adaptability Attributes -->
  <!-- ##### -->
  <attributeGroup name="SEMAdaptabilityAttributes">
    <attribute name="adaptType" type="sedl:adaptTypeType" use="optional"/>

```

```

    <attribute name="adaptRange" type="sedl:adaptRangeType" use="optional"
default="10"/>
  </attributeGroup>
  <simpleType name="adaptTypeType">
    <restriction base="NMTOKEN">
      <enumeration value="strict"/>
      <enumeration value="under"/>
      <enumeration value="over"/>
      <enumeration value="both"/>
    </restriction>
  </simpleType>
  <simpleType name="adaptRangeType">
    <restriction base="unsignedInt">
      <minInclusive value="0"/>
      <maxInclusive value="100"/>
    </restriction>
  </simpleType>
  <!-- ##### -->
  <!-- SEM Base Elements -->
  <!-- ##### -->
  <element name="Declarations" type="sedl:DeclarationsType"/>
  <element name="GroupOfEffects" type="sedl:GroupOfEffectsType"/>
  <element name="Effect" type="sedl:EffectBaseType"/>
  <element name="ReferenceEffect" type="sedl:ReferenceEffectType"/>
  <element name="Parameter" type="sedl:ParameterBaseType"/>
  <!-- ##### -->
  <!-- SEM Base type -->
  <!-- ##### -->
  <complexType name="SEMBaseType" abstract="true">
    <complexContent>
      <restriction base="anyType">
        <attribute name="id" type="ID" use="optional"/>
      </restriction>
    </complexContent>
  </complexType>
  <!-- ##### -->
  <!-- Definition of the SEM root element -->
  <!-- ##### -->
  <element name="SEM">
    <complexType>
      <sequence>
        <element name="DescriptionMetadata"
type="sedl:DescriptionMetadataType" minOccurs="0" maxOccurs="1"/>
        <choice maxOccurs="unbounded">
          <element ref="sedl:Declarations"/>
          <element ref="sedl:GroupOfEffects"/>
          <element ref="sedl:Effect"/>
          <element ref="sedl:ReferenceEffect"/>
        </choice>
      </sequence>
      <anyAttribute namespace="##other" processContents="lax"/>
    </complexType>
  </element>
  <!-- ##### -->
  <!-- Definition of Description Metadata Type -->
  <!-- ##### -->
  <complexType name="DescriptionMetadataType">
    <complexContent>
      <extension base="mpeg7:DescriptionMetadataType">
        <sequence>

```

```

        <element name="ClassificationSchemeAlias" minOccurs="0"
maxOccurs="unbounded">
        <complexType>
            <complexContent>
                <extension base="sedl:SEMBaseType">
                    <attribute name="alias" type="NMTOKEN"
use="required"/>
                    <attribute name="href" type="anyURI"
use="required"/>
                </extension>
            </complexContent>
        </complexType>
    </element>
</sequence>
</extension>
</complexContent>
</complexType>
<!-- ##### -->
<!-- Declarations type -->
<!-- ##### -->
<complexType name="DeclarationsType">
    <complexContent>
        <extension base="sedl:SEMBaseType">
            <choice maxOccurs="unbounded">
                <element ref="sedl:GroupOfEffects"/>
                <element ref="sedl:Effect"/>
                <element ref="sedl:Parameter"/>
            </choice>
        </extension>
    </complexContent>
</complexType>
<!-- ##### -->
<!-- Group of Effects type -->
<!-- ##### -->
<complexType name="GroupOfEffectsType">
    <complexContent>
        <extension base="sedl:SEMBaseType">
            <choice minOccurs="2" maxOccurs="unbounded">
                <element ref="sedl:Effect"/>
                <element ref="sedl:ReferenceEffect"/>
            </choice>
            <attributeGroup ref="sedl:SEMBaseAttributes"/>
            <anyAttribute namespace="##other" processContents="lax"/>
        </extension>
    </complexContent>
</complexType>
<!-- ##### -->
<!-- Effect base type -->
<!-- ##### -->
<complexType name="EffectBaseType" abstract="true">
    <complexContent>
        <extension base="sedl:SEMBaseType">
            <sequence minOccurs="0">
                <element name="SupplementalInformation"
type="sedl:SupplementalInformationType" minOccurs="0"/>
            </sequence>
            <attribute name="autoExtraction" type="sedl:autoExtractionType"/>
            <attributeGroup ref="sedl:SEMBaseAttributes"/>
            <anyAttribute namespace="##other" processContents="lax"/>
        </extension>
    </complexContent>

```

```

    </complexContent>
  </complexType>
  <complexType name="SupplementalInformationType">
    <sequence>
      <element name="ReferenceRegion"
type="mpeg7:SpatioTemporalLocatorType"/>
      <element name="Operator" type="sedl:OperatorType" minOccurs="0"/>
    </sequence>
  </complexType>
  <simpleType name="OperatorType">
    <restriction base="NMTOKEN">
      <enumeration value="average"/>
      <enumeration value="dominant"/>
    </restriction>
  </simpleType>
  <simpleType name="autoExtractionType">
    <restriction base="string">
      <enumeration value="audio"/>
      <enumeration value="visual"/>
      <enumeration value="both"/>
    </restriction>
  </simpleType>

