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**Information technology — Multimedia  
content description interface —**

**Part 5:  
Multimedia description schemes**

**AMENDMENT 2: Multimedia description  
schemes user preference extensions**

iTeh STANDARD PREVIEW  
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*Technologies de l'information — Interface de description du contenu  
multimédia*

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[b5ee22f7/](https://standards.iteh.ai/catalog/standards/sist/330307c6-cf2a-4e49-aa08-b5ee22f7/) *Partie 5: Schémas de description multimédia*

*AMENDEMENT 2: Extensions de préférence d'utilisateur des schémas  
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## Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 2 to ISO/IEC 15938-5:2003 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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# Information technology — Multimedia content description interface —

## Part 5: Multimedia description schemes

### AMENDMENT 2: Multimedia description schemes user preference extensions

Except where noted otherwise, add the corresponding subclauses of ISO/IEC 15938-5:2003 with the content of the following subclauses hereafter:

#### 6.5.7 LogicalUnitLocator datatype

##### 6.5.7.1 Introduction iTeh STANDARD PREVIEW

The locating of nested units is supported by defining an explicit structure to the LogicalUnitLocator that allows media locators to be included as sub-units. Furthermore, by supporting hierarchical structures directly through this nesting, the LogicalUnitLocator retains a clear semantics when multiple locators are sequenced within a description to identify the union of logical units.

##### 6.5.7.2 LogicalUnitLocator datatype syntax

Syntax of the LogicalUnitLocatorType:

```

<!-- ##### -->
<!-- Definition of LogicalUnitLocator datatype (6.5.7) -->
<!-- ##### -->

<!-- Definition of LogicalUnitLocator datatype (AMD/2) -->
<complexType name="LogicalUnitLocatorType">
  <complexContent>
    <extension base="mpeg7:MediaLocatorType">
      <choice minOccurs="1" maxOccurs="unbounded">
        <element name="LogicalUnit">
          <complexType>
            <sequence minOccurs="0" maxOccurs="unbounded">
              <element name="SubUnit" type="mpeg7:MediaLocatorType"/>
            </sequence>
            <attribute name="unit" type="mpeg7:termReferenceType"
use="required"/>
            <attribute name="value" type="string" use="required"/>
          </complexType>
        </element>
        <element name="ReferenceUnit">
          <complexType>
            <sequence minOccurs="0" maxOccurs="unbounded">
              <element name="SubUnit" type="mpeg7:MediaLocatorType"/>
            </sequence>

```

```

        <attributeGroup ref="mpeg7:referenceGrp"/>
    </complexType>
</element>
</choice>
</extension>
</complexContent>
</complexType>
    
```

### 6.5.7.3 LogicalUnitLocator datatype semantics

Semantics of the LogicalUnitLocatorType:

Name	Definition
LogicalUnitLocatorType	Describes the location of logical unit of a media resource, such as a “track” of a CD or “chapter” of a DVD. The localization within a target resource can be specified using either LogicalUnit or ReferenceUnit elements. In the case that multiple instances of these elements are included within the description, the result is the union of the individual locator elements, e.g., chapter 1 and chapter 2 of a DVD. Nested logical units should be described using the SubUnit elements of each locator element.
LogicalUnit	Describes the localization of a logical unit by identifying the name of the logical unit, e.g., “chapter” and value, e.g., “2”.
unit	Identifies the unit, e.g., “chapter” using termReferenceType. The unit name can belong to a classification scheme in order to enforce a controlled vocabulary. The termReferenceType also allows names to be used that do not belong to classification schemes when needed.
value	Describes the value of the unit, e.g., “2” using string.
SubUnit	Describes nested units located within the parent logical unit, e.g., “section 2” of “chapter 1”. SubUnit is of type MediaLocator to allow non-logical sub-units to be described.
ReferenceUnit	Describes the localization of a logical unit by identifying reference of the logical unit, such as by xpath expression.
referenceGrp	Identifies the reference of the logical unit using xpath, idref, etc.

### 6.5.7.4 Example (informative)

The following example describes the logical unit of a “chapter” of a DVD. This example assumes that a classification scheme “urn:dvd:logicalunit” has been defined for DVDs that identifies the names of its logical units, e.g., “chapter”.

```

<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioVisualType">
      <AudioVisual>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <LogicalUnit unit="urn:dvd:logicalunit:chapter" value="1"/>
        </MediaLocator>
      </AudioVisual>
    </Description>
  </MultimediaContent>
</Mpeg7>
    
```

```

    </MultimediaContent>
  </Description>
</Mpeg7>

```

The following example describes the logical unit of a CD that corresponds to track 8 from disk 2. This example assumes that a classification scheme has been defined for CDs that identifies the names of its logical units. Furthermore, this example shows the explicit use of hierarchy of units to indicate that the track is from disk 2. The `LogicalUnitLocator` describes the increasing granularity and nesting of logical units in the case of hierarchical relationship using the `SubUnit` element.

```

<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioVisualType">
      <AudioVisual>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <LogicalUnit unit="urn:cd:logicalunit:disk" value="2">
            <SubUnit xsi:type="LogicalUnitLocatorType">
              <LogicalUnit unit="urn:cd:logicalunit:track" value="8"/>
            </SubUnit>
          </LogicalUnit>
        </MediaLocator>
      </AudioVisual>
    </MultimediaContent>
  </Description>
</Mpeg7>

```

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The following example uses the `ReferenceUnit` xpath reference mechanism of `LogicalUnitLocator` to address a fragment of an XML resource:

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```

<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioVisualType">
      <AudioVisual>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <ReferenceUnit xpath="../../../../../../../SceneUnit[1]"/>
        </MediaLocator>
      </AudioVisual>
    </MultimediaContent>
  </Description>
</Mpeg7>

```

The following example uses the `ReferenceUnit` xpath reference mechanism of `LogicalUnitLocator` to address a fragment of an XML resource.

```

<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioVisualType">
      <AudioVisual>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <ReferenceUnit xpath="../../../../../../../SceneUnit[1]"/>
        </MediaLocator>
      </AudioVisual>
    </MultimediaContent>
  </Description>
</Mpeg7>

```

The following example describes a fragment that corresponds to a time point at 30 seconds from the beginning of the third track of an Audio CD.

```
<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioType">
      <Audio>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <LogicalUnit unit="urn:cd:logicalunit:track" value="3">
            <SubUnit xsi:type="TemporalSegmentLocatorType">
              <MediaTime>
                <MediaTimePoint>T00:00:30</MediaTimePoint>
              </MediaTime>
            </SubUnit>
          </LogicalUnit>
        </MediaLocator>
      </Audio>
    </MultimediaContent>
  </Description>
</Mpeg7>
```

The following example describes the first 15 seconds of all the audio tracks of the second CD disk in a three disk CD Audio package.

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```
<Mpeg7>
  <Description xsi:type="ContentEntityType">
    <MultimediaContent xsi:type="AudioType">
      <Audio>
        <MediaLocator xsi:type="LogicalUnitLocatorType">
          <LogicalUnit unit="urn:cd:logicalunit:disk" value="2">
            <SubUnit xsi:type="LogicalUnitLocatorType">
              <LogicalUnit unit="urn:cd:logicalunit:track" value="1">
                <SubUnit xsi:type="TemporalSegmentLocatorType">
                  <MediaTime>
                    <MediaTimePoint>T00:00:00</MediaTimePoint>
                    <MediaDuration>PT15S</MediaDuration>
                  </MediaTime>
                </SubUnit>
              </LogicalUnit>
            </SubUnit>
            <SubUnit xsi:type="LogicalUnitLocatorType">
              <LogicalUnit unit="urn:cd:logicalunit:track" value="2">
                <SubUnit xsi:type="TemporalSegmentLocatorType">
                  <MediaTime>
                    <MediaTimePoint>T00:00:00</MediaTimePoint>
                    <MediaDuration>PT15S</MediaDuration>
                  </MediaTime>
                </SubUnit>
              </LogicalUnit>
            </SubUnit>
            <SubUnit xsi:type="LogicalUnitLocatorType">
              <LogicalUnit unit="urn:cd:logicalunit:track" value="3">
                <SubUnit xsi:type="TemporalSegmentLocatorType">
                  <MediaTime>
                    <MediaTimePoint>T00:00:00</MediaTimePoint>
                    <MediaDuration>PT15S</MediaDuration>
                  </MediaTime>
                </SubUnit>
              </LogicalUnit>
            </SubUnit>
          </LogicalUnit>
        </MediaLocator>
      </Audio>
    </MultimediaContent>
  </Description>
</Mpeg7>
```



```

        </SubUnit>
        </LogicalUnit>
    </SubUnit>
    <!-- repeat for remaining tracks -->
    </LogicalUnit>
    </MediaLocator>
    </Audio>
    </MultimediaContent>
    </Description>
</Mpeg7>