  <!-- ##### -->
  <!-- Reference Effect type -->
  <!-- ##### -->
  <complexType name="ReferenceEffectType">
    <complexContent>
      <extension base="sedl:SEMBaseType">
        <attribute name="uri" type="anyURI" use="required"/>
        <attributeGroup ref="sedl:SEMBaseAttributes"/>
        <anyAttribute namespace="##other" processContents="lax"/>
      </extension>
    </complexContent>
  </complexType>
  <!-- ##### -->
  <!-- Parameter Base type -->
  <!-- ##### -->
  <complexType name="ParameterBaseType" abstract="true">
    <complexContent>
      <extension base="sedl:SEMBaseType"/>
    </complexContent>
  </complexType>
  <!-- ##### -->
  <!-- Definition of Color Correction Parameter type -->
  <!-- ##### -->
  <complexType name="ColorCorrectionParameterType">
    <complexContent>
      <extension base="sedl:ParameterBaseType">
        <sequence>
          <element name="ToneReproductionCurves"
type="ct:ToneReproductionCurvesType" minOccurs="0"/>
          <element name="ConversionLUT" type="ct:ConversionLUTType"/>
          <element name="ColorTemperature" type="ct:IlluminantType"
minOccurs="0"/>
          <element name="InputDeviceColorGamut"
type="ct:InputDeviceColorGamutType" minOccurs="0"/>
          <element name="IlluminanceOfSurround" type="mpeg7:unsigned12"
minOccurs="0"/>
        </sequence>
      </extension>
    </complexContent>
  </complexType>

```

```

        </extension>
    </complexContent>
</complexType>
</schema>

```

B.2 Sensory effect vocabulary schema

```

<?xml version="1.0"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema" xmlns:sedl="urn:mpeg:mpeg-
v:2010:01-SEDL-NS" xmlns:sev="urn:mpeg:mpeg-v:2010:01-SEV-NS"
xmlns:mpeg7="urn:mpeg:mpeg7:schema:2004" targetNamespace="urn:mpeg:mpeg-
v:2010:01-SEV-NS" elementFormDefault="qualified"
attributeFormDefault="unqualified" version="ISO/IEC 23005-3" id="MPEG-V-SEV.xsd">
    <import namespace="urn:mpeg:mpeg-v:2010:01-SEDL-NS" schemaLocation="MPEG-V-
SEDL.xsd"/>
    <import namespace="urn:mpeg:mpeg7:schema:2004"
schemaLocation="http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-
7_schema_files/mpeg7-v2.xsd"/>
    <!-- ##### -->
    <!-- SEV Light type -->
    <!-- ##### -->
    <complexType name="LightType">
        <complexContent>
            <extension base="sedl:EffectBaseType">
                <attribute name="color" type="sev:colorType" use="optional"/>
                <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
                <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
            </extension>
        </complexContent>
    </complexType>
    <simpleType name="colorType">
        <union memberTypes="mpeg7:termReferenceType sev:colorRGBType"/>
    </simpleType>
    <simpleType name="colorRGBType">
        <restriction base="NMTOKEN">
            <whiteSpace value="collapse"/>
            <pattern value="#[0-9A-Fa-f]{6}"/>
        </restriction>
    </simpleType>
    <!-- ##### -->
    <!-- SEV Flash type -->
    <!-- ##### -->
    <complexType name="FlashType">
        <complexContent>
            <extension base="sev:LightType">
                <attribute name="frequency" type="positiveInteger" use="optional"/>
            </extension>
        </complexContent>
    </complexType>
    <!-- ##### -->
    <!-- SEV Temperature type -->
    <!-- ##### -->
    <complexType name="TemperatureType">
        <complexContent>
            <extension base="sedl:EffectBaseType">

```

```

        <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
        <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
    </extension>
</complexContent>
</complexType>
<!-- ##### -->
<!-- SEV Wind type -->
<!-- ##### -->
<complexType name="WindType">
    <complexContent>
        <extension base="sedl:EffectBaseType">
            <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
            <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
        </extension>
    </complexContent>
</complexType>
<!-- ##### -->
<!-- SEV Vibration type -->
<!-- ##### -->
<complexType name="VibrationType">
    <complexContent>
        <extension base="sedl:EffectBaseType">
            <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
            <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
        </extension>
    </complexContent>
</complexType>
<!-- ##### -->
<!-- Definition of Spraying type -->
<!-- ##### -->
<complexType name="SprayingType">
    <complexContent>
        <extension base="sedl:EffectBaseType">
            <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
            <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
            <attribute name="sprayingType" type="mpeg7:termReferenceType"/>
        </extension>
    </complexContent>
</complexType>
<!-- ##### -->
<!-- Definition of Scent type -->
<!-- ##### -->
<complexType name="ScentType">
    <complexContent>
        <extension base="sedl:EffectBaseType">
            <attribute name="scent" type="mpeg7:termReferenceType"
use="optional"/>
            <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
            <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
        </extension>
    </complexContent>

```

```

        </complexContent>
    </complexType>
    <!-- ##### -->
    <!-- Definition of Fog type -->
    <!-- ##### -->
    <complexType name="FogType">
        <complexContent>
            <extension base="sedl:EffectBaseType">
                <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
                <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
            </extension>
        </complexContent>
    </complexType>
    <!-- ##### -->
    <!-- Definition of Color Correction type -->
    <!-- ##### -->
    <complexType name="ColorCorrectionType">
        <complexContent>
            <extension base="sedl:EffectBaseType">
                <choice minOccurs="0">
                    <element name="SpatioTemporalLocator"
type="mpeg7:SpatioTemporalLocatorType"/>
                    <element name="SpatioTemporalMask"
type="mpeg7:SpatioTemporalMaskType"/>
                </choice>
                <attribute name="intensity-value" type="sedl:intensityValueType"
use="optional"/>
                <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional" fixed="0 1"/>
            </extension>
        </complexContent>
    </complexType>
    <!-- ##### -->
    <!-- Definition of Rigid Body Motion type -->
    <!-- ##### -->
    <complexType name="RigidBodyMotionType">
        <complexContent>
            <extension base="sedl:EffectBaseType">
                <sequence>
                    <element name="MoveToward" type="sev:MoveTowardType"
minOccurs="0"/>
                    <element name="TrajectorySamples" type="sev:TrajectorySamples"
minOccurs="0" maxOccurs="unbounded"/>
                    <element name="Incline" type="sev:InclineType" minOccurs="0"/>
                    <element name="Shake" type="sev:ShakeType" minOccurs="0"/>
                    <element name="Wave" type="sev:WaveType" minOccurs="0"/>
                    <element name="Spin" type="sev:SpinType" minOccurs="0"/>
                    <element name="Turn" type="sev:TurnType" minOccurs="0"/>
                    <element name="Collide" type="sev:CollideType" minOccurs="0"/>
                </sequence>
            </extension>
        </complexContent>
    </complexType>
    <!-- ##### -->
    <!-- Definition of Move Toward type -->
    <!-- ##### -->
    <complexType name="MoveTowardType">
        <attribute name="speed" type="float" use="optional"/>
    </complexType>

```

```

    <attribute name="acceleration" type="float" use="optional"/>
    <attribute name="directionV" type="sev:MoveTowardAngleType" use="optional"
default="0"/>
    <attribute name="directionH" type="sev:MoveTowardAngleType" use="optional"
default="0"/>
    <attribute name="distance-range" type="sedl:intensityRangeType"
use="optional"/>
    <attribute name="distance" type="float" use="optional"/>
  </complexType>
  <!-- ##### -->
  <!-- Definition of Trajectory Samples type -->
  <!-- ##### -->
  <complexType name="TrajectorySamples">
    <complexContent>
      <extension base="mpeg7:FloatMatrixType">
        <attribute name="intensity-range" type="sedl:intensityRangeType"
use="optional"/>
      </extension>
    </complexContent>
  </complexType>
  <!-- ##### -->
  <!-- Definition of Incline type -->
  <!-- ##### -->
  <complexType name="InclineType">
    <attribute name="pitchSpeed" type="float" use="optional"/>
    <attribute name="pitchAcceleration" type="float" use="optional"/>
    <attribute name="rollSpeed" type="float" use="optional"/>
    <attribute name="rollAcceleration" type="float" use="optional"/>
    <attribute name="yawSpeed" type="float" use="optional"/>
    <attribute name="yawAcceleration" type="float" use="optional"/>
    <attribute name="pitch-range" type="sedl:intensityRangeType"
use="optional"/>
    <attribute name="roll-range" type="sedl:intensityRangeType"
use="optional"/>
    <attribute name="yaw-range" type="sedl:intensityRangeType"
use="optional"/>
    <attribute name="pitch" type="sev:InclineAngleType" use="optional"
default="0"/>
    <attribute name="roll" type="sev:InclineAngleType" use="optional"
default="0"/>
    <attribute name="yaw" type="sev:InclineAngleType" use="optional"
default="0"/>
  </complexType>
  <!-- ##### -->
  <!-- Definition of Shake type -->
  <!-- ##### -->
  <complexType name="ShakeType">
    <attribute name="direction" type="mpeg7:termReferenceType"
use="optional"/>
    <attribute name="count" type="float" use="optional"/>
    <attribute name="distance-range" type="sedl:intensityRangeType"
use="optional"/>
    <attribute name="distance" type="float" use="optional"/>
    <attribute name="interval" type="positiveInteger" use="optional"/>
  </complexType>
  <!-- ##### -->
  <!-- Definition of Wave type -->
  <!-- ##### -->
  <complexType name="WaveType">

```