```

Except where noted otherwise, replace the corresponding subclauses of ISO/IEC 15938-5:2003 with the content of the following subclauses hereafter:

### 7.5.3.2 Person DS syntax

```

<!-- ##### -->
<!-- Definition of Person DS (7.5.3) -->
<!-- ##### -->

<!-- Definition of Person DS (AMD/2) -->
<complexType name="PersonType">
  <complexContent>
    <extension base="mpeg7:AgentType">
      <sequence>
        <choice minOccurs="0" maxOccurs="unbounded">
          <element name="Name" type="mpeg7:PersonNameType"/>
          <element name="NameTerm"
type="mpeg7:ControlledTermUseType"/>
        </choice>
        <element name="Affiliation" minOccurs="0" maxOccurs="unbounded">
          <complexType>
            <choice>
              <element name="Organization"
type="mpeg7:OrganizationType"/>
              <element name="OrganizationRef"
type="mpeg7:ReferenceType"/>
              <element name="PersonGroup"
type="mpeg7:PersonGroupType"/>
              <element name="PersonGroupRef"
type="mpeg7:ReferenceType"/>
            </choice>
          </complexType>
        </element>
        <element name="Citizenship" type="mpeg7:countryCode"
minOccurs="0" maxOccurs="unbounded"/>
        <choice minOccurs="0">
          <element name="Address" type="mpeg7:PlaceType"/>
          <element name="AddressRef" type="mpeg7:ReferenceType"/>
        </choice>
        <element name="ElectronicAddress"
type="mpeg7:ElectronicAddressType"
minOccurs="0" maxOccurs="unbounded"/>
        <element name="PersonDescription" type="mpeg7:TextualType"
minOccurs="0"/>
        <element name="Nationality" type="mpeg7:countryCode"
minOccurs="0"/>
      </sequence>

```

```

</extension>
</complexContent>
</complexType>
    
```

**7.5.3.3 Person DS semantics**

Semantics of the `PersonType`:

<i>Name</i>	<i>Definition</i>
<code>PersonType</code>	Describes an individual person.
<code>Name</code>	Describes a name associated with this person. Multiple names are allowed. The interpretation of different names is not defined in this standard.
<code>NameTerm</code>	Describes a name associated with this person using a term from a classification scheme.
<code>Affiliation</code>	Describes an organizations or person groups with which this person is affiliated. For example, the company for which the individual works, the sports team on which they place, and so on. A person may be affiliated with more than one organization or group.
<code>Organization</code>	Describes an organization that this person is affiliated with.
<code>OrganizationRef</code>	Describes a reference to an organization that this person is affiliated with.
<code>PersonGroup</code>	Describes a group that this person is affiliated with.
<code>PersonGroupRef</code>	Describes a reference to a person group that this person is affiliated with.
<code>Citizenship</code>	Describes the countries in which this person is a legal citizen. A person may hold multiple citizenships. The legal definition of citizenship is not defined in this standard and may vary from country to country.
<code>Address</code>	Describes a place that is the address where this person can be located.
<code>AddressRef</code>	Describes a reference to a place that is the address where this person can be located.
<code>ElectronicAddress</code>	Describes the electronic address information for this person.
<code>PersonDescription</code>	Describes information about a person to distinguish them from other persons of the same name - e.g. farmer, poet, American dentist
<code>Nationality</code>	Describes the nationality of an individual by origin, birth, or naturalization

**7.5.6 PersonName datatype**

- The `LinkingName` element is Name Component that describes a link used between family, given and other names (e.g. den, ten, van den, von)

- The Salutation element is Name Component that describes an individual's salutation or title. Eg. Mr., Mrs., Sir. This is distinct fro the Title element which is reserved for terms used personal honours (e.g., F.R.S.) and qualifications (e.g., Professor).

### 7.5.6.1 Introduction

The `PersonName` datatype describes the name of a person, whether historical, existing, or fictional.

### 7.5.6.2 PersonName datatype syntax

```

<!-- ##### -->
<!-- Definition of PersonName datatype (7.5.6) -->
<!-- ##### -->

<!-- Definition of PersonName datatype (AMD/2)-->
<complexType name="PersonNameType">
  <sequence>
    <choice minOccurs="1" maxOccurs="unbounded">
      <element name="GivenName" type="mpeg7:NameComponentType"/>
      <element name="LinkingName" type="mpeg7:NameComponentType"
minOccurs="0"/>
      <element name="FamilyName" type="mpeg7:NameComponentType"
minOccurs="0"/>
      <element name="Title" type="mpeg7:NameComponentType" minOccurs="0"/>
      <element name="Salutation" type="mpeg7:NameComponentType"
minOccurs="0"/>
      <element name="Numeration" type="string" minOccurs="0"/>
    </choice>
  </sequence>
  <attribute name="dateFrom" type="mpeg7:timePointType" use="optional"/>
  <attribute name="dateTo" type="mpeg7:timePointType" use="optional"/>
  <attribute name="type" use="optional">
    <simpleType>
      <restriction base="NMTOKEN">
        <enumeration value="former"/>
        <enumeration value="variant"/>
        <enumeration value="main"/>
      </restriction>
    </simpleType>
  </attribute>
  <attribute ref="xml:lang" use="optional"/>
</complexType>

<!-- Definition of NameComponent datatype -->
<complexType name="NameComponentType">
  <simpleContent>
    <extension base="mpeg7:TextualBaseType">
      <attribute name="initial" type="string" use="optional"/>
      <attribute name="abbrev" type="string" use="optional"/>
    </extension>
  </simpleContent>
</complexType>

```

7.5.6.3 PersonName datatype semantics

Semantics of the PersonNameType:

Name	Definition
PersonNameType	Describes the name of a person.
GivenName	Describes the given name(s) of a person. At least one given name shall be specified in a name description. Given names include middle names and/or middle initials, if known. Given names may be initials or abbreviation if only these elements are known.
Linking Name	Describes a link used between family, given and other names (e.g. den, ten, van den, von)
FamilyName	Describes the family name(s) of an individual. This may be a surname, clan name, and so forth. The use of this element is optional since not all person names include a family name.
Title	Indicates the titles that are part of the name of an individual, such as honorifics. This part of a name is optional.
Salutation	Describes an individual's salutation or title. Eg. Mr., Mrs., Sir
Numeration	Indicates a roman numeral or other numeric designation that is part of the name of an individual. For example, the "III" in "William James III."
dateFrom	Indicates the date starting from which this name came into use (e.g. date of birth, date of change to a new name, and so forth). If not specified, then no such date is known.
dateTo	Indicates the date starting from which this name ceased to be used (death, old name after name change, etc). If not specified, then use of the name is still current.
type	Indicates the type of name using one of the following values: <ul style="list-style-type: none"> <li>• <i>former</i> – The name is no longer used.</li> <li>• <i>variant</i> – The name is a variation of the official or most commonly used name. For example, an abbreviated form of the official name, or an informal nickname.</li> <li>• <i>main</i> –The name is either the official one or is widely known and used.</li> </ul>
xml:lang	Describes the language in which the name is described. This need not be the same as the original language of the name. For example, a Japanese name can be described in English.

Semantics of the NameComponentType:

Name	Definition
NameComponentType	Describes a component of a name.
Initial	Indicates the initial for the name component. Initials are a truncated form of the of the name component.
abbrev	Indicates an alternative shorter form for a name component. For example, "Bill" for "William."

### 7.5.7.2 ElectronicAddress datatype syntax

```

<!-- ##### -->
<!-- Definition of ElectronicAddress datatype (7.5.7) -->
<!-- ##### -->

<!-- Definition of ElectronicAddress datatype (AMD/2) -->
<complexType name="ElectronicAddressType">
  <sequence>
    <element name="Telephone" minOccurs="0" maxOccurs="unbounded">
      <complexType>
        <simpleContent>
          <extension base="string" >
            <attribute name="type" use="optional" >
              <simpleType>
                <restriction base="string">
                  <enumeration value="central"/>
                  <enumeration value="secondary"/>
                </restriction>
              </simpleType>
            </attribute>
          </extension>
        </simpleContent>
      </complexType>
    </element>
    <element name="Fax" type="string" minOccurs="0" maxOccurs="unbounded"/>
    <element name="Email" type="string" minOccurs="0" maxOccurs="unbounded"/>
    <element name="Url" type="anyURI" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>

```

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### 7.5.7.3 ElectronicAddress datatype semantics

Semantics of the ElectronicAddressType:

Name	Definition
ElectronicAddressType	Describes an electronic address.
Telephone	Describes a telephone number.
type	Indicates a particular type of phone number, if known: <ul style="list-style-type: none"> <li><i>central</i> – The telephone number of a central switchboard.</li> <li><i>secondary</i> – The telephone number is a mobile number (e.g., cell phone).</li> </ul>
Fax	Describes a fax number.
Email	Describes an E-mail address.
Url	Describes a URL address, such as a home page.